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To cite this article: Christopher D. Malcolm, Rosa María Chávez Dagostino & José Luis Cornejo Ortega (2017): Experiential and learning desires of whale watching guides versus tourists in Bahía de Banderas, Puerto Vallarta, Mexico, *Human Dimensions of Wildlife*, DOI: [10.1080/10871209.2017.1367442](https://doi.org/10.1080/10871209.2017.1367442)

To link to this article: <http://dx.doi.org/10.1080/10871209.2017.1367442>



Published online: 01 Sep 2017.



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Experiential and learning desires of whale watching guides versus tourists in Bahía de Banderas, Puerto Vallarta, Mexico

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ABSTRACT

Whales are popular tourism attractions in many coastal areas of the world. Although not without disagreement, vessel-based whale viewing is widely considered to be a form of ecotourism, in which experiential and learning opportunities exist to engender pro-environmental awareness and behavior. Guides are considered to play an important interpretive role in this respect, although there is little research that explores what guides themselves desire to impart to their passengers. Using quantitative and qualitative methods, we compared what whale watching guides in Puerto Vallarta, Mexico ($n = 9$) desire their passengers experience and learn to that reported by the whale watchers themselves ($n = 283$). Guides placed a higher importance on education, while whale watchers indicated experiential elements such as viewing whales close up and spectacular behaviors. Furthermore, the guides held a strong view that emotional feelings of respect and love for whales were important for whale watchers to experience and learn about marine conservation.

KEYWORDS

Conservation; education; emotions; guides; whale watching

Introduction

Marine mammals are iconic wildlife that have become important tourism attractions in many coastal areas of the world (Hoyt & Parsons, 2014; O'Connor, Campbell, Cortez, & Knowles, 2009). Cetaceans in particular have become “standard bearers of marine environmental issues” (Corkeron, 2006, p. 162) and, although not without scientifically-based cautionary statements regarding the practice of vessel-based whale watching (Higham, Bejder, Allen, Corkeron, & Lusseau, 2016; Parsons, 2012), are viewed as ambassadors of environmental awareness, conservation education, and pro-environmental behavioral change, through interpretive programs aboard whale watching tourism vessels (Zeppel & Muloin, 2014).

Examination of the human dimensions of whale watchers has provided an understanding about expectations, satisfaction, specialization, education, and opinions toward cetacean conservation and whale watching management (Kessler, Harcourt, & Bradford, 2014; Littlejohn, Needham, Szuster, & Jordan, 2016; Malcolm & Duffus, 2008; Orams, 2000; Zeppel & Muloin, 2014). The purpose of this paper is to compare the experiential and educational desires of whale watchers to the experiences and education that whale watch guides hope to deliver to their passengers.

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Literature review

Interpretive programs delivered during firsthand experiences with wildlife have been promoted as a tool to engender an environmental ethic (Hughes, 2013; Orams, 1996). Behavioral intentions toward wildlife are governed by attitudes and norms applicable to the situation, described as the Theory of Reasoned Action (Ajzen & Fishbein, 1980). Education provided through interpretive programs, such as human impacts on wildlife, is theorized not only to affect attitudes within this paradigm, but also provide wildlife users with the knowledge resources and ability to recognize opportunities for beneficial actions, described in the Theory of Planned Behavior (Ajzen, 1985; Madden, Ellen, & Ajzen, 1992). This ideology has been the marshaling cry of non-market-based support for whale watching tourism (Johnson & McInnis, 2014) and in some cases has shown the potential to do so (Christensen, Needham, & Rowe, 2009; Zeppel & Muloin, 2008). Carefully developed and monitored education programs have, therefore, been recommended as a functional component within marine wildlife viewing management models (Ballantyne & Packer, 2005; Johnson & McInnis, 2014; Orams, 1996), although there remain calls for further research into causal links between ecotourism interpretation programs and changes toward pro-environmental attitudes and behavior (Hughes, 2013), including whale watching (Orams, Forestell, & Spring, 2014).

