



CENTRAL PHILIPPINE UNIVERSITY MULTIDISCIPLINARY RESEARCH JOURNAL

The Official Refereed Research Journal of Central Philippine University,
Jaro, Iloilo City, Philippines

(Formerly *Patubas*)

Special Edition from the School of Graduate Studies

Documentation of Traditional Delicacies in the Province of Iloilo

Elsie B. Tedoco¹ and Ma. Amihan T. Panes²

A Model Analysis of the Worthiness of Public Transport Services to Guimaras Island as Assessed by Tourists: Inputs to the Enhancement of a Tourism Development Plan

Jonan P. Burgos¹ and Mary O' T. Penetrante²

Sustainability and Viability of Community-Based Coastal Tourist Destinations: A Working Example of a Local Community in Aklan

Ernesto B. Templo¹, Carmen N. Hernandez², Luis A. Abioda³, Gynnyn G. Gumban² and Rowena M. Libo-on²

Model Analysis of the Human Resource Crisis Management among DOT-Accredited Hotels in Western Visayas, Philippines

Walter M. Sosmeña¹, Mary 'O T. Penetrante² and Carmen N. Hernandez²

Socio-cultural, Environmental, and Economic Factors Associated with Sustainable and Regenerative Coastal Tourism in the Province of Iloilo: Bases for a Model Development

Febe Rose Libe-Torres¹, Carmen N. Hernandez², Rowena M. Libo-on² and Luis A. Abioda²

The Use of ADDIE Model in the Development and Evaluation of a Training Module for Administrative Leadership and Decision Making in State Higher Education Institutions

Napoleon B. Marasigan III¹ and Gynnyn G. Gumban²



Central Philippine University
University Research Center

5000 Jaro, Iloilo City Philippines

Tel. No. (033) 329-1971 to 79 (local 2109)

E-Mail: urc@cpu.edu.ph

Layout by Ligaya Villarias-Caniel



CENTRAL PHILIPPINE UNIVERSITY

MULTIDISCIPLINARY RESEARCH JOURNAL

The Official Research Journal of Central Philippine University, Jaro, Iloilo City,
Philippines

(Formerly *Patubas*)

Special Edition from the School of Graduate Studies

July 2024

Central Philippine University Multidisciplinary Research Journal
(formerly *Patubas*) is published semi-annually under the auspices
of Central Philippine University, Jaro, Iloilo City, Philippines.

Copyright © 2024 by individual authors and Central Philippine University

All rights reserved. No part of this publication may be reproduced or
transmitted in any form or by means, electronic or mechanical, including
photocopy, recording or any information storage and retrieval system,
without permission in writing from the authors or publisher.

ISSN/ESSN	Print:	2945-3909
	Online:	2945-3917

Opinions and facts contained in the articles published in this issue of
Patubas are the sole responsibility of the individual authors and not of
the Editorial Board, *Patubas* or Central Philippine University.

EDITORIAL BOARD

CHRISTOPHER MARLOWE A. CAIPANG, PhD, RMicro (PAM)

Editor-in-Chief

LIWAYWAY H. ACERO, EdD
San Beda University, Philippines
lacero@sanbeda.edu.ph

LUA T. DANG, PhD
Ministry of Agriculture and Rural Development, Vietnam
danglua@ria1.org; luathi.dang@gmail.com

GERARD G. DUMANCAS, PhD
University of Scranton, USA
gerard.dumancas@scranton.edu

ANGEL B. ENCARNACION, PhD
DA-Bureau of Fisheries and Aquatic Resources Region II, Philippines
abencarnacion10279@gmail.com

NOEL L. GAURAN, PhD
Western Philippines University, Philippines
noel.gauran@wpu.edu.ph

CARLO C. LAZADO, PhD
Norwegian Institute of Food, Fisheries and Aquaculture Research, Norway
carlo.lazado@nofima.no

MARY BETH B. MANINGAS, PhD
University of Sto. Tomas, Philippines
mbmaningas@ust.edu.ph

MARICRIS B. ACIDO-MUEGA, PhD
University of the Philippines Diliman, Philippines
mbacidomuega@up.edu.ph

MA. SHEILAH GAABUCAYAN-NAPALANG, PhD
University of the Philippines Diliman
mgnapalang@up.edu.ph

NOEL PETER B. TAN, PhD
University of San Agustin, Philippines
dtan@usa.edu.ph

JONAS P. QUILANG, PhD
University of the Philippines Diliman, Philippines
jpquilang@up.edu.ph

INDRA SUHARMAN, PhD
Universitas Riau, Indonesia
indra70s@yahoo.com

Ligaya Villarias-Caniel

Managing Editor/Secretary
lcaniel@cpu.edu.ph / urc@cpu.edu.ph

Referees

Referees are not selected from among the author's close colleagues, students or friends. Referees are to inform the editor of any conflict of interests that may arise. The Editorial Board often invites research author to name people whom they considered qualified to referee their work. The author's input in selecting referees is solicited because academic writing typically is very specialized. The identities of the referees selected by the Editorial Board are kept unknown to research authors. However, the reviewer's identity can be disclosed under some special circumstances. Disclosure of Peer Review can be granted under the following grounds: as evidence to prove that the published paper underwent peer review as required by the university for ranking and financial incentives and for regularity bodies.

Research Journal Guidelines

CPU Multidisciplinary Research Journal (formerly *Patubas*) and **Scientia et Fides** serve as the refereed multidisciplinary research journals published by Central Philippine University. The aim of *CPU Multidisciplinary Research Journal* (formerly *Patubas*) includes providing a source of information in the areas of non-STEM related disciplines, including institutional system and process assessments; and community baseline or impact studies. The aim of *Scientia et Fides* includes providing a source of information in the areas of STEM related disciplines. The primary objective of these journals includes helping education and other professionals and other decision-makers to disseminate information and learn from each other's work.

The submission guidelines for both **CPU Multidisciplinary Research Journal** (formerly *Patubas*) and **Scientia et Fides** include:

1. Authors from around the world should submit original articles, with acceptance priority given to institutionally-funded, Central Philippine University faculty and staff.
2. Authors must identify any external agencies that have funded any parts of the development of their submissions in the "Author note" sections at the bottom of the title pages of their manuscripts.
3. Manuscripts submitted must relate to the topical areas specified above and authors should indicate if their manuscripts relate more to STEM or non-STEM disciplines. The editors may reclassify manuscripts. Authors may appeal reclassifications, as required. Authors should submit manuscripts written in either English or Filipino.
4. Topics of research should only include theoretical, descriptive, relational, or experimental / non-experimental (survey-type) research studies.
5. Authors should submit manuscripts that follow the guidelines found in the "Publication Manual of the American Psychological Association," 7th Edition.
Manuscripts shall not exceed 25 double-spaced pages (excluding title, abstract, references, and text of tables and figures) and shall include the following:
 - a. Title Page with Running head, Names of Authors, and Institutional Affiliations
(*maximum 5000 words*) completed research, including references
 - b. Abstract (150 words or not more than one page)
 - c. Introduction
 - c.1. Background/Rationale, Research Problem, and Purpose of the Study
 - *Related Literature/Studies (no. of words/literature) most relevant related literature*
 - *At least ten related lit (relevant), focus on the research gap*

- c.2. Objectives and Hypotheses
 - c.3. Theoretical Framework and Conceptual Framework, as applicable.
 - c.3. Significance of the Study
 - c.4. Scope of the Study (*Limitations, and Applicable Definitions*)
 - c.5. Related Literature/Studies
 - d. Methodology (at least 2 literatures about the chosen methodology/methods)
 - e. Results, presenting the analysis of findings in descriptive text, tables, and figures
 - f. Discussion, presenting the connections, comparisons, and contrasts between the findings and the reviewed literature/studies along with any associated implications
 - g. Conclusions and Recommendations (*based on the significance of the study*)
 - h. Acknowledgement
 - i. References
6. Manuscripts will undergo: (a) screenings for plagiarism, (b) reviews by applicable members of the appropriate Editorial Boards, and (c) double blind reviews by members of the External Referee Panel.
 7. Timing: **CPU Multidisciplinary Research Journal** (formerly *Patubas*) and **Scientia et Fides** will accept articles on a year-round basis.
 8. Response Period: We work to render decisions on all submissions within twelve weeks.
 9. Copy-editing: Upon acceptance for publication, the editors will ask authors to reduce the bodies of their manuscripts maximum of **3000 words**, for inclusion in the hard copy versions of the journals. We will include complete papers in the online versions of the journals. Before publication, each article will receive professional copy-editing, paid for by **CPU Multidisciplinary Research Journal** (formerly *Patubas*) and **Scientia et Fides**.
 10. Publication: We publish at least once per year, per journal, depending on the numbers of submissions we receive, and upon completions of the editorial process. We will not include articles that do not receive full editorial approval at least one month before a given publication date.
 11. Publicity: We send emails to everyone included in our database, alerting them to new issues of the journals. We also regularly push links to individual articles in social media outlets.

12. Rights: Central Philippine University will hold the copyrights to all articles published in both the hard copies and online versions of **CPU Multidisciplinary Research Journal** (formerly *Patubas*) and **Scientia et Fides**, unless otherwise specifically agreed upon. However, we grant authors express, non-transferable permission to reprint their articles in whole or in part in any work written (or coauthored) or edited (or co-edited) by them, without further permission, as long as they provide the appropriate attributions. Others must obtain written permission from the Editor-in-Chief of the given journal, care of the Director of the University Research Center of Central Philippine University to reprint or electronically distribute any portion of any article not covered by the doctrine of fair use.
13. Data Retention: Authors should retain for 2 years from the date of publication and have prepared to make available, upon request, the original data supporting their studies, as applicable.
14. Fees: The editors and staff of **CPU Multidisciplinary Research Journal** (formerly *Patubas*) and **Scientia et Fides** do NOT charge authors publication fees for inclusion in hard copy issues of the journals. However, we may charge for pre-publication or other posting online that allows for internet access to articles.

Please submit manuscripts to:

Preferred:

CPU Multidisciplinary Research Journal (formerly *Patubas*): urc@cpu.edu.ph

Or to:

Managing Editor (lcaniel@cpu.edu.ph)
CPU Multidisciplinary Research Journal (formerly *Patubas*) and *Scientia et Fides*
Ground Floor, Franklin Hall
Central Philippine University
5000 Jaro, Iloilo City
Philippines

MESSAGE



IRVING DOMINGO L. RIO, DM

Vice President for Academic Affairs

Congratulations to the School of Graduate Studies for the timely publication of their research outputs! This achievement not only highlights the dedication and hard work of our graduate students but also underscores the importance of research in advancing academic excellence and supporting the strategic goals of the university. May this milestone inspire continued growth and innovation in your research endeavors.

Table of Contents

- 1 **Documentation of Traditional Delicacies in the Province of Iloilo**
Elsie B. Tedoco¹ and Ma. Aminhan T. Panes²
- 19 **A Model Analysis of the Worthiness of Public Transport Services to Guimaras Island as Assessed by Tourists: Inputs to the Enhancement of a Tourism Development Plan**
Jonan P. Burgos¹ and Mary O' T. Penetrante²
- 42 **Sustainability and Viability of Community-Based Coastal Tourist Destinations: A Working Example of a Local Community in Aklan**
Ernesto B. Templo¹, Carmen N. Hernandez², Luis A. Abioda², Gynnyn G. Gumban² and Rowena M. Libo-on²
- 56 **Model Analysis of the Human Resource Crisis Management among DOT-Accredited Hotels in Western Visayas, Philippines**
Whalter M. Sosmeña¹, Mary O T. Penetrante² and Carmen N. Hernandez²
- 70 **Socio-cultural, Environmental, and Economic Factors Associated with Sustainable and Regenerative Coastal Tourism in the Province of Iloilo: Bases for a Model Development**
Febe Rose Libe-Torres¹, Carmen N. Hernandez², Rowena M. Libo-on² and Luis A. Abioda²
- 89 **The Use of ADDIE Model in the Development and Evaluation of a Training Module for Administrative Leadership and Decision Making in State Higher Education Institutions**
Napoleon B. Marasigan III¹ and Gynnyn G. Gumban²

Documentation of Traditional Delicacies in the Province of Iloilo

Elsie B. Tedoco¹, St. Paul University Iloilo, Iloilo City

Ma. Amihan T. Panes², CPU

Abstract

The province of Iloilo satisfies the senses, with many finding that their sense of taste is most satisfied. With its mouthwatering variety of creative dishes, Iloilo cuisine has made a lasting impression on Filipino culture and has a variety of local cuisines and delicacies made from local ingredients that ignites pride among the locals and contributes to the people's and the place's identity. Iloilo traditional delicacies are commonly made or rice, specifically glutinous rice as the main ingredient, and other local ingredients that can be easily found in the province such as cassava, root crops, coconut, and sugar. The very common process in preparing these delicacies is through steaming that allows the natural flavor and aroma of the ingredients to seep through and wrapped in banana leaves. Most of the materials used in preparing the traditional delicacies can be easily found in the household, mostly are replaced with modern equipment, however, there are still others who are using the traditional materials and process in preparing the delicacy. The makers of the Ilonggo traditional delicacies are mostly seniors who have learned the process from their parents and grandparents. Some are already the 2nd and 3rd generations of delicacy makers in their town. The delicacies documented in Iloilo province exhibited significance in terms of historical, aesthetic, social, socio-economic, and spiritual. These delicacies are not just simply prepared for livelihood, they have become part of Iloilo's identity and Ilonggo tradition and are popular ritual offering when constructing their new home to adopt a food ritual offering that is intended for the dead and other spirits who are connected to the house. Community validation of the identified delicacies was done with the participation of local stakeholders in the province, which included representative from the Department of Tourism's accredited tour guide, tourism officers, tourism staff, Local Economic, Development, & Investment Promotions officer, educator, and student.

