

## Assessing Demand and Supply Perspectives in Marine Wildlife Voluntourism: A Case of Southern Africa

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### Abstract

Marine wildlife voluntourism (MVT) is an alternative form of tourism that has grown due to the desire of people to assist in conservation efforts and research. There is limited research on the demand and supply perspectives of MVT and whether these align. This type of research can guide the sustainable development of MVT. A qualitative research method was followed, using semi-structured interviews to collect data to fill this gap. South Africa, Mozambique and Madagascar were identified as the case study locations for this research. Data were collected from 30 voluntourists and 24 staff members from June 2019 to June 2020. MVT organisations were also asked to describe their business model, using the business model canvas method. Thematic analysis was deployed as the main method to analyse the data. The perspectives of the demand and supply sides of MVT were aligned. Importantly, conservation, research and community engagement were essential to both the voluntourists and the staff members. The business model canvas of the MVT organisations had important elements that contributed to the success of MVT programmes. This study provided a better understanding of MVT in southern Africa from a demand and supply perspective, yielding recommendations for marketing, management and future research.

**Keywords:** marine wildlife voluntourism; citizen science; marine conservation; community engagement; business model

### Introduction

Tourism offers a variety of benefits to the economy, environment and community, and is an essential and fast-growing industry globally (Scholtz & Slabbert, 2016). There is however a negative side of tourism, which includes massification and environmental degradation. This is why more people are participating in alternative forms of tourism (Oberholzer et al., 2010; Scholtz & Slabbert, 2016). One is marine wildlife tourism, which can contribute to conservation, protection of marine animals and economic benefits (Hammerton et al., 2012; Rizzari et al., 2017). Marine wildlife tourism can also have negative impacts, such as species disturbance and environmental degradation (Hyrenbach et al., 2000). This has resulted in an

increase in marine conservation and advocacy around the globe, with tourists wanting to partake in activities more in line with marine conservation (Leslie, 2005; Lück, 2016). An example of this commitment is tourists' participation in voluntourism activities, especially those revolving around marine conservation issues and research (Anderson et al., 2017).

Voluntourism encompasses tourists being involved in organised volunteer activities while on holiday (Wearing, 2001). This could be for different reasons, whereby tourists use their time and money to assist those in need (McGehee & Santos, 2005). Tourists and industry managers are looking for sustainable, interactive and productive experiences (Bargeman et al., 2018). This has led to voluntourism becoming a favoured form of alternative tourism which is expected to become a popular form of sustainable tourism (Bernstein & Woosnam, 2019).

Marine wildlife voluntourism (MVT) involves the activities of those who want to enjoy a coastal destination, and at the same time participate in marine conservation and research (Rahman & Ali, 2019). There has been an increase in interest in MVT activities due to the challenges that the marine environment around the globe is facing, which include high global biodiversity loss and climate change, as well as negative tourism impacts as mentioned earlier (Brooks et al., 2006; Ringler et al., 2010). MVT could result in increased conservation, scientific discovery, ecological monitoring, and endorsing the achievement of sustainable development goals (Devereux & Holmes, 2018).

### **Literature review**

MVT is seen as a way to monitor the marine environment, collect scientific data related to the marine environment, and demonstrate care for the global marine environment (Gray et al., 2017). Environmental, conservation, scientific and educational activities are at the centre of MVT programmes and include litter removal; collecting, entering, and recording data; community development; and educating the local communities on marine life and conservation, to name a few (Brightsmith et al., 2008; Wearing & McGehee, 2013). The motivations of marine wildlife voluntourists usually include gaining new skills and experience, community engagement, interest in a given field (e.g. marine biology), experiencing new places and cultures, marine conservation, giving back to a meaningful cause, and research (Roques et al., 2018; Shum et al., 2021). Ensuring that the voluntourists' motivations are fulfilled, however, requires a proper understanding of the alignment of their perspectives and experiences with the characteristics and objectives of the MVT organisations.