The interface between the natural environment and the ecotourist is the guide or interpreter (Ap & Wong, 2001). Cohen (1985) identified *pathfinder* and *mentor* roles for tour guides, followed by Weiler and Davis (1993), who added *motivator* and *environmental interpreter*, in the case of nature-based tour guides. As such, a guide is a conveyor of meaning (Jennings & Weiler, 2005) and can legitimize the educational component of ecotourism within a guided experience (Zillinger, Jonasson, & Adolfsson, 2012). In ecotourism, guides are education specialists (Weiler & Black, 2015), with the added responsibility of promoting pro-environmentally oriented messages and behavior (Randall & Rollins, 2009), which is not the case for guides in other areas of tourism (Wiener, Needham, & Wilkinson, 2009), such as heritage tourism, where guide's primary role is to interpret history. The role of the ecotourism guide is not simple, as an interest in the environment on the part of the guide does not necessarily automatically result in effective pro-environmental education (Kong, 2014). Furthermore, an ecotourism guide may be required to encourage compliance with policies and laws enacted by natural resource management agencies (Orams, 2000; Randall & Rollins, 2009), such as not feeding wildlife.

In vessel-based marine mammal tourism the tourist has little to no influence on the spatial or temporal nature of the tour, nor the choice of guide presence. They do have the choice of whether or not to pay attention to the educational material presented, which can include biology, ecology, explanation of observed behaviors, and marine conservation, as well as regional codes-of-conduct, policies, or laws that govern the activity (Zeppel & Muloin, 2008). Indeed, in the case of marine mammal viewing, an industry which has developed for the most part without regulatory and management direction (Higham, Bejder, & Lusseau, 2009; Malcolm & Penner, 2011), operators and guides are also often important in maintaining voluntary codes-of-conduct for vessel operation. Kessler et al. (2014) stated that the long-term sustainability of whale watching is dependent on minimizing negative impact, even if this means restricting

the participants' desired wildlife interaction (e.g., proximity and length of time). Guides can therefore be instrumental in rationalizing the activity of vessels to their customers.

Ecotourist expectations have been found to be multi-faceted and variable (Littlejohn et al., 2016; Torres-Sovero, González, Martín-López, & Kirkby, 2012). In the case of marine mammal viewing, there are numerous factors that influence satisfaction apart from the wildlife itself, including other passengers, vessel type, presence and behavior of other vessels, interpretation, and sea sickness (Finkler & Higham, 2004; Orams, 2000), although viewing wildlife remains highly important (Orams, 2000). A common thread through the ecotourism literature is that the presence of a knowledgeable guide who provides meaningful interpretation results in higher levels of satisfaction (Ham & Weiler, 2002; Orams, 1996; Randall & Rollins, 2009).

There is limited research that explores how tour guides themselves view their roles (Kong, 2014; Weiler & Black, 2015). In this article, we compared and contrasted that which guides on whale watch cruises in Puerto Vallarta, Mexico, desire their passengers to experience and learn with the desires of the whale watching tourists on board. This comparison will help inform the development of interpretive programs on board whale watching vessels. We expected that guides would be highly interested in imparting biological and conservation knowledge and, based on existing research (e.g., Finkler & Higham, 2004; Malcolm & Duffus, 2008; Orams, 2000), that whale watchers would be more interested in experiential aspects (e.g., viewing whales and whale behaviors) of the whale watching trip.

Whale watching in Bahía de Banderas

The whale watching industry in the Puerto Vallarta area began in the early 2000's and is composed of a fluctuating number of operators that offer whale watching opportunities to view humpback whales (*Megaptera novaeangliae*) wintering in Bahía de Banderas, from December through March (Figure 1). Opportunistic viewing of bottlenose dolphins (*Tursiops truncatus*), pan-tropical spotted dolphins (*Stenella attenuate*), and Bryde's whales (*Balaenoptera edeni*) also occurs. Hoyt and Iñiguez (2008) reported 34 companies operating in the study area but only a few of these (currently approximately 10, authors' estimate) offer dedicated whale watching as their main tour (i.e., as opposed to operators that offer snorkeling and beach trips that opportunistically stop to watch whales, or artisanal fishers that also take people to see whales). Chávez and De La Cueva (2009) estimated that 76,000 visitors went whale watching in the area in 2008. Only vessels licensed to engage in whale watching by La Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) can approach whales closer than 240 meters (787.4 feet) in Bahía de Banderas; licensed vessels less than 9 meters (29.5 feet) can approach within 60 meters (197 feet), while vessels greater than 9 meters can approach within 80 meters (262.5 feet). In addition, vessels in proximity are restricted to speeds of 4 km/hr (2.5 mph) and a maximum time limit of 30 minutes. There are no requirements for guide training.