Keywords: *culture, cultural heritage, gastronomy, traditional knowledge*

Introduction

Background of the Study

Culinary tourism has emerged as an essential component of any tourist experience, providing both visitors and locals with a true sense or authentic taste of the place. Food serves as a bridge between individuals and the land, their ancestors, and the community. It is a multifaceted and dynamic medium for creating communities, fostering relationships, and narrating stories. Food tourism may provide residents and tourists with a genuine feeling of the destination by fusing travel with culinary experiences (Fortus, 2012).

Claramonte & Faber (2017) emphasized that the Philippines is incomparably different from its neighboring countries in terms of food recognition, particularly when it comes to delicacies. It is customary for Filipinos to purchase well-known

products whenever they visit a new location. The research indicated that a culture's morals, religion, social history, and philosophy of life are all reflected in its cuisine. Ma (2015) also emphasized that many Asian societies are deeply rooted in customs, with various societal purposes assigned to mealtime customs and rituals. Due to its connection to particular cultural rites, food itself may serve as a symbol. These symbolic and ritualistic connotations of food aid in cultural identification. This is particularly true if the primary ingredients serve as an example of the resources that particular culture has access to (Nevana Stajcic, 2013). Every province in the Philippines seems to have its own unique traditional snacks or delicacies that are the pride of the area.

The countries ongoing promotion on culinary tourism product allows more destinations to attract more tourists, and Iloilo is regarded as one of the country's top culinary destinations. Liba et al. (2017) stressed that Filipinos are known to be food enthusiasts, which may explain why there are signature *Pinoy* delicacies everywhere. Throughout history, each region has developed its own delicacies. These Filipino desserts or delicacies are an essential part of the Filipino food culture and make no party or celebration complete. Filipino cuisines are distinct and original, catering to Filipinos' tastes and sweet tooth. They can be very sweet and are always popular with both children and adults.

A province that satisfies all the senses, Iloilo is the one that many people find to most satiate their palates. With its delicious array of innovative dishes, Iloilo cuisine has left a lasting impression on Filipino culture throughout the ages, and it is one of the reasons why tourists keep on returning for more. Composed of 42 municipalities and a component city, the province has a variety of local cuisines and delicacies made from local ingredients which can only be found in the province or region that are made available to the tourists. According to Björk and Kauppinen-Räsänen (2016), local cuisines and delicacies are an essential component in the field of tourism because they are regarded as an asset that travel places, locales, and nations may utilize for their events and marketing campaigns. Furthermore, in terms of destination branding, Iloilo has a delicacy or specialty food item that visitors must try that will surely leave a good impression on their taste buds and of what Iloilo has to offer that will make they want to try out. Delicacies are even development of localities, cities, or regions. Tourists enjoy a variety of foods and tasty sweets. (Marin, 2015)

Delicacies are very important part of a person's, and particularly a place's identity because it ignites pride among the locals and also has an important role in the people and place's identity. With many influences, Filipino native delicacies are starting to be replaced for foreign food, by preference. With the presence of International food chains in the country, specifically in the province, people are now becoming less familiar of the local cuisines and delicacies which are very important part of one's culture. Similarly, the current preparation of Filipino food has been modified to cater to the tastes of foreigners or to the tastes of foreigners in

Filipinos. Because they are drawn to foreign ways, many Filipinos have lost interest in their own culture. Recently, foreign cuisine has begun to supplant Filipino cuisine. Foreign dishes are more common in many Philippine restaurants and on special occasions at home, "with an occasional token of indigenous dish" (Florendo, 2019).

With continuous food innovations and the emergence of foreign foods throughout the country, along with people's sudden disinterest in local food, identification and the preservation of these local and traditional food must be a prioritized. In the Philippines, the preservation and identification of culinary heritage had a lack of initiative, if not, such initiatives are unheard of. There are also limited literatures for these Philippine local cuisines, especially for traditional delicacies. Culinary books in the country focused on Philippine cuisines and fusions on these foods and only a few includes the local or traditional delicacies. Studies on local food and delicacies in the country were also limited. There is no available book in the market that presents the traditional delicacies in the Province, not even a compilation of these local products in the tourism office. Likewise, there is no document that shows these traditional delicacies in the province and how it is handed down from generation to generation. There is then a need to document the traditional delicacies in the province, in order to continually preserve the culture and tradition in preparing these traditional delicacies and be handed down and known by the present and future generation.

Based on the researcher's experience and observation, most students and even local people of the province are no longer familiar of the different traditional delicacies in Iloilo. Locals could not even easily identify what delicacies can be found in the different towns of the province and are only familiar with the very common delicacies in the country. Some municipal tourism officers in the province have not yet identified their town's delicacies and some are not even familiar if they have any. Modernization is a big challenge especially in protecting and sustaining one's culture and tradition. People starting to lose interest in their cultural practices and traditions; youth are becoming more attracted to Western culture, and following tradition is considered outmoded. A lack of documentation is a significant contributor to the loss of traditional knowledge.

This research would add significantly to the extensive historical record on the knowledge of

these customary treats or local delicacies. It may also benefit the selected municipalities in the province of Iloilo by providing additional references to help raise awareness in developing sustainable programs to preserve these traditional delicacies and to enhance their tourism promotion activities. It may help the local community of the Municipalities to be more aware, knowledgeable, and contribute in the preservation of the Ilonggo culture. These resources, if made available to the public, could help increase the awareness and appreciation of locals and tourists of how rich the province’s cuisines and delicacies are and will lead them to the eventual cooking and keeping the recipes alive.

As a result, this study documented traditional delicacies in Iloilo province in order to help safeguard and sustainably develop the culinary tradition in Iloilo. This research could help to broaden the appeal of culinary tourism and encourage all visitors to Iloilo to have a more sustainable travel experience. Locals, food enthusiasts, and buyers from other places will be aware of what Iloilo has to offer, it will also provide recognition and appreciation to the local artisans

who create these traditional delicacies that represent what it means to be an authentic Ilonggo.

Objectives of the Study

This study aimed to document the traditional delicacies in the province of Iloilo as inputs to enhancing tourism promotions.

Specifically, it aimed to:

1. Identify the traditional delicacies in the province of Iloilo;
2. Document the various processes involved in the preparation of these traditional delicacies and develop a coffee table book;
3. Validate the identified traditional delicacies and the preparation of these delicacies by the community; and
4. Present the output to the tourism stakeholders in the province for endorsement and adaption.

Theoretical Framework

This study is anchored on the National Commission for Culture and the Arts (NCCA) Cultural Mapping Program. Various stages or phases that make up a cultural mapping project are outlined in Figure 1.

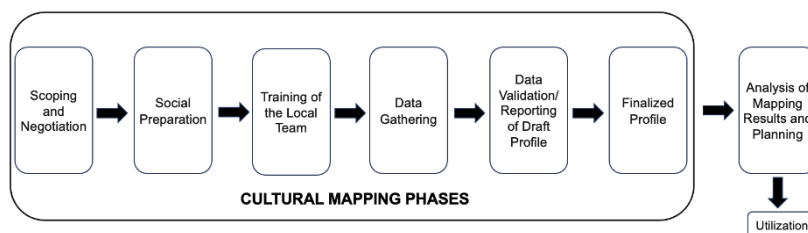


Figure 1. *The Cultural Mapping Phases*

Cultural Identity Theory and Enculturation Theory were also used in this study. Cultural Identity theory refers to a framework that explores how individuals and groups come to feel a sense of belonging and attachment to a particular culture or cultural group. It seeks to understand the ways in which people identify with and express their cultural affiliations, including their shared beliefs, values, customs, traditions, and symbols. The key components of the theory are: (1) cultural affiliation, which focuses on the specific cultural groups to which individuals belong, such as ethnic, religious, national, or regional groups; (2) cultural

beliefs and values within a particular cultural group. This includes attitudes toward family, authority, community, and other aspects of life; (3) cultural practices to include rituals, and behaviors that are characteristic of a particular culture. This can include language use, traditional ceremonies, and everyday customs; (4) cultural symbols which play a significant role in cultural identity. These symbols can include flags, religious symbols, traditional clothing, and other items that hold cultural significance; (5) identity formation as the Cultural identity theory explores how individuals develop and negotiate their cultural identity over

time. This process is dynamic and can be influenced by factors such as social interactions, experiences, and societal changes; and (6) Intersectionality: as Cultural identity theory often considers the intersectionality of identity, recognizing that individuals may belong to multiple cultural groups simultaneously, and these intersecting identities can shape a person's experiences and worldview.

Finally, this study is also based on Enculturation Theory. Enculturation, according to Herskovits in 1948, is the process of assimilating into and upholding the key principles, values, and concepts of one's heritage culture. Melville Herskovits, a cultural anthropologist, originally used the term "enculturation" in 1948. A process of innovative change and inquiry is included in Herskovits' definition of enculturation. Herskovits distinguished between two stages of enculturation: first is the "unconscious" period of early life during which a person "unconsciously" absorbs his culture; and second is the "conscious" stage of later times, when personal inventions are involved. It is suggested that enculturation be characterized as a concept and a behavioral process that characterizes the transfer and transformation of culture during the course of human development. While cultural transmutation is a process of psychosocial mutation, cultural transmission is the process of absorbing the current culture. As a result, enculturation entails creativity and investigation, which is a specific kind of epistemic sensitivity to culture. Enculturation is a continuous process that takes place in communities, families, and larger social settings. It supports the stability and continuation of cultural traditions across generations by assisting people in navigating and adapting to their cultural surroundings.

Significance of the Study

This study is beneficial to the following: Iloilo Provincial Tourism Office, Department of Tourism, National Commission for Culture and Arts, Delicacy Makers, Tourism and Hospitality Management Educators and Students, Local Restaurants and Chefs, Travel Agents and Tour Operators, Meeting, Incentives, Conferences, and Exhibition (MICE) Groups, Food bloggers and vloggers, Tourists, and Future Researchers.

Scope and Limitation of the Study

This study determined the traditional delicacies in Iloilo province. These traditional

delicacies were made from local ingredients which can be found in the province or region. This study was limited in documenting the processes, ingredients, and materials used in the preparation of the locally-known traditional delicacies with potential market or tourist value, and its progress over time.

The following were the inclusion criteria for the traditional delicacy: (a) unique in the town; (b) handed down from generation; and (c) existing for at least 50 years.

Identification of these traditional delicacies and delicacy makers was done with the help of the municipal tourism officers and the Office of Iloilo Local Culture and the Arts Council. Respondents of this study were the makers or of the traditional delicacy, identified by the Municipal Tourism Officer of the town, who were willing to participate in this study. There were 34 respondents who were willing to participate in this study coming from the different towns in the province of Iloilo. There were more traditional delicacies and makers in the province, however, only those who have responded and willing were included in this study. The traditional delicacy were unique in the town and a delicacy for the past several years handed down from generation. The respondents were either the one who originally made the delicacy, or the one who continued making the delicacy wherein he or she received the recipe and procedures from his or her parents, grandparents, or great grandparents. The documentation of traditional delicacies was conducted in August 2021 up to March of 2022. Community validation was done with the participation of local stakeholders (representatives) in the province such as, DOT accredited tour guide, tourism officers, tourism staff, Local Economic, Development, & Investment Promotions officer, educator, and student.

Review of Related Literature

Philippines as a Culinary Destination

The Philippine economy relies heavily on tourism. With many spectacular beaches, sunny weather, and a diverse bio-diversity, the nation is full of breathtaking scenery. In addition, people are drawn to the country's unique and complex culture because of its people, food, and way of life.

While many visitors come to the Philippines to explore its beautiful idyllic islands and renowned beaches, the nation's more than 7000 islands also provide an incredibly diversified

gastronomic experience. Every dish in Filipino cuisine is influenced by the inhabitants, past, and customs of a certain area, town, or island. Taking food tours or sampling well-known dishes in the Philippines is part of the Philippine travel experience.

The nation's culinary tourism will be further promoted by the Department of Tourism (DOT), as promised, citing Filipino food as a deciding factor when visiting a tourist destination. Food has an impact on tourism industries all over the world, according to Tourism Secretary Bernadette Romulo-Puyat. Culinary or gastronomic tourism is rapidly expanding, as per United Nations World Tourism Organization (UNWTO), and currently a key component of the travel encounter and experiences. Food is becoming an increasingly important motivator for people to travel to new places. Someone somewhere in the world is scrolling through their phone, laptop, or iPad looking for the next best place to eat, possibly a festival that will lure them to travel, like a farmers' market or food tour.

Culinary tourism is also a component of the Department of Tourism's flagship campaign, "Experience Western Visayas First." The Department of Tourism (DOT) is pushing for the expansion of culinary tourism in Western Visayas. Food has an effect on travel and tourism sectors worldwide, according to Tourism Secretary Bernadette Romulo-Puyat, and the Philippines, with its old-fashioned cooking methods, food-focused celebrations and customs, and family recipes, is not far behind. Despite a demanding international gastronomic scene, Filipino chefs are optimistic about the country's food scene's continued global dominance, especially utilizing governmental organizations such as the Department of Tourism (DOT) stepping up efforts to encourage food tourism as one of the primary product categories in the nation.

