

**Diving Beneath the Surface: A Phenomenological Exploration of Shark Ecotourism  
and Environmental Interpretation from the Perspective of Tourists**

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### **Abstract**

Wildlife ecotourism is becoming a well-established industry due to its ability to contribute to local economies and the growing tourist demand for opportunities to observe endangered or rare species. Wildlife ecotourism is also recognized for its ability to provide free choice-learning settings for visitors, through the use of environmental interpretation programs. The process of environmental interpretation is a communication phenomenon thought to hold the potential to contribute to conservation by educating and raising awareness amongst tourists about environmental issues. Using a qualitative phenomenological research design, this research examined the environmental interpretation programs of great white shark ecotourism operators in Gansbaai, South Africa, from the perspective of tourists. Findings indicated that while tourists did not primarily choose to embark on shark tourism excursions to learn more about the species, many participants became slightly more informed about great whites and the surrounding environment after their experience. It was also found that most participants did not experience nervousness or fear when in the water with great whites, but instead felt an emotional connection and appreciation for the animal, causing a shift towards pro-conservation attitudes.

*Keywords:* ecotourism, wildlife tourism, environmental interpretation, free-choice learning, qualitative research, phenomenology

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This thesis is dedicated to the South African great white shark tourism industry, as well as all the individuals who dedicate their lives to the conservation of the species. As an academic researcher, tourist, and devoted shark lover, I am optimistic to see the future growth and development of this industry, and hope that I have contributed in some small way.

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## Introduction

Tourism is one of the largest industries in the world, and has grown rapidly over the past 30 years in terms of both the income it generates and the number of people who travel abroad (Miller, 1990; Theobald, 2005). Today's tourists have more choices than ever before and as tourism businesses increase their competition for consumer attention in a saturated global marketplace, market differentiation and specialization are similarly increasing. Tourism is no longer made up of "easily definable markets and mainstream tourists" but is now an "amalgam of highly varied experiences, tastes and behaviors," known as niche tourism markets (Robinson & Novelli, 2005, p. 8). Niche tourism refers to a specialized type of tourism activity directed to satisfy a particular market and audience for a product (Robinson & Novelli, 2005, p.4). In order to satisfy almost any tourist interest, various forms of niche tourism have emerged and steadily expanded over the past two decades, and are expected to experience continued growth in the future (Wilhelm Stanis, 2013, p. 495).

Ecotourism, a form of niche tourism, has experienced steady growth since emerging in the 1980s, and researchers have found that this industry attracts a diverse range of tourists, not just the environmentally conscious (Arnegger et al., 2010). Wildlife ecotourism in particular has emerged as an established industry, one which contributes to local economies, especially in developing areas, by allowing marginal areas to promote their rich nature resource bases (Conway et al., 2012). Forms of wildlife tourism that provide visitors with the opportunity to observe endangered or rare species are being offered in a growing number of destinations, such as giant panda tourism in China, turtle viewing in Australia, and sting ray tours in the Cayman Islands (Ballantyne et al., 2011;

He et al., 2008; Semeniuk et al., 2010). Marine ecotourism, and shark diving in particular, demonstrates this growing demand for rare encounters with wildlife, as studies have shown that tourists find interacting with unusual or endangered animals in a non-captive setting to be particularly appealing (Weaver, 2005; Cong, Wu, Morrison, Shu, & Wang, 2014).

Wildlife ecotourism is recognized for its potential to contribute to conservation efforts for endangered species through the use of environmental communication or interpretation, which has the ability to educate participants, raise awareness, and provide a platform for lobbyists and scientific research (Dobson, 2008). Interpretation is a form of educational communication that aims to disseminate meaning in an informal setting, involving an involuntary audience, such as tourists on an ecotourism excursion (Jacobson, 2009). Just as a language interpreter translates information from one language to another, environmental interpreters translate technical, scientific information into a language that is easy to understand by individuals outside of the field (Jacobson, 2009, p. 303). By adopting an environmental interpretation program, ecotourism experience can target educational communication to tourists groups in order to influence their conservationist beliefs and behaviors (Brown et al., 2010; Lai et al., 2009).

Ecotourism is often promoted as a communicative tool for conservation efforts since interpretation programs can be designed to educate and influence tourists' attitudes by providing them with pro-conservation knowledge (Powell et al., 2008). The effective design of interpretation programs is essential as ecotourism experiences are not formal education settings, but instead rely upon free-choice or voluntary learning, which occurs under the control of the learner (Ballantyne & Packer, 2011, p. 202). Interpretation

strategies, such as tour guide communication, printed materials, and exhibits, aim to encourage free-choice learning amongst tourists in hopes of influencing participant knowledge about wildlife and the environment, as well as their beliefs, attitudes, and behaviors regarding conservation (Ham & Weiler 2002; Powell & Ham 2008). Therefore, environmental interpretation can be useful in influencing pro-conservation attitudes and sustainable behaviors (KyoungJin Kim & Weiler, 2013, p. 605).

Educating tourists on issues facing the species and ecosystems they encounter is exceptionally important for the shark tourism industry, since the management of shark populations is nearly non-existent despite the mounting pressures faced by species, such as finning, over the past 20 years (Jacques, 2010, p. 192). The growth of shark-based tourism increasingly presents participants with the opportunity to observe and interact with rare marine predators, and in turn, demonstrates the economic value for the “non-consumptive use” of the species (Gallagher et al., 2011, p. 799). The growth of the shark-based tourism is thought to be an emerging “global phenomenon” as the species attracts “significant attention and allure from people worldwide” (Gallagher et al., 2011, p. 809). Not only does shark tourism present economic opportunities, it is also acclaimed for its role in shark conservation and awareness (Muter et al., 2013), by moving away from the sensationalized news coverage of the species, which is often credited with perpetuating “negative portrayals of sharks and for amplifying public fear” (Muter et al., 2013, p. 188).

**Purpose of the Study.** Similar to museum, zoo, and aquarium experiences, wildlife ecotourism experiences possess the capacity to “inspire, educate, and influence

large numbers of visitors” (Ballantyne & Packer, 2011, p. 202). In order to evaluate and understand interpretation programs, researchers often carry out focus groups, surveys, or interviews at an interpretive site, in order to determine what visitors learned from the interpretation (Jacobson, p. 2009, 314). By assessing the effectiveness of ecotourism interpretation programs, researchers are able to identify ways “to increase visitor enjoyment and understanding, and prompt more environmentally sustainable behaviour” (Orams, 1997, p. 296). Studying environmental interpretation programs can also provide niche ecotourism operators with better insight into tourist experiences, which may allow for the improvement and development of their services to align with visitor expectations. Environmental education through ecotourism experiences is thought to have a positive influence on environmental conservation, and therefore, it is important to assess interpretation programs in order to understand the impact of such communication on the beliefs of tourists and upon their future behavior (Tisdell & Wilson, 2005, p. 292). The recent growth in the number of shark ecotourism operators suggests the economical viability of this niche tourism market, while also illustrating the potential of shark-based tourism activities to play a role in the conservation of the species.

Given the relevance and importance of these areas of research, this study explored the concepts of niche tourism and, more specifically, shark ecotourism as a form of niche wildlife tourism, through the lens of environmental interpretation theory. Using a hermeneutic phenomenological approach, the purpose of this study was to understand and describe the free-choice learning experiences of visitors to the region of Gansbaai, South Africa, identified as one of the major aggregation sites for great white sharks (Peschak & Scholl, 2006) and one of the most popular sites for shark tourism in the world (Gore et

al., 2012).

A phenomenological approach was employed for this study as the research aimed to explore and describe the experiences of tourists within the niche market of shark tourism in order to gain a better understanding of how ecotourism communications are interpreted by participants. This study sought to describe the experiences of shark tourism from the perspective of participants in order to explore whether this niche market of ecotourism holds the potential to educate tourists on the importance of species conservation.

**Overview of the Theoretical Framework.** Environmental interpretation theory, a form of educational communication, is the main theoretical framework employed in this study. Designing an effective education strategy for ecotourism experience is complex, as tourists are non-captive audiences, and therefore can not be motivated to learn through tangible rewards such as grades or certificates, but must be motivated by intrinsic rewards, such as self-enrichment and satisfaction (Ham, 1992). Therefore, this study aims to evaluate the process of free-choice learning, which is under the choice and control of the learner (Ballantyne & Packer, 2011, p. 202).

Previous research has demonstrated that free-choice learning can influence visitors' knowledge about wildlife and the environment, as well as their beliefs, attitudes, and intentions regarding conservation (Ham & Weiler 2002; Powell & Ham 2008). In order for free-choice learning to occur, the environmental interpretation programs of tourism experiences must be designed effectively. Interpretation is as a form of educational communication, "aimed at revealing meanings and relationships to people

about the places they visit and the things they see and do there” (Ham et. al, 2002, p. 36).

According to Moscardo and Pearce (1986), environmental interpretation must stimulate enthusiasm and emotion while also providing an educational experience. Additionally, environmental interpretation programs are often built on the premise that learning involves “the resolution of a cognitive conflict” called cognitive dissonance (Luck, 2003, p.945). Cognitive dissonance is the process by which participants are exposed to new knowledge that challenges or conflicts with their existing perceptions or beliefs, which in turn, may motivate participants to resolve this conflict through learning (Luck, 2003). Along with cognitive dissonance, environmental interpretation must also interact with tourists’ affective domain. The affective domain includes feelings, attitudes, emotions, and values, and therefore, can be appealed to in order to illicit empathy for marine life (Luck, 2003; Zeppel, 2008).

Orams (1996) developed a framework for environmental education programs, which not only focuses on theories of cognitive dissonance, but the affective domain as well (Luck, 2003). The Orams model consists of five major steps: (1) instilling curiosity or a desire to learn (2) appealing to the affective domain (3) creating the motivation to act (4) providing opportunities to act (5) receiving evaluation and feedback (Orams, 1997, p. 298). This study applied Orams’ indicators of enjoyment, knowledge, attitude, and intentions to change behavior in order to understand tourist experiences, and also employed Orams’ framework to comment on the design of the educational programs of Gansbaai’s shark diving tours, as described by visitors.

**Methodology.** A qualitative hermeneutic phenomenological case study research design was employed for this study. Phenomenology is recommended by several authors (DeMares & Krycka, 1998; Suvantola, 2002; Curtin, 2006) as the most appropriate approach for gaining a deeper understanding of lived tourist experiences. In order to better understand the experience of environmental free-choice learning in ecotourism, tourists' perspectives of this phenomenon must be understood. It is important to address that phenomenological approaches in tourism studies often "misleadingly insist on a subjective-objective" in that they attempt to bracket out the researcher's perception of the phenomena under study (Pernecky & Jamal, 2010, 1057). This study will differ in that it will be guided by hermeneutic phenomenology, as the researcher sought to interpret and understand the lived experiences for participants, and searched for meaning by negotiating through both theory and data (Pernecky & Jamal, 2010, p. 1067).

In order to gain insight into the global shark tourism niche market, the researcher interviewed participants of shark tourism activities in Gansbaai, South Africa. The region of Gansbaai was selected as it is recognized as one of "the main aggregation sites for great white sharks" and consequently, is where the industry of great white shark diving was born (Weisel et al., 2010, p. 184). Additionally, Gore et al.'s (2012) study identified South Africa as one of the most popular shark tourism destinations in the world through their analysis shark tourism websites across the globe. In accordance with the hermeneutic phenomenological framework of this study, the role of the researcher was not minimized, as the construction of experiences is not one-sided, since understanding and interpretation are bound together (Pernecky & Jamal, 2010). Additionally, while the researcher has not participated in shark tourism activities, she is still embedded in the

world of tourism, as both a tourist and resident, and therefore is unable to completely separate herself from the phenomenon under study.

Purposive sampling was employed for the selection of interview participants for this study. Data collection involved in-depth, open-ended interviews with eight participants in order to obtain detailed and robust narratives of shark tourism experiences. All interviews were recorded and transcribed verbatim, and after pulling out significant statements, meanings were formulated and clustered into categories, allowing for the development of common themes shared amongst participants (Creswell, 2007, p. 61). To ensure the validity of this study's findings, the researcher identified her biases, used thick description, and peer debriefing (Geertz, 1973; Creswell, 2009). It is also worth noting that importance was given to ethical considerations throughout the qualitative research process. An ethics application was submitted for review in October 2013 to the Social Sciences and Humanities Research Ethics Board of the Office of Research Ethics and Integrity of the University of Ottawa, and was given approval in January 2014.

**Research Questions.** This study seeks to gain insight into the environmental interpretation programs of the great white shark tourism industry in Gansbaai, South Africa, a niche wildlife ecotourism destination. A central research question, as well as four subquestions, anchored the study.

**Central Research Question.**

- Do the environmental interpretation programs of Gansbaai's shark ecotourism industry hold the potential to contribute to conservation of the species by raising

awareness, educating, and promoting pro-environmental attitudes amongst tourists?

**Subquestions.**

- What motivates tourists to participate in shark tourism activities?
- How do tourists perceive the risks involved in diving with great whites?
- Do tourists acquire species and environmental based knowledge during shark tourism activities?
- What types of emotional responses and/or attitudinal changes do tourists experience during shark tourism activities?

**Structure of the Thesis.** This thesis has been divided into five chapters, namely (1) Introduction, (2) Literature Review, (3) Methodology, (4) Findings and Analysis, and (5) Conclusion.

Chapter 1: Introduction – This chapter describes the current landscape of the global tourism industry, commenting on the growth of the niche tourism experiences, and in particular, wildlife ecotourism activities. This section also provides a background on the shark tourism industry, the region under study, and the potential of ecotourism activities to provide environmental education. The study’s purpose, theoretical framework, methodology, and research questions are also outlined.

Chapter 2: Literature Review – This chapter outlines the key concepts of the study,

including niche tourism and ecotourism, as well as the theoretical perspective of environmental interpretation theory. A brief overview of the current state of shark populations as well as common public perceptions of the species is also outlined. The chapter concludes with the rationale for the study.

Chapter 3: Methodology – This chapter outlines the hermeneutic phenomenological research design employed by this study. It briefly provides a rationale behind the selection of Gansbaai, South Africa as the case chosen for the evaluation of shark ecotourism experiences. This section also describes the data selection, collection, and analysis processes, the role of the researcher, and the trustworthiness and ethics of the study.

Chapter 4: Findings and Analysis - This chapter presents the findings of the study by first providing a contextual description of Gansbaai, the selected tourism region, which is followed by a detailed description and analysis of the accounts provided by participants. The findings are organized by under the study's four subquestions, and are then grouped by thematic categories.

Chapter 5: Conclusion – This chapter summarizes the key findings of the study and comments on their significance and contribution. This section also recognizes the limitations of the study, and provides recommendations for future research in the area of wildlife ecotourism and environmental education.

## Chapter 2: Literature Review

This chapter provides an in-depth review of the literature in the field of tourism, including the areas of niche tourism, ecotourism, and more specifically, shark tourism as a form of wildlife ecotourism. Following the review of literature, this section outlines the theoretical framework of environmental interpretation, focusing in particular on cognitive dissonance and the affective domain, which represents the theoretical underpinning of the study. This chapter concludes with the rationale of the study.

### Tourism

Until the nineteenth century, travel was not an easy endeavor as many landscapes that we now regard as aesthetically pleasing were not as easily accessible; therefore traveling for pleasure and not necessity is a relatively recent phenomenon (Holden, 2004, p. 2). Moreover, tourism became more accessible with the growth and declining cost of transportation, along with the increase in amount of disposable income for leisure activities (Maitland, 2009). According to the World Tourism Organization (2011), tourism can be defined as “a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes” (¶1).

The industry of tourism is unique not only in that it is the consumer who travels to the product, but also because the product is comprised of the physical and cultural attributes of a destination (Holden, 2004, p. 6). Conventional mass tourism is defined by Poon (1993) as a large-scale phenomenon that packages leisure experiences at fixed prices for clients. International tourism embodies “the notion of mass production and

consumption”, as tour operators, airlines, and hotel groups monopolize the market, and “hold significant power and influence with regard to the political economies of destinations and host communities around the globe” (Robinson & Novelli, 2005, p. 1-2).

The tourism industry is one of the largest and fastest growing industries in the world, and is expected to grow by 4.3 percent per annum between 2008 and 2017 (Miller, 1990; WTO, 2007). The growth of the tourism industry has been accompanied by a significant increase of scholarly research in the field, which is can be seen on campuses through the development of tourism programmes, centres, and departments, the rising amount of tourism conferences and publications, and the increasing number of specialized tourism journals (Pearce & Butler, 1999, p. 2).