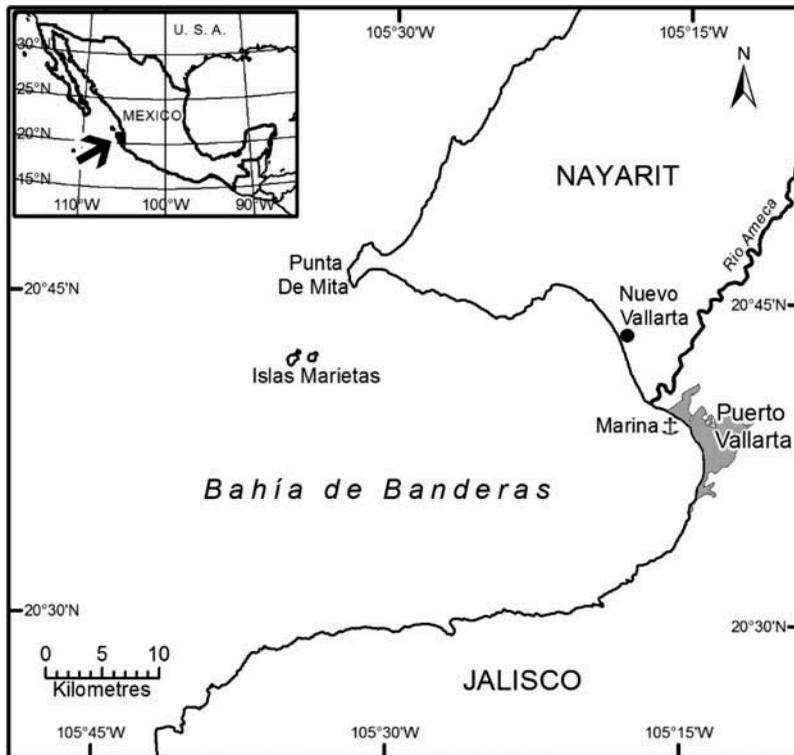


Figure 1. The study area, showing Puerto Vallarta and Bahía de Banderas.

Methods

During 2013–2014, we collected quantitative and qualitative information regarding experiential and learning desires of whale watching company guides and whale watching tourists in the Puerto Vallarta area. Data were collected from the senior guide ($n = 9$) from each of nine different whale watching companies. The guides' years of experience ranged from 7 to 25 years ($\bar{x} = 14.8$). On all vessels in this study the main role of the guide was as interpreter; in no cases was the guide also the vessel operator. Two hundred and eighty-three whale watching tourists were surveyed across the same nine companies. Respondents were mainly from the U.S.A. (49.6%) and Mexico (28.7%), 57.2% female, relatively well-educated (30.3% university undergraduate degree, 30.2% some college/university, 17.3% post-graduate degree), for the most part older (28.6% > 60 years old, 23.4% 40–59) and either with a friend/spouse/partner (59.2%) or with family (23.5%). Demographics are discussed in more detail in Cornejo Ortega, Chavez Dagaostino, Malcolm, & Andrade Romero, In review. Potential participants were intercepted while they waited to board the whale watching vessel. For couples and families, only one member of the group was asked to participate; passengers less than 20 years old were not asked to participate. Participation was high (approximately 90%).

Data were collected using questionnaires that were available either in English or Spanish, upon the participant's desire. The quantitative data consisted of 14 items, for

which the respondents were asked to rate the importance of seven experiential and seven educational aspects of a whale watching tour. The items were ranked on a four-point scale from “Not at all important” to “Very important”. The items were worded identically for both groups with the exception that each item began with the word “Passengers” for the guides (e.g., “Passengers see whales up close to the boat” versus “See whales up close to the boat”). The quantitative data were compared between guides and tourists and tested for statistical differences using a Mann–Whitney U-test. The questions reported on in this article for the whale watcher participants were part of a longer survey that included questions regarding expectations, satisfaction, and opinions about whale watching management. The expectations versus satisfaction (importance-performance) and opinions about whale watching management are addressed elsewhere (Cornejo Ortega et al., In review).