There are contrasting accounts of the impacts of MVT, resulting in the need to further investigate them by juxtaposing demand-side and supply-side views. For example, some researchers have criticised MVT for the commodification of nature and greenwashing (Godfrey & Wearing, 2012; Gray & Campbell, 2007; Lyons & Maxwell, 2004). However, MVT programmes can result in increased awareness and understanding of marine conservation issues (Ballantyne et al., 2007; Strzelecka et al., 2017), and voluntourists experiencing self-fulfilment and personal growth, leading to increased knowledge and skills (Grimm & Needham, 2011). The voluntourists' motivation, behaviour intentions and future commitment toward MVT can enhance once satisfaction meets or exceeds expectations (Polus & Bidder, 2016). MVT can influence the voluntourists' attitude towards aspects such as conservation and future commitment (Finkler & Higham, 2004), leading to voluntourists changing their attitude and becoming more environmentally aware by reducing their environmental footprint (Goldberg et al., 2018). MVT can also influence the voluntourists' attitude toward science and scientific thinking (Donnelly et al., 2014; Vann-Sander et al., 2016). This could lead to voluntourists wanting to follow a marine conservation career path (Hicks, 2016), and pay to support the conservation and protection of marine wildlife (Cárdenas & Lew, 2016; La Manna et al., 2020). A deeper investigation of the short-term effects of MVT experiences can shed light on the value

of these experiences for tourists and whether MVT organisations have met some of their objectives.

There are several claims that MVT can result in important positive outcomes such as long-term funding for conservation (Brightsmith et al., 2008; Brondo, 2015), conservation and protection of specific marine destinations through valid research, and management of threatened and vulnerable marine species (Coghlan & Gooch, 2011; Roques et al., 2018; Schmeller et al., 2008). MVT can increase the education of the local people (Gray et al., 2017; Roques et al., 2018) and offer collaboration opportunities between destination stakeholders, leading to effective marine resource management (Hammerton et al., 2012; Pattengill-Semmens & Semmens, 2003; Rees et al., 2010). This can result in the development of a community and destination, and increase the living conditions of the local community, contributing to poverty alleviation (Knollenberg et al., 2014; Wearing, 2001). These outcomes require continuous validation, for example, by weighing them against the perceptions of marine voluntourists regarding their experience.

This study aimed to address gaps concerning the need to assess the alignment of voluntourists' perspectives and experiences with the characteristics and objectives of MVT organisations, through a qualitative research approach. The results would assist with proper marketing and management of MVT, and importantly, the sustainable growth of this industry. Notably, MVT in the global south including areas like southern Africa has been growing, with more people wanting to contribute to conservation and make a difference (Kitney et al., 2018; Roques et al., 2018; Weaver, 2015). MVT in southern Africa is attracting many young voluntourists who want to offer their services abroad (Govender & Rogerson, 2010). Due to the extensive coastlines and high biodiversity of marine species, several of which are threatened, southern African countries are part of the top ten rated countries for MVT worldwide (Alexander, 2012; Keese, 2011; Roques et al., 2018; Van Tonder et al., 2017). For these reasons, southern Africa was selected as a region of interest for this study.

## Methods

### *Case study locations*

The three locations selected for this study included South Africa, Mozambique and Madagascar. There are four reasons why these countries were chosen within the southern African region. Firstly, South Africa, Mozambique and Madagascar are three out of four countries in southern Africa that host MVT projects (Volunteerworld.com, 2022). Secondly, these countries have extensive coastlines and require significant conservation and management efforts to safeguard marine habitats and species (Greenan et al., 2018; Motta et al., 2000). Thirdly, these countries host charismatic and vulnerable marine wildlife species that move across trans-frontier boundaries (Sink et al., 2011).

MVT organisations in southern Africa focus on working with charismatic, unique, vulnerable and conservation value-laden species like sharks, coral, whales, sea turtles, dolphins, and sea birds. The average price for MVT trips in southern Africa is \$591.44 per week, and the duration of trips ranges from 1 to 26 weeks. Voluntourists participate in a variety of conservation, scientific, environmental, and education activities (e.g. scuba diving, collecting data, community work, monitoring and observing marine species, and rehabilitation and releasing of marine animals). Three MVT organisations in southern Africa, one for each country, were invited and agreed to participate in this study. One is situated in Mossel Bay, South Africa and focuses on shark-based MVT; one is in Ponta do Ouro, Mozambique and focuses on dolphin-and turtle-based MVT; and one is in Nosy Be, Madagascar and focuses on reef-based MVT.