### **Niche Tourism**

‘Niche tourism’ is a concept largely borrowed from ‘niche marketing’, which originally adopted the term from the scholarly field of ecology. Hutchinson (1957) is widely accepted as having coined the term niche to refer to an optimal location, where an organism can exploit resources without the presence of competition. In the marketing world, a niche implies that there is a particular market and audience for a product, thus increasing the likelihood of that product’s consumption. (Robinson & Novelli, 2005, p.4) Similarly, niche tourism operators are increasingly seeking out particular leisure activities practiced by particular groups in order to commercialize these activities for consumption (Robinson & Novelli, 2005, p. 5). This has been the case for over the past two decades, and researchers have been exploring change in the tourism industry brought on by globalization and technology, calling it ‘new tourism’ or niche market tourism (Lew,

2008, p. 411). Moreover, old forms of mass tourism are being associated with the era of modernity, whereas new tourism, flooded with niche markets, is a phenomenon of society today.

Today's tourists have more choices than ever before as businesses are "vying for consumer attention in a crowded global marketplace, market differentiation and specialization are increasing" (Lew, 2008, p. 412). Moreover, hyper consumerism has led to the rapid growth of special interest travel experiences and destinations, and travel to some of the most remote place across the world (Lew, 2008). With this development, "many commercial and not-for-profit tour operators have emerged aiming to cater to the group of tourists seeking these specialized experiences" (Wilhelm Stanis & Barbieri, 2013, p. 495). As a result, tourism is no longer made up of "easily definable markets and mainstream tourists" but now, is an "amalgam of highly varied experiences, tastes and behaviors" (Robinsion & Noveli, 2005, p. 8). Various forms of niche tourism have emerged to satisfy almost any tourist interest, such as surf tourism, shark diving, turtle watching, swimming with dolphins, whale watching, and voluntourism (Buckley, 2002; Tisdell & Wilson, 2005; Topelko & Dearden, 2005; Curtin, 2006; Raymond & Hall, 2008).

Many emerging tourism activities involve outdoor adventure or encounters with wildlife, and are therefore dependent upon the natural environment. These forms of nature-based tourism are impacted by many of the environmental problems facing the world today, such as acid rain, air pollution, water contamination, and deforestation (Nickerson, 2003). As a result, the nature-based tourism industry is "increasingly adopting a conservation-based ethic" in order to minimize detrimental impacts to the

environment (Ballantyne & Packer, 2011, p. 202). Additionally, the international demand for these sustainable services and attractions has increased, as tourists are making travel decisions based on an expectation of ethical environmental practices (Butler, 1999; Hassan, 2000; Liu, 2003; Tarrant and Cordell, 2002). Moreover, “changing public values and attitudes about how people should relate to the natural environment” has increased the demand for environmentally sustainable attractions in the tourism industry (Ballantyne & Packer, 2011, p.202). As a result, although it remains a niche market, environmentally sensitive travel, more commonly known as ecotourism, has increased (Lew, 2008, p. 412).

## **Ecotourism**

### *The Emergence and Rise of Ecotourism*

In order to remain competitive, world-class destinations are expanding their tourism industries to include environmentally oriented undertakings, as tourist interest in ecotourism activities is growing by 25% to 30% annually (Hassan, 2000). As a result, ecotourism and nature-based tourism has become the fastest growing sector of the tourism industry, growing three times faster than the industry as a whole (Neil & Wearing, 2013, p.6). Ecotourism and nature-based tourism have been steadily emerging since the 1980s, and researchers have found that these natural attractions are frequented by not only a diverse range of tourists, not just the environmentally conscious (Arnegger et al., 2010). The ecotourism industry contributes to local economies, especially in developing areas, by allowing marginal areas to promote their rich nature resource bases (Conway et al., 2012).

The increasing interest in, and growth of the ecotourism industry represents more

than just a trend – it “reflects a fundamental shift in the way human beings view and engage with nature and tourism” (Neil & Wearing, 2013, p. 1). Ecotourism was originally envisioned as an alternative to mass tourism and its detrimental impacts on destination site’s natural environments (Neil & Wearing, 2013). However some critics argue that ecotourism can be just as damaging as mass tourism in that it draws tourists to natural and sensitive environments (Butler, 1990; Nelson, 1994; Steele, 1995; Wheeler, 1993). Nevertheless, ecotourism first emerged as a form of alternative tourism, a tourism typology that includes educational, scientific, adventure, and agri-tourism (Mieczkowski, 1995). Mieczkowski (1995) asserts that alternative forms of tourism often overlap, as is the case with ecotourism, since it often coincides with educational, scientific, adventure, agri-tourism, and in recent years, volunteer tourism.

Hector Ceballos-Lascurain (1981) is widely acknowledged for coining the term ecotourism, which he identified as a primary strategy for maintaining rainforest areas in the Mexican state of Chiapas (Neil & Wearing, 2013, p. 5). Ecotourism is defined as a “low key, minimal impact; interpretative tourism where conservation, understanding, and appreciation of the environment and cultures visited are sought” (Neil & Wearing, 2013, p. 4). Moreover, ecotourism must not only occur in a natural area, “it must be ecologically sustainable and provide environmental education and interpretation” (Beaumont, 2001, p. 317). Therefore, as well as economically contributing to the sustainable management of the host area, ecotourism must also spread awareness and foster pro-environmental attitudes amongst tourists.

Ecotourism can be defined as travel to remote natural areas “with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals”

(Conway et al., 2012, p. 398). Ecotourism is often comprised of the following four key characteristics: (1) minimal environmental impact, (2) minimal impact on host cultures, (3) maximum economic benefits for host countries and (4) maximum satisfaction for tourists (Conway et al., 2012, p. 398). Observing species in their natural environments has grown in popularity in recent decades, as wildlife encounters present visitors with exciting ways to encounter nature, making it one of the fastest growing sectors of the tourism industry (Gallagher et al., 2011). Forms of wildlife tourism that provide visitors with the chance to observe endangered or rare species are being offered in a growing amount of destinations (Ballantyne et al., 2008).

Ecotourism can be defined as hard or soft based on two distinctions: specialized (hard) or generalist (soft) interest in nature, and a high (hard) or low (soft) degree of physical effort (Wight, 1993, p. 59). Many wildlife tours are a form of soft ecotourism (Weaver 2005), in that they “involve short trips, large groups of visitors with minimal environment commitment, and physically passé, close encounters with wildlife” (Walter, 2013, p. 18). Wildlife ecotourism usually provides tourists with the opportunity to passively observe or interact with mega-fauna, such as pandas, giraffes, and elephants in land-based tourism, and dolphins, whales, and sharks in marine ecotourism (Walter, 2013, p. 18). The rise of shark diving in particular demonstrates this growing demand for rare encounters with wildlife in the soft ecotourism sector.

Ecotourism is often promoted as a communicative tool for conservation efforts, as tour design and interpretation can educate and influence tourists’ attitudes by providing them with pro-conservation knowledge (Powell et al., 2008). Moreover, through their participation in ecotourism experiences, tourists encounter information on the issues

facing the host-protected area, which may influence them to be supportive of resource and wildlife management. Past studies have found that ecotourism activities can increase environmental knowledge and influence conservation views and behaviours amongst participants, especially when new information about animals and their habitats was provided (Beaumont, 2001; Ballantyne et al., 2007).

### *Wildlife Ecotourism and Environmental Education*

The precise definition of ecotourism continues to be debated (Weaver, 2008; Newsome et al., 2002; Blamey, 1997; Bottrill & Pearce, 1995). Despite this ongoing debate over definitions it is important to note that almost all definitions include “visitor learning and education as one of their main objectives” (Walter, 2013, p. 15). Ecotourism is recognized for its potential to contribute to conservation, as it has the ability to educate participants, raise awareness, and provide a platform for lobbyists and scientific research (Beaumont, 2001; Chan et al., 2007; Dobson, 2008). Wildlife ecotourism mainly falls within behaviourist and liberal philosophies of adult environmental education (Walter, 2009).

Behaviourist approaches focus on changing visitor behavior through education, and in wildlife ecotourism specifically, follow a linear process of educational inputs and behavioral outputs (Walter, 2013). Educational inputs or stimuli can include the new knowledge of wildlife and the environment, understanding of environmental and human threats to wildlife, direct, emotional experience with wildlife, and awareness of conservation efforts (Walter, 2013, p. 22). In addition to its behaviourist roots, wildlife ecotourism education models also have philosophical grounding in Liberal approaches,

which assume that visitors are “empty vessels who may be filled with new knowledge by those interpreters more knowledgeable than they”, and therefore will become more environmentally responsible (Walter, 2013, p. 22).

In marine areas specifically, interpretation activities may include talks led by tour guides onboard boats or onshore and visitor centers, which may include displays, signs, and brochures, with information covering the ecology and behaviors of the species, along with both best practices and threats to marine life (Zeppel & Muloin, 2008, p. 281). Tour guides are often experts in areas such as ecology, zoology, natural interpretation and environmental conservation, and as a result, seek to pass this knowledge onto visitors in order to promote environmentally responsible values, attitudes and behaviors (Walter, 2013, p. 19).

Exploration and knowledge needs have been identified as key motivators for tourism (Mitchell, 1998), and therefore, participants are often open to receiving messages and new information from interpreters (Ballantyne & Packer, 2011). Along with knowledge transfer, connecting visitors with the natural environment is key for successful learning experiences, as this may elicit an emotional response (Ballantyne & Packer, 2005). Moreover, although learning is often considered an active process, research shows that much of learning occurs unconsciously, driven by emotion (Ballantyne et al., 2011; Turner, 2000; Orams, 1996). For example, in wildlife ecotourism, the initial excitement of seeing the animal is often “instrumental in eliciting a reflective response” associated with learning (Falk et al., 2012, p. 919). Moreover, direct observation and interaction with wildlife allows ecotourism visitors to connect with animals, which may fuel their desire to learn from interpreters.

While ecotourism operators holds the potential to educate visitors, research investigating the influence of these experiences on participants' knowledge, attitudes, and behaviors has had mixed results (Powell & Ham, 2008). Some researchers have found that ecotourism participants gained little or no environment knowledge from their experiences (Markwell, 1998; Ryan et al., 2000), while other studies show that tourists' knowledge increased, but had little impact on environmental attitudes and behaviors (Beaumont, 2001; Cable et al., 1987; Lee & Balchin, 1995; Lee & Moscardo, 2005; Morgan et al., 2003; Orams, 1997; Tubb, 2003; Wiles & Hall, 2005). Wallace and Pierce (1996) and Hvenegaard and Dearden (1998) studied the potential of ecotourism operators and visitors to support local conservation, and cited poorly developed interpretative programs as a key barrier. Similarly, Weaver (2005) found that more planning is needed to develop interpretation strategies and techniques, especially for soft ecotourism experiences, since these tours are short in duration, involve large groups of visitors, and brief, passive engagement with wildlife and the environment.

Orams (1997) argues that while many researchers assert that participation in nature-based tourism encourages the adoption of pro-environmental attitudes and behaviors, past studies in educational psychology prove that changing behavior is difficult, and therefore, tourism operators must carefully design and carry-out interpretation programs. In other words, if environmental interpretation programs are carefully planned and executed, ecotourism experiences can be influential. This assertion is supported by Tisdell & Wilson's study (2005) of turtle watching at Mon Repos Conservation park, which found that tourist interaction with wildlife directly contributed "to their pro-conservation sentiments and actions" (p.291).

Some authors assert that another limitation with ecotourism activities is that they often appeal to individuals already possessing pro-environment attitudes and/or behaviors, and therefore, the industry may not be as beneficial as hoped (Beaumont, 2001; Hatch, 1998; Saleh & Karwacki, 1996). Conversely, other researchers have found that since the emergence of the industry in the 1980s, forms of nature-based tourism not only attract environmentally conscious individuals, but a wide range of tourists (Arnegger et al., 2010; Beckmann, 1993; Cater, 1994;). Along with appealing to a wide range of tourists, another obstacle to environmental learning during ecotourism experiences is due to the fact that the primary motives of tourists are “entertainment, comfort, and consumption”, making it difficult for interpretation programs to encourage learning and influence the attitudes and behaviors of visitors (Powell & Ham, 2008, p. 469). Moreover, without the careful planning and execution to ensure interpretation programs arouse curiosity and enjoyment, ecotourism operators may be unsuccessful in cultivating environmental concern and distilling conservation knowledge amongst visitors.

The recent global increase in the number of shark dive operators suggests the economical viability of this niche tourism market, while also illustrating the potential of shark-based tourism activities to play a role in the conservation of the species (Topelko et al., 2005). The expansion of shark-based tourism presents participants “with opportunities to observe, photograph, and interact with these marine predators”, and in turn, demonstrates the economic value for “non-consumptive use” of the species (Gallagher et al., 2011, p. 799). The potential role of the shark tourism industry in the conservation of the species is exceptionally important, since the sustainable management of shark populations is nearly non-existent despite the increase in pressures on the species

over the past 20 years (Jacques, 2010). For these reasons, it is important to explore and describe the experiences of tourists within the niche market of shark tourism in order to gain a better understanding of how ecotourism communications are interpreted by participants.

### **Shark Tourism**

By evaluating tourists' experiences with shark-based ecotourism, this study aimed to explore the role of ecotourism in promoting environmental learning and in sustaining conservation of nature. Ballantyne (2008) asserts that one of the central arguments for continuing the development of wildlife tourism is that this industry aids in securing long-term conservation of ecosystems. The potential role of the shark tourism industry as a conservation tool is exceptionally important, as many species of sharks are vulnerable to even modest fishing practices, due to their slow growth rates, late maturity, low birth rates, and long life spans (Jacques, 2008, p. 193).

The rise of shark ecotourism presents participants “with opportunities to observe, photograph, and interact with these marine predators”, and in turn, demonstrates the economic value for “non-consumptive use” of the species” (Gallagher et al., 2011, p. 799). The shark ecotourism industry is recognized for its ability to bring economic value to coastal destinations, as seen through the 2010 policy changes enacted in the Maldives, where shark fishing was banned in order to sustain shark-based ecotourism, which contributed roughly thirty percent towards the Maldives GDP. Similarly, the Bahamas has profited from shark-based tourism activities for the past twenty-five years, bringing in an estimated seventy-eight million dollars (US) in 2007 (Gallagher et al., 2011).

A wide range of shark tourism activities – including cage diving, shark feeding and drift diving – are currently available in over forty countries with an increasing number of destinations establishing operations due to the increasing acknowledgment of the economic potential of this niche tourism industry (Vianna et al., 2012). Not only does shark tourism industry present economic opportunities, it is also acclaimed for its role in shark conservation and awareness (Muter et al., 2013). Shark tourism can play a role in the better management and understanding of the species as it markets the animal from an educational perspective, instead of from the sensationalized news coverage of the species that is often credited with perpetuating “negative portrayals of sharks and for amplifying public fear” (Muter et al., 2013, p. 188). Moreover, “shark-based tourism is a global phenomenon” as the species attracts “significant attention and allure from people worldwide” (Gallagher et al., 2011, p. 809).

### *Perception of the Species*

Forms of wildlife tourism that give visitors with the opportunity to observe endangered or rare species are being offered in a growing amount of destinations (Ballantyne et al., 2008). Marine tourism, and shark diving in particular, demonstrates this growing demand for rare encounters with wildlife. Negative perceptions of the shark, particularly in the Western world, may provide insight into why sharks can act as wildlife attractions, as the perceived risk associated with shark encounters appeals to the growing eco-adventure market (Dobson, 2008).

Adventure tourism can be broadly defined as incorporating a certain element of risk during activities in exotic, away from home locations (Kane et al., 2004). In Western culture in particular, sharks have a negative reputation and are widely perceived as

dangerous and threatening to humans (Dobson, 2008). This is illustrated through the shark's "long history of demonization", stemming from the early paintings of John Singleton Copley's *Watson and the Shark* and Winslow Homer's *The Gulf Stream*, which depicted sharks as dangerous threats to those at sea (Dobson, 2008, p. 51). More recently, these threatening depictions have been capitalized on by popular culture, through Peter Benchley's 1974 book, *Jaws* and its subsequent film adaptation, where Steven Spielberg's cinematography entrenched the fear of sharks amongst audiences worldwide.

Interestingly, it is these negative perceptions of the shark that may explain why the species is such a wildlife attraction, since the shark represents an untamed, wild nature (Dobson, 2008). Moreover, the perceived risk associated with shark encounters appeals to the growing eco-adventure market. However, Muter et al.'s (2012) study on the Australian and U.S. coverage of sharks in news media found that although a majority of articles highlighted risks from sharks, overtime, the number of articles that presented sharks in a positive light have been steadily on the rise. These findings demonstrate "a shift from 'adventure-seeking hunters' [...] towards 'nature-seeking observers'" or in other words, shifting attitudes, from those focused on the need "to protect humans from sharks, to that of needing to protect sharks from humans" (Simpfendorfer et al., 2011, p. 519). Shark-based tourism, a niche market of the ecotourism industry, is seen as an emerging conservation tool as it can promote public awareness of the threats facing the species (Techera et al., 2012).