Local Food

Lacap (2019) conducted a study on "The Effects of Food-Related Motivation, Local Food Involvement, and Food Satisfaction on Destination Loyalty: The Case of Angeles City, Philippines". The study revealed that an important component in the field of tourism is local food because it is regarded as a resource that nations, locations, and destinations can be used to develop promotions and occasions. Additionally, it has a significant effect

on destination branding because every nation's cuisine, as a component of its culture, is represented by distinctive or outstanding dishes (Björk & Kauppinen-Räsänen, 2016). Local food has potentials in achieving tourism sustainability while also enhancing destination authenticity, fostering a stronger domestic economy, and contributing to the establishment of sustainable tourism infrastructure (Hall & Mitchell, 2007; Hjalager & Richards, 2003).

Food tourism, also known as gastronomic tourism, is becoming increasingly popular. Food-related activities and events are attracting a growing number of tourists. Visitors come to these events to experience iconic native delicacies or goods while additionally witnessing one-off occasions (Kivela & Crotts, 2006). Tourists' desire for authentic and one-of-a-kind food experiences is a developing travel trend (Smith & Costello, 2009). Local cuisine is closely linked to regional customs and histories, which can leave visitors with enduring memories (Tsai, 2016).

Several studies have found that local food, or food in general, plays an important role in increasing the destinations' value, whether it is in the culture, growth, sustainability, and economy. As a result of its contribution to tourism sustainability, food as a tourism resource is receiving increased attention (Chen & Huang, 2019; Everett & Aitchison, 2008; Everett & Slocum, 2013). Local food or cuisine has a direct or indirect impact on a destination's sustainability (Everett & Slocum, 2013) in terms of generating revenue, supporting local businesses, or meeting the needs of the tourists. It can improve the sustainability of tourism industry in terms of the economy, society, and environment for the local tourism experiences (Berno et al., 2014; Sims, 2009).

Iloilo as a Culinary Destination

Iloilo is a Philippine province located in the country's center. The province is located in the southeastern part of Panay Island, just across the coast from Guimaras Island. With Iloilo City as the capital city of the province, the city is often referred to as the "Heart of the Philippines."

The province has traditionally been one of the most significant provinces in the country. Even before the Spaniards arrived, merchants from China and India traded with the *Ilonggos*; evidences of this thriving civilization can be found in museums and private galleries. Iloilo remained

an important trading post even during the Spanish and American colonial periods. Iloilo, shielded from the open sea by the picturesque Guimaras Island, boasts a charming harbor with tranquil waters that are secure for sailing. At the turn of the century, this excellent port facility established Iloilo as a trade center, with trade coming into this port from all over the world, especially in the sugar boom years. Indeed, Iloilo was named "Queen City of the Philippines" because it was the second-biggest city in the nation after Manila.

As a modern city that retained its charm and natural scenery and environment despite its rapid growth. Because of its many first-rate hotels and international-standard airport, Iloilo is becoming a popular destination for conventions and meetings. Throughout the province, there are large shopping centers where visitors can refuel for the busy beach and water environment that lies ahead and numerous hotels and restaurants. Iloilo is the region's entry point. It is a popular stopover for tourists visiting Boracay and Palawan's beaches, as well as the neighboring provinces. Because of beautiful waters and lush fields, which produce an abundant harvest, Iloilo's pride is being the rice granary and food basket of the region. The main crop of the province of Iloilo is rice. In southern and northern parts, products from the sea and islands provide the majority of revenue. Many restaurants offer tourists a delectable feast of fresh seafood and well-known Ilonggo dishes like *La Paz Batchoy*, *Chicken Inasal*, and *Pancit Molo*.

A province that satisfies all the senses, Iloilo is the one that many people find to most satiate their palates. With its delicious array of innovative dishes, Iloilo cuisine has left a lasting impression on Filipino culture throughout the ages, and it might probably be a factor of people's recurring visits. As per Marin in 2015, tourists will want to try a variety of foods in Iloilo. Every province has a specialty dish or delicacy that tourists should try, and Iloilo's mouthwatering confections are sure to make an impression on travelers' palates as well. The best way to define any society is to look beyond its history and culture. Food has always

been a symbol of historical conflict and cultural advancement, so understanding a society's evolution can require an understanding of its people's culinary traditions and preferences. The purpose of this presentation is to educate all tourists who decide to visit Iloilo City about the abundance of delicious recipes and culinary skills that serve as a remarkable representation of the native Ilonggo culture.

Heritagization in Food Tourism

In tourism studies, the concept of heritage has been widely adopted. The inclusion of French and Mexican cuisine in UNESCO's list of Intangible Cultural Heritage of Humanity includes the Mediterranean diet, has brought attention to the significance of preserving culinary heritage and its role in a region's economic, political, and social sustainability. Numerous studies on the topic of heritage and food have been conducted since then. Bessiere (2013) authored a highly cited paper that utilized the heritagization theory in the domains of gastronomy and tourism. Other studies (Bowen et al., 2014; Teigen et al., 2019) define food heritage as traditional knowledge, farming methods, and agricultural products associated with a specific location, such as a rural context. These studies are inspired by Bessiere's (2013) concept of *terroir*, which states that some agricultural products produced in a specific location, such as a rural context, have unique flavors. Some studies examined culinary heritage in the same way as earlier research, but highlighted the distinctive feature of food heritage as a symbol of identity, custom, place, and legacy of a region; additionally, food heritage can encompass a broader range of agricultural product cultivation, harvesting, and conservation practices, products, and knowledge. Some emphasized socio-cultural aspects of culinary practices, which he defined as a synthesis of material (like ingredients and kitchenware) and immaterial (like flavors, aromas, recipes, and dining customs) components that support a country's cultural identity and traits.

Methodology

This study used a developmental research design to explore the complex field of contextualization of learning research using

cultural mapping as basis to arrive at assumptions and develop outputs from a detailed method of data collection, analysis, and interpretation.

In the field of instructional technology, developmental research is especially crucial (Richey & Klein, 2005). In contrast, the systematic study of creating, implementing, and assessing instructional processes, products, and programs that must adhere to internal consistency and effectiveness standards is known as basic instructional development has been defined as developmental research. The most prevalent forms of developmental research focus on scenarios where the end product and the product

development process are analyzed and described (Driscoll, 1991). This was accomplished by providing a detailed description of the traditional delicacies that had cultural, historical, social, and economic significance in accordance with objectives of the study. However, this design allowed researcher to identify the need and then develop contextualized instructional materials in the form of a coffee table book. Cultural mapping is used to create materials.

Data Gathering Procedure

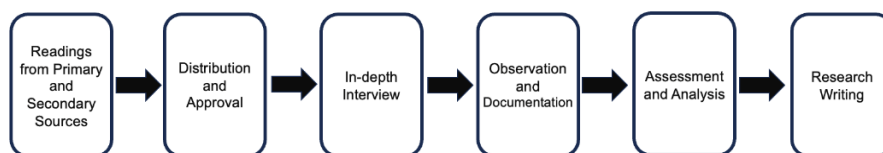


Figure 2. *Data gathering procedure*

Figure 2 showed the procedure in gathering the data for this study. Readings from primary and secondary sources on the traditional delicacies in the country were done prior to the conduct of the study. Approval from the University Ethics Committee was acquired, then the researcher requested permission to conduct the study from the Dean of the School of Graduate Studies of Central Philippine University, Iloilo City through an official communication addressed to the dean, signed by herself and the research adviser. For ethical standard, letters to the different Municipal Tourism Officers were given asking for assistance in identifying the traditional delicacy in their town and the original delicacy maker, this was done with the assistance of the Provincial Tourism Office. When the traditional delicacy and delicacy maker were identified, a letter was given to the identified delicacy maker asking for their consent and approval in participating in this study. Once approval was granted, a schedule was made for the fieldwork of doing the observation and documentation. Before the interview and documentation process started, the respondents were oriented about the research, its purpose and the expected output. Letter of consent was provided and explained to the respondents to indicate their willingness to participate in the study. Interview, observation, and documentation of the procedures

and finish products were done in the fieldwork. After the administration of the interview and documentation, gathered data were processed, analyzed, and validated by experts in the field of Ilonggo's history and culture. This study was done in coordination with the Provincial Tourism Office.

Data Analysis Procedure

This research focused on documenting the identified traditional delicacies in the province of Iloilo. Carefully and methodically, the data collected with the designated research instruments was analyzed. A developmental study's data synthesis and analysis are comparable to those of other research initiatives. Descriptive data presentations and qualitative data analyses utilizing information from records, interviews, and observations are probably in store.

The transcribed data was coded and analyzed in order to answer the research objective. There were three phases: analysis, development, and evaluation. The sources of knowledge were identified during the analysis phase, and the mapping of the contents of the Documentation of Traditional Delicacies in the Province of Iloilo was developed and validated by the community and stakeholders. After the documents were validated and returned, the researcher went through the written comments and identified the areas which

required further investigations. When all the gathered data were approved and corrected, finalization of the output was made and presented to the tourism stakeholders in the province for approval and adaption.

Results

Table 1 presents the documented traditional delicacies per municipality in the province of Iloilo with the ingredients used per delicacy. Iloilo is divided into 5 congressional districts with a total of 42 municipalities. This study was able to document a total of 34 delicacies coming from 21 municipalities that participated in the conduct of this study. Most of the traditional delicacies are made of rice, specifically glutinous rice, followed by cassava and other root crops. Some additional ingredients used to add flavor are coconut milk and sugar.

Table 1
Summary of Delicacies per Municipality

DISTRICT	MUNICIPALITY	DELICACIES	INGREDIENTS	DESCRIPTION
1	Tigbauan	- <i>Kalamay sa Buri</i>	Sap from the <i>Buri</i> tree	<i>Kalamay sa Buri</i> is made from sap of <i>buri</i> tree. When boiled, it turns into dark brown sugar thus it has a flavor profile of being sweet. In preparing this delicacy, the sap of the <i>buri</i> tree is boiled to perfection allowing that sweet, toasty, and nutty caramel-like aroma to seep through.
		- <i>Biko</i>	Glutinous rice, coconut milk, sugar	<i>Biko</i> is a glutinous rice cake made traditionally creamish-white with brown topping from the caramelized curd of the glutinous rice and coconut milk mixture, has a soft and chewy texture.
	Tubungan	<i>Sirit-sirit</i>	Cassava, sugar	<i>Sirit-sirit</i> is a deep fried sun-dried cassava turned into golden brown color with a rough texture. This sweet and crunchy afternoon snack, traditionally of golden brown in color and shaped like a medium plate.
	Miag-ao	- <i>Baye-Baye</i>	Glutinous rice, coconut meat, brown sugar	<i>Baye-baye</i> is a sweet dessert, traditionally of light brown in color has a flavor profile of being sweet, light, and creamy. It is shaped and sized like an egg wrapped in a withered banana that adds to the traditional look of the dessert.

Table 1 Continued

DISTRICT	MUNICIPALITY	DELICACIES	INGREDIENTS	DESCRIPTION
	San Joaquin	- <i>Bandi</i>	Peanuts, sugar, sesame seeds	<i>Bandi</i> is San Joaquin's version of peanut brittle. Traditionally, the appearance is dark brown due to the use of muscovado sugar. The reddish brown to light brown is due to the use of washed sugar, while the almost transparent color is from the refined sugar used during the cooking.
2	Alimodian	- <i>Sinakol</i>	Glutinous rice, coconut meat, muscovado and white sugar	<i>Sinakol</i> is a sweet, creamy, soft, chewy and sweet circular chunks is of light brown color due to local classic blend of its ingredients. It is steamed to perfection allowing that sweet aroma to seep through.
	Leon	- <i>Binarot na Palawan</i>	Swamp taro (<i>Palawan</i>), coconut meat, muscovado	<i>Binarot na Palawan</i> has a flavor profile of being not too sweet and creamy. It is usually deep cream in appearance with a soft texture when steamed.
		- <i>But-ong na Palawan</i>	Swamp taro (<i>Palawan</i>), salt, muscovado sugar	<i>But-ong nga Palawan</i> has the right amount of sweetness, tastes creamy and is usually light brownish in appearance with a soft texture when steamed.
		- <i>Palawan Alupe</i>	- Swamp taro (<i>Palawan</i>), salt, coconut meat, muscovado sugar	<i>Palawan Alupe</i> is a sweet and creamy delicacy usually light brownish in appearance has a soft texture when steamed. It is a quick morning or afternoon snack in the municipality of Leon.
	Leganes	- <i>Ibos nga may Lubi</i>	Glutinous rice, coconut meat & milk, sugar	<i>Ibos nga may Lubi</i> is creamish-white with a sticky, silky, soft texture. It has a flavor profile of having the right amount of sugar and salt.
3	Cabatuan	- <i>Ibos nga may Haliya</i>	Glutinous rice, purple yam, coconut milk, sugar	<i>Ibos nga may Haliya</i> is a rice cake highly similar to another local <i>kakanin</i> , the <i>Suman</i> . The leaves of the coconut are used as the food wrap for this most loved delicacy served for breakfast with ripe mangoes or dipped in native chocolate or mid-afternoon snack.
		- <i>Cassava Pinwheel (Balolo)</i>	White variety of Cassava, grated coconut meat, coconut milk, white refined sugar, sesame seeds, water	Cassava Pinwheel is a sweet and chewy rolled cassava dough with caramelized grated young coconut meat filling. Banana leaves are used as the food wrap for this local dessert.

