

Exploring Knowledge, Attitude and Practices of Tourism Providers Contingent on Mt. Malindang Range Natural Park, Philippines: Basis for Interventions

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Abstract: Tourism, if sustainably implemented, can greatly contribute to the protection and conservation of biodiversity and resources in Protected Areas (PA), such as Mt. Malindang Range Natural Park (MMRNP), in Misamis Occidental, Philippines. Mt. Malindang Range Natural Park is a tourism haven, rich in biodiversity with unique and majestic waterfalls, lake, rivers, and cold and hot springs. In the pursuit towards sustainability, it is vital to understand the knowledge, attitude, and practices of the tourism providers/owners to establish baseline data for any intervention. This study was conducted to identify the knowledge, attitude, and practices of tourism providers contingent on Mt. Malindang Range Natural Park in the provinces of Misamis Occidental, Zamboanga del Norte and Zamboanga del Sur, Mindanao, Philippines and its relationship to sustainable tourism and environmental conservation. The respondents of the study are the tourism providers/owners/managers of tourism sites contingent on Mt. Malindang Range Natural Park (MMRNP). Descriptive and inferential statistics were employed to analyze data gathered using a researcher-administered questionnaire. The results show that the respondents have knowledge of basic facts about Mt. Malindang Range Natural Park, sustainable tourism and environmental conservation, and have positive attitudes and practices toward it. Furthermore, it was also found out that there are significant relationships between knowledge and attitude, knowledge and practices, and attitude and practices. Therefore, the respondents' knowledge influences a positive attitude that translates into good practices. With this, enhancing their knowledge of comprehensive and in-depth information about MMRNP is vital, as this could influence their attitude and translate into good practice.

Keywords: environmental conservation, environmental education, Knowledge, Attitude, Practices (KAP), Protected Areas, sustainable tourism



INTRODUCTION

Protected areas, as defined by International Union Conservation for Nature are clearly defined geographical spaces, recognized, dedicated, and managed, through legal and other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. In the Philippines, Mt. Malindang Range Natural Park (MMRNP) is a protected area that straddles the three provinces- Misamis Occidental and parts of Zamboanga del Norte and Zamboanga del Sur. It was proclaimed National Park and Watershed Reserve in 1971 under RA 6266. Under Republic Act 9304, it was declared a Natural Park in 2002. With its rich biodiversity, MMRNP was then declared the 29th ASEAN Heritage Park by ASEAN Centre for Biodiversity (Pito et al., 2020).

The MMRNP covers 52,262 hectares with about 33,000 hectares of forest cover composed of highly diverse species of plants and is inhabited by diverse species of fauna (UNESCO, retrieved August 2021). RA 9304, also known as “Mt. Malindang Range Natural Park 2004,” recognizes the rich biodiversity and unique natural resources, and the aesthetic and ecological value of the park and ensures the protection and preservation of Mt. Malindang, the communities, their culture, and way of life therein. It also fosters sustainable and participatory development, safeguards biodiversity, protects and advances the interests of its legitimate inhabitants, and honors customary laws.

The MMRNP sustains lives, communities, industries, and agriculture in the provinces of Misamis Occidental and parts of Zamboanga del Norte and Zamboanga del Sur. It is home to diverse species and indigenous people called Subanen. Locally, it is also considered the crown jewel of the tourism industry in the area, which is one of the fast-growing industries that directly benefit from the rich biodiversity, aesthetic and ecological resources of the park (MMRNP PAMP, 2022). Mt. Malindang’s unique natural resources and biodiversity such as waterfalls, cold and hot springs, the mountains and forests, and the landscapes, in addition to man-made facilities such as pools, accommodations, and recreational activities are vital to tourism. According to Tapper (2010), wildlife and landscapes are important attractions for tourism in mountain areas, and biodiversity contributes significantly to the attractiveness and quality of destinations and, therefore, to their competitiveness. Moreover, in nature-based tourism areas, biodiversity can be the primary attraction, such as wildlife watching, scuba diving, or tourism products in protected areas (Tapper, 2010).