### *Human-wildlife Conflict*

Conflict between humans and wildlife are "increasing in frequency and intensity

worldwide” (Conover, 2002). Human-wildlife conflict (HWC) occurs when contact between humans and wildlife cause or are perceived to cause negative effects on the other (Muter et al., 2009). Moreover, HWC is derived from public perceptions of risks from exposure to wildlife (Decker et al., 2002). Wildlife risks can include threatening of human health and safety through disease or attacks, as well as risk to personal property, agriculture, or other species of wildlife valued by humans (Conover, 2002). HWC can be concerning for conservation efforts due to its ability to shape public perceptions of wildlife, which may cause risk to certain species and their habitats (Muter et al., 2009). For example, the increased frequency of cougar attacks on humans, livestock, and pets across western North America worked against those trying to protect and sustain cougar populations due to “increased human-caused cougar mortality, primarily through hunting and animal damage control actions” (Riley & Decker, 2000, p. 51).

Individuals will judge risks more severely when they are presumed to be involuntary, catastrophic, or not well understood (Elliot, 2003, p. 215). According to this assertion, great white sharks may be judged harshly, as humans are often attacked unsuspectingly, which may result in serious injury or even fatality, and the feeding behaviors of sharks and the rationale behind attacks are not quite fully understood. The news and entertainment media also have a role to play in human perceptions of wildlife risks, as they “often highlight low-incidence, high-consequence events such as wildlife-related human fatalities” (Muter et al., 2009, p. 367). Mass media can contribute to public perceptions of wildlife, as negative human-wildlife encounters “will be highly publicized by print, television, radio, or Internet media” (Gore et al., 2005, p. 513). As previously mentioned, media coverage of sharks is often negative, and pop culture has capitalized on

the vilification of the species, which may amplify public fears surrounding the species (Muter et al., 2012).

Public perceptions play an influential role in setting of public policy agendas (McCombs & Shaw, 1972) and therefore, positive public perceptions of wildlife are essential for positive wildlife management outcomes (Gore et al., 2005). Thompson et al.'s (2003) study on dingo management on Fraser Island, Australia, found that after a dingo related fatality occurred and was heavily documented in the media, lethal wildlife management actions were taken to remove almost twenty percent of the dingo population from the region. Moreover, this study highlighted the importance of wildlife management models to address risk communication in order to improve people's perception of species in order to conserve and sustain wildlife populations (Gore et al., 2005). There have been few studies that examine the role risk perception plays in wildlife management and human acceptance of wildlife populations (Stout et al., 1993; Riley et al., 2000), and therefore, collection of risk perception data is important to determine any barriers to wildlife conservation efforts.

### **Theoretical Framework**

The purpose of this study is to understand and describe the experiences of shark tourism participants in order to explore whether this niche market of ecotourism holds the potential to educate tourists on the importance of species conservation. Through their participation in ecotourism experiences, tourists encounter information on the issues facing the host-protected area, which may influence them to be supportive of resource and wildlife management. Ecotourism is often promoted as a communicative tool for conservation efforts, as tour design and interpretation can educate and influence tourists'

attitudes by providing them with pro-conservation knowledge (Powell et al., 2008).

Tilden (1957) originally coined the concept of interpretation as a form of educational communication, “aimed at revealing meanings and relationships to people about the places they visit and the things they see and do there” (Ham et. al, 2002, p. 36). Interpretation is “a process of communicating the significance of a natural area site to encourage a positive concern for that environment (Hughes & Morrison Saunders, 2005, p. 611). Moreover, interpretation aims to influence tourists’ knowledge of the natural environment in order to encourage a pro-conservation attitude. Interpretation is at the heart of a tour guide’s responsibilities, especially when guiding visitors through ecotourism, cultural, heritage, or adventure activities. Interpretative media is not limited to face-to-face communication, but can also include signs, printed materials, self-guided walks, and exhibits, which are employed by various tourism attractions, such as museums, resorts, theme parks, and zoos (Ham et. al, 2002).

Wildlife tourism experiences are often accompanied by conservation-themed interpretation, which aims to educate tourists on issues facing the species and ecosystems they encounter and to develop their appreciation of natural habitats and wildlife populations (Ballantyne et al., 2009). Strategic interpretive planning strategies are rooted in the theory of reasoned action (Fishbein and Ajzen, 1975) and the theory of planned behaviour (Ajzen, 1991). These theories assert, “that much human behaviour, or at least behavioural intent, is consistent with our attitudes, and that these attitudes are consistent with our beliefs” (Ham et al., 2002, 39). Therefore, interpretive messages must be designed to enhance pro-conservation knowledge and attitudes amongst visitors who may change their beliefs and behaviors if they take this information with them when they

return to their everyday lives (Newsome et al., 2004). This study conducted individual interviews in order to collect and analyze tourist experiences and to explore the implications of shark tourism on the awareness and support of conservation efforts for the species amongst participants.

### *Cognitive Dissonance and Affective Domain*

Designing an effective education strategy is complicated due to various factors, including different group sizes, demographics, and the fact that tourists are often non-captive audiences. According to Ham (1992), non-captive audiences are internally motivated for intrinsic rewards, such as self-enrichment and satisfaction, whereas captive audiences are motivated by tangible rewards, such as grades or certificates. Moreover, non-captive audiences, such as tourists, are often voluntary audiences, meaning they have the option of “ignoring the information without punishment or loss of a potential reward” (Ham, 1992, p. 6). Therefore, if the information tourists’ encounter is not appealing or gratifying, they will lose interest and not pay attention. In order to hold the attention of non-captive audiences, Ham asserts that interpretative approaches must be pleasurable, relevant (meaningful and personal), organized, and themed (1992, p. 8). Moreover, successful interpreters must understand their audiences in order to tailor their communication methods accordingly.

Free-choice learning does not take place in formal education settings, but rather, occurs under the control and choice of the learner, such as the environmental learning within tourism experiences (Ballantyne & Packer, 2011, p. 202). Tourism and leisure settings are “a medium through which people can acquire knowledge, develop ideas, and construct new visions for themselves and their society” (Falk et al., 2012, p. 910). These

free-choice learning experiences “rely on their ability to connect visitors with the natural environment” (Ballantyne & Packer, 2011, p. 204). Past studies have shown that free-choice learning influences visitors’ knowledge about wildlife and the environment, as well as their beliefs, attitudes, and intentions regarding conservation (Ham & Weiler 2002; Powell & Ham 2008).

According to Moscardo and Pearce (1986), interpretation must have “both an entertainment and a pedagogic role” (p. 90). Moreover, environmental interpretation must stimulate enthusiasm and emotion while also providing an educational experience. Educational models are often built on the premise that learning involves “the resolution of a cognitive conflict” (Luck, 2003, p.945). Moreover, when two elements are inconsistent or unsupportive of one another, this causes psychological discomfort, which in turn motivates learning (Luck, 2003). Festinger (1957) call this process cognitive dissonance, which can be deliberately used by interpretation programs in order to motivate participants to resolve this conflict (Luck, 2003). Moreover, cognitive dissonance is the process by which tourists gain new knowledge on how to improve environmental quality, which often challenges their existing beliefs; however, this knowledge alone will not always motivate tourists to take action (Iozzi, 1989).

Along with cognitive dissonance, interpretation must also interact with tourists’ affective domain. The affective domain includes feelings, attitudes, emotions, and values, and therefore, can be appealed to in order to illicit empathy for marine life (Luck, 2003; Zeppel, 2008). Moreover, the affective domain is the entry point of the learning process, as it is the source of one’s feelings and therefore, the motivation to act (Iozzi, 1989).

Appealing to the affective domain is essential to environmental education models in that

it is “effective in teaching positive attitudes and values (Iozzi, 1989, p. 4). This assertion stems from Eiss and Harbeck’s (1969, as cited in Iozzi 1989) learning model that claims an individual’s response to the environment is effected by affective, cognitive, and behavioral domains. Despite this argument, many environment programs have solely emphasized the cognitive domain, and not the way people feel about the environment (Pooley & O’Connor, 2000, p. 713). Pooley and O’Connor’s (2000) study on the sources of information in which environmental attitudes are based found that both cognition and affect are essential in working to change environmental attitudes and beliefs, and that relying solely on environmental knowledge hinders environmental education efforts (p. 719). Moreover, both “enhanced visitor knowledge and empathy” or in other words, eliciting both cognitive and affective responses from tourists, are “necessary for effective environmental learning in free-choice settings such as wildlife tours” (Zeppel, 2008, p. 13).

### *Environmental Education Models*

Forestell and Kaufman (1990) reviewed literature on cognitive psychological theory in order to develop a model for successful environmental interpretation programs. To develop the model, the researchers studied visitors of whale-watching tours in Hawaii in order to determine the types of knowledge they acquired from interpretive talks (Forestell Kaufman, 1990). A key principle of the Forestell and Kaufman model is that in order to be the most effective, tour experiences should be both direct and guided (Luck, 2003). Moreover, tours should involve real-life situations, such as directly observing wildlife, but should also be accompanied by a knowledgeable guide, in order to direct the

experience. An effective ‘direct guided experience’ would first instill excitement or curiosity in tourists, and would then provide that needed information in an engaging manner (Luck, 2003, p. 946). Moreover, the motivation to learn is produced by “creating a perceived need for information in the tourist” (Orams, 1996, p. 85). Following contact with wildlife, Forestell and Kaufman recommend follow-up activities, such as calls for signing petitions and making information available to participants, in order to solidify the environmental information they encountered and increase the chances of behavioral change (Luck, 2003, p. 947).

Orams (1996) built on Forestell and Kaufman’s model in order to develop a framework for environmental education programs, which not only focuses on theories of cognitive dissonance, or the resolution of competing information, but the affective domain as well (Luck, 2003). The Orams model is based on five major steps: (1) instilling curiosity or a desire to learn (2) appealing to the affective domain (3) creating the motivation to act (4) providing opportunities to act (5) receiving evaluation and feedback (Orams, 1997, p. 298). In summary, participants must be presented with information that challenges their existing knowledge and peaks their curiosity (cognitive dissonance); they must have their emotions aroused in order to illicit feelings of empathy or care; and they should be given a chance to act in order to reaffirm these newfound beliefs or outlooks. In order to measure the effectiveness of an education program designed to meet these five criteria, Orams (1997) conducted a study in Tangalooma, Australia where he surveyed tourists who were given an opportunity to feed a group of wild dolphins (p. 298). To gauge tourist satisfaction and desired behavioral change, Orams used the following five indicators to guide his questions: enjoyment, knowledge,

attitude, intentions to change behavior, and behavior change (Orams, 1997, p. 298).

This study applied Orams' indicators of enjoyment, knowledge, attitude, and intentions to change behavior in order to understand tourist experiences, and also employed Orams' framework to comment on the design of the educational programs of Gansbaai's shark diving tours, as described by visitors. Since this study is concerned with understanding the experience of shark diving from the perspective of tourists in Gansbaai, it focused solely on the cognitive and affective domains, and did not explore behavioral changes or actions that tourists took following their participation in shark tourism, as these actions occurred outside of the phenomenon being examined.

### **Rationale**

Ecotourism has emerged as the fastest growing sector of the tourism industry, growing three times faster than the industry as a whole (Neil & Wearing, 2013, p.6). More and more individuals are choosing to make environmentally sensitive travel decisions, which reflects a shift in the way tourists view and engage with nature (Lew, 2008; Neil & Wearing, 2013). This original research study was undertaken to understand and explore this emerging type of tourism, and more specifically, shark tourism as a category of wildlife ecotourism. Forms of wildlife ecotourism that provide visitors with the opportunity to observe endangered or rare species are being offered in a growing amount of destinations, and the perceived risk associated with shark encounters appeals to this growing market (Ballantyne et al., 2008, Dobson, 2008). The allure of shark tourism appeals to people worldwide (Gallagher et al., 2011), and due to the increase in

pressures on the species (Jacques, 2010), exploring whether or not the industry can promote conservation is of utmost importance.

This study is therefore an extension of the research that has begun to take place in the areas of ecotourism, and more specifically, shark tourism, and the process of environmental interpretation. This study not only fills a gap in the ecotourism and free-choice learning literature, but it also breaks new ground by examining shark tourism, a newly emerging form of niche tourism, from the tourist's perspective. Shark tourism is an emergent form of wildlife ecotourism, and therefore, remains largely unexplored. Past studies have focused on online marketing and framing of tours (Gore et al., 2011, 2013), the economic value of the industry (Brunnschweiler, 2010; Gallagher & Hammerschlag, 2011, Vianna et al., 2012), and the role of law and policy regulation within the industry (Techera & Klein, 2013) While the assertion that shark tourism has the potential to instill pro-conservation knowledge in tourists has been speculated on (Whatmough et al., 2011; Topelko & Deardon, 2005), an exploratory study of the experiences of shark tourism visitors and the process of interpretive communication has not yet been carried out. Gansbaai, South Africa is one of the world's most popular destinations for diving with the great white shark and is the birthplace of this emergent form of niche tourism (Hara et al., 2003). Consequently, a phenomenological study exploring the perceptions and experiences of tourists is relevant and important to the development of a deeper understanding of this phenomenon.

Environmental education is still a young and emerging area thus research conducted in the field is very valuable (Iozzi, 1989, p. 4). The purpose of this research was to understand and describe the experiences of tourists who participated in Gansbaai's

shark diving industry in order to comment on the environmental education models of these tours and process of interpretation. The ultimate objective of this study is therefore to investigate the role Gansbaai's shark tourism industry played in the dissemination of environmental knowledge and promotion pro-conservation attitudes amongst tourists. As a result, this study's central research question and subquestions were designed to contribute to an understanding of the phenomenon under study and to explore the effectiveness of ecotourism interpretation programmes.

Assessing the effectiveness of ecotourism interpretation programs has the potential "to increase visitor enjoyment and understanding, and prompt more environmentally sustainable behaviour" (Orams, 1997, p. 296). Moreover, the findings of this study provide ecotourism operators with insight into tourist experiences, which may allow for the improvement and development of their services to align with visitor expectations. Additionally, just like museums, zoos, and aquariums, ecotourism and wildlife tourism experiences have the ability to "inspire, educate, and influence large numbers of visitors" (Ballantyne & Packer, 2011, p. 202). Environmental education through ecotourism experiences has a positive influence on environmental conservation, and therefore, it is "important to measure the extent of environmental learning at ecotourism sites and the impact of such learning on values of tourists and upon their future conservation behavior" (Tisdell & Wilson, 2005, p. 292).

In summary, the relative dearth of scholarly literature on the effectiveness of ecotourism interpretation programmes from the perspective of visitors, in addition to the very few studies on shark based tourism that have been undertaken to date, point to the timeliness, suitability and value of this research. In effect, exploring the shark tourism

industry in Gansbaai as an emergent form of wildlife ecotourism, is an original, contemporary and relevant area of study on a topic of public interest and importance.

### **Chapter 3: Methodology**

This chapter provides a summary and justification of the methods adopted for this study, addressing the aspects of the qualitative research design, selection of data, role of the researcher, data collection, data analysis, trustworthiness, and ethics.

#### **Research Design**

A qualitative phenomenological research design was employed for this study. Qualitative research, in general terms, is a naturalistic, intensive, and interpretive approach to studying phenomena (Denzin & Lincoln, 1994). Moreover, in qualitative research, researchers view the world as being socially constructed and emphasis is placed on the meanings that individuals bring to their experience of the social world (Denzin & Lincoln, 1994). Therefore, by employing a phenomenological study, the researcher was able to explore and describe the experiences of shark tourism participants, and was subsequently able to apply these findings to the larger phenomenon of the educational interpretation programs of ecotourism activities.

This qualitative research study is rooted in the philosophical traditions of phenomenology, which questions “the structure and essence of lived experience” and hermeneutics, which questions “the conditions that shape interpretations of human acts or products” (Rossman & Ralis, 2003, p. 7). The qualitative approach taken for this study is phenomenological in nature, as it seeks to gain insight into the lived experiences of participants in shark tourism. Phenomenological studies investigate the lived experiences of a small number of people in which the researcher seeks to “understand the deep meaning of a person’s experience” and how these experiences are articulated (Rossman

& Ralis, 2003, p. 97). Therefore, emphasis is placed on "the world as lived by a person, not the world or reality as something separate from the person" (Laverly, 2003, p. 24). The purpose of phenomenology is to "reduce individual experiences with a phenomenon to a description of the universal essence" (Creswell, 2007, p. 58).

Phenomenology is recommended by several authors as the most appropriate approach for gaining a deeper understanding of lived tourist experiences (for example, DeMares & Krycka, 1998; Suvantola, 2002; Curtin, 2006). Experience "is an integral component of the tourism product", and therefore, phenomenological approaches in tourism are gaining momentum (Pernecky & Jamal, 2010, p.1056). In order to better understand the experience of environmental learning in ecotourism, tourists' perspectives of this phenomenon must be understood. Moreover, a phenomenological approach is best suited to uncover "the essential qualities of a tourism learning experience, as perceived by tourists" which is the intent of this study (Winkle & Lagay, 2012, p.343). It is important to note that phenomenological approaches in tourism studies often "misleadingly insist on a subjective-objective" in that they attempt to bracket out the researcher's perception of the phenomena under study (Pernecky & Jamal, 2010, 1057). This study differs in that it is guided by hermeneutic phenomenology, as the researcher sought to interpret and understand the lived experiences for participants, and searched for meaning by interpreting both theory and data (Pernecky & Jamal, 2010, p. 1067).