The qualitative data for the guides included the questions: “Can you tell me what you want your whale watch passengers to experience during the tour?” and “Can you tell me what you want your whale watch passengers to learn during the tour?” At the end of the whale watching tourist questionnaire, completed at the end of the trip, were four open-ended questions: “What did you like best about your whale watching trip today?”, “What did you like least about your whale watching trip today?”, “What did you learn on your whale watching trip today?”, and “Is there anything you would have liked to learn about on your whale watching trip today?” In all cases the respondents were able to provide multiple answers to each question. Answers provided in Spanish were translated into English and all data were examined using content analysis methods that recorded the use of key words and word repetition (Strauss & Corbin, 1998) to sort the responses into common expressions, which were subsequently assigned to themes.

Results

Predictably, seeing a whale was very important to both whale watchers and guides (Table 1). Experiential items, such as *See lots of whales*, *See whales up close to the boat*, and *See spectacular behaviors...* were significantly more important to the whale watchers than guides, while cognitive items such as *Learn about whale biology*, *Learn about protection of whales*, and *Learn about whale behaviors...* were significantly more important to the guides than tourists.

Responses to the whale watch guide question “What would you like your passengers to experience?” were grouped into nine different expressions. Each was then assigned to a theme, either relating directly to “whales” or to the “trip” in general (Table 2). Responses were mainly classified within the “whales” theme and guides primarily hoped that the passengers would leave their trip with a respect and love for whales, and satisfied expectations.

The same method was applied to the whale watching tourist responses for “What did you like best?” and “What did you like least?” (Tables 3 and 4). Within the context of this study “behavior(s)” were short-term activities that tourists might view during the trip, such as breaching, tail lobbing, or fin slapping. We considered items such as migration, mating (in the context of why the whales are in Bahía de Banderas), and calving to be related to biology. We did not assign a theme to very general answers such as “Everything” or “Nothing”. Experiential satisfactions, such as seeing whales and their behaviors, were

Table 1. Comparison of mean whale watch guide and tourist responses to fourteen items of importance on whale watching trips.

Item	Guide mean ^{1,2}	Tourist mean	Gap	Mann-Whitney U
See a whale even if it is only one	2.89	2.69	0.2	$U = 907, p = 0.143$
See lots of whales	1.67	1.93	-0.26	$U = 1,808, p = 0.002$
See whales up close to the boat	1.78	2.23	-0.45	$U = 1,745, p = 0.006$
Take pictures of whales	1.89	1.94	-0.05	$U = 1,469.5, p = 0.78$
See whales in a manner which is respectful to the whales and their environment	2.67	2.47	0.2	$U = 1,149, p = 0.912$
See spectacular behaviors such as jumping or a whale's tail as it dives	1.44	1.96	-0.52	$U = 1,957, p > 0.000$
See a variety of wildlife besides whales	1.89	1.63	0.26	$U = 1,349.5, p = 0.365$
Learn about whale biology (feeding, reproduction)	2.4	1.83	0.57	$U = 706.5, p = 0.010$
Learn about protection of whales	2.44	1.97	0.47	$U = 629, p = 0.020$
Learn about whale behaviors (jumping, socializing, migration)	2.28	1.94	0.34	$U = 1,413.5, p = 0.050$
Learn about regulations for watching whales	1.78	1.88	-0.1	$U = 1,373, p = 0.332$
Learn about ocean conservation	2.12	1.96	0.16	$U = 1,287, p = 0.520$
Learn how to identify different species of whales	1.11	1.78	-0.67	$U = 1,900, p = 0.001$
Learn about whales in local culture	1.33	1.5	-0.17	$U = 1,632.5, p = 0.054$

¹ Means were calculated on the following scale: "Not at all important" = 0, "Somewhat important" = 1, "Important" = 2, "Very important" = 3.

² Guide items were all preceded with the word "Passengers", e.g., "Passengers see whales up close to the boat."

Table 2. Whale watch guide responses to "Can you tell me what you want your whale watch passengers to experience during the tour?".

Expression (n = 9)	Theme (n = 2)	Frequency
Respect and love whales	<i>Whales</i>	5
Satisfied expectations	<i>Trip</i>	5
Excitement/surprise when seeing whales	<i>Whales</i>	3
See whales	<i>Whales</i>	2
See different behaviors	<i>Whales</i>	2
Experience nature	<i>Trip</i>	2
Learn about whales	<i>Whales</i>	1
Good service	<i>Trip</i>	1
Feel safe	<i>Trip</i>	1
Totals	<i>Whales = 13</i>	22
	<i>Trip = 9</i>	

Table 3. Whale watching tourist responses to "What did you like best about your whale watching trip today?".