Table 1 Continued

DISTRICT	MUNICIPALITY	DELICACIES	INGREDIENTS	DESCRIPTION
		- Cassava Roll	White variety of Cassava, grated coconut meat, coconut milk, white refined sugar, sesame seeds, water	Cassava Roll is a rolled cassava dough with muscovado sugar and sesame seed filling giving it a sweet taste and a chewy texture.
	Maasin	- <i>Muasi</i>	Glutinous rice, coconut milk, sugar	<i>Muasi</i> is a chewy white dessert that is cooked and garnished with toasted sesame seeds and muscovado sugar allowing that subtle, nutty aroma to seep through.
		- <i>Kalamay Hati</i>	Glutinous rice, coconut milk, brown sugar	<i>Kalamay Hati</i> is a sticky dessert, usually sweet and with a chewy texture, traditionally of dark brown in appearance is cooked and stirred to perfection allowing that subtle, sweet aroma to seep through. Its banana leaf wrapping adds a distinct taste, fragrance.
	Badiangan	- <i>Kombo</i>	Banana (<i>saba</i>), flour, water, sugar	<i>Kombo</i> has a sweet taste due to the refined sugar used as coating, golden brown in color and with a soft creamy texture in the inside with a bit of crunch due to its fried batter.
		- <i>Bitso Bitso</i>	Glutinous rice, sugar, sesame seeds	Bitso Bitso is traditionally dark brown, crispy and sweet on the outside from the caramelized washed or muscovado sugar and white, and chewy inside.
	Lambunao	- <i>Linupak</i>	Banana, coconut meat, sugar	Traditionally, the appearance of <i>Linupak</i> is creamish-brown with a soft texture. It is pounded to perfection allowing that sweet and nutty aroma to seep through and having the right amount of sweetness.
		- Coconut balls	Coconut meat, muscovado sugar, water	This sweet dessert, traditionally of dark brown in color has a flavor profile of being very sweet and creamy. It is shaped and sized like a golf ball.
	Pototan	- <i>Aripahol</i>	Glutinous rice, coconut meat, sugar	<i>Aripahol</i> is a round-shaped <i>kakanin</i> , traditionally of creamish-white in color and has a flavor profile of having the right amount of sweetness and is creamy. It is steamed to perfection allowing that subtle, sweet, nutty-aroma to seep through. It is wrapped in banana leaf that adds to its local feel

Table 1 Continued

DISTRICT	MUNICIPALITY	DELICACIES	INGREDIENTS	DESCRIPTION
4	Calinog	- <i>Sinapid</i>	Corn, coconut meat, condensed milk sugar	This sweet and creamy dessert, of golden yellow in color, is a blend of the local classic ingredients. The corn husks in different hues of brown and yellow are used as wrapper which adds to the traditional look of the delicacy.
	Dumangas	- <i>Bitog</i>	Glutinous rice, coconut meat & milk, sugar	This soup-style sweet dessert is an afternoon snack favorite in the municipality of Dumangas. It is traditionally of light brown in color is due to local classic blend of muscovado sugar. It has a flavor profile of being sweet, light, and creamy. The glutinous rice dough balls are shaped and sized like a marble with a chewy texture.
		- <i>Linugaw</i>	Glutinous rice, coconut meat & milk, sugar, banana, taro, sweet potato	This sweet dessert, traditionally of cream color, has a flavor profile of being sweet, light, and creamy. The blend of different root crops adds to the variety of color seen in this local cuisine.
	Dingle	- Papaya Rosette	Papaya, sugar, egg yolk	This super sweet delight is originally cream in color with a flavor profile of being sweet. Nowadays, there are many variations on the traditional look of the candy and come in different colors and flavors.
	Passi City	- <i>Inday-inday</i>	Glutinous rice, coconut meat & milk, sugar	<i>Inday-inday</i> is usually white in appearance with a soft texture and creamy dough for the rice dough; and a dark brown, very sweet taste with a burnt smell for the caramelized young grated coconut meat.
		- <i>Tikoy</i>	Glutinous rice, coconut meat & milk, sugar	<i>Tikoy</i> has a flavor profile of having the right amount of sweetness and with a creamy taste. It has a dark brown color appearance due to the muscovado sugar used. The texture is soft and chewy.
	Lemery	- <i>Butong-butong</i>	Coconut milk, sugar, sesame seeds	This tube-like <i>candy</i> , with a flavor profile of being too sweet and creamy, is traditionally of creamish-white in color is due to local classic blend of its ingredients. As the candy is prepared the color changes from rusty dark brown to creamy-white.
	Carles	- <i>Alupe</i>	Glutinous rice, coconut meat & milk, sugar	<i>Alupe</i> is commonly rectangular in shape. This is of light brown color, soft, chewy and sweet. It is prepared to perfection allowing that nutty-charcoaled aroma to seep through.

Table 1 Continued

DISTRICT	MUNICIPALITY	DELICACIES	INGREDIENTS	DESCRIPTION
		- <i>Puto sa Paya</i>	Cassava, coconut meat, brown sugar	This cake-like creamish-brown color delicacy has a flavor profile of being sweet and creamy. It is prepared to perfection allowing that sweet-toasty, nutty aroma to seep through. It used to be traditionally prepared by a family for special occasion and still a favorite snack in the municipality of Balasan.
		- <i>Suman sa Lasaw</i>	Glutinous rice, coconut milk, salt, sugar	This sweet rice cake is usually made with a combination of sticky rice, muscovado sugar, and coconut milk. It has many versions and innovations from different regions in the country. It has a very sweet taste due to the <i>Lasaw</i> or thickened sweet coconut sauce topping.

The figure below represents the summary of districts with 42 municipalities. It also highlights the documented delicacies in the province of Iloilo. The map of Iloilo is divided into five congressional municipalities that participated in the study.

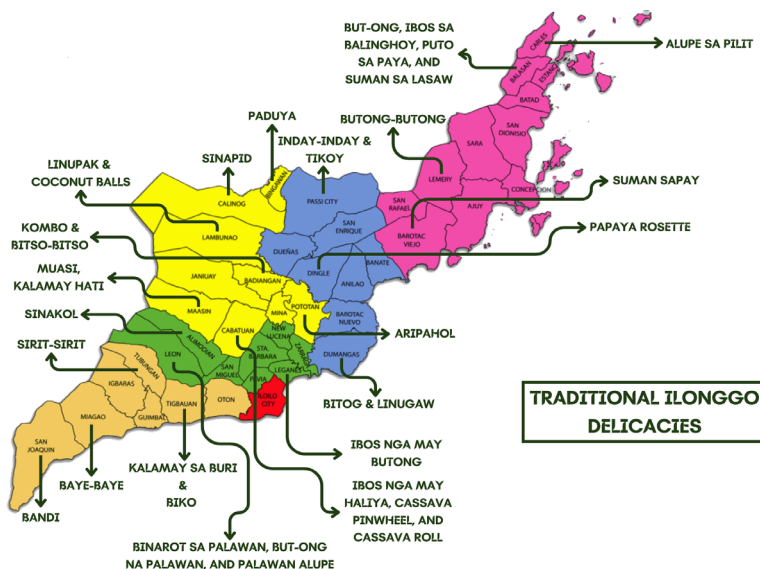


Figure 3. Summary of documented delicacy per municipality

As a subset of Cultural Tourism, local destination. The authentic or even familiar has culinary are part of the rich heritage of a somehow motivated some people to visit a

destination. People are becoming more conscious of the significance of food in terms of culture and legacy component for Iloilo and consider it as a valuable source to attract tourists. Food is an essential part of an authentic experience. So much can be learned about people and how they live through the food they eat, and the way they eat it. Community validation of the identified delicacies was done with the participation of local stakeholders in the province, which included representative from the Department of Tourism's accredited tour guide, tourism officers, tourism staff, Local Economic, Development, & Investment Promotions officer, educator, and student.

Culinary traditions are equally important when considering the environment and context. Food is associated with a location's physical location, element of agriculture, indigenous peoples, and cultural factors; unique customs and behaviors of the neighborhood; historical advancement and contribution; sociological impacts, including acculturation and the demonstrative effect; and other elements. As a result, there is always a connection and significance between the related customs and culinary traditions and the local community. This demonstrates the importance of food to a place's identity and reputation, whether for cultural and heritage preservation or for business and tourism.

Filipinos cannot survive without rice, and most meals are incomplete without it. Products made of rice have crept into Filipino *meriendas*, or afternoon snacks. According to Food and Nutrition Rice Research Institute, processed rice products roughly account for 2% of the Philippines' rice consumption. The most widely utilized major ingredient in the creation of *kakanin*, which is available in various forms, is rice. The most commonly used variety in making *kakanin* is the first class, specifically the short and spherical glutinous rice grain is perfect. It could be made from rice, sweet rice, or any root vegetable such as *ube*, cassava, or taro. It could make use of coconut and byproducts of coconut. It could be flavored with *pandan* leaf or cooked in banana leaf. It is usually sticky and chewy, and it takes hours to prepare - a true labor of love...and they are Filipino originals!

Most delicacies in Iloilo province use glutinous rice (*pilit*) as the main ingredient, as the province has the honor of being known as the rice

bowl and food source for the Region because of its waters and rich terrain, which produce a plenty of food. Iloilo province's main crop is rice. The central section is an agri-industrial complex that produces a wide range of agricultural products, including corn, rice, bananas, sugar, and pineapples, as well as high-end crops. The sugar industry is concentrated in Passi and its surrounding towns such as Lambunao, Duenas, San Enrique, and Binggawan.

The delicacies are mostly prepared with the use of a steamer or the process of steaming and require minimal ingredients which makes raw ingredients and products accessible to the users and supports local produce provided by the province. It is essential to employ conventional and local ingredients and supplies to the dish's integrity and identity. The ingredients demonstrate food's integrity and contribute in conservation and preservation of culinary tradition.

The Ilonggo delicacies' creators simply followed in their parents' and grandparents' footsteps. Their methods and processes may have deviated from technology and normal processes, but they remain one of the best examples of how rich *Ilonggo*'s are in terms of native delicacies.

As stated by Lucin (2013), the Council on International Education Exchange (n.d.), and Di Mauro et al. (2011), the community's culinary tradition is an integral part of its identity. This is due to the fact that every aspect of food is linked to the anthropological, historical, and cultural aspects of the community. These factors include the purpose for which the community makes cuisines or food, its value, the tangible uncooked materials and ingredients, the process of preparing, cooking, and presenting, lastly, the transmission of food from generation to generation (Kivela and Crotts 2006). Everything began with the reasons behind its preparation and the sociocultural significance of food. Similar to the widely held Filipino belief that making noodles on a person's birthday will grant them a longer lives, and that making sticky *kakanins*, or traditional rice cakes, can strengthen bonds between family members, friends, and relatives. According to Sta. Maria, 2019, ancestors believed each grain of rice had a soul commanding respect and careful handling. Sticky rice varieties were preferred as pagan offerings. They continue as special occasion cakes and puddings as well as daily comfort foods.

Conclusions

The following conclusions were made based on the findings of this study:

1. Ilonggo customs, beliefs, and traditions that are passed down from one generation to the next are abundant in culture and traditions. Rice, being abundant in the province is being used as the main ingredient in making delicacies. Some of the delicacies has the same ingredients, however, it creates a different finish product, with a difference in appearance and taste, based on how it was processed and prepared.

2. Rice and other ingredients such as root crops are slow cooked to perfection through steaming. This method of cooking when properly executed, uses hot steam to transfer heat to the rice or root crop without disturbing it in a boiling liquid, producing a delicate, moist and tender result of the end product.

3. Traditional delicacies have been existing and being prepared for decades in Iloilo. Some may come with different names to other parts of the country but in Iloilo, they come with the same name though variations in the preparation may occur.

4. In Iloilo, making delicacies is more than just a means of subsistence. It has become a part of Iloilo's identity and Ilonggo tradition, highlighting the environment in which raw materials are produced; using conventional materials and

equipment for preparation and cooking; cooking, eating, and disposing of and recycling waste. As a result caused by commercialization and industrialization, these culinary traditions and recipes are already on the verge of extinction. Aside from that, the current generation, which should be attempting to carry on this tradition, is already losing interest in passing down culinary traditions and recipes as a result of the modernized way of life that we are currently experiencing.

5. Everywhere over Iloilo, there are several kinds of sweet treats available that serve as the place's identity and pride that has been handed down from generations to generations. Documentation and information dissemination are extremely important preservation methods for this culinary heirloom as food heritage is an important part of one's identity and reflects how much Filipinos value their rich traditions and customs. According to Bessière (2013), food heritage can also act as a source of distinctiveness by defining similarities and differences and acting as a symbol of regional identity. This definition states that heritage is what we live with today, what has been left behind from the past, and what we either personally or collectively pass on to the next generation. This can be of individual, family, band, community, province, region, country, or world significance.

Recommendations

The following recommendations were made based on the findings of this study:

1. Iloilo Provincial Tourism Office should continue promoting the Ilonggo traditional delicacies through *Namit* festival. They should invite more local makers for the cooking demonstration, and encourage schools to participate in cooking competitions and demonstration in preparing the traditional delicacies. The office may also distribute brochures for these traditional delicacies to create more awareness to the people in the province.

2. The Department of Tourism should create various publications, including coffee table books, about the culinary tradition; develop marketing collaterals such periodicals, booklets, brochures, and leaflets, available to prospective travelers and visitors; and offer interpretations of the culinary

legacy through exhibitions, for the Western Visayas and specifically for Iloilo. Department of Tourism may begin the process of forming an organization to oversee the evolutionary development or preservation of *Kakanin's* culinary legacy or tradition. Additionally, this will offer a suitable setting for cooperation and partnership with other culinary tradition stakeholders, which can ensure its long-term viability. They may also establish a *pasalubong* center and create various committee specializing in a certain industry within tourism that will serve as their official representative.