Gadamer (1989) built upon the philosophical underpinning of Heidegger and argued that it is not possible for the researcher to bracket their perceptions of the phenomenon under study because understanding and interpretation are inextricably bound. In other words, the construction of experiences is not one-sided –there is a

dialogic interaction between the researcher and the interview participants wherein the participant attempts to make sense of their experience in order to share it with the researcher, and the researcher also attempts to reconstruct the experience being shared through their interpretation and understanding (Pernecky & Jamal, 2010, p. 1068).

Therefore, in hermeneutic phenomenology ‘truth’ is not objective nor can it be verified, it is an interpretive construct (Pernecky & Jamal, 2010, p. 1068). Therefore, in order to assess the truth presented by hermeneutic phenomenology study, readers assess “the trustworthiness or credibility of the researcher’s interpretation of the participant’s experience” (Pernecky & Jamal, 2010, p. 1068). It is argued that a hermeneutic phenomenological approach is especially appropriate in tourism studies, as the researcher lives in the world of tourism, possibly as a tourist, resident, or enterprise owner, and has an ongoing “relationship with the objects and things in local or global tourism” (Jamal & Hill, 2002).

Through the examination of shark tourism in Gansbaai, the researcher seeks to understand the larger phenomenon of ecotourism and environmental communication. It is important to note that since the researcher focused on a specific occurrence of ecotourism in a defined area, it is difficult to generalize in probabilistic sense (Rossman & Ralis, 2003). However, findings can be applied from one specific group or occurrence to a broader population or phenomenon “believed or assumed to be sufficiently similar to the study sample that findings apply there as well” (Kennedy, 1979, p. 665). In this research study, shark tourism was selected in order to understand the issue of environmental learning during ecotourism activities, and the South African shark tourism industry served as the case to explore this specific issue in-depth. This study is significant in that

hermeneutic phenomenological approaches enable researchers to thoroughly “study experience, understanding, and meaning in tourism”, yet this methodological framework remains largely unexplored in tourism studies (Pernecky & Jamal, 2010, p. 1055).

### **Data Selection**

In qualitative research, sampling strategies are purposeful rather than random (Rossman & Ralis, 2003). Purposeful sampling entails that the researcher has “reasons for selecting specific participants, events, or processes” (Rossman & Ralis, 2003, p.137). In this study, Gansbaai, South Africa was chosen as the case for its novelty and the emergent nature of its diving industry, as it is one of the few regions in the world to present tourists with the opportunity to dive with great white sharks. Gansbaai is referred to as “The Big 2 Town” as it is home to both the great white shark (*Carcharodon Carcharias*) and southern right whale (*Eubalaena Australis*) (Weisel, Chivell, & Gottfried, 201 p. 184). It is one of the major aggregation sites for great white sharks (Peschak & Scholl, 2006) and is where the shark cage-diving industry first emerged (Hara et al., 2003). Additionally, Gore et al.’s (2012) study identified South Africa as one of the most popular shark tourism destinations in the world through their analysis of global shark tourism websites. Moreover, this case highlights an emergent form of wildlife tourism industry that allows for the observation of an endangered species, and explores whether the environmental communication encountered by visitors holds the potential to contribute to pro-conservation attitudes and beliefs.

The strategy for the purposive selection of participants employed by this study is convenience sampling. This study employed a convenience sampling method, as the

researcher recruited participants on a volunteer basis by contacting TripAdvisor reviewers of shark tourism attractions in Gansbaai. Established in 2000, TripAdvisor is the most popular online travel community, with over 47 million monthly visits and 20 million members (Lee et al., 2011). TripAdvisor users provide written reviews of various hotels, restaurants, and tourist attractions, as well as rating/recommendation scores (Lu et al., 2012). Therefore, the plethora of travel reviews on TripAdvisor allows for efficient and cost effective access to participants of shark tourism activities in Gansbaai. However, it is important to note that with absence of incentives to review activities, participants with a moderate outlook often do not voice their opinions on review sites, causing the obtained sample to be unrepresentative of all experiences (Jurca et al., 2010).

TripAdvisor uses reviews to rank the top rated attractions in a specific region, and these top-rated attractions tend to have more reviews than other attractions (Lee et al., 2011). Therefore, the researcher contacted 30 of the latest reviewers of the three top-ranked shark ecotourism operators in Gansbaai, South Africa, as this helped to generalize the results in the region (Lee et al., 2011). The 30 most recent reviewers of each of the selected shark tourism operators were contacted in order to limit ‘the memory effect’ by interviewing tourists have recently participated in shark tourism (Lu et al., 2012). The researcher contacted each reviewer individually by using TripAdvisor’s ‘private message’ feature, explained the goals of her study, and inquired whether the reviewer would be interested in participating in an interview via Skype, FaceTime, or the telephone. Upon expressing interest in the study, potential participants were screened in order to ensure they met the following criteria for inclusion in the sample; participants

had to speak English, be above the age of eighteen, and have participated in their dive within the past 12 months.

### **Role of the Researcher**

The researcher has a prominent role in qualitative research, since the researcher is the primary instrument for gathering and analyzing data (Merriam, 1988). Furthermore, the researcher plays an interpretive role in the study, as the “criteria of representation ultimately are decided by the researcher” (Stake, 1994, p. 240). In qualitative research the topic of study, the formulation of its key research questions, and data collection and analysis are influenced by the researcher’s personal views, biases, and background. Nevertheless, due to this study’s phenomenological approach, the researcher focused on the description of experiences according to the depictions provided by participants, and less on her own interpretations (Creswell, 2007).

It is important to address that phenomenological approaches in tourism studies often attempt to bracket out the researcher’s perception of the phenomena under study in order to present objective findings or truth (Pernecky & Jamal, 2010, 1057). This study will differ in that it will be guided by hermeneutic phenomenology, as the researcher sought to interpret and understand the lived experiences for participants, and searched for meaning by negotiating through both theory and data (Pernecky & Jamal, 2010, p. 1067). In accordance with the hermeneutic phenomenological framework of this study, the role of the researcher was not minimized, as the construction of experiences is not one-sided, since understanding and interpretation are bound together (Pernecky & Jamal, 2010). The researcher has not participated in shark tourism activities being studied, nor is she

involved in the planning, promotion, or development of the shark tourism industry, and has never travelled to the region under study. However, the researcher is embedded in the world of tourism, as both a tourist and resident, and therefore is unable to completely separate herself from the phenomenon under study. Additionally, the researcher has preexisting knowledge and interest in global shark conservation; therefore, her perception of the species may have played a role in the interpretation of the phenomenon.

### **Data Collection**

In order to gain insight into the global shark tourism niche market, the researcher interviewed participants of shark tourism activities in Gansbaai, South Africa. Qualitative interviews allow researchers to understand and richly describe experiences that they did not participate in (J. Rubin & S. Rubin, 2005) and provide multiple views and realities of a specific case (Stake, 1995). Qualitative interviews were employed for this study because it sought to understand experiences that occurred prior to the start of the research, and could thus not be witnessed directly by the researcher. Secondly, the study focused on the points of view of participants in the shark tourism industry, which can most easily and accurately be obtained through the conduct of in-depth interviews. Phenomenological studies typically involve in-depth interviews with a small number of individuals (3-10) who have experienced the issue under investigation (Creswell, 1998). The researcher conducted eight in-depth, one-on-one interviews with shark tourism participants. The interviews were conducted over FaceTime, Skype, video calling, or the telephone. In total, four interviews were carried out over FaceTime, two over Skype video calling, and two over the phone.

Phenomenological interviews use open-ended questions and probes in order to create an informal and interactive environment (Moustakas, 1994). The role of the interviewer in hermeneutic phenomenological studies is to lead respondents to certain themes and to clarify ambiguities in responses without directing them to express specific meanings (Kvale, 1983). Consequently, to carry out the interviews, the researcher developed an interview guide (see Appendix B: Interview Guide), which contained twelve open-ended questions to help guide the discussion. The interviews were semi-structured and aimed to be of an approximate duration of thirty minutes. The average length of the interviews was twenty-nine minutes and six seconds. Interviews were conducted over a four-month period, from February 2014 to May 2014, and were audio recorded, and transcribed verbatim. Participants were given the opportunity to review their transcripts for the accuracy, and one out of the eight participants chose to do so, but no modifications were made.

### **Data Analysis**

Phenomenological analysis “requires that the researcher approach texts with an open mind, seeking what meaning and structures emerge” (Rossman & Rallis, 2003, p. 296). Moreover, when analyzing interview data, the researcher is focused on the development of the themes that make up the participants’ experiences (Van Manen, 1990). Hermeneutic analysis begins with a thorough exploration of interview data to identify predominant themes in which the narrative accounts can be “meaningfully organized, interpreted and presented” (Patterson, 1998, p. 423). The researcher read participant narratives several times in order to gain understanding of the experiences in

their entirety before more deeply exploring and identifying individual themes (Pernecky & Jamal, 2010).

This study followed Moustakas phenomenological approach (1994) in analyzing the participants' transcripts. Using this method, all transcripts were read over and significant statements that "provide an understanding of how participants experienced the phenomenon" were highlighted (Creswell, 2007, 61). According to Moustakas (1994), the process of identifying these significant statements is known as horizontalizing. During this process, the researcher must pull out statements that a) contain a moment of experiences that constitutes sufficient understanding of the phenomenon and b) are possible to extract and label (Moustakas, 1994). Any expressions that did not meet these requirements were not extracted.

After pulling out significant statements, meanings were formulated and clustered into categories, allowing for the development of common themes shared amongst participants (Creswell, 2007, p. 61). The thematic categories were not developed in advance, but instead arose ad hoc during the analysis of transcripts (Rossman & Rallis, 2003, p. 296). This process of thematic coding enabled the researcher to identify patterns in participants' perspectives and ways of thinking (Berger, 2000, p. 122). Finally, the researcher used the identified statements and themes to write a textual description of the participants' experience and a composite description of the essence of the phenomenon (Creswell, 2007, p. 61-22).

### **Trustworthiness**

All research, even qualitative research, is concerned with validity, or in other words, in ensuring that data has been properly collected and analyzed “so that the conclusions accurately reflect and represent the real world” (Yin, 2011, p.78). Moreover, even studies that pose a relativist stance, “holding that no single reality exists” still need to be concerned with validity (Yin, 2011, p. 78). Joseph Maxwell (1996), who has written extensively on qualitative research, defines validity as the credibility of a description, interpretation, conclusion, or account. Multiple strategies were employed to ensure the validity and trustworthiness of this qualitative case study, and to contribute to the credibility of its findings, notably the identification of the researcher’s biases, respondent validation, and thick description.

Firstly, to ensure validity, the “bias the researcher brings to the study” must be identified (Creswell, 2009, p. 192). As previously stated, although the researcher has no direct involvement or stake in the phenomenon being studied, she is embedded in the tourism industry as both a tourist and resident, and is passionate about shark conservation and environmental education. Therefore, this study focused on both the rich description of experiences, as described by participants, and the interpretation of the researcher through the theoretical lens of environmental interpretation and free-choice learning.

In order to ensure the accurate and consistent representation of the population under study, the researcher checked interview transcripts to ensure that no obvious mistakes were made during transcription (Creswell, 2009, p. 192). Additionally, reliability can be compromised if there is “drift in the definition of codes”; therefore, data was constantly compared with emerging codes through the “writing [of] memos about the

codes and their definitions” (Creswell, 2009, p. 192). The researcher also used thick description (Geertz, 1983) or in other words, a highly detailed account of the phenomenon that “moves the interpretation away from researcher-centric perspectives” and instead focuses on portraying people, events, and actions (Yin, 2011, p.213). Thick descriptions helps “transport readers to the setting”, giving them a reliable understanding and experience of the phenomenon (Creswell, 2009, p. 192). Furthermore, the researcher used peer debriefing “to enhance the accuracy of the account” by asking her thesis supervisor and colleagues to review the description of the phenomenon and pose questions in order to ensure the account resonated not just with the researcher, but all readers (Creswell, 2009, 192).

### **Ethics**

It is important for researchers to anticipate any ethical issues that may arise during their research, as they need to “protect their research participants; develop trust with them; [and] promote the integrity of research” (Creswell, 2009, p. 87). Importance was given to ethical considerations throughout the qualitative research process. An ethics application was submitted for review in October 2013 to the Social Sciences and Humanities Research Ethics Board of the Office of Research Ethics and Integrity of the University of Ottawa, and was given approval in January 2014. Ethical consideration was given to the qualitative interviews used for data collection. The interviews were all conducted with participants on a voluntary basis. An informed consent form was orally read to participants, who were required to provide verbal consent prior to engaging in the interview. The consent form outlined the purposes of the study, the details of interview

participation, and informed participants that they were able to withdraw from the study at any time without suffering negative consequences. As mentioned previously, participants were given the opportunity to review their interview transcripts for accuracy, and one out of the eight participants chose to do so, but no modifications were made.

The anonymity of participants was guaranteed during this study, and no personal information was collected beyond what participants chose to make publicly available on their TripAdvisor profile. During the presentation of data analysis and interpretation, interviewees' names, if known, were protected through the use of pseudonyms. The names of the operators at which participants toured with were kept confidential, but anonymity is not guaranteed due to the finite number of dive operators present in Gansbaai. In order to ensure confidentiality, only the researcher and the supervisor had access to participants' interview responses.

The benefits of the study for participants outweighed the risks as no known risks and/or discomforts were associated with the study. Participants simply volunteered their knowledge, perceptions, and opinions of their past experiences with shark tourism. Participants benefited from having the chance to take part in a qualitative case study, as it provided them with the opportunity to reflect back on their tourism experience and contribute to investigating a model of successful environmental education within tourism. Additionally, the results of this study hold the potential to improve wildlife tourism experiences for visitors, as well as to improve the dissemination of environmental and pro-conservation knowledge.

## Chapter 4: Findings & Analysis

This study's data source consists of in-depth interviews with individuals who have travelled to Gansbaai, South Africa in the past year, and have participated in shark ecotourism activities with great whites. Four males and four females were interviewed for this study. Two individuals were from Canada, three were from the United Kingdom, and three were from the United States. In order to protect the anonymity of individuals participating in this study, no other personal information was gathered, and names will not be disclosed.

A brief contextual description of the case study is presented first, which looks at the reasons behind the selection of Gansbaai, South Africa for this case study and the region's growth as a popular destination for shark ecotourism. Subsequently, using the data analysis strategies outlined in the methodology chapter, the presentation of participant accounts is organized by the sub questions that guided the study. The research questions are ordered chronologically, starting with the thematic categories that relate to the tourist's initial decision to partake in the shark ecotourism, followed by participants' perception of risk in regards to the ecotourism experience. Finally, the study explores the themes identified in participants' detailed accounts of their ecotourism experience, including the environmental information participants acquired, the emotions they felt, and any self-reported attitudinal changes they had towards the species. Both the contextual description of the case study and the description of narrative accounts are linked to the scholarly literature reviewed in Chapter 2 in order to gain further insight into the findings.

*Contextual description*

Gansbaai, South Africa is often referred to as ‘The Big 2 Town’, which refers to the presence of both the great white shark, and southern right whale populations that can be observed off its coasts. Gansbaai is recognized as one of “the main aggregation sites for great white sharks” and consequently, is where the industry of great white shark diving was born (Wcisel et al., 2010, p. 184). Participants mentioned the geographical features of the region as a reason for the presence of shark ecotourism in Gansbaai. Prior to the dive, one participant recalled a staff member explaining why so many great whites were present in the area, “which has a lot to do with Dyer Island and all the seals” (Participant 6). Interview participants stressed how the narrow waterway and abundant seal population was the perfect breeding ground for sharks, with one participant emphasizing “we drove right up between the islands and they’re not very far apart [...] you could see the seals getting into the water and swimming around [...] we went out there and saw why its called shark alley” (Participant 5). The participant went on to say “it makes perfect sense; if seals are your favourite food and there’s sixty thousand of them swimming back and forth all day long, why would you want to be anywhere else?” (Participant 5).

Shark Alley refers to the waterway between Dyer Island and Geyser Rock, where operators in Gansbaai bring tourists for their dives. Great white sharks are known to congregate close to the surface near the rocky islands, especially those in which seal colonies are present (Compagno et al., 2005). Dyer Island and Geyser Rock are located on the continental shelf 7.5 km of the coast of Gansbaai and are inhabited by seabird and

cape fur seal colonies (Sperone et al., 2014 p. 409). Over 1,500 great white sharks are present in the waters off of Dyer Island and Geyser Rock, especially during the months of March and September (Spertone et al., 2014 p. 409). Underwater visibility in the area ranges from 3 to 20 meters depending on the time year and weather, making it an ideal location for divers interested in viewing great whites (Martin, 2003). Moreover, the ecological and geographical features of the area make it “the pinnacle of shark diving locations” (Participant 5).