### ***Research design and data collection***

This study used qualitative research to collect data in the form of semi-structured interviews targeting both voluntourists and staff (including managers) at the MVT organisations (Nieuwenhuis, 2019b). The interviews targeting voluntourists included questions on the demographic profile of the interviewees; motivations and expectations to participate in MVT; satisfaction with the MVT experience; and post-experience attitudes, such as towards the environment or science. The interview targeting MVT staff included questions on the demographic profile of the interviewee; the business model of the organisation (completed only by the managers following the business model canvas to organise responses); and key characteristics of the MVT organisation, such as vision, objectives and goals. The interviews were accompanied by a consent form with the necessary information regarding the research. The participants had to give consent that they understood the information provided and that they voluntarily agreed to take part in the study (Henning, et al., 2007; Maree, 2019).

Data collection started on 25 June 2019 and ended on 25 June 2020. Interviews were conducted in person at the organisations except for Madagascar, where due to COVID-19, participants were interviewed by the first author using Google Meet. In total, 30 voluntourists (17 in South Africa, nine in Mozambique and four in Madagascar) and 24 staff members (17 in South Africa, four in Mozambique and three in Madagascar; of which six were managerial staff) were interviewed. Interviews were in English and were 30 minutes on average. The interview sessions were recorded for transcription purposes with the permission of the participants.

### ***Data analysis***

The recordings were each transcribed verbatim into a Word document. The demographic data of the participants were captured in Microsoft Excel and analysed descriptively using the statistical software TIBCO Statistica (Version 13.3, 2020). The business model canvas data were used to draft a profile of the business models of the organisations; the rest of the data were analysed using thematic analysis separately for the tourists and the staff at the three MVT organisations. Thematic analysis was performed in five phases (Creswell & Creswell, 2018; Nieuwenhuis, 2019a) namely reading the data, coding the data (identifying meaningful analytical units using inductive open coding), establishing themes (assigned to the codes that shared commonality), interpreting themes and underlying codes, and comparing them between tourists and staff at the MVT organisations. During coding, a master list was kept for each code that was developed and reapplied to similar segments of data – in vivo coding. Key quotes for each theme were also identified from the data.

## **Results and discussion**

### ***A business model canvas of MVT organisations***

Table 1 displays the overall business model canvas of the MVT organisations in South Africa, Mozambique and Madagascar. The organisations had a variety of key partners, from government organisations to non-profit ones. In MVT, collaborations are essential and organisations are dependent on key partners to operate successfully (Wearing, 2001). They can create pathways between stakeholders, resulting in shared information and providing support for effective marine resource management (Bramwell & Lane, 2000; Cater & Cater, 2007; Pattengill-Semmens & Semmens, 2003; Rees et al., 2010).

Key activities and value propositions at the organisations included the community, research, conservation, ecotourism, and education-related aspects, which are also reported in the available literature on MVT (Rocha et al., 2020; Roques et al., 2018). According to Benson and Henderson (2011), MVT organisations that offer a wide range of key activities are more



likely to be successful. These activities and opportunities should make unique and memorable experiences, which can assist with saving flagship species from extinction and addressing marine ecosystem degradation (Wingit et al., 2017). The key resources of the organisations included the environment, voluntourists, collaborators, community, staff and equipment, which are also recurrent in the available literature (Benson & Henderson, 2011; Gray & Campbell, 2007; Kohler et al., 2016; Roques et al., 2018; Wingit et al., 2017). Key resources are essential for the successful operation of an MVT organisation, allowing them to offer unique opportunities to the voluntourists, and to obtain repeat and new voluntourists (Debarliev & Mitrovska, 2016; Forster, 2001).