Tourism is considered one of the fastest-growing industries that can contribute directly and indirectly to the Sustainable Development Goals (SDG) as long as it is sustainable tourism (UNWTO, Retrieved August 2022). Sustainable tourism as defined by the World Tourism Organization is a tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities. Moreover, a sub-category of sustainable tourism, ecotourism is defined as a nature-based tourism that conserves the environment, sustains the well-being of local people, and involves interpretation and education (Smith & Pettorelli, 2020).

These types of tourism are some of the valuable methods to support conservation efforts. However, are these definitions translated into actions in the real scenario of tourism sites in protected areas especially now that most of the restrictions of the Covid 19 pandemic were lifted and people are eager to travel? Additionally, the negative and positive effects of the hype that the social media create have influenced tourists to travel to destinations. According to the

Secretariat, (2003), tourism activities in and around protected areas can have both positive and negative impacts on local people and the environment. Furthermore Canteiro et al. (2018), identified 21 types of impacts on biodiversity, plant coverage, soil, and water in the protected areas, which include perturbation by people and motorized vehicles, loss or contamination of plant coverage, soil compaction erosion, and pollution, and eutrophication of the waters. This is due to no supervision or regulation of visitor's quantity nor the kind of activities they develop in the area (Canteiro et al., 2018). On the other hand, positive impacts of tourism in protected areas include an increase in income, provision of jobs, promotion of conservation of natural spaces, minimizes the migration of the local population, and improvement in the economic and socio-cultural level of the local population, the commercialization of the local products, exchange of ideas, costumes and the sensitization of the tourist and local population for protection of the environment (do Val et al., 2020; Belsoy et al., 2012).

In the pursuit of achieving sustainable tourism, biodiversity, and resources protection and conservation, laws and regulations were established. In the Philippines, the Tourism Act of 2009, also known as Republic Act No. 9593, is the omnibus tourism code which is “an act declaring a national policy for tourism as an engine of investment, employment, growth, and national development, and strengthening the department of tourism and its attached agencies to effectively and efficiently implement that policy, and appropriating funds therefor” (Official Gazette, retrieved Mar 2023). This law was passed to acknowledge that tourism is a crucial part of the national economy (Official Gazette, retrieved Mar 2023). Moreover, the Executive Order No. 111, s. 1999 establishing the Guidelines for Ecotourism Development in the Philippines is the basis for the partnership of the Department of Tourism and Department of Environment and Natural Resources. Locally, RA 9539 was adopted in the province of Misamis Occidental, by passing the Ordinance No. 13-17 also called as “An Ordinance Enacting the Tourism Code of Misamis Occidental”. Moreover, the Republic Act 9003 or the Ecological Solid Waste Management Act of 2000 is the basis for necessary policy frameworks, and mandates in solid waste management.

The national and local plans such as the Philippine Biodiversity Strategy and Action Plan 2015-2028 (PBSAT), Revised Environment Code of Misamis Occidental, MMRNP Protected Area Management Plan 2022-2031 (MMRNP-PAMP), Provincial Development and Physical Framework Plan 2019-2024 (PDPFP), among others, contain programs, plans, and activities on tourism and environment, and vital and comprehensive information that are good sources of knowledge for the tourism providers. The inclusion and collaboration with the community stakeholders such as tourism providers in crafting these plans are also important. However, it is acknowledged that access to these plans are limited, and the role of the local government units, specifically the Tourism Officers and City/Municipal Environment and Natural Resources Officers is crucial in disseminating these plans to tourist providers especially to those private operators.

The KAP model has three fundamental pillars which are knowledge, attitude, and practices. The KAP model is popular and useful in various fields such as health care, solid waste management, climate change, agriculture, education, and sustainability because it can help provide valuable information for resource allocation in planning, and implementation of programs (Liao et al., 2022; Andrade et al., 2020; Salas-Zapata et al., 2018; Severin & Jacobs-Small, 2016; Goutille et al., 2009; Debrah et al., 2021; Owojori et al., 2022). Likewise, with

tourism, the KAP model is vital to identify what is known, believed, and done, which are useful in identifying points for improvement and future intervention and innovation.