### *Participant Accounts*

#### **Tourist Motivations**

The first research question this thesis set out to answer is as follows: **what motivates tourists to participate in shark tourism activities?** This research question is designed to elicit data which will aid in gaining insight into the allure of shark tourism activities. This data will further aid in exploring the extent to which tourists have an appreciation and/or understanding of great white sharks prior to their participation in the tour. Three categories emerged from the interviews within the theme of motivation for participation, and will be presented in order of prevalence, with the most reoccurring category being presented first.

**“Bucket list” experience.** Some participants claimed that they chose to dive with great whites because it was on their “bucket list.” The term *bucket list* refers to “a number of experiences or achievements that a person hopes to make during their lifetime” (“Bucket List,” 2013). Diving with sharks was seen as an activity tourists wanted to

experience at least once in their lifetime. This is illustrated by the following participant's statement: "we have to go to Cape Town because I want to dive with great whites, it's a bucket list thing" (Participant 5). This theme was echoed by another participant: "so it was sort of like a bucket list thing to see great whites in the wild, that was really what our motivation was" (Participant 6). The participant went on to say that "a majority of people come to dive with sharks because it's the thing to do" (Participant 6). Another participant also felt most tourists were there in order to cross an item off their bucket list: "it was definitely a bucket list item for most people" (Participant 7).

Moreover, shark tourism experiences are coveted due to their perceived novelty as this form of tourism seems to hold epistemic value for consumers, which is why participants may deem this activity as a 'bucket list' item. Epistemic value, or novelty value, has been identified as a key component of adventure tourism experiences, and is created when "a product arouses curiosity, provides novelty and/or satisfies a desire for new knowledge (Williams et al., 2009, p. 417). The tourist motivations identified in this study are consistent with past research in the tourism industry, where epistemic value was found to be a key motive for travel (Walle 1997; Weber 2001; Zuckerman 1994). It has been argued that the ecotourism industry may often appeal to individuals already possessing conservationist beliefs (Beaumont, 2001; Hatch, 1998; Saleh & Karwacki, 1996); however, the support of shark populations or the desire to learn more about conservation efforts were not identified as the major motivations for tourists to take part in shark tourism.

***Fascination.*** A common theme identified amongst responses was that participants

described having a preexisting fascination with sharks before taking part in the tour. When describing other tourists who took part in the tour one participant said “I think it’s generally people who have a fascination with sharks and maybe don’t know a lot about it but want to learn” (Participant 3). As this participant asserts, many tourists appeared to be deeply interested in sharks they did not necessarily have a deep understanding of the species and had never participated in cage diving before. Moreover, instead of being grounded in a strong knowledge background of the species, tourists’ fascination with great whites seemed to stem from a captivation and/or respect for the apex predator. For example, Participant 8 said, “I’m fascinated, I kind of have a shark addiction of sorts”. When talking about other tourists taking part in the dive, one participant explained “everyone that I talked to that was on that trip, this was a first-time, kind of once in a lifetime, just you know they had seen it on National Geographic or TV and they just wanted to experience it” (Participant 5). Participants’ past media exposure to great whites, most notably as seen on television, stirred feelings of curiosity and captivation, which motivated them to partake in the dive.

The negative portrayal of sharks in the media, specifically the popular film *Jaws*, seemed to play into tourists’ fascination and desire to learn more about the species. This is illustrated by an interview subject who observed: “Well basically when I was little I saw *Jaws* and I was terrified of sharks and then I don’t know, as I got older I wanted to know more about them [...] then became fascinated with them” (Participant 3). This statement demonstrates the role fear played in the participant’s desire to learn more about the species. Similarly, another participant referenced *Jaws* when describing their fascination with the species: “great whites of course have this mythical aspect...my

language is escaping me here, but you know, there's that movie *Jaws*" (Participant 5). Moreover, the unprovoked, aggressive behavior associated with great whites in movies like *Jaws* has fueled tourists' curiosity to acquire a better understand the species. In this vein Slovic (2000) asserts that shark attacks force humans to question whether oceans are safe for recreation, and in turn fuel their "fascination with these fear-inducing creatures of the deep" (p. 1119). In other words, many individuals find great whites alluring due to their fascination and desire to learn more about such an evasive predator.

Brady (2011) has researched extensively on the human fascination with species that possess negative or unattractive attributes. To illustrate the human fascination with 'ugliness' or negative qualities, Brady describes a wildlife writer and photographer's captivation with the aye-aye lemur, a "beguiling" and even "revolting" looking creature (2011, p.83). The uniquely unattractive or negative aesthetic qualities of the aye-aye lemur were found to be fascinating. Brady asserts that ugliness, whether displayed in physical aesthetics or negative actions, will cause "negative feelings such as uneasiness, distaste, dislike, revulsion, but also fascination" (2011, p. 83). This phenomenon can be seen more clearly in acts of predation, as they "display positive aesthetic qualities, such as the remarkable, graceful action of a cheetah chasing a gazelle" (Brady, 2011, p. 89). This action puts the cheetah in both beautiful and ugly light: "the grace of the chase and the bloody attack of the kill" (p. 90). This example illustrates that animals that are either physically unattractive or have horrific qualities, can also possess beautiful aspects that humans find fascinating (p. 90). Therefore, while the occurrence of shark attacks associates the species with negative or unattractive attributes, these attacks paradoxically also attribute the species with attractive and appealing characteristics, such as strength

and grace, which fascinate and captivate audiences.

*Adventure.* Many participants described their decision to take part in shark tourism activities as motivated by a sense of adventure. Diving with great whites was viewed as being both an exciting and daring opportunity. The desire to embark on a wildlife adventure was a prevalent theme, as described by the following participant: “my sense was that most people were probably just there because it was a really big adventure” (Participant 2). One participant traveled with her husband to South Africa specifically to cage dive with great whites and her rationale for doing so was “that’s our big thing; scuba diving, snorkeling, anything adventurous to do with the ocean, and that’s the one thing we hadn’t done” (Participant 1). Similarly, another participant described her decision to participate in a shark dive as follows: “I’m not that big on getting into the ocean but my partner was like ‘It’ll just be exciting’ so I said you know me I’m in on any animal adventure, we also did the walk with the lions [...] so I just like to get into every animal adventure I can” (Participant 2). The above participants describe their sense of adventure as a major motivation for taking part in the shark dive.

Participants appear to consistently associate an element of risk with the shark tourism industry. One participant, who had travelled to South Africa with family before, had not even planned to take part in the shark dive because of how daring she viewed the experience to be: “I thought to keep them excited, I would add this shark dive experience, which was just going to be for them. I was just going to watch because I’m not a brave person” (Participant 4). These findings are consistent with Cater’s (2006) research on adventure tourism, particularly the observation that “on entering into an adventure,

participants play with their fears” (Cater, 2006, p. 322). Moreover, while it is generally an aspect of human nature to eliminate risks in our professional and day-to-day lives, Cater argues that when it comes to leisure pursuits, “we are more likely to accept the presence of risk” (Cater, 2006, p.318). Perceived risk is a key element of adventure tourism, and is discussed more thoroughly later in the analysis.

Shark tourism presents the opportunity to have a close encounter with an apex predator, and consequently, may appeal to tourists who are seeking a wildlife adventure. While shark tourism is a form of ecotourism, cage diving with great whites illustrates the fluid nature of the ecotourism industry, which overlaps with other tourism industries, such as adventure tourism. Sharks, in particular great whites, are often perceived as threatening animals (Davey et al. 1998), and therefore, “shark diving is generally considered a high-risk behavior” (Lapinski et al., 2013, p. 736). As a result, shark tourism does not solely attract participants who have pro-conservation values or attitudes and are seeking out environmentally educative activities.

Many participants in this study expressed they were seeking out an adventurous experience, as opposed to an environmentally responsible activity, and this seemed to be a reoccurring motivation for tourists; “it definitely just seemed like a lot of people who happened to be in the area, saw it is an activity for the day and gave it a whirl” (Participant 8). Interestingly, while the risk associated with the species may serve to draw participants to shark-based ecotourism activities (Dobson, 2008), public perception of wildlife as posing a high risk has also been linked to the impediment of conservation efforts and policy in support of the sustainable management of the species (Muter et al., 2009).

### **Risk Perception**

The second research question is as follows: **How do tourists perceive the risks involved in diving with great whites?** This research question was designed to gain insight into how the risks tourists may associate with species contribute to the thrill of the dive, and whether the tourists' risk perceptions of this apex predator prevent them from supporting the conservation of great white populations. Two categories emerged from the interviews within the theme of risk perception; the risks associated with the species, and the risks associated with the tour, and will be presented in that order.

*High risk perception of the species.* Human-wildlife conflict (HWC) can occur when wildlife poses risks to human safety or wellbeing, personal property, agriculture, or other species viewed to hold value (Muter et al., 2009, p.366). Perceptions of wildlife risks shape the public's attitudes, and beliefs towards certain species, and ultimately, can impact the amount of support received for wildlife management (Muter et al., 2009, p. 366). Examining participants' risk perceptions associated with great whites is important in order to understand what influence these perceptions could have on shark conservation efforts. Moreover, existing risk perceptions held by tourists need to be acknowledged and considered during the planning of environmental interpretation programs in order to construct messaging aimed at dispelling these views.

Many participants in this study associated a high perception of risk with great whites. For example, one participant admitted he agreed to go on the dive because his partner wanted to dive with great whites, but upon arriving, was nervous to participate. The participant stated, "we got down there and he started watching some of the videos

and I was like uh I don't know if I could do this" (Participant 5). Moreover, watching videos of past tour footage intimidated the participant, making him doubt whether he had the courage to get in the water with the apex predator. Similarly, another participant, who had travelled to South Africa with her family several times before, booked the shark dive for her children "to keep them excited" but admitted she was not planning to join them: "I was just going to watch because I'm not a very brave person" (Participant 4). This response echoes the reoccurring theme of risk associated with great whites, as the participant described the shark dive as an experience that would captivate her children, but that was too daring for herself. Moreover, the risk associated with the species was viewed as enthralling for a younger, more thrill-seeking tourist, but potentially too perilous for the participant. One participant recalls shaking so badly on the boat before the dive that one of the crewmembers asked if she was cold or scared, to which she responded "both" (Participant 2). The participant went on to say that her husband "didn't even want to go in" (Participant 2).

The high level of risk participants associated with great whites made participating in the dive seem like an intimidating and frightening experience. Due to these preconceived notions held by tourists regarding the species, the shark dive can not be viewed narrowly as an ecotourism experience, as it also holds adventure tourism attributes. In other words, while the shark operators in Gansbaai are ecotourism ventures, illustrated by their support for and adherence to sustainable management efforts, the risk and allure that is so commonly associated with great whites is very much reflective of activities seen within adventure tourism market. The risks described by participants are consistent with Carnicelli-Filho et al.'s study (2010) of adventure tourists in Brazil,

where imaginary fear played a role “in the moments long before the activity” or “immediately before the activity” as tourists imagined what could happen (p. 955). In their study, the level of fear tourists reported feeling before the activity depended on their ability “to imagine what the activity they would be practicing for the first time would feel like” or what accidents they foresaw happening (Carnicelli-Filho et al., 2010 p. 955). Similarly, the responses of participants in this study illustrate their imaginary fear, based upon their risk perception of the species.

The initial hesitancy to get into the water with such a large animal was voiced by most participants; however, the fact that the dive took place in an enclosed cage provided participants with reassurance. Participants seemed to feel a sense of security while being in the water with great whites because they were diving in the confines of a cage. One participant, who had dove with other shark species in the past, felt that a cage was needed when dealing with great whites:

You absolutely need the cage there because they are more aggressive and whatever but I didn't feel unsafe at all, the cage was pretty sturdy and pretty big, and I had no safety concerns. (Participant 6)

Participants seemed to have a strong risk perception associated with great whites prior to their tour, which is demonstrated by the importance placed on diving within the confinements of a cage as opposed to free diving. Interestingly, while great whites are viewed as having the potential to cause harm to humans, tourists still decided to take part in the shark dive. According to Buckley (2011), adventure tourists “pay for risk

recreation activities” while tourism operators “aim to minimize risks” (p. 961). Buckley calls this the risk/rush paradox, and asserts that is the main motivation for adventure tourists. Therefore, tourists seeking adventure are not motivated by risk itself, as tourism activities only hold a semblance of risk, but instead, are after the emotional experience of a rush (Buckley, 2011, p. 961). Buckley defines the sensation of rush as a combination of both flow and thrill, whereby flow entails being “intensely absorbed” mentally in a physical activity, and thrill is defined as a “purely adrenalin based physiological response” (2011, p. 963). Moreover, while many participants admitted to being fearful of great whites, they still felt safe enough to participate in the tourism experience.

*Low risk perception of the experience.* While participants felt certain safety precautions had to be taken based on their risk perception of great whites, many participants were not fearful during the dive, but rather were in awe of the species. One participant stated: “I wasn’t nervous at all; I was just absolutely fascinated” (Participant 3). Instead of being fearful of the predatory animal, the participant expressed amazement and reverence for the species ability, illustrated through the following response:

I think one of the things that helped me not be nervous is that there so graceful in the water, because they just are, amazing creatures in the water, so I think that sort of gracefulness was calming, I just wasn’t nervous. I just wanted to keep going in – it was brilliant. (Participant 3)

The participant expressed how the experience of viewing the great white’s superior

agility in the water caused them to look on in amazement, as opposed to fear. The participant seemed to be mesmerized upon seeing the species interact in its natural habitat. Similarly, another participant recalls feeling exhilaration when a great white swam towards him during the dive:

“And then all of a sudden, it’s like the ads on TV when the bait ball breaks up, and this giant animal swim up towards you. You’re shocked, in a great way.

(Participant 7)

This participant also echoes feelings of fascination and amazement upon encountering the species. Participants express feeling fortunate at having the opportunity to get up close and personal with a usually inaccessible apex predator. This finding is consistent with Ballantyne et al.’s (2011) study which found tourists who viewed turtles and whales in the wild felt “a sense of privilege” due to the opportunity be in such close proximity to the animal in its natural setting, making their experience “novel or remarkable” (p. 773) in other words, while many participants admitted to being intimidated by great whites prior to participating in the tour, the dive experience caused some participants to develop a profound appreciation of the species:

I can’t think of another example where you can get people near apex predator that gives them that type of appreciation in that sort of mass way. (Participant 8)

The following participant reflected on how the risks often associated with great whites are often overstated:

It's an intimidating experience because people talk about how dangerous they are but I think the worst thing that anyone did was make that movie, *Jaws*. It turned people into shark fearing. (Participant 7)

Interestingly, the participant comments on how portrayals of the great white, in movies such as *Jaws*, provide viewers with an inaccurate depiction of the species. Moreover, the participant concludes that much of our fear towards the species is based on these inaccurate depictions, and is thus irrational. The participant went on to say that the dive "sounds a lot more scary than it really is" (Participant 7). Another participant echoed this sentiment: "*Jaws* is not the realistic portrayal" (Participant 6). Furthermore, while great whites are predatory animals, the villainous depictions of the species in movies like *Jaws* are far from the reality some participants experienced during their dive. In other words, for some participants, their imagined fears, discussed previously, were not consistent with their actual experience.

These findings differ slightly from other studies in adventure tourism, where participants did not express possessing a strong degree of imagined fear leading up to their experience, but instead felt stronger feelings of fear and risk during the tour (Morgan, 2001; Carnicelli-Filho et al, 2010). For example, in Morgan's (2001) study of white-water rafters in New Zealand many participants reported feeling more scared and anxious during the tour than they had expected. Morgan speculates that this was due to participants' inability to foresee or imagine what challenging circumstances they would encounter (Morgan, 2001, p.123). Conversely, participants in this study expressed

stronger feelings of fear and apprehension before the dive rather than during, which may be due to their preexisting knowledge and risk perception of the species.

In Lapinski et al.'s (2013) study of shark tourism websites, it was discovered that operators tended not to rely on sensational messages to attract risk-seekers, but instead, were able to rely “on the arousal likely to be elicited by the images people have of sharks” (p. 746). Furthermore, most tour operators did “not message to scare the already scared” (Lapinski et al., 2013, p. 747). This assertion holds true in this study, as some participants attributed their low perception of risk during the experience to how the species was showcased by the tour operator. For example, one participant attributed their shift in perception (from high risk to low risk) to how their interaction with the species was mediated by the tour operator:

I found they were very much in the *Jaws* is not the realistic portrayal attitude kind of thing. They talked a lot about the ecosystem and why it's important that sharks are in there. [...] They would just sort of throw the wooden seal cutouts out onto the water and let them float and slowly bring them in but they weren't making them splash or making a big scene to rile up the sharks or anything like that.