Table 1. An overall business model canvas of the MVT organisations studied

<b>Key Partners</b> <i>(Infrastructure)</i>	<b>Key Activities</b> <i>(Infrastructure)</i>	<b>Value Propositions</b> <i>(Offer)</i>	<b>Customer Relationships</b> <i>(Customer)</i>	<b>Customer Segments</b> <i>(Customer)</i>
<ul style="list-style-type: none"> <li>• Tourism support services</li> <li>• Educational institutions</li> <li>• Government</li> <li>• Research centres</li> <li>• NGOs</li> </ul>	<ul style="list-style-type: none"> <li>• Community engagement</li> <li>• Conservation of marine ecosystems and species</li> <li>• Research projects</li> <li>• Marine ecotourism</li> <li>• Diving/snorkelling</li> <li>• Training/teaching protocols</li> <li>• Courses</li> </ul>	<ul style="list-style-type: none"> <li>• Protecting</li> <li>• Raising awareness</li> <li>• Educating</li> <li>• Research</li> <li>• Conservation</li> <li>• Alleviating poverty</li> <li>• Ethical marine ecotourism</li> </ul>	<ul style="list-style-type: none"> <li>• Social media</li> <li>• Newsletter</li> <li>• Company blog</li> <li>• Courses</li> </ul>	<ul style="list-style-type: none"> <li>• Someone interested in and with a passion for ocean conservation and marine fauna and flora</li> <li>• Students and gap year takers</li> <li>• Those interested in marine mammal research</li> <li>• Ecotourists</li> <li>• General divers</li> </ul>
	<p style="text-align: center;"><b>Key Resources</b> <i>(Infrastructure)</i></p> <ul style="list-style-type: none"> <li>• Ocean, coastal zone and marine life</li> <li>• Voluntourists</li> <li>• External collaborators</li> <li>• Local destination and community</li> <li>• Staff</li> <li>• Equipment</li> <li>• Marine animal species databank</li> </ul>		<p style="text-align: center;"><b>Channels</b> <i>(Customer)</i></p> <ul style="list-style-type: none"> <li>• Social media</li> <li>• Scientific conferences</li> <li>• Company website</li> <li>• Newsletter</li> <li>• Educational institutions</li> <li>• Exhibitions</li> </ul>	
	<p style="text-align: center;"><b>Cost Structure</b> <i>(Financial Viability)</i></p> <ul style="list-style-type: none"> <li>• Advertising</li> <li>• Maintenance</li> <li>• Governance tax</li> <li>• Educational material</li> <li>• Training/teaching protocols</li> </ul>	<ul style="list-style-type: none"> <li>• Courses</li> <li>• Trainers</li> <li>• Travel expeditions</li> <li>• Miscellaneous items (T-shirts)</li> </ul>	<ul style="list-style-type: none"> <li>• Voluntourist fees</li> <li>• Sponsors</li> <li>• Grants</li> <li>• Research funds</li> </ul>	<p style="text-align: center;"><b>Revenue Stream</b> <i>(Financial Viability)</i></p> <ul style="list-style-type: none"> <li>• Marine ecotourism</li> <li>• Documentaries</li> <li>• Donations and membership</li> </ul>
<ul style="list-style-type: none"> <li>• Employee salaries</li> <li>• Services and requirements for voluntourists</li> <li>• Rent</li> <li>• IT and Equipment</li> <li>• Fuel</li> </ul>				

According to Benson and Henderson (2011), MVT organisations use different marketing channels to advertise their programmes to potential voluntourists and to interact with them before and after participation in MVT. The organisations in this study used social media, company websites, newsletters, company blogs, scientific conferences, exhibitions and educational institutions to communicate and maintain a relationship with their voluntourists. Some of these have been highlighted also by Roques et al. (2018). General marine wildlife tourists, such as divers, ecotourists, students and researchers with an interest in marine conservation were identified as customer segments, in line with previous studies (Clifton & Benson, 2006; Coghlan, 2006; Ellis, 2003; Galley & Clifton, 2004; Gray & Campbell, 2007; Lorimer, 2009; Wood, 2010). From this, it can be seen that MVT represents a different customer segment compared to mass tourism (Wearing et al., 2010).