Ideally, a KAP survey should come before an education or intervention program, and the survey's findings will give program designers the information they need to create successful programs and will serve as a starting point for future program performance assessments (Andrade et al., 2020). The tourism industry is a knowledge-based industry, and knowledge serves as a guide for tourism providers or managers in its management and use. Shaw and Williams (2009) stressed that knowledge is one of the significant drivers of innovation, productivity, and competitiveness in the tourism industry. According to United Nations Environmental Protection Agency, environmental education improves public awareness and knowledge of environmental issues, equipping them with knowledge, skills, values, experiences, and determination to make responsible decisions and behave responsibly. In connection with the fundamentals of sustainable tourism and ecotourism, which are sustainability, reducing impact, cultural conservation, ecology, and education, these knowledge are expected to be embedded in their management, including the transfer of information to employees and tourists.

Objective of the study

Understanding the knowledge, attitude, and practices on sustainable tourism and environmental conservation among tourism providers contingent on protected areas is essential for any shift towards sustainability to be effective. In the Mt. Malindang Range Natural Park Protected Area Management Plan (DENR, 2022), it was cited that there is a gap between tourism facilities contingent on MMRNP and environmental education. To date, locally, there is no established baseline data on the knowledge, attitude, and practices of tourism providers useful for MMRNP management and for other government and non-government agencies, and there is no study in the area that analyzes how environmental education can be integrated into the tourism sites operations and management as their contribution in the protection and conservation of the protected area. Therefore, in order to address this gap, this study has focused on exploring the knowledge, attitude, and practices of the tourism providers or operators and its relationship on sustainable tourism and environmental conservation to establish baseline data before any environmental education and other interventions. The present research will establish baseline data for the tourism providers, protected area management, local government units, other government and non-government agencies, policymakers, and academes to utilize for future interventions and for better decision-making. Specifically, this study identifies the readiness of the tourism sites in the integration of environmental education in their operations. Moreover, this will pave way for tourism providers for an improved and varied tourism services and activities, and more ecologically adaptive tourism management.

RESEARCH METHODOLOGY

This study aimed to identify the correlations between knowledge, attitude and practices on sustainable tourism and conservation among tourism providers contingent on MMRNP as basis for future environmental education, policy making and other interventions.

To gather the relevant data, a researcher-administered questionnaire on Knowledge, Attitude, and Practices was utilized. There were five (5) questions under the Knowledge about MMRNP, five (5) for sustainable tourism and environmental conservation, ten (10) for attitudes on impacts and related issues of sustainable tourism and environmental conservation, and fifteen (15) for practices.

The questionnaire was pretested to 15 tourism owners/providers/managers of tourism sites with the same characteristics. The questionnaire was externally validated by 3 experts and the results of the pretest were run through the Cronbach's Alpha Test for internal validation with an acceptable score of 0.7130. Prior to the conduct of actual interview, coordination with the provincial, city, and municipal local government units of the sampling areas were conducted to inform them of the study and involvement of tourism providers/owners/managers. A written consent was obtained from the respondents.

The respondents consisted of 34 tourism operators/managers or owners of the private and government-operated tourism sites contingent on MMRNP from the provinces of Misamis Occidental, Zamboanga del Norte, and Zamboanga del Sur. The tourism offices of the respective local government units identified the tourism sites that are fully operating with business permits to be included in the survey.

This study utilized descriptive research design and inferential statistics. Descriptive statistics such as frequency and percentage were applied. A Chi-Square Test of Independence was used to identify the significant relationship between Knowledge and Attitude, Knowledge and Practices, and Attitude and Practices.