3. The National Commission for Culture and Arts (NCCA) should have a sub-commission primarily focused on the Culinary Arts, so that the food heritages of each region, cities and municipalities in the Philippines are strictly

preserved, documented, and disseminated to the public. This could serve as a starting point for the Philippine government to take action on the issue of discovering Philippine food heritage.

4. Delicacy makers should continue producing delicacies and encourage their children and grandchildren to continue their legacy in making these traditional delicacies for safeguarding.

5. Tourism and Hospitality Management Educators should integrate the significance and identity of the culinary tradition, specifically the Ilonggo culinary tradition to the curriculum, and courses or subjects of the student. For those who are interested in learning about the culinary tradition and possibly utilizing it for financial gain, workshops and trainings may be made available.

6. Local Restaurants and Chefs should integrate traditional delicacies in their menu offering. They can tap the local delicacy makers as suppliers for these delicacies that can be added in their menus. They may also create workshops and trainings to individuals who wished to become knowledgeable about the culinary customs and perhaps make profit from them.

7. Travel Agents and Tour Operators should consider including visits to traditional delicacy makers in the itinerary for Iloilo Tour. Or they may

develop a tour package on Iloilo Culinary Heritage Tour that will include cooking demonstration, by local makers, in preparing traditional delicacies with food tasting. Snacks given to tourists may include these traditional delicacies, too.

8. Meeting, Incentives, Conferences, and Exhibition (MICE) Groups could celebrate an annual festival on the culinary heritage of the province and hold competitions in which locals would participate to showcase the authentic dishes in the province. MICE groups could also include in the menu or food offering, during events, the traditional delicacies in the province.

9. Food Bloggers and Vloggers should start exploring Iloilo's traditional cuisines and delicacies as part of their contents (blogs and vlogs). They may explore a wider selection and deeper documentation of the Ilonggo cuisines and delicacies to be featured.

10. Tourists should indulge themselves in trying the traditional delicacies in Iloilo as these can also be the culinary attractions of the province.

11. Future Researchers may conduct a study that will focus on the deeper meaning and significance of these traditional delicacies in Ilonggo culture and traditions that may further help in safeguarding the Ilonggo traditional delicacies.

Acknowledgment

The researcher would like to express her utmost profound respect, gratitude, and appreciation to the Iloilo Provincial Tourism Office, and his team for all the assistance, guidance, and consistent support in the successful conduct of this study from inceptions to the final stage of completion. Also, the different Municipal Tourism Officers in the province of Iloilo, for their assistance in determining the delicacy makers in

their town. All the identified delicacy makers that were included in this study, who voluntarily participated and willingly shared their stories to provide the needed data in this study. Lastly, the panel members of this study, the Dean of the CPU School of Graduate Studies and to all who contributed to the successful completion of this paper.

References

Agyeiwaah, E. et al. (2019). Understanding culinary tourist motivation, experience, satisfaction, and loyalty using a structural approach. *Journal of Travel & Tourism Marketing*. <https://doi.org/10.1090/10548408.2018.1541775>

Andersen, B. V., & Hyldig, G. (2015). Consumers' view on determinants to food satisfaction. A qualitative approach. *Appetite*, 95, 9-16. <https://doi.org/10.1016/j.appet.2015.06.011>

- ASEAN (2014). Far-flung ASEAN Culinary Delicacies. *ASEAN*.
<https://www.aseantourism.travel/articles/detail/far-flung-asean-culinary-delicacies>
- Australia ICOMOS. (2013). The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance. Australia: Deakin University. <https://openarchive.icomos.org/id/eprint/2145/>
- Besa, A. (2012). *Ang Sariling Atin* (ASA) Culinary Heritage Institute (Food That Was Always Ours). <https://culinaryhistorians.org/hidden-flavors-philippine-kitchen/>
- Bessiere, J. (2013). 'Heritagisation', a challenge for tourism promotion and regional development: An example of food heritage. *Journal of Heritage Tourism*, 8(4), 275-291. <https://doi.org/10.1080/1743873X.2013.770861>
- Bessière, J. (1998). Local development and heritage: Traditional food and cuisine as tourist attractions in rural areas. *Sociologia ruralis*, 38(1) 21-34. <https://doi.org/10.1111/1467-9523.00061>
- Björk, P., & Kauppinen-Räsänen, H. (2016). Local food: A source for destination attraction. *International Journal of Contemporary Hospitality Management*, 28(1), 177-194. <https://doi.org/10.1108/IJCHM-05-2014-0214>
- Briones, D. M. S., Cueto, R. M., Ocampo, R. S., Aballa, J. M., & Festijo, B. (2013). Lucban specialty foods as culinary attraction in Quezon Province, Philippines. *International Journal in Management and Social Science*, 1(3), 7-14. <http://www.ijmr.net>
- Brulotte, R.L. & Di Giovine, M.A. (1st ed) (2014). Edible identities: Food as cultural heritage. *Heritage, Culture and Identity*. Ashgate Publishing, Ltd.
- Celis, M. I., Mendoza, E. E., & Baruc, M. M. (2013). Tourist attraction in the CALABARZON Region, Philippines: Basis for strategic planning. *International Journal of Academic Research in Business and Social Sciences*, 3(8), 2222-6990
- Chen, Q., & Huang, R. (2019). Understanding the role of local food in sustaining Chinese destinations. *Current Issues in Tourism*, 22(5), 544-560. <https://doi.org/10.1080/13683500.2018.1444020>
- Chhabra, D. (2007). Exploring market influences on curator perceptions of authenticity. *Journal of Heritage Tourism*, 2(2), 110-119. <https://doi.org/10.2167/jht031.0>
- Department of Agriculture, Kagawaran ng Pagsasaka. (2014)
- Everett, S., & Slocum, S. L. (2013). Food and tourism: An effective partnership? A UK based review. *Journal of Sustainable Tourism*, 21(6), 789-809. <https://doi.org/10.1080/09669582.2012.741601>
- Fernandez, D. (2000). *Palayok: Philippine food through time, on site, in the pot*. Makati City: Bookmark; 2000. <https://www.goodreads.com/book/show/12984364-palayok>
- Florendo, J. (2019). Colonizing the Filipino Palate. *Padayon Sining: A Celebration of the Enduring Values of the Humanities*. 12th DLSU Congress. <https://www.coursehero.com/file/77695321/FAC-03pdf/>
- Galang, D. (2004). *Kanin na naman: Kakanin Through Time and Pinoy's Modern Sweet Indigent*. <http://www.mb.com.ph/node/181033>
- Hall, C. M., & Mitchell, R. (2007). Gastronomic tourism: Comparing food and wine tourism experiences. In M. Novelli (ed.), *Niche tourism*, 87-102. Routledge.
- Hall, C. M., Sharples, L., & Smith, A. (2003). The experience of consumption or the consumption of experiences? Challenges and issues in food tourism. In C.M. Hall, L. Sharples, R. Mitchell, N. Macionis, & B. Cambourne (Eds.), *Food tourism around the world: Development, Management, and Markets*, (pp. 314-335). Oxford: Butterworth-Heinemann

- Handszuh, H. F. (2000). Local food in tourism policies. In WTO-CTO local food & tourism international conference, Larnaka, Cyprus, 9(11), 173-179. *World Tourism Organization* (WTO)
- Harrison, R. (2013) *Heritage. Critical Approaches*. London: Routledge, 268. ISBN: 978-0-415-59197-3
- Hjalager, A. M., & Richards, G. (Eds.). (2003). Gastronomy: An essential ingredient in tourism production and consumption? *Tourism and Gastronomy*. Routledge. 8(27).
- Kalalo, R.S.B, Cablaol, A.L. Cabatay, M.P., Mantal, C.P. Manalo, R.T. & Felicen, S.S. (2014). Cuisine preference of local tourists in San Juan, Batangas, Philippines. *Asia Pacific Journal of Multidisciplinary Research*, 2(4), 101-111. <http://www.apjmr.com>
- Kearney, J. (2010). Food consumption trends and drives. *Philosophical Transaction of the Royal Society. Biological Sciences*. 365, 2793-2807. <https://doi.org/10.1098/rstb.2010.0149>
- Kim, Y. G., Eves, A., & Scarles, C. (2013). Empirical verification of a conceptual Model of local food consumption at a tourist destination. *International Journal of Hospitality Management*, 33, 484-489. <https://doi.org/10.1016/j.ijhm.2012.06.005>
- Kim, Y. G., Suh, B. W., & Eves, A. (2010). The relationships between food related personality traits, satisfaction, and loyalty among visitors attending food events and festivals. *International Journal of Hospitality Management*, 29(2), 216–226. <https://doi.org/10.1016/j.ijhm.2009.10.015>
- Kivela, J., & Crotts, J. C. (2006). Tourism and gastronomy: Gastronomy's Influence on how tourists experience a destination. *Journal of Hospitality & Tourism Research*, 30(3), 354-377. <https://doi.org/10.1177/1096348006286797>
- Lee, Y., Yoon, J., Chung, S.J., Lee, S.K., Kim, H. & Kim, S. (2013). Effect of TV Food advertising restriction on food environment for children in South Korea. *Health Promotion International*, 33(2), 366. <https://academic.oup.com/heapro/article/33/2/366/3095841>
- Levitt, J. A., Zhang, P., DiPietro, R. B., & Meng, F. (2017). Food tourist segmentation: Attitude, behavioral intentions and travel planning behavior based on food involvement and motivation. *International Journal of Hospitality & Tourism Administration*, 1-27. <https://doi.org/10.1080/15256480.2017.1359731>
- Lindholm, C. (2008). *Culture and Authenticity*. Wiley-Blackwell. ISBN: 978-1-405-12443-0. <https://www.wiley.com/en-us/Culture+and+Authenticity-p-9781405124430>
- Ma, G. (2015). Food, eating behavior, and culture in Chinese society. *Journal of Ethnic Foods*, 2(4), 195-199. <https://doi.org/10.1016/j.jef.2015.11.004>
- Mintz, S.W. & Du Bois, C.M. (2006). The anthropology of food and eating. *Annual Review of Anthropology*, 31: 99-119. <https://www.jstor.org/stable/4132873>
- NCCA. (2019). Cultural Mapping Program. *National Commission for Culture and the Arts*. <https://ncca.gov.ph/about-ncca-3/ncca-cultural-mapping-program/>
- NCCA. (2022). *Revised Procedures on the 30-Day Public Validation of Cultural Properties in the PRECUP*. <https://www.precup.ncca.gov.ph/media/attachments/2022/11/17/30-day-precup-validation-policy.pdf>.
- Stajcic, N. (2013). Understanding culture: Food as a means of communication. *Hemispheres. Studies on Culture and Societies*, 1–10. [Users/madelineholt/ Downloads/05-Stajcic v01 \(1\).pdf](https://www.madelineholt.com/Downloads/05-Stajcic%20v01%20(1).pdf)
- Nwegbu, M.U., Eze, C.C. & Asogwa, B.E. (2011). Globalization of Cultural Heritage: Issues, Impacts, and Inevitable Challenges for Nigeria. *Library Philosophy and Practice* (e-journal). Paper 674.
- Ngwira, C., & Kanchan, Z. (2018). What attracts tourists to a destination? Is it attractions?

- African Journal of Hospitality, Tourism and Leisure*, 7(1), 1-19. 17(3), 321–336. <https://doi.org/10.1080/09669580802359293>
- Nikjoo, A. H., & Ketabi, M. (2015). The role of push and pull factors in the way tourists choose their destination. *Anatolia*, 26(4), 588-597. <https://doi.org/10.1080/13032917.2015.1041145>
- Nwegbu M.U., Eze, C.C. & Asogwa, B.E. (2011). Globalization of cultural heritage: Issues, impacts, and inevitable challenges for Nigeria. *Library Philosophy and Practice (e-journal)*. Paper 674.
- Oliver, R. L. (2014). Satisfaction: A behavioral perspective on the consumer. *Routledge*.
- Routledge Ji, M., Wong, I. A., Eves, A., & Scarles, C. (2016). Food-related personality traits and the moderating role of novelty-seeking in food satisfaction and travel outcomes.
- Tourism Management. 57, 387-396. <https://doi.org/10.1016/j.tourman.2016.06.003>
- Robinson, R.N. & Clifford, C. (2012). Authenticity and festival foodservice experiences. *Annals of Tourism Research* 39: 571-600
- Sims, R. (2009). Food, place and authenticity: Local food and the x consumer: A tourism experience. *Journal of Sustainable Tourism*, 17(3), 321–336. <https://doi.org/10.1080/09669580802359293>
- Smith, S., & Costello, C. (2009). Culinary tourism: Satisfaction with a culinary event utilizing importance-performance grid analysis. *Journal of Vacation Marketing*, 15(2), 99-110. <https://doi.org/10.1177/1356766708100818>
- Taylor, C. (2001). The ethics of authenticity. Cambridge, Massachusetts: Harvard University Press
- Tsai, C. T. (2016). Memorable tourist experiences and place attachment when consuming local food. *International Journal of Tourism Research*, 18(6), 536-548. <https://doi.org/10.1002/jtr.2070>
- Taylor and Muir (2012). Experiential Branding of the "Spice Island". <https://books.google.com.ph/books>
- UNESCO. (2003). The convention for the safeguarding of the intangible cultural heritage. United Nations Educational, Scientific and Cultural Organization. 2003. <https://ich.unesco.org/doc/src/15164-EN.pdf>
- Vidal Claramonte, M. Á., & Faber, P. (2017). Translation and food: the case of mestizo writers. *Journal of Multicultural Discourses*, 12(3), 189–204. <https://doi.org/10.1080/17447143.2017.1339352>

A Model Analysis of the Worthiness of Public Transport Services To Guimaras Island as Assessed by Tourists: Inputs to the Enhancement of a Tourism Development Plan

*Jonan P. Burgos¹, Capiz State University, Pontevedra Campus
Mary O' T. Penetrante², Central Philippine University, Jaro, Iloilo City*

Abstract

The study was a model analysis of the worthiness of public transport services to Guimaras Island, Western Visayas, Philippines as assessed by tourists' travelers. A non-experimental predictive research design using linear regression was used. A total sample size of 389 respondents participated in the study. A continuous Likert scale was used to measure the tourists' assessment of the worthiness of public transport services to Guimaras Island and to enable probability testing on data. Results pointed out that young to middle-age tourists (18-35 years old) have higher assessment of the worthiness of transport services as compared to older tourists (56 years old and above) especially in terms of convenience, reliability, and availability of public transportation. Light users (once a year) as compared to heavy users (once a week) of transport services have higher assessment of the worthiness of the transport services especially in terms of the safety, convenience and reliability, while professionals/employees have higher assessment of safety, reliability, convenience, and value for money as compared to housewife and students. These demographics (age, occupation) and psychographic (usage) variables are worth considering in revisiting the quality of transport services being provided to the tourists, especially in terms of cleanliness, availability of seats while waiting and accessibility, punctuality and service frequency of transport service, ticket availability and fare promotion and discounts, lower fare, advanced booking/online payment systems to deliver better travel experience to the Island of Guimaras, Western Visayas, Philippines.