The financial viability of MVT organisations includes different incomes and expenses (Benson & Henderson, 2011; Gray & Campbell, 2007; Wearing, 2001). This can be seen from the results, where the cost structure revolved around general business expenses (e.g. fuel and rent), to more specialised matters (e.g. training and travel expeditions). The revenue stream was mainly focused on donations and payments received from voluntourists. The cost structure and revenue streams of MVT organisations are also described in the available literature and generally confirm what emerged in this study (Benson & Henderson, 2011; Gray & Campbell, 2007; Rocha et al., 2020; Roques et al., 2018; Wingit et al., 2017). From this, it is understood why MVT organisations tend to attract western or young travellers with the time and money to support conservation projects (Coghlan, 2006; Heath, 2007; Scheyvens, 2002). This could be one of the reasons why an MVT holiday is more expensive compared to a general holiday, due to the variety of expenses and only a few methods to obtain an income (Wearing, 2001). It is important to ensure that an MVT organisation is financially viable and successful, by offering a quality experience, even if it means charging higher prices (Benson & Henderson, 2011; Buzzell & Gale, 1987). Increased financial support can lead to the protection of marine species and habitats, and increase support for marine conservation work, resulting in enhanced marine wildlife management and research (Dearden et al., 2007; Trave et al., 2017; Wiener et al., 2009; Zeppel, 2008; Zeppel & Muloin, 2013).

### ***Demographic profile of voluntourists and staff***

Table 2 represents the demographic profile of the participants in this study, including voluntourists and staff.

Table 2. Demographic profile of participants

Variable	Categories	Voluntourists (N=30)	Staff (N=24)
Origin (%)	Africa	3	46
	Europe	47	29
	North America	43	25
	Australia	3	0
	South America	3	0
Gender (%)	Male	17	58
	Female	83	42
	$\bar{x}$	26	35
Age (y)	Min-max	20-52	22-70
	SD-SE	6.93-1.29	11.94-2.44
	School	57	33
Education (%)	University	43	67
	Subject of study (%)	Environmental or biological sciences	54
Other		46	31
Occupation (%)	Student	60	-
	Employed	30	-
	Unemployed	10	-
How did you start working at this organisation? (%)	Internship/volunteer	-	46
	Offered/approached	-	33
	Founder / CEO	-	21
For how long have you worked at this organisation? (y)	$\bar{x}$	-	6
	Min-max	-	0.5-22
	SD-SE	-	6.27-1.28
Did you volunteer before you started working at this organisation? (%)	Yes	-	50
	No	-	50

The voluntourists mainly originated from Europe (47%) or North America (43%), and the staff from Africa (46%). The majority of the voluntourists were female (83%), and there was a similar proportion of male (58%) to female (42%) staff at the MVT organisations. The

voluntourists were 26 years old on average, and the staff were almost ten years older (35 years on average). The highest level of education for the voluntourists was equivalent to high school (57%), almost half of them had a university degree (43%), and 60% of them were still studying. The staff at the MVT organisations mainly had a university degree (67%). Both the voluntourists and staff had a background in environmental or biological sciences (54% and 69% respectively). The staff had been working at their organisation for an average of six years. Almost half of them (46%) had volunteered at the same organisations before they started working there.

results of this study partly reflect the profile of marine voluntourists described in previous literature (Benson & Henderson, 2011; Gray & Campbell, 2007; Roques et al., 2018). Some MVT organisations try to attract international tourists to participate in their programmes (Heath, 2007; Scheyvens, 2002), and employ local staff to work for their establishments (Clifton & Benson, 2006; Gray & Campbell, 2007). This results in a stable income and at the same time support for the local economy (Wearing, 2001). It should be noted that in certain instances, it is not possible to employ local people, due to a variety of reasons (e.g. lack of skills and experience) (Wearing, 2001). According to Roques et al. (2018), females are more motivated to travel internationally for leisure activities or to join voluntourism programmes. Younger voluntourists with the skills and experience are usually targeted to join MVT programmes, as this prepares them for the global labour market (Jones, 2011). Staff at the MVT organisations are usually older, more experienced and able to share knowledge with the voluntourists (Bhandari & Heshmati, 2010). In some instances, the MVT organisations try to employ previous voluntourists who have become loyal to the MVT programme (Lester et al., 2017).