RESULTS ND DISCUSSION

As shown in Table 1, there were 19 (55.88 %) female and 15 (44.12 %) male. Most of the respondents are in the age range between 38-47 years old (26.47 %), married (76.47 %), and are college graduates (58.82 %) and are tourism site providers/owners (38.23 %) in more than 10 years (79.41). Majority (44.12 %) of the respondents are from the province of Misamis Occidental.

Protected areas like MMRNP are essential for conserving biodiversity and natural resources, which the tourism industry is dependent on being the primary tourism attraction, especially for nature-based tourism, food supplies, clean water, and other ecosystem services they provide to communities (UNTWO, 2010). These parks consistently face natural and man-made threats (DENR, 2022). As cited in Leung (2018), tourism, if done sustainably, can directly contribute to the objectives of global agreements such as the Strategic Plan for Biodiversity 2011–2020 of the Convention on Biological Diversity, the United Nations' Sustainable Development Goals, and the Muscat Declaration on Tourism and Culture (UNWTO and UNESCO, 2017). Moreover, the purpose of the three principles of sustainable tourism, namely, environmental sustainability, sociocultural sustainability, and economic sustainability, is to maximize the positive impacts on the natural heritage, biodiversity, economy, and communities while responsibly utilizing the natural resources.

Table 1*Characteristics of the Respondents*

Demographics	Frequency (n=34)	Percent
Age		
18-27 years old	4	11.76
28-37 years old	7	20.59
38-47 years old	9	26.47
48-59 years old	6	17.65
60 years old and above	8	23.53
Sex		
Male	19	55.88
Female	15	44.11
Civil Status		
Single	5	14.70
Married	26	76.47
Separated/Annulled	1	2.94
Widow/Widower	1	2.94
Others	1	2.94
Educational Attainment		
Elementary Graduate	1	2.94
High School Level	1	2.94
High School Graduate	2	5.88
College Level	5	14.70
College Graduate	20	58.82
Master's Degree	5	14.70
Position		
Tourism site owner	13	38.23
Tourism site manager	10	29.41
Others	11	32.25
Years in Service		
< 10 years	7	20.58
> 10 years	27	79.41
Provinces		
Misamis Occidental	15	44.12
Zamboanga del Norte	5	14.71
Zamboanga del Sur	14	41.18

The majority (94.12 %) of the respondents know about the basic facts of MMRNP and the principles of sustainable tourism and environmental conservation (Table 2). The respondents' knowledge of these aspects is necessary to form responsible decisions in their respective tourism products and maximize the positive impacts of tourism on the economy, communities, and parks or the environment in general. The result implies that the respondents acknowledge the information on MMRNP, sustainable tourism, and environmental issues as important factors to the tourism industry and should be considered to sustain their tourism sites. In many fields such as family planning, medicine, healthcare, human resource, education, sustainable travel, and environmental issues, specifically climate change and solid waste management, it is reaffirmed that better understanding can lead to a positive attitude and eventually positive

practices (ul Haq, et al., 2012; Mehrdad, et al., 2012; Kasa et al., 2019; Weber, 2019; Purba, 2020; Debra, e.al., 2021). As mentioned in the study of Postma et al. (2017), one of the primary forces behind sustainability has been the realization that there are inherent limits to growth and that, if these limits are exceeded, societal collapse may result (Meadows et al., 1972). Although sources of information about MMRNP, sustainable tourism, and environmental conservation were not included in this study, the results could be attributed to their educational attainment and the length of service (Table 1) in the industry, as knowledge is regarded as the result of education and direct observation (Niezgoda, 2011). This finding also implies that the respondents' knowledge of MMRNP, sustainable tourism, and environmental conservation can be enhanced, especially on biodiversity, and natural resources, including threats, and utilized information sources for environmental education to employees and tourists in their respective tourism sites.