Keywords: model analysis, public transport services, tourist assessment

Introduction

Service quality and worthiness in transportation have been evaluated globally, with studies showing a positive impact on passenger behavioral intention and customer satisfaction. In Turkey, light rail public transportation quality was evaluated using the American Customer Satisfaction Index, showing perceived quality leads to customer loyalty. In South Korea, Kim et al. (2018) explored service quality in rail transfer facilities using five dimensions: Information, Mobility, Comfort, Convenience, and Safety. Safe and efficient transport is crucial for progress and shaping visitors' experiences, making transport systems essential for both domestic and international tourism success.

Mansfield (2018) believed that the results of the company's efforts to create value are measured in the customers' perception of that value and this

perception varies by personal and product attributes. This means that customers compare perceived value of similar products before making a purchase decision and this perceived value varies by certain factors.

To maintain Guimaras Island's competitive tourism position, understanding tourists' evaluations of local public transportation services is crucial for improving services to meet or exceed tourist expectations, leading to a higher degree of quality service, satisfaction and repeat visits. Further, studying the perceptions of the tourists helps tailor out transportation services to provide and cater different demographics and ensure a more personalized service and satisfying experiences. A tourism transport worthiness index can assess efficiency, accessibility, information, ticket prices, service frequency, space, cleanliness,

ease of use, and recency the quality of being recent or new and the importance of recent information, use, events or etc.

Objectives of the Study

The study aimed to conduct a model analysis of the worthiness of public transport services to Guimaras Island as assessed by tourists. Results can be used as inputs to the enhancement of the tourism development plan of the local governments.

Specifically, the study aimed to:

1. Describe the respondents' demographics, geographic, psychographic and behavioral characteristics.
2. Determine the tourists' assessment of the worthiness of the public transportation service availed in going to Guimaras Island in terms of service dimensions such as safety/security, convenience/comfort, reliability, frequency of service, availability of transport information, and monetary value.
3. Determine if there is significant differences in the tourists' assessment of the worthiness of the transport services by demographic, geographic, psychographic, and behavioral characteristics.
4. Determine if significant correlations exist between tourist's assessment of the worthiness of the public transportation services and their profile attributes.
5. Determine which of the tourist profile attributes can significantly predict their assessment of worthiness of the public transportation services.
6. Identify problems and solutions exist while availing transport services as determine by the tourist.

7. Establish baseline tourism transport service index (BTTSI) for use in identifying areas for enhancement.

Hypothesis of the Study

H₀₁: The tourists' assessment of the worthiness of various public transport services do not significantly vary by demographic, geographic, psychographic, or behavioral characteristics.

H₀₂: No significant correlations exist between the tourists' assessment of the worthiness of the public transport services and their demographic, geographic, psychographic, and behavioral characteristics.

H₀₃: None of the demographic, geographic, psychographic, and behavioral characteristics of the tourists can significantly predict their assessment of the worthiness of the public transport services.

Theoretical Framework

The study focuses on measuring customer perceived value of products or services using the Perceived Benefits (PB) and Perceived Cost (PC) models (Mansfield, 20218). The PB/PC model examines the drivers that impact a customer's perception of value, which can be controlled or uncontrolled. Segmentation helps organizations design highly valued service/product offerings. Understanding individual segments' responses to a given value proposition is crucial for determining if a company's value proposition matches customers' perceived value.

Figure 1 below shows the customer value delivery model as discussed above.



Figure 1. *The Customer Value Delivery Cycle* Source: Mansfield, 2018. *Marketing Theory: Understanding Customer Value*

Also, the concept of market segmentation was developed in economic theory to show how a firm selling a homogenous product in a market characterized by heterogeneous demand could maximize profit (Dutta, 2019). Generally, there are four types of market segmentation-demographics (age, sex, civil status, education, income, etc.), geographic (e.g. local or foreign tourists, place of residence), psychographic (e.g. occupation, profession, etc.), and behavioral (e.g. frequency of visit, type of service availed, duration of travel, etc.).

A priority segmentation (NUS, 2013) involves selecting a cluster-defining descriptor and categorizing customers into predefined segments. This study uses the priori approach, as the cluster descriptors were identified and examined in terms of differences between segments or characteristics.

Conceptual Framework of the Study

Figure 2 shows a Model Analysis of the Worthiness of Public Transport Services to Guimaras Island as Assessed by Tourists: Inputs to the Enhancement of a Tourism Development Plan.

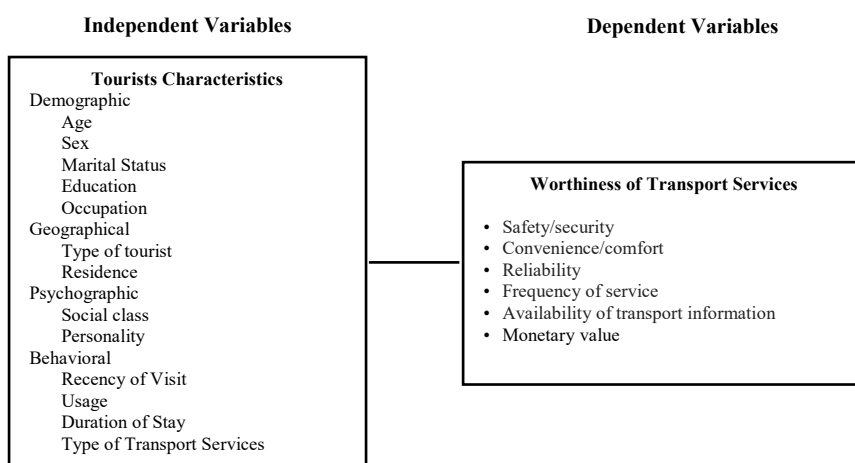


Figure 2. Conceptual Framework of the study showing the study variables

Based on the theoretical framework of this study, the conceptual framework of the study was developed as shown in figure 2 above. The respondents will be grouped according to their demographic, geographic, psychographic and behavioral characteristics as independent variables of this study and their perceived worthiness of transportation services will be measured in terms of safety/security, convenience/comfort, reliability, frequency of service, availability of transport information, and monetary value as dependent variables. Differences in the level of worthiness will be determined using the priori analytical approach (NUS, 2013) where responses from the respondents will be classified into a predefined number of segments or characteristics and further examined in terms of differences by characteristics such as demographic, geographic, psychological, and behavioral characteristics.

Definition of Terms

For clarity and a common understanding of the terms used in the study, the following terms are operationally defined:

Age. The quantity of time that has passed since the organisms birth (American Psychological Association, 2020). In this study it refers to the respondent’s number of years in existence from birth.

Availability of Transport Information. It pertains to the presence or readiness for use of something (Webster, 2022). In this study it refers to whether or not the information on transport system such as type of transportation, schedule of departure, fare, and the like are ready to be accessed from information center, help desk, flyers, brochures or any other marketing paraphernalia or collaterals by the tourists. It was measured using the 5-point Likert Scale where 1

means very unworthy/unavailable, 2- unworthy/rarely available, 3- slightly worthy/sometimes available, 4- worthy/mostly available, 5- very worthy/Always.

Average Monthly Income. The average monthly income that include all salaries and wages, but also other unearned income on investments or capital gains (World Data Info, 2022). In this study it refers to the average take home monthly pay of the respondent within the last six months that could comprise basic salary, overtime pay, commissions, allowances and bonuses, and other dispensable income.

Behavioral Characteristics. It relates to the behavior of a person or to the study of their behavior (www.collinsdictionary.com) or relates to or concerned with the social, emotional factors that affect financial decisions and behavior (www.merriam-webster.com). In this study, it is the type of market segmentation based on differences in the consumption behavior of different groups of consumers, taking into account their recently of visit, frequency of visit, duration of stay, cost of service and type of transportation service.

Civil Status. It means single, married, separated, divorced, widowed, in a civil partnership or being a former civil partner or in a civil partnership that has ended by death or by being dissolved (www.lawinsider.com/dictionary/civil-status). In this study it refers to the respondent being single, married, separated, divorced, widowed, or other civil partnership arrangement.

Convenience/Comfort. A quality or situation that makes something easy or useful for someone by reducing the amount of work or time required to do something (Encyclopedia Britannica, Inc., 2023). In this study, it refers to being conducive, comfort or ease. It will be measured using the five-point Likert scale, where 1 means very unworthy/very inconvenient/uncomfortable, 2-unworthy/inconvenient/uncomfortable, 3- slightly worthy/slightly convenient/comfortable, 4- worthy/convenient/comfortable, and 5-very worthy/very convenient/comfortable.

Demographics Segmentation. It refers to refers to the categorization of the target market based on specific variables like age, education, and gender and it is a type of market segmentation that helps businesses to understand their consumers better and meet their needs, effectively (<https://www.formpl.us/resources/market-segmentation/demographic/>). In this study, it

refers to the characteristics of the respondents such as age, sex, education, civil status, average monthly income.

Duration of Stay. It refers to the continuance or persistence in time (Rogets' Thesaurus, 2013). In this study it refers to the duration or length of stay of the tourist in Guimaras Island and will be measured in terms of days.

Education. The act or process of acquiring knowledge, especially, systematically during childhood and adolescence (Collins Dictionary, 2013). The highest education level obtained, categorized as elementary, high school, college, and post-graduate level.

Frequency of Service. Frequency of service indicates the overall number of trips or service made (Nielsen Norman Group, 2023). In this study, it refers to the transport service vehicle number of trips each day.

Geographic Characteristics. It refers to the component that competently complements a marketing strategy to target products or services based on where their consumers reside in terms of countries, states, regions, cities, colleges, or areas (<https://www.marketing91.com/>). In this study it refers to the locational characteristics of the tourist such as whether they are local or foreign tourists and place of residence.

Occupation. An activity in which one engages (Webster, 2023). In this study, it refers to the regular activity or a tourist's job/s that would serve as his source of living or income.

Place of Residence. The place of residence is the part of a country where a person lives, such as a district, county, municipality, province, department, or state (<https://www.medical-definitions.net/place-of-residence-meaning/>). In this study it pertains to the origin or a place or country where the tourist permanently resided to include either in Asia, Europe, USA, among others.

Psychographic Characteristics. Psychographic segmentation refers to factors such as beliefs, values, lifestyle, social status, opinions and activities. It's different from behavioral segmentation because it draws out the motivations behind behavior, rather than tracking the behavior itself (<https://www.qualtrics.com/>). In this study, it refers to the psychological attributes of the respondent such as occupation and purpose of travel.

Reliability. It refers to the quality of being trustworthy or of performing consistently well

(Webster, 2023). In this study it is one of the criteria in measuring the worthiness of transportation going to Guimaras Island and is a fundamental factor in travel behavior and will be measured using the five-point Likert scale where 1 means very unworthy/very unreliable, 2 mean unworthy/unreliable, 3 means slightly worthy/slightly reliable, 4 means worthy/reliable and to 5 very worthy/very reliable.

Safety/Security. Safety refers to the state of being away from hazards caused by natural forces or human errors randomly and security means the state of being away from hazards caused by deliberate intention of human to cause harm (Nas, 2015). In this study it refers to one of the criteria in measuring the worthiness of transportation going to Guimaras Island in terms of the degree of safety from accidents and crime using a five-point Likert scale where 1 means very unworthy/very unsafe/unsecured and 5 very worthy /very safe/secured.

Sex. It is either of the two main categories (male and female) into which humans and most other living things are divided on the basis of their reproductive functions (Webster, 2023). In this study, it is the distinction between males and females of the tourist-respondents based on the biological differences in sexual characteristics.