### ***Perspectives on MVT***

Six main perspectives (themes) emerged from the narratives of voluntourists and staff who participated in this study. The themes are described and discussed as follows.

Conservation and education: The voluntourists participating in this study were drawn to MVT for ecocentric reasons. They mainly wanted to be part of marine and wildlife conservation. Conservation was defined by both the voluntourists and the staff as safeguarding the environment and ecosystems. This is in line with the definition given by Sandbrook (2015), where conservation is the actions that directly increase the probability of species and habitats staying in the natural ecosystem. They expressed that conservation revolves around protecting, changing one's behaviour and educating others. Both the voluntourists and the staff believed that they contributed to conservation through education, science and responsible behaviour. A staff member explained that "conservation is educating people so that they want to make a change in their lives, and want to protect the environment."

The voluntourists stated that new or modified conservation policies should be put into place by politicians and the government to enhance conservation. They also indicated that people should be educated on these policies to ensure that conservation is achieved. They claimed that they wanted to take action and educate people once they returned home from the MVT programme. They had a desire to share information about their experience, and arrange conservation activities. The staff at the case studies claimed that they educated the public about conservation through social media, scientific outputs and public talks, and considered it as an essential instrument of conservation advocacy. Other activities of advocacy included research, active stewardship, and petitioning.

The voluntourists believed that the MVT organisations they visited acted according to proper ethical standards. They mostly mentioned how the organisations promoted moderate and respectful interactions with wildlife, followed codes of conduct, and educated the

voluntourists before allowing them to do any tasks. A voluntourist stated that “there is always a code of conduct with each marine animal that the staff approach. There is a no-touching rule, no noise rule, and they are always careful and respectful towards the marine animals.” These results are in line with the idea that MVT organisations and voluntourists want to contribute to ethically sound marine conservation through science and education, proper handling of marine wildlife, and being more environmentally aware (Anderson et al., 2017; Brightsmith et al., 2008; Wearing & McGehee, 2013; Zeppel & Muloin, 2013).

**Pro-environmental behaviour:** Both the voluntourists and the staff at the MVT organisations believed that the greatest threats to the environment and ecosystems are anthropogenic. They stated that humans have the largest negative impact on the environment, such as pollution, climate change, and overfishing. A staff member expressed that “the biggest threat is the human impact.” The voluntourists and staff indicated that they are environmentally responsible, by reducing their environmental footprint. This included reducing, reusing and recycling, using eco-friendly products, and education. The voluntourists added that they would further reduce their environmental footprint after participating in the MVT programme, through sustainable food consumption, responsible waste disposal and responsible transportation. The voluntourists believed that the obligations of the citizens towards the environment and conservation include being actively responsible. A voluntourist stated that “all citizens have the responsibility to care about our planet. Because as many people say, we do not have a planet B. So, we have to be responsible.” Generally, voluntourism organisations and voluntourists want to be more environmentally aware and reduce the impact that they have on the environment (Goldberg et al., 2018; Zeppel & Muloin, 2013).

**Science and community engagement:** Working with marine scientists, using research equipment and participating in scientific research were part of the motivations and expectations of voluntourists in this study. The voluntourists had high expectations to learn as much as possible through science and experience. They were also motivated to discover Africa and its cultures and wanted to experience the destination by interacting with the local community.