Table 2
Knowledge on MMRNP and Sustainable Tourism

Indicators	Claimed to have Knowledge	Claimed to have no Knowledge (n=34) % Ave. 94.12%	Undecided
1. Mt. Malindang is one of the protected areas in the Philippines due to its recognized rich natural, ecological resources and cultural values.	88.2	8.82	2.94
2. MMRNP encompasses the province of Misamis Occidental and parts of Zamboanga del Sur and Zamboanga del Norte.	91.2	8.82	
3. The benefits that MMRNP provides are the different types of bodies of water such as rivers, springs, lakes, falls, different species of flora and fauna, and beautiful scenic views that are used or can be used as tourism attractions.	91.2	2.94	5.88
4. Protected areas such as MMRNP face various threats such as climate change, poaching, unregulated visitor behaviour and others.	91.2	5.88	2.94
5. Mt. Malindang is a home to the indigenous peoples Subanen.	91.2	8.82	
6. Sustainable tourism takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.	100	--	--
7. The purpose of sustainable tourism is to make a balance between protecting the environment, maintaining cultural integrity, establishing social justice and promoting economic benefits, meeting the needs of the host population in terms of improved living standards both in the short and long term.	100	--	--
8. All tourism attractions and facilities are required to contribute in the conservation and sustainable use of biodiversity.	94.12	5.88	
9. Tourism is one of the industries that contributes to the positive and negative impacts in our environment.	94.12	--	5.88
10. Members of the local communities should benefit from the tourism facilities/attractions providing them business and employment opportunities to sustain their well-being.	100	--	--

As shown in Table 3 almost all (77.06%) respondents have a positive attitude toward sustainable tourism and environmental conservation impacts and related issues. This result is comparable with the study of Cardinali et al. (2020), although respondents were tourists, which revealed that respondents have a highly positive attitude towards sustainable tourism. The same results are in the study of Mutisya et al. (2013), wherein pupils have positive attitudes toward environmental conservation due to environmental education. The same with knowledge, a positive attitude is important for future interventions in environmental conservation. In this

study, the respondents' optimistic attitude is evident in statements 1 to 4, where 100% of the respondents believed that environmental conservation is important to sustain their tourism sites, and they are willing to adopt sustainable tourism and environmental conservation in their respective tourism sites.

Further, in statement 6, the majority of the respondents (61.76%) believed that principles in sustainable tourism could be achieved and fulfilled. Further, in statement 10, 73.53% of the respondents are willing to lead the initiative in achieving sustainable tourism practices. The results indicate that respondents value sustainable tourism and environmental conservation practices as these, directly and indirectly, impact their tourism sites. Moreover, most of the respondents are private tourism providers; thus, their enthusiasm for implementing sustainable practices is an opportunity for the government and non-government agencies to support and maximize especially for interventions on environmental conservation such as integration of environmental education in their marketing and advertisements, capability building, Etc., as positive pro-environmental attitude may lead them to adhere to the requirements for sustainable behavior (Tian et al., 2020). Additionally, Wyss et al. (2022), in their behavioral experiment, found that pro-environmental attitudes are strongly linked to pro-environmental behavior when the opportunity cost to do so is low. In contrast, the results of the systematic review by Salas-Zapata et al. (2018) revealed that the positive attitude of the respondents only sometimes translates into a willingness to engage in sustainable behavior.

Table 3

Attitude on Sustainable Tourism and Environmental Conservation Impacts and Related Issues

Indicators	Positive Attitude	Negative Attitude (n=34) % Ave. 94.12%	Undecided
1. I agree that tourism in my area should be sustained.	100		
2. I agree that environmental conservation is needed.	100		
3. I support the adoption of sustainable tourism and environmental conservation practices by the tourism facilities contingent to MMRNP.	100		
4. I support the adoption of environmental conservation practices by the tourism facilities contingent to MMRNP.	100		
5. I agree that destruction of natural resources in MMRNP will not affect our business in tourism.	20.59	79.41	
6. I think that principles in sustainable tourism is difficult to fulfill.	35.29	61.76	2.94
7. Tourism operators/entrepreneurs should help in strengthening efforts for environmental conservation.	100		
8. Regulatory standards are needed to reduce the negative impacts of tourism.	97.06		2.94
9. Collaboration between the government and tourism operators/entrepreneurs is necessary in implementing regulatory standards to reduce the negative impacts of tourism development.	97.06		2.94
10. You will not also implement sustainable tourism practices if the government does not lead the implementation.	23.53	73.53	2.94