(Participant 6)

This participant explains that the tour turned focus away from showcasing great whites as aggressive and predatory and instead, presented the species as an important player in the ecosystem. Additionally, the participant describes the guides as trying to lure the sharks in such a way that did not agitate the animal for tourist entertainment or adrenaline

inducing purposes.

These actions seemed to demystify the great white for some participants, allowing them to observe the animal without strong feelings of fear. Another participant echoed this sentiment, “they weren’t trying to aggravate the sharks or anything like that” (Participant 6). The tour operator mediated participants’ interaction with the great whites in a noninvasive manner, which allowed tourists to observe the species without feelings of fear. Moreover, participants found that tour operators did not play up the negative image of great whites by aggravating sharks to instill fear into tourists. Although participants found shark dives to be exhilarating, when interacting with species, they did not find the sharks to exhibit aggressive or frightening behavior, as illustrated through the following participant’s statement: “even throwing chum into the water and stuff these sharks were curious but they weren’t predatory [...] the bigger they were the calmer they were” (Participant 1).

Although participants described feeling trepidation or a rush when making the decision to dive with great whites, strong concerns for safety during the dive were not expressed. When asked about the importance placed the tour operator placed on safety information, one participant said safety information was not really needed and was limited to: “just like don’t stick your hands out of the cage and don’t be stupid” (Participant 8). This participant went on to say that the tour was “very safe and professional, and interesting, not an adrenalin junkie type of rush” (Participant 8).

Similarly, participants also expressed that they trusted their tour operator to exercise precaution and eliminate any causes of harm. One participant stated the following: “obviously if people got injured or hurt by sharks very often these tours

wouldn't happen" (Participant 5). Therefore, while the participant viewed interacting with great whites as being perilous, they trusted tour operators to provide them with a safe experience. These findings highlight Cater's (2006) assertion that trust plays an important role in the decision to engage in adventure tourism, as "participants do not want to participate in an experience where there is no trust in the operators and the outcome" (p. 323). Therefore, while participant responses highlighted previously demonstrated that great whites were perceived as risky, this perception of risk did not translate into feelings of trepidation during their interaction with the species. As one participant states:

If they had any trepidation or any like negativity toward it, and they went with a good company like a reputable company or whatever. If they had the experience I had they would come out with a whole different view. (Participant 1)

This participant states that individuals who fear or harbor negativity towards great whites would likely challenge their perceptions after observing and learning about the species on the tour. This statement is significant as a strong perception of risk surrounding a species can be a deterrent to the sustainable management of wildlife populations (Gore et al., 2005). Therefore, minimizing risk perceptions is essential in order to educate tourists on the environmental threats facing a species and to ultimately, to reduce barriers to conservation efforts.

### **Environmental and Wildlife Knowledge**

The third guiding research question is as follows: **Do tourists acquire species and environmental based knowledge during shark tourism activities?** This research question was designed to explore what types of interpretive information tourists encountered during their dive in order to comment on whether the ecotourism experience educated participants on the species and wildlife conservation. This research question aims to identify the information tourists are able to recall being communicated to them during their lived experience. The following three categories emerged from the interviews within the theme of interpretive information: information encountered prior to the dive, information encountered during the dive, and deterrents to cognitive learning, and will be presented in order of chronologically, with the information encountered prior to the dive being presented first.

*Information encountered prior to the dive.* While information about the species did not seem to resonate as strongly amongst tourists as conservation information, participants were able to recollect and describe some species-specific information. Interpretive activities in marine areas often involve “talks by tour guides, interpreters, and rangers onboard boats” but can also include “visitor centers, displays, signs and brochures” aimed at delivering information to tourists about the species they will encounter as well as the general ecology of the area (Zeppel & Muloin, 2008, p.281). In this study, many participants reported that tour operators presented an introductory video to tourists prior to the dive, which provided information on what to expect during the dive as well as general information about great whites. The video was around a half hour long and the majority of information presented “is about the environment and why it’s unique

and the shark behavior that they see there and don't see other places" (Participant 8).

One participant described the introductory video as follows:

And while we were eating breakfast, there was this huge presentation on sharks, shark biology, why they're in the waters there, which has a lot to do with Dyer Island and all the seals. (Participant 6)

The video was described as providing information on the general ecology of the area and shark biology; however participants were often unable to recall specific details. One participant explained that the video gave a "kind of a background on the great white shark" but when probed by the researcher, was unable to relay any facts that they learned (Participant 2).

The following participant's ambiguous account of the video illustrates their ability to recall the overall themes that were communicated, but not specific or detailed information:

Well they brought up some historical stuff [...] and I can't remember what they said about the protection of the species, but they mentioned that too. (Participant 1)

The participant went on to say that there was a "huge educational component" to the video, but again, was unable to recall any detailed information that was communicated about the species (Participant 1). Therefore, while the introductory video aimed to provide participants with a background on great whites through the presentation of

educational information on the species and ecology of the area, the interpretation process proved to not be overly memorable.

This finding is consistent Curtin's (2006) study on participant experiences with dolphin tourism, where she found that the introductory video showed to participants prior to getting in the water only amounted to a "small amount of interpretation" (p. 307). Moreover, participants in this study may not have retained a lot of the information that was communicated to them prior to the dive if it was not done so in a way that aroused their curiosity. As previously stated, the video was not overly engaging, and according to Orams (1997) if interpretation programs do not pose interesting questions to get participants thinking, it is unlikely that learning will take place (p. 298).

The anticipation of diving with the great whites may have also acted as a deterrent to environmental learning during the introductory video presentation. It is probable that participants may have been preoccupied with feelings of nervousness or excitement, since they would be getting into the water shortly. The following participant said she was unable to recall what information was communicated to her during the opening presentation video due to her preoccupation with fear: "I was shitting myself [...] so I was not very receptive to information" (Participant 4). Therefore, some participants' disengagement from the video may have been due to their preoccupation and anticipation for the dive, as this may have taken away from their inability to recall many specific details or facts that were communicated.

It is important to note that when in voluntary learning situations, visitors "have to be motivated and encouraged to engage in learning" and therefore, interpretive programs must allow for participation and engagement in the learning process, and must not simply

present the information (Moscardo & Pearce, 1986, p. 92). When presented the introductory video, participants may have only passively viewed the information which can lead to what Lang describes as mindlessness, where there is “little questioning of new information” (Moscardo & Pearce, 1986, p. 93). Moreover, had the introductory video provided participants with opportunities to ask questions or engage with the tour’s biologists or guides, the learning process might have been more successful. Environmental interpretation must capture the curiosity of visitors in order to motivate participants to listen to and remember the information being communicated.

*Information encountered during the dive.* Participants were also given information on the area’s ecology and shark biology by the operator’s tour guides and biologists while onboard the boat. Interpretation activities on the boat seemed to be more informal, allowing for participants to engage and ask questions. While on the boat, participants recalled receiving information about both the species, and the surrounding environment.

They were talking through the whole tour about the environment and what affects sharks and what they do if they see some in distress and all of that stuff.

(Participant 1)

Some participants expressed being impressed with the level of knowledge tour employees possessed. These employees were able to answer questions about “migrating patterns, [...] health of the species” and other “wide ranging” inquiries (Participant 1). One

participant stated: “I was very surprised and very impressed and with the knowledge of the tour guides too, [and] the biologists” (Participant 1). Another participant echoed this sentiment, and explained the expertise required to be employed on the tour:

You have to take a lot of training to do that work in South Africa, I was actually quite surprised by how intense the courses were that they were telling us they had to take were. (Participant 6)

Moreover, participants found the operator’s tour guides and biologists to be credible sources of information, and were impressed by their level of knowledge. Participants were able to recall more specific pieces of information that were communicated to them by tourism employees while they were on the boat:

One of the things that I learned that was really interesting was the regional differences between great whites; that definitely stuck [...] In South Africa they’re top feeders, which you realize because when you’re doing the cage dive on the surface all of a sudden the sharks are right next to you at the surface.

(Participant 8)

This participant recalls factual information regarding feeding habits of great whites in South Africa, as they found it to hold held epistemic or novel value. Moreover, the participant was not previously aware of the regional differences between great whites before the excursion, but seemed to easily recall this fact as not only was it verbally

communicated to them by their guide, but also because they were able to witness the behavior firsthand while in the water, further confirming the information. In this instance, it seems that the participant was fully engaged in the learning process, allowing the environmental interpretation to be successful and memorable. By providing information about shark behavior that can be observed firsthand, such as feeding and swimming behaviors, the participant was engaged, as he was able to confirm the credibility of what was being communicated once in the water. Additionally, the participant regarded this information as novel, which may have also contributed to its memorability.

Other participants were also able to recall specific information that they found novel or distinctive while out on the boat:

They really did focus in on even current news on what was going on in Australia with them trying to you know get the sharks away from the swimmers and surfers and how it was useless because sharks are migratory and therefore it wasn't going to do any good and just different sharks would come and so I thought it was very educational. (Participant 2)

Again, this participant recalls information communicated to them that they felt was novel and therefore interesting. The information provided about migratory patterns may have also been memorable to the participant because of its relation to the interactions between sharks and humans.

The interactions between great whites and the tour's biologists was also discussed onboard the boat, as participants frequently reported that they were informed about the

research and conservation efforts of their chosen tour operators. One participant mentioned overhearing staff “talking to a lot of families about what they were doing with tagging and monitoring the population, and how they identify species” (Participant 8). The participant went on to relate how tour guides and biologists seemed to be passionate about the research they conduct on the species:

The group of people [...] are very much there not just to make money off the sharks but they’re there to maintain the environment and have an interest in monitoring the conservation efforts and making sure that they’re observing the species. (Participant 8)

Another participant echoed this sentiment, stating that the tour guides and biologists seemed focused on providing tourists with information on the species and the environment in order to “make sure that people understood what amazing creatures they were and how they are part of the ecosystem” (Participant 2).

Moreover, participants recognized the passion tour guides and biologists had for the species to be authentic, and genuine. For example, one participant recalls that the tour guide was able to recognize each shark, and let tourists know when a new shark was approaching the boat or one they had seen before was returning, as if staff “they saw them almost like a person” (Participant 5). The below participant response also confirms this account:

And they knew each individual shark from the scratch marks on the shark – because when the sharks attack seals sometimes they get gashes on themselves by the seals [...] they would say ‘Oh hey, there’s Wendy!’ (Participant 7)

Recognizing tour guides as passionate and trustworthy sources of information is essential to effective interpretation, as tour guides are often participants’ primary knowledge contact and play an “influential role in information delivery, interpretation” (Randall & Rollins, 2009, p. 358).

Participants were consistently able to recall information that was presented regarding environmental or human threats to great whites, as well as the need for conservation efforts. One participant recalled being told that a female great white only gives birth once or twice in her lifetime, to a small litter of pups which “makes it difficult for populations to recover” once threatened (Participant 7). The participant went on to express that they didn’t think “many people understand or know” how vulnerable the species is (Participant 7). The information provided about shark breeding seemed to resonate with the participant because it was new and surprising information, and because it authenticated the true vulnerability of shark populations to depletion.

Other participants were also able recall detailed information they received from tour guides and biologists about depleting shark populations, as illustrated through the following response:

She talked about, at length, what they were doing, that they really don’t know a lot about sharks, they don’t really know how sharks mate, there’s so much they

don't know [...] She talked about some shark counts that they had done in one area and how that count seems to be going down. So they're concerned about how many sharks they're losing. (Participant 5)

The decline of great white populations was something that most participants recalled, whether briefly or in depth, illustrating that the tours' interpretation programs were especially successful at transferring knowledge regarding conservation of the species to create awareness amongst tourists. This finding supports Ballantyne et al's (2005) assertion that visitor experiences in free-choice learning settings can peak their interest in and contribute to their awareness and understanding of sustainability issues. Therefore, the interpretation programs encountered by participants in this study were often successful at captivating tourists' attention when delivering information on the sustainability issues facing the great white shark populations. This is illustrated again by the following participant's ability to recall learning about the economic value of conserving sharks while on the tour:

They were saying shark tours are now trying to persuade local people that there is a lot more financial acumen in shark tourism than shark fin soup for Chinese restaurants – so that did stick with me. (Participant 4)

Based on participant responses, the shark diving experiences were overall successful at increasing tourist knowledge about the surrounding environment of Gansbaai, great white behaviors and attributes, and conservation efforts. These findings

are consistent with Orams' (1997) study of tourists who hand-fed wild dolphins in Tangalooma, Australia, as he surveyed visitors before and after their experiences and found that even a brief ecotourism encounter can slightly "increase tourists' knowledge" (p. 300). Similarly, in Powell & Ham's (2008) study on the interpretation program at Galapagos National Park found that visitors' environmental knowledge increased slightly, by approximately ten percent, based off of their answers from the pre-voyage to post-voyage questionnaires (p. 478).

Ecotourism experiences are often brief, so in order for interpretation strategies to be successful, it is important that information is communicated in a distinctive and stimulating way to capture the curiosity and attention of participants. Moreover, tourists are in a voluntary free-choice learning situation, as there is no obligation for them to listen or pay attention to the information being communicated to them. In order to successfully engage participants where there is no obligatory motivation for learning, tour operators must make the experience engaging and exciting (Moscardo & Pearce, 1986, p. 92). Therefore, while the introductory video presented to tourists aimed to communicate education information about the species, participants were much more successful at recalling information communicated by tour guides and biologists while on the boat, as the learning process was more engaging.

***Deterrents to learning.*** It is worth noting that some participants mentioned various factors on the tour that took away from their ability to pay attention to the messages that were communicated and to engage in the learning process on a whole. These deterrents to cognitive learning included seasickness, fear, and the hectic

environment onboard the boat.

Seasickness was the most frequent deterrent to learning mentioned by tourists, as illustrated by the following participant's response:

My mom gets super sea sick really easily, she didn't get that sick though, but everyone else on the boat was puking their brains out just within 10 minutes and it wasn't that rough. I don't know if there's just something about that spot or what but it's definitely an issue. (Participant 8)

Many participants mentioned that seasickness was a frequent experience on the tour, making it difficult to be fully engaged in their surroundings and unable listen to the environmental information being communicated. As one participant remarked, "I got a sense that most people on the tour were a little sea sick so I'm not sure how well they were listening" (Participant 2).

Tourists preoccupied with their seasickness were not as open to absorbing the information being communicated to them by the tour's guides and biologists. Some participants took preventative measures, such as anti-nausea patches and tablets, as they were advised in advance by the tour that seasickness was often an issue.

There were a handful of people that got really sick, I felt awful for them because they didn't get to enjoy the experience. But, you know I would have been the same way if I hadn't got the patch. (Participant 5)

Passengers' seasickness also monopolized the attention of tour operator's guides and volunteers, taking away opportunities for communication on the environmental surroundings as well as the ability to address any questions tourists may have had. Tour guides were forced to "hand out barf bags while trying to talk to tourists" (Participant 8). Even if participants were not sick themselves, the presence of other sick passengers posed a distraction from the process of interpretation, as it added to the chaotic environment onboard the boat.

The environment on the boat was fast-paced, because while some tourists were nursing their seasickness, others were going in and out of the water or putting on their wetsuits. One participant describes being preoccupied with her surroundings instead of focusing on any environmental messages be communicated:

I was so engrossed with watching what was going on and waiting for the next chance to go back in the cage that I wasn't aware of a lot of educational talk going on onboard the catamaran. (Participant 4)

Another participant observed that amidst all of the activity and bustle on the boat they were forced to be proactive in asking questions in order to learn and gain more information about the species:

It was chaotic, there were a lot of people on board and a lot of things going on. But I would have liked more science information on the boat. I hounded the marine biologist that was there and asked a lot of questions. (Participant 6)

This participant felt that large group on the boat made it difficult for tour guides and biologists to address the group in order to provide information about great whites or the general ecology of their surroundings. This finding is consistent with Ballantyne et al.'s study (2009) on turtle tourism in Australia's Mon Repos Conservation Park, where tourists "expressed concern that large groups [...] made it difficult to hear the guide's explanations" (p. 662).

In addition to seasickness and the hectic environment, a few participants also identified fear as a deterrent to learning. One participant, who felt claustrophobic because of the size of the cage, reported that when onboard the boat, she was focused on coping with her "panic attack" just before getting into the water and "wasn't aware of a lot of educational talk going on" (Participant 4). Another participant echoed this sentiment, as he explained the waters were extremely rough, with waves "going 20 feet in the air", making the experience onboard the boat "not for the faint of heart" (Participant 5). Moreover, the lengths participants had to go through in order to interact with the great whites, such as the rough waters or being submerged in a confined cage, may have served as a mental preoccupation or distraction for those who were not comfortable or used to these conditions.

Other participants recalled that the environment onboard the boat was chaotic and intimidating due to the rough waters. The fear described by this participant was not crippling or overwhelming as described in the previous participant's account, but it still acted as a deterrent to learning, as it forced the participant to stay alert to their surroundings.