The voluntourists believed that participatory research, also called citizen science (which the tourists believed they practised during their trip), was an essential scientific tool. A voluntourist indicated that “citizen science is important because communities may have or access information that the scientist needs or can use. It is important to involve various communities so that they can give the scientist additional knowledge. One just needs to ensure that communication and relations between the scientists and communities are good, because some communities may need to first learn something before participating and collecting data, which is a good thing.” The voluntourists indicated that citizen science is important for education, community engagement, the contribution of valuable data, and capacity building. They believed that proper involvement of the community could result in scientific validity and legitimacy of data in citizen science. In line with these perspectives, the staff at the MVT organisations claimed that they were focused on contributing to research, through collaboration and publications. A staff member stated that “the data that we collect and supply to scientists is a way that we contribute to scientific research.” They acknowledged that the voluntourists played a large role in research through data management. The organisations were also involved in community engagement, through sponsorships, education, beach clean-ups, supporting the tourism industry, purchasing products and services and enhancing local diving tourism.

Indeed, MVT can provide essential and reliable data on marine wildlife and ecology that can result in positive conservation management outcomes (Schmeller et al., 2008). Voluntourists play a central role in the collection of quality data and conducting environmental monitoring and conservation research (Dickinson et al., 2012). The data collected by MVT organisations can be incorporated into existing marine monitoring programmes and can be used



to inform decisions or address specific marine conservation problems (Malpica-Cruz et al., 2016; Pattengill-Semmens & Semmens, 2003). MVT can also assist local communities in hosting MVT projects, resulting in the empowerment of the local community, increased skills and education on marine environmental issues and conservation, enhanced living conditions of the local community, and poverty alleviation (Knollenberg et al., 2014; Lyons & Wearing, 2008; Wearing, 2001).

**Training and skills development:** The training offered to the staff and voluntourists were closely related. Training for the staff was more hands-on and formal (e.g. first aid and research project management skills). Whereas for the voluntourists it was formal hands-on training (e.g. research skills and project management skills). Both the staff and voluntourists also received informal training (e.g. people skills). A staff member explained that “the whole programme is a training opportunity, and each of the projects is a skill development opportunity.” The voluntourists were satisfied with the training and education received, and expressed an interest in marine conservation careers, claiming that education, research and interaction with people were important elements in this choice. These results are corroborated by the finding that personal development was part of the motivations and expectations of the voluntourists. They wanted to increase their knowledge and experience by participating in MVT. Indeed, MVT programmes can give voluntourists the necessary skills and experience that would prepare them for the global labour market (Jones, 2011).

**Vision and mission of MVT:** The mission and vision of the MVT organisations were to make a difference through a variety of activities including conservation, education, research, ecotourism and community engagement. A staff member indicated that “our mission is to protect and educate people about the problems and the importance of marine life.” All the activities offered by the organisations formed part of the voluntourists’ motivations, preferences, expectations and satisfaction. Voluntourists wanted to have experiences where they could interact with the local community, contribute to marine conservation, learn about marine life and participate in scientific research. A voluntourist stated that “I want to educate the new generations and protect the ocean and nature, involving the local communities.” According to Wood and Zeppel (2008), marine voluntourists are interested in marine discovery, marine exploration, social interaction, learning from experienced researchers, engaging with the local community, fun and skills development. Voluntourism organisations that offer a wider range of key activities are more likely to be successful (Benson & Henderson, 2011). The mission and vision of MVT organisations would not be achievable without the hard work of staff and voluntourists, the support of the local community, and a diverse marine ecosystem. Without these, organisations would also not be able to operate successfully and offer unique opportunities to tourists (Debarliev & Mitrovska, 2016). The organisation, activities offered, and people involved are crucial to ensure repeat voluntourists (Forster, 2001).

**Future of MVT organisations:** The staff believed that in five years the MVT organisations they worked at would be bigger and better, with long-term staff and attracting more voluntourists. A staff member expressed that “the organisation will educate more volunteers and attract more researchers and conservationists with the same passion.” They also believed that the organisations would have a larger impact on marine conservation through research and education. They knew that various resources were required to achieve these goals, such as increased finances, staff and voluntourists. The voluntourists indicated that they would continue to participate in conservation and community voluntourism following their experience. However, they stated that their circumstances, especially financial, would have a large impact on their ability to continue participating in voluntourism. A voluntourist explained that “It depends on the circumstances. For example, in my case, I think there are two differences. If I am talking from a marine biologist’s point of view, these experiences help me