Expression (n = 11)	Theme (n = 2)	Frequency	Percent
Seeing whales	<i>Whales</i>	57	18.9
The guide, captain, operators	<i>Trip</i>	54	17.9
Seeing surface behaviors (e.g., breaching, fin slapping, tails)	<i>Whales</i>	40	13.2
Landscape, scenery, weather	<i>Trip</i>	30	9.9
Learning, information presented	<i>Whales</i>	29	9.6
Seeing calves (with mother)	<i>Whales</i>	27	8.9
Everything /the whole package		22	7.3
Being close to whales	<i>Whales</i>	22	7.3
Seeing whales multiple times on trip	<i>Whales</i>	17	5.6
Seeing whales in the wild, their natural environment	<i>Whales</i>	3	1.0
Taking pictures, videos	<i>Trip</i>	1	0.3
Totals	<i>Whales = 195</i>	302	100
	<i>Trip = 107</i>		

Table 4. Whale watching tourist responses to “What did you like least about your whale watching trip today?”.

Expression (n = 11)	Theme (n = 2)	Frequency	Percent
Nothing /not applicable /it was all good		72	34.8
Not enough time with whales	<i>Whales</i>	48	23.2
Did not see enough whales/dolphins	<i>Whales</i>	22	10.6
Wanted trip to be longer /time on water too short	<i>Trip</i>	17	8.2
Wanted to see more surface behaviors, see more of whale's bodies	<i>Whales</i>	15	7.2
Too many other boats in the area	<i>Trip</i>	14	6.8
Boat did not get close enough to whales	<i>Whales</i>	8	3.9
Not enough information on humpback whales in general	<i>Whales</i>	5	2.4
The end /the trip back	<i>Trip</i>	2	1.0
Could not always hear information being presented	<i>Trip</i>	2	1.0
Lack of information on conservation	<i>Trip</i>	2	1.0
Totals	<i>Whales = 98</i> <i>Trip = 37</i>	207	100

the most common responses, whether positive or negative, in which case the respondents desired more of the experiences, with statements such as “Not enough time with whales,” and “Did not see enough whales...” Aspects of the “trip” theme were also important, where “The guide, captain, operators” was highly satisfactory and “Wanted trip to be longer” was a common negative response, which is again actually a desire for more of the positive experiences. Responses related to learning also appeared in responses to both the positive and negative open-ended questions, although in minor roles; only 10% of participants indicated that “Learning, information presented” was an aspect that they liked, while only 2% responded that “Not enough information about humpback whales,” or “Could not always hear the information being presented,” and “Lack of information on conservation” (1% each) were aspects that they disliked.

Guide responses to the question “Can you tell me what you want your whale watch passengers to learn during the tour?” were grouped into 7 expressions and further categorized into the themes “conservation,” “behavior,” or “biology” (Table 5); the “conservation” theme, which included responses such as “Whales are wild animals to respect,” were most important for guides. In contrast, whale watching tourist responses to “What did you learn on your whale watching trip today?” were primarily grouped within “behavior” (43% of responses) and “biology” (36%) themes, with little indication that “conservation” (8%) themes were learned (Table 6). While the main response to “Is there anything you would have liked to learn about on your whale watching trip today?” were

Table 5. Whale watch guide responses to “Can you tell me what you want your whale watch passengers to learn during the tour?”.

Expression (n = 7)	Theme (n = 2)	Frequency
Whales are wild animals to respect	<i>Conservation</i>	7
Environmental /conservation education	<i>Conservation</i>	6
About whale behaviors	<i>Behavior</i>	3
Whale biology	<i>Biology</i>	3
About whale migration	<i>Biology</i>	3
How to identify whale species	<i>Biology</i>	1
Relationships between whales and humans	<i>Conservation</i>	1
Totals	<i>Conservation = 14</i> <i>Biology = 7</i> <i>Behavior = 3</i>	24

Table 6. Whale watching tourist responses to “What did you learn on your whale watching trip today?”.