There wouldn't be much opportunity to talk. I mean small groups of people clustered together to talk about the wind and the surf but there was no attempt to talk about what's going on. But no there really wasn't a whole lot of conversation going on, you really had to hang on for your life. (Participant 5)

Furthermore, the rough waters and strong winds forced the participant to remain focused on their safety, and not on initiating or participating in conversation on great whites or their environment with tour guides or other passengers.

The hectic environment onboard the boat coupled with some participants being preoccupied with feelings of sea sickness or fear did not create the most ideal setting for fostering environmental conversations, but as previously outlined, despite these conditions many participants still managed to walk away from the ecotourism experience learning something new about the species and the environment, as well as a more pro-conservation attitude. However, in order for interpretation program to be successful, they must not only be pedagogical, but must also have affective appeal.

### **Emotional Responses and Attitudinal Shifts**

The fourth research question this study address was: **What types of emotional responses and/or attitudinal changes do tourists experience during shark tourism activities?** This research question was designed to explore and identify the types of emotions tourists experienced when diving with great whites, and whether this affective experience impacted their attitudes towards the species and conservation efforts in any

way. Furthermore, this research question aims to identify what type of emotional appeal encountering great whites in the wild had for tourists, and whether this emotional appeal resulted in an attitudinal shift towards pro-conservation behavior.

Three categories emerged from the interviews within the theme of emotional appeal: excitement and exhilaration, admiration and appreciation, and the desire to support conservation efforts, and will be presented in the reverse order of prevalence, with the least reoccurring category being presented first.

**Excitement/Exhilaration.** Along with admiration and appreciation, participants expressed experiencing feelings of excitement and exhilaration during their cage dive with great whites. Upon seeing the apex predator up close for the first time, many participants were taken aback by the sheer size of the great white shark, causing them to feel “both complete awe and exhilaration” (Participant 1), as illustrated by the following participant responses:

Some of these sharks are big, our biggest was a fourteen footer [...] so when you see something that big [...] you're like ‘oh boy’. I mean were going to be in a cage just strapped beside the boat, you know, watching this thing come at us.  
(Participant 5)

And then all of a sudden, it's like the ads on TV when the bait ball breaks up, and this giant animal swim up towards you. You're shocked, in a great way [...] down there, and your in his environment – this is a 22 foot long animal and I don't think

you realize how big they really are until you see them down there. (Participant 7)

The participants describe the experience of seeing great whites up close as exhilarating and astonishing. Inciting feelings of excitement amongst visitors in a free-choice learning situation can aid in increasing participants' motivation to learn and discover new information about the species. The feeling of excitement described by participants upon seeing great whites in the wild for the first time is an important element of the learning process, as "marine life interpretation needs to include both cognitive and affective aspects of experiential learning" (Zeppel & Mulloin, 2008, p. 288).

Participants also seemed to find the touristic experience exciting because they were able to authentically view shark behavior in the wild by entering the great white's world through cage diving.

I found it exhilarating, because you could look down and see the sharks coming up you know a lot of times they would just come up or sometimes they would swim towards the boat. (Participant 5)

Even when we were out of the water we could see all the sharks coming and going too and I enjoyed that just as much as being in the water with them because you can see them coming and swimming and it's just fascinating. (Participant 6)

Instilling excitement amongst visitors is of utmost importance for interpretation strategies to be effective. It has been found that in wildlife ecotourism, the initial excitement of seeing the animal is often “instrumental in eliciting a reflective response” associated with learning (Falk et al., 2012, p. 919). Moreover, direct observation and interaction with great whites allowed tourists to emotionally connect with animals, which may have further fueled their desire to learn from interpreters.

In Howard’s (2000) survey of visitors to the sea turtle nesting site in Mon Repos Conservation Park, it was found that participants were more likely to report the desire to engage in turtle conservation if they had reported their tourism experience as being exciting or surprising. Therefore, it is argued that free-choice learning programs can “influence environmental attitudes and behavior using appeals to the emotions”, as arousing emotions such as excitement may encourage discovery and curiosity amongst visitors (Ballantyne & Packer, 2005, p. 289). In other words, the affective or emotional element of the touristic experience may serve to further deepen the connection between the tourist and the environment, and can help foster a stronger appetite for learning.

***Admiration and Appreciation.*** Along with feelings of excitement and exhilaration, study participants expressed feelings of admiration and appreciation when getting into the water with great whites, as illustrated through the participant statements below:

But I mean it was complete, it was completely surreal [...] there was no anxiety, there was no nothing, it was just like can you believe were here? And it was just,

just seeing them, it was just wow. Can't even really put it into words. So lucky.

(Participant 1)

I don't know if we got lucky that day or if this was just a normal day but we had nine different sharks swim passed the boat [...] there was fourteen foot female [...] was big and she was curious. She came by several times! (Participant 5)

The first participant expresses that being able to see great whites in their natural environment as a surreal moment, leaving her feeling lucky or blessed at having the opportunity to do so. The second participant expresses appreciation at being able to see so many sharks during his dive, and found that one shark in particular seemed to approach the cage out of its own curiosity. This affective experience of appreciation and admiration of viewing an animal in their natural environment is consistent with the findings of Curtin's (2006) phenomenological study of the tourist experience with swimming with dolphins. Curtin identified that visitors found greater enjoyment when viewing animals in the wild, as "the element of uncertainty goes to make any dolphin encounter all the more special" since the contact was seen to be due to the animal's own volition and was "perceived to be symbolic of a greater connection" (Curtin, 2006, p. 307). Tourists felt privileged to be able to enter the dolphin's natural environment, and upon coming into contact with the animal, felt a deeper emotional connection as the encounter occurred out of the dolphin's own free-will. Similarly, upon studying wildlife tourism experiences in both captive and non-captive settings, Ballantyne et al., (2011) found that there was a "heightened sense of privilege and emotional affinity" amongst

tourists who were able to interact with animals in their natural settings (p. 774).

The participant statement below further depicts this feeling of privilege and appreciation at being able to encounter great whites in their natural habitat:

I just thought it was magnificent. They're magnificent animals [...] this enhances people's appreciation of the great white shark and you know I don't see how it couldn't because you know you're down there and you're seeing them in their natural habitat and they're just magnificent creatures. (Participant 5)

The participant goes on to say that they believe by seeing great whites in the wild, "that's when you really have this appreciation for the animal" (Participant 5). This illustrates that the ecotourism experience was effective in "invoking the affective domain", which is an essential step for interpretation programs to be effective, as emotional responses allow participants to better internalize environmental communication, and also increase the chances that it will be acted upon (Orams, 1997, p. 298).

The emotions aroused by the wildlife tourism experience did not just make the encounter more memorable, it caused the participant to truly appreciate and value the species. This emotional connection was also uncovered by Ballantyne et al.'s (2011) study on visitors to turtle nesting areas, as the emotions aroused by the tourism experience "did more than produce strong and vivid memories", but actually "led them to care about the animal's well-being" (p. 774). By creating an emotional connection between visitors and wildlife, interpretation programs are better able to motivate and inspire tourists to care about the welfare of the species, which may aid in fostering pro-

conservation attitudes and behaviors.

*The Desire to Conserve Populations.* The reported feelings of admiration and appreciation are heavily linked to participant responses that reflected an attitudinal change towards the species. The ultimate aim of educational communication in ecotourism experiences is not to just to foster awareness and understanding of wildlife and their natural environment, but is to promote pro-environmental attitudes amongst visitors (Beaumont, 2011). Participants in this study consistently reported on the importance of shark conservation efforts and research, reflecting pro-environmental attitudes. Part of both empathizing with and supporting the sustainment of wildlife populations begins with an informed understanding of the species, which is illustrated by the following participant's statement:

I figured as an apex predator they were immune from that. You know, I had heard that they hunt them for shark fin soup and they get caught in nets and stuff but I don't know, I hadn't really thought about it. And actually because [...] I live near the beach something that might come out of the water and eat me, I don't necessarily have a fondness for it right off the bat. I had to be swayed a little bit to kind of think okay even though this thing might take my leg off, I still want to care for it. (Participant 5)

The above statement demonstrates that after learning about and observing great whites in their natural setting, the participant challenged his existing attitude towards the species by

recognizing that just because great whites are an apex predator, their populations are still vulnerable to endangerment, which should not be dismissed or diminished solely due to the threat the species can pose to humans. In other words, the participant's preexisting perception that great whites must be immune to population threats did not align with the information encountered during the tour – the participant experienced cognitive dissonance. As a result, the participant's attitude was shaped by the educational information they encountered during their tourism experience, as it caused them to foster a better understanding and appreciation of the animal.

In Packer's (2004) study on visitor's free-choice learning in various tourism settings such as aquariums and national parks, it was found that many participants questioned and rethought their attitudes in relation to environmental issues. Successful interpretive strategies are often designed to challenge tourists' conceptions in order to "help visitors become aware of within and consequences of their conceptions, as well as the relative merits of other conceptions" (Ballantyne & Packer, 2006). This then allows visitors "great control over their learning", which often increases the "intrinsic motivation to explore and learn more" (Csikszentmihalyi & Hermanson, 1995).

Some participants attributed their attitudinal change to the tour's staff, whose genuine passion to protect and strengthen great white shark populations inspired their own care for the well being of the animal:

The captain of the boat, and the staff generally, you know they love sharks and they want to help in any way they can and then they pass that passion sort of onto us. (Participant 3)

The participant comments on how the tour guide and biologist's passion and care of tour guides and biologists for the species was made clear by their genuine advocacy of the species and environment throughout the tour. Curtin's (2010) study found that in the wildlife ecotourism industry, the tour guide plays a crucial role in both making the experience memorable and enjoyable for visitors, and for encouraging environmentally responsible behavior. Moreover, by being openly passionate about great white populations and their environment, tour guides were successful at motivating and inspiring the participants of this study to also share concern for the well being of the species.

In addition tour guides also reinforced amongst participants that by taking part in the shark dive, they had already participated in and contributed to the efforts to protect great whites. The following participant exhibited feelings of pride when reflecting on this contribution:

Just by being there, and being apart of this ecotourism, we had contributed, especially proving the point that sharks are worth more alive than dead"  
(Participant 4).

Participants were also given the opportunity to donate money at the end of the tour, which many admitted to taking advantage of.

And a lot of people, including my partner, that donated money, certainly hadn't gone down there intending to donate money but we donated money because it

was, we believed it to be a good cause. I can't, I couldn't in good conscious not do something, or to just passively allow that animal to become extinct just because I didn't care. (Participant 5)

This finding is consistent with step four of Orams' (1997) model for effective environmental interpretation programs, as the tour provided visitors with opportunities to act through the facilitation of monetary donations at the end of the tour. Providing visitors with opportunities to take action is very important as changes to behavior "can be prompted on the spot", which can reinforce or solidify participants' attitudes towards wildlife and the environment (Orams, 1997, p. 298). The participant explains that while they did not preemptively plan to donate money, after participating in the shark dive and learning about the threats facing the species, they felt compelled to support the species in hopes of making a difference. This statement is significant as it illustrates an attitudinal shift in the way the participant felt about great white populations, which motivated pro-conservation behavior, as prior to the dive, the participant admits they would not have felt obligated to aid in conservation efforts. This finding is supported by past research conducted in the wildlife tourism industry (Ballantyne & Packer, 2005; Ballantyne, Packer, Hughes, & Dierking, 2007) that argues if interpretation programs are "carefully designed, managed and delivered", tourism experiences have the ability to influence the conservation knowledge, attitudes and ultimately, the behavior of tourists (Ballantyne et al., 2009, p. 658). During their study of turtle watching tourism in Australia, Ballantyne et al. (2009) also found that a majority of tourists claimed they would be "willing to pay extra for the experience [...] in order to support turtle conservation" after interacting with

the animal (p. 661).

The following participant also expressed that prior to the diving experience; they likely would not have been supportive of conservation efforts for great whites:

I do a lot of charity work, I donate to a lot of charities, and I have a little bit of charity burn out. So if someone pitched me on a shark, I would have been like ‘I have hungry kids, I’ve got all sorts of other causes that I deal with,’ but once you’re down there and you’re down in the water and you see these magnificent animals you kind of have an attachment and you’d hate to think that the next generation wouldn’t be able to do the same thing. (Participant 5)

The participant admits that although they actively donate money to certain social causes, they would likely not have been empathetic towards supporting great white populations before embarking on the tour. The diving experience caused the participant to be much more invested in the conservation of the species, as they felt future generations should not be denied the experience of interacting with such a magnificent animal. Again, a shift in tourist’s perception of the species as a result of the ecotourism experience can be linked to a potential change in behavior.

Feelings of empathy are often elicited from tourists when information regarding human threats to wildlife is presented. Packer (2004) found that visitors to aquarium exhibits rethought their attitudes towards certain oceanic species, as they became more empathetic towards the negative impacts felt by fish populations due to practices such as trawler fishing. Similar to the visitors in Packer’s (2004) study, the participants in this

study began to challenge their existing beliefs regarding great whites when learning about the threats facing the species and feeling a connection with the animal, which is richly illustrated in the below response:

Now when I think about sharks, the image is far more complex because I remember driving into this beautiful little village and the coastline there was just stunning, it was an incredibly beautiful day, the sky was blue and it was windy but gorgeous. Then we went out and saw them in their native habitat, we saw what a magnificent creature they are. And to have one swim right passed you when you're in the cage I mean I could have reached right out and touched it's fin, so you start to associate sharks not just with killing surfers, you see the whole picture. And then they talk about their place in the ecosystem, and you know I understand that, you don't necessarily think about that until someone brings it to the surface. If sharks weren't here there would be a trickle down effect. I have far greater appreciation. (Participant 5)

When reflecting on the ecotourism experience, the above participant describes how their perception towards the species has become far more complex as a result of the acquirement of new knowledge and the development of an emotional connection with the animal during their interaction. The response outlined above demonstrates that the participant experienced cognitive dissonance, the key premise of effective environment interpretation models. Moreover, the participant was made to realize that two elements were inconsistent or unsupportive of each other, which motivated learning (Luck, 2003).

Participants negative perception and lack of concern for great whites populations prior to the tour was confronted by their newfound feelings of appreciation and respect for the animal during the tour, ultimately forcing tourists to challenge their existing beliefs. Moreover, once visitors of wildlife are made aware of threats facing the species, and develop an emotional connection with the animal, the promotion of pro-environmental attitudes is made possible.

It is important to note that while many participants in this study reported experiencing attitudinal shift towards more pro-environmental ways thinking, accurately measuring respondents' attitudes is difficult, due to what Orams (1997) asserts as the influence of 'social desirability'. Over the past few decades "environmental issues have been widely discussed and are familiar to many", therefore it is difficult to determine whether participant responses that reflect positive environmental attitudes are genuine, or if these responses are given "as the socially/politically correct answer" (Orams, 1997, p. 301). In order to account for the influence of social desirability, the researcher did not directly ask participants if their attitudes towards the species had changed as a result of their diving experience, but instead only probed participants for further explanation if they voluntarily mentioned experiencing an attitudinal change. The responses highlighted above are part of each participant's overall description of their dive with great whites, and therefore it is believed that these statements reflect what participants genuinely took away from their wildlife tourism experiences.

## **Chapter 5: Conclusion**

This final chapter summarizes the study's main findings, followed by a discussion of the significance of the research in terms of its application for both scholarly and non-scholarly contexts. This section concludes by recognizing the limitations of the study, and providing recommendations for future research, which builds on the findings and insights presented here.

### **Summary of the findings**

Ecotourism is often championed for its potential to promote pro-environmental attitudes and behaviors amongst visitors; however, it has been argued that the industry may often appeal to individuals already possessing these beliefs and therefore; the industry may not be as beneficial as hoped (Beaumont, 2001; Hatch, 1998; Saleh & Karwacki, 1996). Contrary to these claims, this study found that participants of shark tourism in Gansbaai did not claim to have preexisting knowledge of shark biology or a desire to conserve populations, but were instead motivated instead by a fascination of the species, a desire for adventure, and because they recognized the experience as a 'bucket list' item, that is to say, as something exciting and novel to accomplish as part of one's lived experience.

Participants who reported feelings of fascination or intense interest in great whites did not appear to possess a deep understanding for or strong scientific background in the species, but instead, their fascination stemmed from a captivation with and reverence for the apex predator. Relatedly, some participants reported they were motivated to take part in the tourism experience by a sense of adventure, or in other words, found the risks associated with the species to present an opportunity to both "play with their fears"

(Cater, 2006, p. 322). Lastly, some participants reported that their main motivation for partaking in the dive was because the activity was on their bucket-list, as the experience was coveted due to its novelty. In summary, it was found that participants were not motivated by the desire to learn about the species or the environment, nor did they partake in the dive in order to support conservation efforts. Therefore, the shark ecotourism experience held the potential to present these visitors with new information and perspectives on the species and sustainable environmental management.