to enhance my skills and experience for a career in marine science. So, I am willing to pay to do it. But, if I were a tourist passionate about marine ecosystems, I think the price would be more influential on my choice.” MVT organisations have a variety of financial expenses and only a few methods to obtain an income, resulting in MVT trips being more expensive than a normal tourism holiday (Wearing, 2001). It is essential to ensure that an organisation is financially viable, even if it is not profit-driven (Benson & Henderson, 2011). With increased financial support, further marine species and marine habitats can be protected, and the support for marine conservation work can increase, resulting in improved marine wildlife management and research (Wiener et al., 2009; Zeppel, 2008; Zeppel & Muloin, 2013).

From the above results, it is evident that when MVT organisations strive to follow ethical standards, the tourists' experience is not negatively affected and attitudinal outcomes after the experience are positive, with an alignment of perspectives between staff and voluntourists. MVT organisations are encouraged to ensure that they follow pro-environmental behaviours, as they are likely to affect the voluntourists' attitude and behaviour. Given the different circumstances in which these organisations operate, their location and their vision, it is not advised to standardise business models in MVT. However, the business model canvas approach allows businesses to see what areas in operational management can be improved to overcome important challenges and achieve sustainable growth. On the other hand, it must be remembered that MVT is often criticised for greenwashing, the commodification of nature and conservation, and the lack of scientific legitimacy. Some organisations are culpable of greenwashing, as they promote the positive difference that they make to attract a wide range of voluntourists but fail to represent the real situation (Lyons & Maxwell, 2004). Certain organisations may sell conservation experiences as a form of commodity (Gray & Campbell, 2007). MVT could also influence the reliability and validity of the scientific data collected. This could be due to voluntourists having different levels of experience and knowledge, getting bored with repetitive tasks or taking longer to complete the tasks (Gürel & Tat, 2017). While the results of this study are positive in this regard, they are not necessarily generalisable to the global MVT context, and further work should always pay attention to investigations of scientific legitimacy and authenticity in MVT.

## Conclusions

This study investigated the perspectives of marine wildlife voluntourists and staff representing marine wildlife voluntourism (MVT) organisations in southern Africa, concerning MVT (as an experience or an offering) and its value. In particular, this study looked into the alignment of tourists' and organisations' views and confirmed it. From the results, it can be concluded that the business model canvas of the organisations shared important characteristics as found in the literature. The business model canvas allows businesses to see what areas in operational management can be improved to overcome important challenges and achieve sustainable growth. Organisations could identify additional key partners and resources, enhance their key activities and value propositions, improve their customer relationships and channels, attract additional customer segments, reduce their cost structure, and improve their revenue stream.

The voluntourists and MVT organisations shared similar orientations towards conservation, environmental attitude and behaviour, research, and community. Voluntourists were driven by the need to make a difference and participate in research, while at the same time understanding the importance of the community in marine conservation. MVT organisations focused on making a difference through research, education and community engagement. Organisations could ensure that they provide voluntourists with a memorable experience that can result in positive word of mouth, repeat visits and loyalty. This would bring an increased income and growth for said organisations, as well as better conservation and

protection of marine species and ecosystems, and improved marine wildlife management and research. MVT organisations could also ensure that they involve the voluntourists in legitimate and ethically sound research, conservation and community engagement, all of which are highly valued by the tourists. This would allow organisations to continue to make a difference and enable voluntourists through training to be ready for the global labour market. This would also result in the improvement of existing marine monitoring programmes and can address specific marine conservation problems. More research of this type would contribute to a better understanding of MVT in southern Africa and globally and guide its sustainable development.

The following limitations were faced during the research. First, the researcher was not able to travel to the Madagascar case study to collect data in person. This was due to the COVID-19 pandemic and the resulting national lockdowns. Second, while this study focused on MVT in southern Africa, which included both demand and supply sides, the inclusion of other stakeholders may have enriched the data and improved the interpretation thereof. Finally, the subjectivity of the researchers may have, in part, affected the way that the final data were analysed and interpreted.

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