Expression (<i>n</i> = 11)	Theme (<i>n</i> = 4)	Frequency	Percent
About migration (distance, seasonality, reason)	<i>Biology</i>	39	15.5
About competition, mating	<i>Behavior</i>	38	15.1
About behaviors (breaching, tail/pec slapping)	<i>Behavior</i>	34	13.5
General information about whales and/or dolphins		34	13.5
About biology (size, maturity age, 5 finger bones, baleen, demographics, taxonomy)	<i>Biology</i>	26	10.4
About feeding calves, caring for calves	<i>Behavior</i>	25	10.0
About protection or conservation, respecting whales	<i>Conservation</i>	20	8.0
About identifying whales, visible male and female differences, unique tails and fins	<i>Biology</i>	16	6.4
About whale songs	<i>Behavior</i>	10	4.0
About habitat	<i>Biology</i>	6	2.4
About whale and dolphin interactions with other species	<i>Biology</i>	3	1.2
Totals	<i>Behavior</i> = 107 <i>Biology</i> = 90 <i>Conservation</i> = 20	251	100

variations on “Nothing else,” (57%) there was some indication that learning about “conservation” themes was desired (Table 7): almost one quarter (23.4%) of the responses indicated a desire for learning about conservation, including “About conservation of whales...and ocean conservation,” and “Regulations for watching whales.”

Discussion

Seeing whales was of high importance to both whale watching tourists and guides (Table 1), which is similar to Orams (2000). We did, however, find some differences between our study groups. The tourists placed a significantly higher importance on three experiential items, *See lots of whales*, *See whales up close to the boat*, and *See spectacular behaviors*, while the guides placed a significantly higher importance on three learning items, *About protection of whales*, *About whale biology*, and *About whale behavior*. The guides therefore view their roles as interpreters of meaning (Jennings & Weiler, 2005; Weiler & Davis, 1993), as well as marine educators (Zillinger et al., 2012). The tourists showed less interest in learning and more in experiential thrills. This result echoes the findings of Beaumont (2001) and Uysal, Jurowski, Noe, and McDonald (1994), in that whale watching requires no specialized skills or previous knowledge

Table 7. Whale watching tourist responses to “Is there anything you would have liked to learn about on your whale watching trip today?”.

Expression (<i>n</i> = 11)	Theme (<i>n</i> = 4)	Frequency	Percent
No, not applicable, nothing else etc.		84	57.5
About conservation of whales and/or dolphins and ocean conservation	<i>Conservation</i>	22	15.1
Whale behaviors	<i>Behavior</i>	12	8.2
Regulations for watching whales	<i>Conservation</i>	9	6.2
Information about other whale species	<i>Whales</i>	7	4.8
Whale anatomy/biology	<i>Biology</i>	3	2.1
Whale reproduction	<i>Biology</i>	3	2.1
Human uses of whales, whale hunting	<i>Conservation</i>	2	1.4
Whale feeding behavior	<i>Behavior</i>	2	1.4
Information about aquatic birds in area	<i>Other</i>	1	0.7
Local perspective on conservation (Mexico)	<i>Conservation</i>	1	0.7
Totals	<i>Conservation</i> = 34 <i>Behavior</i> = 14 <i>Biology</i> = 6	146	100

(Malcolm & Duffus, 2008), which has been correlated with less interest in the environment (Duffus & Dearden, 1993; Malcolm & Duffus, 2008). It is also possible that advertising for whale watching, which often portrays breaching and close encounters (Orams, 2000), thus emphasizing experiential elements, may influence expectations on the part of whale watchers. The high importance of viewing whales close to the boat in this study, though, does not agree with Orams' (2000) findings; the results here are more similar to those of Kessler et al. (2014), who reported that whale watchers conveyed a desire to be closer to whales, within the minimum proximity restrictions. Curtin (2010) also reported the importance of close encounters to ecotourists in wildlife viewing and theorized that advertising and televised nature programming may have influence this desire.