The practices of the respondents follow the pattern of knowledge and attitude. Table 5 shows that the majority (87.25%) of the respondents have good practices in almost all of the practices asked in the survey. In the systematic review of studies on knowledge, attitude, and practices of sustainability from 1990-2016 by Salas-Zapata (2018), respondents with good knowledge and attitude are most likely to participate or practice conservation and sustainable practices, while those that have low knowledge and attitudes also have low participation. The concern for sustainable tourism increased (Weber, 2019), especially when people have more access to far-flung natural resources in the protected areas due to massive road developments and better transport (Leung, 2018). Based on the profile of tourism sites in the provinces of Misamis Occidental, Zamboanga del Norte, and Zamboanga del Sur, 50% have begun operation later in 2019 up until 2022, when more tourist sites have continuously sprung. During the COVID-19 pandemic and even after the restrictions were lifted, people prefer tourist destinations in the highlands or nature-based destinations (Butler et al., 2022; Moya et al., 2022) for various reasons. This massive tourist influx, if not planned well, may pose threats and bring negative impacts to the environment, especially for destinations located in protected areas. The majority (94.12%) of the respondents claimed that the tourism activities in their facilities contribute to environmental conservation. This practice is aligned with the Tourism Code of Misamis Occidental Article 1 Section 3 (a), which states that in the pursuit of sustainable development, Misamis Occidental as a tourism haven should protect and preserve the natural environment, including its biodiversity.

Moreover, 100% of the respondents also claimed that they provide information, tips, and training on environmental responsibility, which means they share what they know and believe with their employees. However, their on-site information drive is limited to solid waste management, water-saving measures, and scientific/ecological information through marketing campaigns or advertisements. Based on the researchers' observations during visits as well as in the assessments of their social media posts and Information, Education, and Communication (IEC) materials and advertisements, there is no orientation done, or there is only limited information given to the tourists (e.g., solid waste management & water saving measures), with zero information about MMRNP. This result implies that their practices in information dissemination on scientific/ecological information can be enhanced by integrating in-depth or comprehensive information on flora, fauna, and natural resources that can be found in their respective tourism sites or in MMRNP in general. The integration of this information can contribute to the principal pressures of biodiversity loss in the Philippines, which are habitat loss, invasive alien species, climate change, pollution, and overexploitation (Philippine Biodiversity Strategy and Action Plan (PBSAP), 2016) and to SDGs 13, 15, and 17.

Moreover, PBSAP (2016) cited that the lack of awareness is one of the contributing factors, specifically the need for a consolidated inventory of biodiversity resources. The proposed supporting actions for this factor are orientation on Biodiversity Basics and Communication Skills, incorporation of biodiversity information series in Family Development Sessions of the 4Ps Program, use of spokespersons/champions/personalities, popularization of biodiversity concepts as understood within Indigenous Peoples' context, advocacy and constituents'

mobilization through IEC, multimedia campaigns, and citizen science initiative. Hence, given proper training, tourism sites contingent on MMRNP have a huge potential to champion citizen science as an added-value experience for tourists that could generate biodiversity inventory data and utilize these data through Science Communication in disseminating information about MMRNP through integration in their on-site orientations, IEC materials, marketing, and advertisements. Further, Section 41 of The Revised Environment Code of Misamis Occidental particularly stipulated that the provincial government shall pursue partnerships and collaborative efforts with the provinces of Zamboanga del Norte and Zamboanga del Sur for the proper management and conservation, protection, and preservation of the MMRNP to ensure the sustainability of its resources. Likewise, in Section 44 of the provincial environment code, cooperation among local stakeholders in developing educational and public awareness programs is encouraged pursuant to the existing laws, specifically, the National Environmental Education Awareness Act. Therefore, this could lead to an inclusive partnership and collaboration between tourism providers, tourists, and local government units. Moreover, 47.06% have not set limitations to the number due to the fact that they were starting operations, and the tourism office has not set limits and guidelines as to the number of tourists arriving.