Type of tourists. Most of the literature classifies tourists using various classification such as based on purpose (psychographic tourists, psychocentric travellers, etc.) or based on their interest (<https://journeyz.co/different-types-of-tourists/>) such as backpackers, adventure, business, etc.) In this study it refers to the type of tourist who travels in Guimaras Island that can be categorized either foreign or local tourists.

Type of Transportation Services. It refers to air, water, and land transportation, which includes rails or railways, as well as road and off-road transportation, are the many different types of transportation (Krafty Sprouts Media, LLC, 2022). In this study, it refers to the transportation services used by the tourist going to the Guimaras Island to include sea transport, air, and land (taxi, van, jeepney, etc.) transportations.

Monetary Value. It refers to the property of having material worth often indicated by the amount of money something would bring if sold (<https://www.definitions.net>). In this study, the same definition is used and this will be measured in terms of the degree of difference between the benefit derived from the transport service and the

cost of availment of this service using the 5-point Likert scale where 1 means very unworthy/very low to 5 as very worthy/very high.

Worthiness. It refers to having worth or value (Webster, 2023). In this study it refers to the overall benefits received from the transportation services in exchange of what was paid. Benefits could be in the form of the overall safety/security, convenience/comfort, reliability, frequency of service, availability of transport information,

Scope and Limitation of the Study

The study assessed the worthiness of public transport services in terms of safety, security, convenience, reliability, frequency, information availability, and value for money among tourists. The respondents included both local and foreign tourists, excluding those using owned transport. Due to the COVID pandemic, the study focused on domestic tourists, ensuring their health and safety.

Significance of the Study

The results of the study will provide an insights and understanding on the worthiness of public transport services to Guimaras Island, Western Visayas, Philippines as perceived by the tourists and could benefits the following:

PTCAO/Department of Tourism. Results of the study will enable understanding of the customers' evaluation of the worthiness of transportation services to Guimaras Island, thus better strategies to address areas for improvement and maintaining best practices can be developed and implemented for a sustainable tourism industry.

Land Transportation Office/LTFRB. Results of the study will provide valuable insights to Land Transportation office on the quality of public transport services being provided to tourists which they can use to inform their decisions and policies particularly on maintaining road safety, security, and convenience of passengers.

Local Government Unit. The LGU will be aware on the perception of the tourists on the transport services provided them which may enable them develop or enhance existing policies to improve public transport services.

MARINA. They may use the results to review their transport system and enhance their services to ensure the safety concerns pertaining to vessel construction, and the enforcement of maritime law to safeguard the local and foreign tourists crossing the island of Guimaras.

Academe. The academe will be provided with empirical data on how customers' perceived the transport services provided to them, thus enriching the data bank of business models and theories that can be used for the enhancement of knowledge and processes and practices.

Future Researchers. Results of the study will become a baseline information for venturing topics related to transportation, destination and perception of the tourists on the aspect of traveling from one place to another in which transportation plays a vital role in bridging the gap between tourists and tourism related products and services.

Review of Related Literature

Dissatisfaction among travelers is primarily due to inadequate transportation systems. Local government and agencies should adopt comprehensive transportation development plans, including ticketing, travel schedules, maps, and guides, to meet market requirements.

Studies by Solomon et al. (1968) and Iseki and Taylor (2008) and Eboli and Mazzulla (2010) about safety during a journey is often considered a less relevant aspect in modal choice decisions, but it is highly valued when explicitly asked about its importance. Studies by Solomon et al. (1968) and Iseki and Taylor (2008) and Eboli and Mazzulla (2010) have confirmed this. In Nathanail (2008), safety during a trip was defined as the number of passenger fatalities, collected and retained by the operator, and compared to the average number of fatalities in the last five years. Eboli and Mazzulla (2011) calculated safety and competence indicators based on road accidents verified in the last year, and service aspect indicators based on complaints registered in the last year.

Methodology

Research Design

The study mainly used the non-experimental predictive research design using linear regression. This type of research tries to extrapolate from the analysis of existing phenomena using models, or other entities in order to predict something that has not been tried, tested, or proposed. This is appropriate when constructing a model that will explain how the personal attributes can significantly predict one's assessment of the worthiness of public transport to Guimaras Island, Western Visayas, Philippines.

In a study of Beirao and Sarsfield-Cabral (2007) about comfort/reliability factors found that habitual public transport users consider the new vehicles with air-conditioning and lower floor as "very good and very comfortable", but the overcrowding on board at peak hours is considered a problem. On the other hand, car users and occasional public transport users usually see buses as uncomfortable, overcrowded, smelly and airless. Wachs (1976) underlined that vehicle comfort is less important to the traveler's decision process than other service aspects.

Further, consumer satisfaction, also influenced by the price variable, as well as by the two variables discussed earlier, namely trust and service quality. This statement is supported by the results of research from Miranthen and Idris (2017), which states that in addition to service quality, prices significantly influence customer satisfaction, in this case, customers who use transportation services. That statement was also stated by several other researchers regarding the findings, which stated that service quality and price significantly influence service user satisfaction (Bei & Chiao, 2001; Haryanto, 2013; Prasetyo, 2012). But on the other hand, in contrast, the Bilgies (2016) study produced findings that the price variable had no effect on customer satisfaction. Furthermore, regarding the research gap related to service quality, it was also stated by Isra and Trenggana (2017) that found that the variables tangible, empathy, reliability, and assurance, which are indicators of service quality, proved to have no significant effect on customer satisfaction.

Population and Sample Size

The target population of this study is composed of local and foreign tourists who have availed of the public transport to Guimaras Island, Western Visayas, Philippines. Basing from the annual report of the Department of Tourism, Province of Guimaras, the total tourist arrival for 2019 is 562,307 and the monthly average is 46,859. From this number, an estimate of the sample size of 389 was determined using Cochran (1977)

developed a formula to calculate a representative sample for proportions as

Sampling Technique

Systematic sampling was used to identify respondents from two ports of entry/exit in Guimaras Island. The sample size was proportionate to the total tourists' arrival, with Buenavista port having 70% of respondents and Jordan port having 30%. Both research teams consisted of two field researchers trained in using instruments and identifying respondents. Ensured equal proportions of respondents in terms of sex when applicable.

Locale of the Study

This study was conducted within the Province of Guimaras, Western Visayas, Philippines, particularly on sea ports of Guimaras, Island where most tourists wait for transport service to Iloilo and to their places of origin from Jordan and Buenavista ports.

Data Gathering Instrument

The researcher-made questionnaire is composed of three parts. Part I pertains to the tourists characteristics of the respondents. Part II pertains to the respondents' evaluation of the worthiness of public transport services to Guimaras Island in terms of safety/security,

convenience/comfort, reliability, frequency of service, and value for money. Part III pertains to the responses of the tourists on the common problems they encountered in going to Guimaras Island and their recommendations to address the problem. It will be submitted for construct and content validation by at least 3 experts. Then it will be revised and field tested to at least 30 non-target respondent tourists for reliability and consistency test using Cronbach alpha test, which should not be less than 75 percent. The measurement of the worthiness of transport service will follow the Perceived Benefits-Perceived Cost analytical approach espoused by Mansfield (2018). This model looks at the drivers that impact a customer's perception of value, compare it by customer segment to identify which aspect of service is most valued by customers and which are least valued. Results will form part of the empirical evidence of the worthiness of transport service to Guimaras Island as perceived by tourists.

A five-point Likert scale was used where 1 means very poor and 5 very good was used to measure the respondents' perceived worthiness of the public transport service. The following table shows the scaled data collected and their interpretations.

Table 1
Likert Scale used in Dimension of Transport Services

Measure (Likert Scale Continuous)	Description	Mean Score	Interpretation
Safety/Security/Convenience/comfort/reliability			
1	Very unsafe/Unsecured/inconvenient/uncomfortable/unreliable	1.0-1.80	Poor
↓ 5	Unsafe/unsecured/inconvenient/uncomfortable/unreliable	1.81-2.60	Fair
	Slightly Safe/Secured/convenient/comfortable/reliable	2.61-3.40	Good
	Safe/Secured/convenient/comfortable/reliable	3.41-4.20	Very Good
	Very safe/secured/convenient/comfortable/reliable	4.21-5.0	Excellent
Availability of Information/Value for money			
1	Unavailable/very low value for money	1.0-1.80	Poor
↓ 5	Few are available/Low value for money	1.81-2.60	Fair
	Some are available/Moderate value for money	2.61-3.40	Good
	Most are available/High value for money	3.41-4.20	Very Good
	All are available/Very high value for money	4.21-5.0	Excellent

Secondary data as to the documented tourists' arrival and tourism receipts from 2018 to 2019 was obtained from the statistical unit/department of the Provincial Tourism Office of Guimaras Island.

Data Gathering Procedures

The study was conducted at two entry/exit ports in Guimaras, with endorsement letters from the university's dissertation adviser and the Dean. Field researchers provided clarification. Data collection was conducted in March 2020, just before community quarantine heightened.

Data Processing and Analysis

The processed data were analyzed using frequencies, mean scores, Pearson's correlation coefficient and multiple linear regression between tourists' personal attributes and their assessment of the worthiness of transportation services. A five-point Likert scale was used to measure Seven

Dimension of Transport Services from safety, security, convenience, comfort, reliability, availability of information, and value for money, where 1.0- 1.80 means poor, 1.81 – 2.60 means fair, 2.6-3.40 means good, 3.41-4.20 means very good and 4.21-5.0 means excellent was used to measure the respondents' perceived worthiness of the public transport service.

Ethical Considerations

The approved proposal underwent plagiarism testing and ethics review at the university, ensuring compliance with ethics and data privacy policies. Researchers obtained informed consent from tourists, informed them of the study's purpose, group, findings, potential adverse impacts, and access, and provided additional information in case of distress. Each research team consisted of two field researchers trained in using instruments and identifying respondents.

Results and Discussions

Tourists' Demographic Characteristics

Table 2 shows that the majority of tourists in Guimaras Island are It can be noted that in terms of demographic characteristics, most of the tourists visited in Guimaras Island in the month of March 2020 were young male or female, mostly single, with college education, either housewife or student or professional private employee or housewife student.

According to the study of Kim & Prideaux (2005), young tourists have different travel behaviours and preferences, influencing their transportation choices and the types of services they find valuable. Single tourist may prioritize convenience and cost effectiveness in transportation options, affecting their assessment

of transport service (Alegre, 2010). Chen (2010) mentioned that differences in occupation may influence perceptions of transport services worthiness differently thus influencing satisfaction and behavioral intentions.

The study suggests that studying demographic characteristics such as age, sex, marital status, education and occupation can help in the marketing and crafting tourism services to cater specific segments. Further, since from the results of the study revealed that majority of the tourists are young, single and college educated professionals allows for the advancement and development of tailored fit strategies and services that has an appeal to this group.

Table 2

Tourists' Demographic Characteristics

Variables	f	%
<i>Entire Group</i>	389	100
Age		
18-35	314	81
36-55	65	16
56 and above	10	3
Sex		
Male	175	45
Female	214	55
Marital Status		
Single	291	75
Married	92	24
Widowed	6	1
Educational attainment		
Elementary/High School	91	23
College/post graduate	298	77
Occupation		
Professional/Employee	167	43
Business person	46	12
Housewife/Student/None	176	45

Table 3

Tourists' Geographic Characteristics

Variables	f	%
Type of Tourist		
Foreign	2	0.5
Local	387	99.5
Total	389	100.0
Place of Residence		
Asia	389	100.0
Europe	0	0.0
USA	0	0.0
Total	389	100.0

Table 4

Tourists' Psychographic Characteristics

Variables	f	%
<i>Entire Group</i>	389	100
Social Class based on monthly income		
Low but not poor (P22,000 -and below)	330	85
Lower middle (P22,002-P45,000)	49	13
Middle (P45,001 – P77,000)	10	2
Personality		
Belongers	169	43
Achievers	29	8
Survivalists	191	49

Tourists' Geographic Characteristics

Table 3 shows a majority of tourists are local (99.5%), with a small percentage of foreign travelers due to COVID-19 restrictions. All samples belong to one category.

Given that the majority of the travelers and or tourists are local with a small percentage of foreign travelers due to COVID-19 pandemic, it can be noted that there is a significant opportunity to focus on promoting local tourism. Thus, the local government unit and tourism province should intensify their campaigns to attract more residents from nearby areas, provinces and regions to visit the island. This includes special promotions and partnerships with local businesses to create attractive packages and offers.

Tourists' Psychographic Characteristic

Based on PIDS (2022) social classification of income earners in the Philippines, majority (85%) of the respondents are low income (but not poor) earners with monthly income ranging from P22, 000.00 and below, followed by low middle income earners (13%) with monthly income from P22, 002.00 - P45, 000.00 and middle income earners (2%) with monthly income from P45, 001.00 - P77, 000.00.

In terms of personality classification, a large proportion are survivalists (49.1%), belongers (43%) and achievers (8%). The findings show that most of the tourists are low income earners, either survivalists or belongers. This means that in terms of psychographic characteristics, the tourists are low but not poor income earners.

The study of Kim, Lee, and Klenosky (2015) examine the influence of push and pull factors on tourist intentions to revisit they explore how place attachment and satisfaction are related to demographics and psychographics including income and personality traits shaped tourists behavior and intentions.

For Guimaras Island, understanding that tourists are primarily low-income earners, classified as survivalist or belongers, it suggests the need to develop tourism products and services that will cater to this group. The services may include affordable transport services, budget friendly activities, and promotions that resonate with their psychographic profiles. Further, by focusing on enhancing satisfaction and fostering

place attachment among low-income to this segment, the Guimaras Island can potentially increase repeat visits and improve the overall tourist experience.