The qualitative data added depth to our quantitative findings, particularly with respect to the way in which the guides desire their passengers receive the message of conservation. The guides were most interested that their passengers experience "Respect and love" for whales, along with "Satisfied expectations," followed by "Excitement /surprise when viewing whales" (Table 2). The first and third of these desires are emotional in nature and 13 of the 22 guides' responses, including four of the top five expressions, were assigned to the "whales" theme. That emotional experiences of respect and love are paramount in the guides' desires for their passengers' experiences is important, as seven of the nine guides used the term "respect" again as their greatest desire their passengers learn about whales, with conservation of whales almost equally as important (Table 5). It appears to be through an emotional avenue, rather than strict pedagogy, that the guides hope their passengers learn about environmental conservation. Indeed, anecdotally, during our experiences on board the whale watching vessels during the study we did not observe the guides engaging in many structured, planned interpretive episodes (authors, per. obs.); rather, the guides waited for questions or reactions from passengers to interpret meaning. This can be viewed as a passive interpretive approach that prescribes to the notion that firsthand experiences of wildlife will engender an environmental awareness (*sensu* Shrestha, Stein, & Clark, 2007), and that the strong emotions elicited by viewing charismatic megafauna, such as whales, in the wild will evoke a connectivity with nature that can empower in people a desire to contribute to marine conservation (Johnson & McInnis, 2014; Peake, Innes, & Dyer, 2009).

From a vessel-based whale watching guide's perspective, this approach makes sense: whale watching tourists have been shown to exhibit low specialization (Malcolm & Duffus, 2008), which is also true in our study, where 59% of the respondents had never been whale watching previously, and a further 20% only once (Cornejo Ortega et al., In review), meaning they possessed few previous similar experiences or knowledge that provided context, and may as a result have been bombarded by novel affective experiences (e.g., being on a boat, the motion of the boat, seeing marine wildlife) that may have "masked" cognitive interpretation of "lectures". The relationship between affective emotions and cognition is reviewed by Storbeck and Clore (2007). They argued that affect and cognition do not operate independently, but also that affect can moderate cognitive operations, including learning. Furthermore, guides on a whale watching vessel are more restricted in their ability to model environmentally beneficial behavior, such as the practice of "leave no trace" that can be modeled by kayak guides (Randall & Rollins, 2009), beyond an explanation of why vessels may remain a certain distance from whales (although the quantitative data in this study do not seem to indicate that the guides view this information as important). The guides in this study therefore appear to ascribe to the *interpreter* role (Weiler & Davis, 1993), however passive, but not as *mentor* (Cohen, 1985) or *motivator* (Weiler & Davis, 1993).

The whale watchers in our study overwhelmingly indicated experiential aspects of the trip, mostly within the “whales” theme, in response to “What did you like best”, including “Seeing whales,” and “Seeing surface behaviors” (Table 3). In answer to “What did you like least” 34.8% of the respondents indicated “Nothing..” (Table 4); the following four expressions, however, were all indications of wanting more of the whale watching experiences that they reported as positive experiences (e.g., “Not enough time with whales,” and “Wanted to see more surface behaviors, see more of whale’s bodies”) rather than genuine negative comments regarding the trips. As in other whale watching studies (Finkler & Higham, 2004; Muloin, 1998; Orams, 2000) there was a high level of satisfaction reported by the respondents.

Only 9.6% of the respondents indicated that “learning” was a favorite outcome, which is further supported in that only 8% of the answers to “What did you learn about” indicated “About conservation of whales” (Table 6) and 58% of the respondents to “Is there anything you would have liked to learn” indicated “No, nothing” (Table 7). This is not to say that the respondents did not report learning. Table 6 indicates 251 responses comprising ten specific different learning items (not including “General information..”), primarily within the “Biology” and “Behavior” themes. Overall, these results are similar to Neil, Orams, and Baglioni (1996), who indicated that whale watchers were able answer general questions about cetacean ecology well (although with a high degree of variability), but not about cetacean management. It is possible that conservation concepts are unfamiliar enough to whale watchers as to be intangible. There is a small degree of overlap in Tables 6 and 7 in which responses to “What did you learn on your whale watching trip today?” and “Is there anything you would have liked to learn about on your whale watching trip today?” appear in both; for example, 20 respondents reported learning about conservation, while 22 responded that they would have liked to learn about conservation. This result likely reflects differences in interpretation between guides and learning interests of whale watchers.

Interestingly, of the 43% of respondents that did not reply “No, nothing” to “Is there anything you would have liked to have learned”, 53% indicated “Conservation” themes (23% of total responses). Without recording the guides during the tours, we cannot conclusively state whether this resulted from conservation-related information either (a) not being offered, or (b) not being offered effectively. Further research is necessary to examine whether conservation information is delivered effectively on whale watching vessels in the study area, as Kong (2014) stated that interest in the environment on the part of the guide does not necessarily result in effective pro-environmental education.