Perception of risk can be a strong deterrent to the sustainable management of wildlife populations that are heavily associated with human-wildlife conflicts (Gore et al., 2005). Moreover, the collection of risk perception data is important to determine any barriers to wildlife conservation efforts. As previously mentioned, media coverage of sharks is often negative, and pop culture has capitalized on the vilification of the species, which may amplify risk perceptions surrounding the species (Muter et al., 2012). Consistent with the assertion that sharks are associated with high-risk perceptions, many participants reported feeling nervous and fearful prior to their dive, as they viewed great white sharks to be threatening apex predators.

These findings are consistent with studies in adventure tourism which found perceived fear played a role in the moments leading up to the activity, causing the experience to be viewed as both exciting and intimidating (Buckley, 2012; Carnicelli-Filho et al., 2010; Swarbrooke et al., 2003). Moreover, feelings of fear or trepidation may cause visitors to feel hesitant, but can also serve as motivation for tourists to take part in certain leisure activities. This is due to the fact that the perception of risk often provides participants with a 'rush' or feeling of adrenaline, as these emotional experiences are in

stark contrast to their everyday routines (Williams & Harvey, 2001). Therefore, while the shark dive experiences examined in this study are wildlife ecotourism activities, due to the high-risk perception of the great white species, they can arguably lend themselves to the genre of adventure tourism, due to the presence of perceived fear and risk amongst visitors.

While many participants reported feeling nervous or fearful in anticipation of their dive and felt certain safety precautions had to be taken based on their risk perception of Great Whites, many participants were not fearful during the dive, but instead, were in awe of the species. Participants described feelings of fascination and admiration when observing great whites, finding the species to be graceful and powerful predators. Moreover, the fear many participants reported feeling in anticipation of the dive, seemed to be replaced by reverence for the species upon entering the water. According to Buckley (2011), risks or safety concerns may be anticipated by adventure tourists leading up to an activity, but these perceptions are simply constructions, and do not actually materialize during adventure tourism experiences. Buckley calls this the “risk/rush paradox”, as tourists are motivated not by risk itself, but by the semblance of risk and the emotional experience of rush or thrill (2011, p. 963). Moreover, this study’s findings illustrate that while many participants admitted to being fearful of great whites, they still chose to participate in the tourism experience, and upon participating, did not describe the dive as a risky or unsafe environment.

Effective interpretation programs must have “both an entertainment and a pedagogic role” (Moscardo & Pearce, 1986). Moreover, environmental interpretation must stimulate enthusiasm and emotion while also providing an educational experience.

It was found that many participants were often only able to recall a limited amount of specific information relating to shark biology and the environment of Gansbaai, demonstrating that environmental communication and learning was not as successful as it could have been. However, participant accounts of their experiences illustrated that they were often able to recall information regarding the threats facing the species as well as ongoing conservation efforts, which caused participants to significantly alter their perception of great whites. Moreover, participants experienced cognitive dissonance; where interpretation programs facilitate the learning process by providing visitors with surprising information that may challenge their preexisting beliefs (Luck, 2003). The motivation to learn is produced by “creating a perceived need for information in the tourist” (Orams, 1996, p. 85). In this study, many participants reported that they were surprised to learn that great white shark populations were vulnerable and experiencing decline, since they viewed the species to be an apex predator and therefore assumed great whites were largely immune to environmental threats. Resultantly, information on threats to the species and conservation efforts seemed to strongly resonate with participants.

Tourists’ encounters with great whites in the water incited strong feelings of respect, appreciation, and awe, which may have helped in shaping and strengthening pro-environmental attitudes towards the species. Moreover, while participants may not have developed an overly strong expertise in the area of great white sharks or on the geographical region of Gansbaai, as a result of participants’ interaction with the species during their dive, they felt a strong emotional connection when directly observing with the species. These findings support the framework developed by Orams (1999) for managing marine tourism experiences, as the information presented by tour guides and

biologists was reinforced by the emotional connection tourists experienced by directly engaging with great whites in their natural habitat.

Many participants expressed that after partaking in the shark ecotourism experience, their outlook on the great whites species was altered. Participants' existing perceptions of the animal were challenged by the information they encountered regarding threats facing the species. In addition, when observing great whites in their natural environment, many participants also reported feeling a strong emotional connection with species, causing them to express concern for the well-being and sustainable management of populations. Therefore, the interpretation programs of Gansbaai's shark ecotourism experiences were largely effective in disseminating environmental information regarding conservation issues and effort, and ultimately, at eliciting empathy from visitors for great white shark populations.

### **Significance and Contribution of the Study**

Despite popular belief that ecotourism experiences hold the potential to educate tourists about environmental issues and to instill pro-conservation attitudes, assumptions about these positive effects remain largely unexplored (Budeanu, 1999; Weiler & Ham, 2001; Powell & Ham; 2008). This hermeneutic phenomenological study is therefore significant in that it has illustrated the effectiveness of the environmental interpretation programs and free-choice learning environments of wildlife ecotourism experiences through the exploration and understanding of participant accounts of great white shark dives in Gansbaai. Utilizing Orams' (1997) indicators of enjoyment, knowledge, attitude,

and intentions to change behavior, this study explored tourist ecotourism experiences and evaluated environmental interpretation programs of Gansbaai's shark diving tours.

The decline of top oceanic predators, such as great whites, can cause complex functional changes to the ecosystem, and can ultimately contribute to “the worldwide erosion of the marine food web” (Jacques, 2008, p. 192). Many species of sharks are vulnerable to even modest fishing practices, due to their slow growth rates, late maturity, low birth rates, and long life spans (Jacques, 2008). As a result, the overharvesting of shark populations makes recovery an extremely difficult and long process, spanning decades, and would require active policy changes and consumer decisions that recognize sharks as crucial to marine ecosystems (Jacques, 2008). Therefore, industries that have a vested interest in keeping sharks alive, and hold the potential to spread awareness on the threats facing the species and the importance of conservation efforts, are of utmost importance for the sustainment of shark populations. One of the central arguments for continuing the development of wildlife ecotourism is that the industry aids in securing long-term conservation of species and their environments (Ballantyne, 2008).

The potential role of the shark tourism industry as a conservation tool is exceptionally important, since the sustainable management of shark populations is nearly non-existent despite the increase in pressures on the species, such as finning, over the past 20 years (Jacques, 2010). Therefore, this study is both timely and significant as it sheds light on and draws attention to the value that shark ecotourism interpretation programs can have on the environment through both educational awareness and the promotion of pro-conservation attitudes amongst participants, thus contributing to the sustainable management of vulnerable shark populations.

This study holds the potential to make both academic and practical applications to the wildlife ecotourism industry. Firstly, this study is academically significant in that it evaluates a largely unexplored niche area of wildlife ecotourism. To the researcher's knowledge, this study is groundbreaking in that no other study has looked at the experiences of tourists with shark tourism activities in order to evaluate whether the industry has a positive effect on disseminating knowledge of the species and pro-conservation attitudes amongst participants. This study's findings also have practical application, as they shed light on the experiences of tourists with ecotourism products, which can serve to provide individuals in the industry with the necessary insight to effectively develop their tour's interpretation programs and their tourism products on a whole to ensure consumer satisfaction.

### **Limitations**

The methodological approach of this study was limited by both time and resource constraints. These constraints were due to the constricted timeline for the study's completion, as dictated by the researcher's Master of Arts in Communication university program. Moreover, the study's scope of work was restricted from the onset. As a result, the researcher was limited on how many sources of literature could be reviewed, and was only able to focus on one geographical ecotourism site as opposed to multiple regions. Additionally, in order to ensure data could be collected, transcribed, and analyzed in accordance with timelines, the researcher was limited to the amount of tourists that could be interviewed.

The methodological approach of this study is also limited as interviews were the only source of data collection, as the researcher did not conduct direct observation or the review of tourism documents. Personal experience is recognized as being essential to the comprehension of tourism experiences, as it allows the researcher to obtain an insider experience of participant behaviors and motivations, both her own and of others (Buckley, 2012). However, due to timing constraints and lack of funding, the researcher was unable to travel to Gansbaai in order to directly observe and experience shark ecotourism activities, and was therefore also unable to directly observe any education documents (ex. pamphlets, displays, signage) disseminated by the tour operators in the region.

The selection of participants also poses limitations, as participants were solicited on a volunteer basis using TripAdvisor, a popular travel review website. As a result, participants may not be a representative sample of tourist experiences because in the absence of incentives, individuals with moderate outlooks are unlikely to voice their opinions online (Jurca et al., 2010). Moreover, tourists who did not have strong opinions, whether positive or negative, were likely not represented in this study's sample. However, it is important to note that the researcher did not analyze the TripAdvisor reviews posted by selected participants, but simply used the website in order to access a large population of tourists who had engaged in shark ecotourism activities in Gansbaai.

Finally, this study's findings are limited in terms of the generalizability because interviews were not carried out to gauge tourists' knowledge of great whites or their existing attitudes towards the environment prior to their ecotourism experience. As a result, this study relies on self-reports of tourists' motivations to participate in the tour, as

well as the knowledge they possessed prior to their experience. Therefore it is difficult to determine whether participant responses that reflect positive environmental attitudes are genuine, or if these responses are given “as the socially/politically correct answer” (Orams, 1997, p. 301). In order to accurately understand tourist motivations, and to assess any changes in environmental knowledge, attitudes, and behaviors, Ballantyne et al., (2011) recommend the researcher to have three touch points with visitors; before the tour, directly following the tour, and four months after the tour. Unfortunately, due to timing and resourcing constraints, as well as the remote geographical location of Gansbaai, the researcher was only able to interview participants after some time had passed, ranging between four to twelve months, from their ecotourism experience.

The ability to generalize this study’s findings to the wildlife ecotourism industry, or more specifically, the global shark ecotourism industry, is limited due to the specific case and small sample size being used. As identified by Gore et al., (2011), while the amount shark tourism operators in South Africa account for almost half of industry, shark tourism offerings are also available in the United States, Mexico, Australia, Bahamas, Fiji, Costa Rica, Honduras, Mozambique, and Thailand. Moreover, this study only evaluated great white shark diving experiences in Gansbaai, and is therefore not representative of ecotourism offerings involving other shark species in various geographical locations. Additionally, due to the finite amount and of participants being interviewed, the sample will not be fully representative of shark tourism participants, given that not all viewpoints will be accounted for. These limitations are due to the time and resource constraints of the researcher.

### **Future Research**

This study sought to understand the environmental interpretation programs presented in the free-choice learning environments of great white shark ecotourism activities in Gansbaai, South Africa, from the perspectives of tourists. In order to extend and enrich this study's findings, future research on the region's shark ecotourism offerings could also explore the perspectives of individuals in the industry, in order to understand the strategic planning that goes into the development of environmental interpretation programs. Moreover, further research on the free-choice learning environments of shark ecotourism experiences from the industry's perspective could provide insight into the similarity or disparity between how environmental interpretation programs are intended to be experienced and how they are actually experienced.

Future research on great white shark ecotourism experiences should also be carried out in other regions where this form of tourism is popular, such as Australia, in order to better able to generalize results across the industry. The recent increase in the number of shark ecotourism operators worldwide provides a vast and largely unexplored landscape for future research on the various species of sharks capitalized on by the niche ecotourism industry, such as tiger sharks in the Bahamas or whale sharks in Thailand, in order to assess the potential of these shark-based tourism activities to play a role in the conservation of the species. The shark ecotourism industry is an emergent form of niche tourism and is a highly underdeveloped area of study requiring further research in order to understand its potential impacts to the conservation efforts for various shark species.

This research took a qualitative approach to understand participant experiences with shark ecotourism activities, and could serve as a jumping off point for future

quantitative studies. Quantitative research, in the form of closed-ended questionnaires or surveys, is often used to evaluate participant knowledge and attitudes towards wildlife both before and after ecotourism experiences (Ballantyne et al., 2011; Catlin et al., 2010; Powell & Ham, 2008). The quantitative design of these studies allow researchers to make clear comparisons on the environmental knowledge participants possessed before and after ecotourism experiences, thus gauging the effectiveness of interpretation programs and their ability to facilitate free-choice learning amongst visitors.

While currently only representing between five to ten percent of the overall travel industry, ecotourism is one of the most popular and fastest growing niche tourism markets (Vincent & Thompson, 2009). Shark ecotourism experiences in particular have experienced recent growth, with almost four hundred operations identified across the globe (Gallagher et al., 2011). Although the economic value of the shark ecotourism industry has been recently studied in order to assert the significant value of non-consumptive shark use (Catlin et al., 2013; Gallagher et al., 2011), the potential of the shark ecotourism activities to support conservation efforts through the education of visitors remains largely unexplored. Therefore, this study provides contemporary scholarly and practical research on the emergent and underdeveloped area of shark ecotourism, and more specifically, the implications risk perception for the sustainable management of a species (Stout et al., 1993; Riley et al., 2000), as well as the potential of environmental interpretation programs to raise awareness, educate, and promote attitudinal changes amongst visitors to natural environments (Ballantyne et al., 2011; Cong et al., 2014; Howard, 1999; Orams, 1997, Powell & Ham, 2008). The great white shark tourism activities in Gansbaai, South Africa, are delivering effective environmental

interpretation programs for visitors, illustrating that wildlife ecotourism experiences do in fact hold the potential to educate tourists on environmental issues and to promote pro-conservation attitudes. The findings of this study showcase the region of Gansbaai as a leader in the great white shark ecotourism industry, and hold the potential to influence the development of successful environmental interpretation programs in both shark-based and various other niche wildlife tourism industries.

Tourists can encounter various forms of environmental communication during a wildlife ecotourism experience, which if presented in an engaging and thoughtful manner, can make participants aware of the threats facing a species and educate them on pro-environmental practices. However, what is much more difficult for environmental interpretation programs to achieve, is the ability to foster a free-choice learning experience that is meaningful enough to visitors that they are inspired to change their beliefs, attitudes, and ultimately, their behaviors. Sharks, and great whites in particular, are arguably an especially difficult species to evoke human compassion for, due to the plethora of wildlife-human conflicts covered in the press, and the vilification of the species in pop culture (Dobson, 2008; Muter et al., 2012). Consequently, the perceived threat great whites pose to humans makes eliciting support for the conservation and sustainable management of the species especially difficult. Interestingly, human pressures on shark populations have substantially escalated over the past twenty years, illustrating that it is of utmost importance that attitudes move away from the perspective of protecting humans from sharks, towards the need to protect sharks from humans (Simpfendorfer et al., 2011). This makes the niche market of shark-based ecotourism both a timely and significant area of study, as this emerging industry holds the potential to act

as communicative tool for conservation; capable of promoting public awareness and empathy for the threats facing the species, and ultimately, contributing to the sustainable management of global shark populations.

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Appendix A: Recruitment Script

The following text will be sent to selected reviewers for interview recruitment using TripAdvisor's 'private message' feature:

Dear [name of individual],

I am a graduate student at the University of Ottawa and am conducting research on ecotourism experiences for my thesis. More specifically, I'm interested in learning more about shark tourism activities in order to understand how participants experience these excursions.

I saw your TripAdvisor review of [name of tour operation] and would like to ask you a few questions about your experience. I am looking to interview 8-10 participants on a first-to-respond basis. Please let me know if you would be interested in participating in a short interview over the phone or online (via Skype or FaceTime).

Interviews will last approximately 30 minutes, and will be conducted in English; therefore participants should be fluent in the language. You must be over the age of 18 to participate in this study. I would like to record the audio of the interview, and will take you through a process of informed consent before the interview begins. The identity of all participants will be kept confidential and participants will remain anonymous in the research report.

If you have any questions about the research, the format of the interviews or anything else, please feel free to get in touch. I may be reached by email at [insert email address here].

Thank you for your consideration,

Jenna Colangelo  
Graduate Student  
Department of Communication,  
University of Ottawa  
Ottawa, Canada

Appendix B: Interview Guide

Please see below for a list of questions that will guide the semi-structured interviews with shark tourism participants:

Participant's name: \_\_\_\_\_

Participant's email: \_\_\_\_\_

Participant's country of origin: \_\_\_\_\_

Name of the Shark Tourism Operator that hosted the experience: \_\_\_\_\_

Date of participation in the shark tourism activity: \_\_\_\_\_

Interview Date: \_\_\_\_\_

Questions:

1. When do you remember first hearing about shark tourism and what were your initial feelings towards these activities?
2. What motivated you to take part in shark tourism?
3. Prior to your participation, did you have any concerns with engaging in shark tourism activities?
4. How did you learn about the shark tourism operator you chose? What were your expectations for the tour?
5. What kinds of information did you receive from your tour guide regarding safety? The host area? The species? Conservation?
6. Do you feel that your tour guild provided an accurate depiction of the natural environment and species you encountered?
7. How familiar were you with the threats facing shark populations prior to your participation in the tour? After?
8. What did you enjoy most about your experience?
9. What did you enjoy least about your experience?
10. Would and have you recommended shark tourism activities to others?
11. Would you participate in shark-based tourism again? Why or why not?