Table 4*Practices on Sustainable Tourism and Environmental Conservation*

Practices Statements		Good practices	Bad practices N=34 (%) Ave. 87.25%	Undecided
1.	The tourism activities in our facility contribute to the environmental conservation.	94.12		5.88
2.	You limit the number of tourists during day and night tours to limit the negative environmental impacts.	52.94	47.06	
3.	You ensure that the tourists observe and follow environmental conservation practices.	88.24	8.82	2.94
4.	Your tourism facility promotes learning experiences and conservation awareness.	97.06	2.94	
5.	The management hires local staff.	94.12	5.88	
6.	I provide staff with information, tips and training on environmental responsibility.	100		
7.	I orient tourists/visitors with information and tips on environmental responsibility.	67.65	11.76	2.94
8.	I practice and promote water-saving measures (e.g. regular check-up of water pipelines & toilets for leaks, encourages guests to take shorter shower or to turn off the water while brushing teeth, rain catchment)	91.18	8.82	
9.	I use scientific/ecological information in marketing campaigns or advertisements.	58.82	41.18	
10.	I practice proper solid waste management.	97.06	2.94	
11.	My tourism facility have a long-term environmental approach.	91.18	5.88	2.94
12.	I reduce the use of environmentally dangerous products.	88.24	11.76	
13.	Agency inspections of establishments in connection with health and safety standards are conducted on a regular basis.	91.18	5.88	2.94
14.	I provide personnel with standards for communication with tourists to maintain alignment and consistency.	85.29	14.71	
15.	I promote the culture of the province.	94.12	2.94	2.94

There are significant relationships between knowledge-attitude, knowledge- practices, and attitude-practices as shown in Table 5. The calculated values based on the Pearson Chi-square show that the relationship between knowledge and attitude, and knowledge and practices are highly significant. This means that knowledge on sustainable tourism and environmental conservation can lead to positive attitude translating into good practices on sustainable tourism and environmental conservation. Moreover, intervention on environmental education is important to enhance their knowledge and improve their attitude and result to better practices (ul Haq et.al 2012). In contrast, the study of Ahmad et al. (2015) revealed the low significance between students' knowledge and practice, and attitude and practice on environment which implies that high knowledge cannot predict good practices.

Table 5
Chi-square Test of Independence Analysis

	Knowledge	Attitude	Practices
Knowledge	----	45.8825 <i>p-value < 0.00001*</i>	13.2842 <i>p-value .001304*</i>
Attitude		----	16.6972 <i>p-value .000237*</i>
Practices			----

* significant at $p < .05$.

CONCLUSION

The respondents are knowledgeable on basic facts of MMRNP, with positive attitude and good practices in sustainable tourism and environmental conservation. Their knowledge, attitude and practices on sustainable tourism and environmental conservation are also found significantly correlated. Therefore, their knowledge influences positive attitudes that manifests into good practices although only limited to solid waste management and water-saving conservation, thus, there is the need for a more comprehensive and integrated environmental education and capacity building giving emphasis on MMRNP protection and conservation to sustain their tourism operations. This calls for a collaborative action from academes and government agencies such as Department of Tourism (DOT), Department of Environment and Natural Resources (DENR) alongside with the tourism providers and Local Government Units of Misamis Occidental, Zamboanga del Norte, and Zamboanga del Sur.

LIMITATION AND RECOMMENDATION

This study is limited to the tourism sites in the three provinces- Misamis Occidental, Zamboanga del Norte, and Zamboanga del Sur, contingent on Mt. Malindang Range Natural Park. Future studies may explore the impacts and possible contribution of tourism sites to the conservation of MMRNP. These tourism sites can be a good venue for environmental education and other interventions in collaboration with the government and non-government agencies that will contribute to sustainable tourism.

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