Conclusions and future research

In this article, we examined how the experiential and educational desires of whale watchers in Puerto Vallarta, Mexico, compared to those which whale watch guides hope to deliver to their passengers. We discovered some differences. The whale watchers were more interested in experiential aspects of the trip while the guides were more interested in delivering education. Our study supports the idea that ecotourists, in this case whale watchers, are not always interested in learning about environmental conservation,

although we were able to demonstrate that the whale watchers indicated they learned about biology and ecological aspects of humpback whales.

The guides felt that “Respect and love for whales,” emotional elements, were most important for their passengers to take away from whale watching trips; this relates to both experiential and learning components. We suspect that the guides hope emotions elicited through viewing wild humpback whales will engender conservation awareness. We were limited by a small sample of whale watching guides in restricting ourselves to dedicated whale watching tours, which could be expanded through interviews with guides on snorkeling and beach tours in the area, or expanding the geographical focus to multiple whale watching sites. In addition, we did not ascertain whether or not the guides hope an awareness of conservation issues would lead to pro-environmental behavior modification. It seemed curious to us, however, that the guides we interviewed for the study did not place high importance on informing their passengers about local regulations, particularly given that whale watching activities are primarily controlled through proximity restrictions, whether scientifically-based or not, and that the guides expressed a desire that the whale watchers learn to respect whales. We suggest a more active role on the part of the guides in this study to interpret the nature and purpose of local whale watching guidelines in the context of the behavioral information the whale watchers seem to absorb, and relate it to conservation efforts at multiple spatial scales (*cf.* Higham, Bejder, & Williams, 2014). Interpretation by the guides to this effect could likely address the negative comments related to proximity and time spent with whales, and would promote awareness of environmentally precautionary behavior that might engender the “Respect and love for whales” that the guides hope to impart.

It is apparent that the nature of the relationship between viewing wildlife, emotions, interpretation, and promotion of an environmental ethic is more complex than placing tourists in viewing distance of wildlife and imparting knowledge. In particular, the potential for emotions to play a role in this context, and how ecotourism guides view their role in effecting awareness and behavior change, requires further research. It is widely accepted that close encounters with wild whales elicit strong emotions, and guides who participated in our study demonstrated that they feel emotions of respect and love for whales are highly important to experience on a whale watching tour. The literature is currently limited and contradictory in this matter. For example, while Peake et al. (2009) were not able to establish that emotions could act as a predictor of effective communication of conservation messages, Jacobs and Harms (2014) reported that emotional interpretation was more influential on conservation intentions of whale watchers than environmental knowledge and messages of conservation responsibility. It would be interesting to explore this from the whale watching guide’s point of view. How do they approach the affective and cognitive components of their roles on a whale watching tour? How might guides recognize and utilize emotions in the links between norms, attitudes, and behavioral intentions? Is behavioral modification even an objective of their interpretation programs?

It is also worth exploring the role emotion might play in social marketing (Bright, 2000) of sustainable whale watching to promote “Respect and love for whales” through an appreciation of marine conservation even before tourists step on the deck of a whale watching vessel. Both Chhabra, Andereck, Yamanoi, and Plunkett (2011) and Truong and

Hall (2013) suggested that social marketing is an area in need of exploration by tourism researchers as it may be an effective method to encourage behaviors appropriate to sustainable tourism. This approach could be integrated into a ‘rethinking’ (p. 369) of sustainable whale watching as espoused by Higham et al. (2014), in which tourists, central themselves to encouraging proximity to whales, can be ‘empowered to discern between sustainable and unsustainable practices’ (p. 374), a central tenet in the Theory of Planned Behavior; this could be further engendered by the guides once the tourists are on the vessel and engaged in viewing whales, when emotions, like the whales, come to the surface.

Acknowledgments

The authors wish to thank the whale watching companies, guides, and whale watchers that participated in this study. R. Moore, Brandon University, and numerous students at the Universidad de Guadalajara, Centro Universitario de la Costa, Puerto Vallarta, helped with data collection. Cartography was provided by W. van Heyst, Department of Geography, Brandon University. Funding for this project was provided by a Social Sciences and Humanities Research Council of Canada Aid to Small Universities grant.

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