Tourists’ Behavioral Characteristics

Table 5 shows the results on the behavioral characteristics of the tourists. As to recently, majority of the tourists visited Guimaras Island a month ago or less (95%), and the rest have visited the Island a year ago. Mostly visited the island once to twice a week (63%) and the duration of their stay is 1 to 3 days (86%), and their transportation cost is P500 or less (92%) for a ride in Steel boat or Ferry (57.3%) and tricycle or habal-habal (33%).

The findings show that the tourists just recently visited the island, following their once to twice a week visit, stayed 1-3 days for every visit, mostly took Steel boat or ferry and tricycle during their travel to the island and spends more or less five hundred pesos for their transportation.

Based on the study of Cheng and Long (2015) on understanding tourist travel behavior in Hongkong, tourists generally prefer convenience when choosing transportation options. This includes factors such as ease of access, frequency of service and connectivity to tourist attractions. When it comes to costs, tourists are sensitive and they opted for an option that value cost-effective and provide value for their money.

Tourism authorities and transportation providers should invest in developing robust public transport infrastructure that caters to tourists need. An effective campaign can highlight the benefits using public transport to tourists, emphasizing cost savings, convenience and reduced environmental impact. In doing so, the local government unit should develop policies that prioritizes sustainable and tourist-friendly transport solutions, including enhancing connectivity and integrating public transport.

Table 5

Tourists’ Behavioral Characteristics

Variables	f	%
<i>Entire Group</i>	389	100
Recently of visit		
Weeks ago	162	42
Months ago	205	53
Year ago	22	5
Usage		
Light users (1-2 x a week)	246	63
Medium users (3-4 x a week)	27	7
Heavy users (5 or more times a week)	116	30
Duration of stay		
1 day	155	40
2-3 days	180	46
4 or more	54	14
Cost of Service		
P500 or less	358	92
P501 - or more	31	8
Type of Transportation Service		
RORO	37	10
Tricycle/Habal-habal	129	33
Steel Boat/Ferry	223	57

Tourists’ Perceived Level of worthiness of the various public transportation services to Guimaras Island

The overall assessment of the tourists on the worthiness of the various public transportation is shown in Table 6. Generally, the worthiness rating of public transportation is “good”. Results show that only RORO is perceived to be “very good” while Jeepney, Van, tricycle, boat and other forms of transportation like “*Sikad*” were “good”. In terms of service dimensions such as safety/security, convenience/comfort, reliability, frequency of service, availability of transport information, and monetary value, the following are the results: RORO was rated “very good” in all these five dimensions; Tricycle/*Habal-habal*, steel boat or ferry, Jeepney were rated “good” in safety, convenience, reliability, value for money and availability; Van and others was rated “very good” on safety and was rated “good” for safety, convenience, reliability, value for money and availability.

The findings show that overall, the tourists’ perceived worthiness of public transportation to Guimaras Island is “good”. Specifically, all of the transportation dimensions, were rated “good”.

It was supported by the study of Tyrinopoulous and Antoniou (2008) the difference of customer perception between different transit operators due to their specific characteristics and service conditions. He mentioned that the most

important attribute across transit operators were service quality, cleanliness, waiting condition, distance and network coverage. Moreover, other authors believed staff behavior/drivers was of significant importance in customer perception, along with service reliability, simplicity of information and design. In contrast, Lai and Chen (2011) suggested that service quality and perceived value should receive greatest attention in improving customer satisfaction, whereas Eboli and Mazzula (2007) stressed the role of service planning and reliability.

Batzakakis & Vreeker (2013) combined the insight of passenger preferences including public transport customer satisfaction revealed that tourists are likely to share their positive experiences leading to a word of mouth promotion and increased tourist arrival. The positive perception of public transportation to Guimaras Island among tourists highlights its importance in enhancing the tourist experiences and contributing to sustainable tourism development. This underscores the need for continued investment and improvement of public transport services to maintain and further enhance visitor satisfaction.

Table 6
Tourists' Perceived Level of Worthiness of Public Transportation (Multiple Answers)

Worthiness Rating	RORO		Tricycle/HH		Steel boat/Ferry		Jeepney		Van/Others		All	
	f	%	f	%	f	%	f	%	f	%	f	%
Excellent	10	27.0	17	11.9	61	16.9	14	12.3	2	6.9	104	15.2
Very good	15	40.5	45	31.5	125	34.6	37	32.5	11	37.9	233	34.1
Good	12	32.4	38	26.6	77	21.3	22	19.3	8	27.6	157	23.0
Fair	0	0.0	32	22.4	71	19.7	34	29.8	6	20.7	143	20.9
Poor	0	0.0	11	7.7	27	7.5	7	6.1	2	6.9	47	6.9
Total	37	100.0	143	100.0	361	100	114	100.0	29	684	684	100.0
Mean	3.82		3.21		3.29		3.17		3.14		3.27	
Description	VG		G		G		G		G		G	
SD	0.71		0.92		0.97		0.96		0.86		0.95	
Service Dimensions	Mean	Description	Mean	Description	Mean	Description	Mean	Description	Mean	Description	Mean	Description
afety	4.02	VG	3.27	G	3.40	G	3.35	G	3.41	VG	3.40	G
Convenience	3.91	VG	3.13	G	3.28	G	3.19	G	3.06	G	3.25	G
Reliability	3.80	VG	3.02	G	3.06	G	2.91	G	2.83	G	3.06	G
Value for Money	3.60	VG	3.31	G	3.40	G	3.26	G	3.28	G	3.36	G
Availability	3.75	VG	3.32	G	3.31	G	3.13	G	3.14	G	3.30	G

Legend: E = Excellent; VG = Very Good; G=Good; F=Fair; P= Poor

Differences in the Tourists' perceived level of worthiness of the public transportation services by demographic, psychographic, and behavioral characteristics.

Table 7 shows the data on the differences in tourists' perceived level of worthiness of the public transportation to Guimaras Island in terms of demographic, psychographic, and behavioral characteristics. Further, a one-way Analysis of Variance (ANOVA) was conducted to determine whether the tourists' assessment of the worthiness of the transport services differ when they are grouped according to their demographic, geographic, psychographic, and behavioral characteristics.

Demographic Characteristics. As shown in table 7, there is enough evidence to reject the null hypothesis which states that there is no significant difference in the tourists' assessment of the worthiness of the transport services when

grouped according to age specifically between the age bracket 18-35 and 56 and above so with the age bracket 36-55 and 56 and above which after using LSD as a post hoc test verified the p- value results of $0.006 < 0.05$ and $0.018 < 0.05$ respectively. Respondents aged 36-55 and 56 and above have varying perception towards the level of worthiness of the public transportation. Respondents aged 18-35 and 36-55, although they have a mean difference of 0.16183, it is not enough to conclude further that their perceptions were significantly different. Thus, their perception of the level of worthiness of public transportation is the same. When grouped according to sex, it revealed an f-value of 3.25, p-value $0.07 > 0.05$. This means that there is not enough evidence to reject the null hypothesis, which states that there is no significant difference in the tourists' assessment of the worthiness of transport services when grouped

according to sex. Also, both male and female respondents have the same perception regarding the worthiness of the transport services.

Regarding marital status, an f-value of 1.41, p-value of $0.25 > 0.05$ so in this study there is not enough evidence to reject the null hypothesis, which states that there is no significant difference in the tourists' assessment of the worthiness of transport services when grouped according to marital status. It can be implied that the perception of single, married and widowed respondents towards the worthiness of transport services is the same. When grouped according to education, it can be observed that an f-value of 0.37, p-value $0.78 > 0.05$ so in this study there is not enough evidence to reject the null hypothesis, which states that there is no significant difference in the tourists' assessment of the worthiness of transport services when grouped according to education. Therefore, that the perception of elementary graduate, high school graduate and college graduate were the same regardless of education.

In terms of occupation an f-value of 5.45, p-value $0.00 < 0.05$, which means that in this study there is enough evidence to reject the null hypothesis which states that there is no significant difference in the tourists' assessment of worthiness of transport services when grouped according to occupation. The significance was being compared the responses of Housewife/Student/None versus Professional/Employee after undergoing an LSD Post Hoc Test. This implies that the perception towards the worthiness of the transport services of Housewife/Student/None differs significantly from that of Professional /Employees. Perceptions between Business person and Professional/Employee so with Business person and Housewife/Student/None may have a mean difference of 0.16026 and 0.17260 respectively, but these differences were not enough to conclude that their perceptions were significantly different.

When demographic characteristics were considered, tourists' assessment of the worthiness of the transport services differed when they were grouped according to age and occupation, but not when grouped according to sex, marital status, and education. Examining closely, tourists of varying ages and occupation perceived convenience, reliability, availability of public transportation and value for money and availability of public information differed significantly. Tourists exhibit diverse perceptions and attitudes towards transport (Dallen, 2007). Their satisfaction with transport is

influenced by several factors. It was found that visitors differ significantly from local users in terms of their needs and use of public transport (Kinsella and Caulfield 2011). Stradling, et al. (2007) argued that age and frequency of use are the most influential on tourist satisfaction with transport, whereas factors such as household income, car avail- ability, and gender are less significant.

Therefore, the demographic characteristics in this study simply show that there is enough evidence to reject the null hypothesis, which states that the tourists' perceived worthiness of public transportation does not vary by age and occupation. However, the evidence gathered was not sufficient to reject the null hypothesis stating that there is no significant difference in the tourists' perceived worthiness of the public transportation to Guimaras Island when they were grouped according to their sex, marital status, and education.

Psychographic Characteristics. Findings revealed that tourists' perception of the worthiness of public transportation as a whole did not differ significantly when they were grouped according to their social status and personality. However, examining closely, when tourists were grouped according to their social status, a significant difference was observed in their perception of the safety of public transportation.

Therefore, in this category it simply shows that the null hypothesis stating that tourists' perceived worthiness of public transportation to Guimaras Island does not significantly vary by duration of stay is rejected. On the contrary, the null hypothesis stating that the perceived worthiness of the public transportation does not vary when tourists were grouped according to their recently of visit, usage, and transport cost is not rejected. This study demonstrates that pricing factor such as affordability, price have significant influence on how satisfied passengers with their transportation services availed. In other words, the better the pricing that is provided the more beneficial and impactful will have on the business and the level of passenger satisfaction. Price also conveys the intended value positioning of a company's products or brand in the market. Well-designed and strategically promoted products can command high prices and make substantial profits (Kotler & Kelly, 2009). Pricing is a crucial component of any business since it may demonstrate the company's profits and serves as a

standard for the purchase and sale of goods and services.

According to Kim & Uysal (2013), the significant difference in perception of the safety of public transportation among tourists based on their social status suggest that perceptions of safety can vary depending on socio-economic factors.

Therefore, tourism authorities and transportation providers should implement targeted measure to address the concerns of different social groups by enhancing security measures, improving the facilities, presence of security personnel that can help alleviate safety concerns and improve the overall perception of safety among tourists. Addressing these concern can lead to improved travel experience and increase visits.

Behavioral Characteristics. As to behavioral characteristics, the table shows an F-value of 1.58, p-value $0.18 > 0.05$ for recently of visit; f-value of 4.49, p-value $0.01 < 0.05$ for usage, F-value of 2.58, p-value $0.05 = 0.05$ for duration of stay ; and an F-value of 1.26, p-value $1.04 > 0.05$ for transport cost. All of the behavioral characteristics except for usage will tell us that there is no significant difference in the tourists' perceived worthiness of the public transportation to Guimaras Island when grouped according to Behavioral Characteristics such as recently of visit, duration of stay and transport cost. It can be noted that the perception of the respondents when they were grouped according to recently of visit, duration of stay or transport cost is the same or it does not vary. On the other hand, when grouped according to usage, the perception of the respondents on the worthiness of public transportation varies significantly with a mean difference of 0.30216.

Therefore, in this study the null hypothesis stating that tourists' perceived worthiness of public

transportation to Guimaras Island does not significantly vary by duration of stay, recently of visit and transport cost is not rejected. On the contrary, the null hypothesis stating that the perceived worthiness of the public transportation does not vary when tourists are grouped according to their usage is rejected.

According to Felleson and Friman (2008), they identified that traveling comfort was an important service dimension. This factor describes features needed for a comfortable trip. It covers the requirements for vehicles (space, cleanliness, seat availability, and safety) as well as stations. Additional features shared some similarities with Tyrinopoulos and Antoniou's (2008) identification of information/courtesy, Thompson and Schofield's (2007) ease of use, and Felleson and Friman's (2008) staff dimensions. Accessibility is the new dimension found in this study, which was not examined in previous research. Accessibility is an important criterion for high-quality, sustainable public transport systems (Soltani et al. 2012; Gutiérrez 2009). Accessible stations and transport vehicles are necessary for the improvement of customer penetration.

Since the perceived worthiness of public transportation varies significantly by usage, the local government unit of Guimaras Island can use this information to segment their audience and tailor improvement accordingly. Understanding the usage pattern affect perceived worthiness and will allow for more strategic resource allocation. Also, policymakers can use these findings to inform transportation policies and planning. This includes decisions related to development of infrastructure, service enhancements and minimizing environmental impact.

Table 7
Tourists' Perceived Level of Worthiness of Public Transportation (Multiple Answers)

Worthiness Rating	Safety		Convenience		Reliability		Value for Money		Availability		Overall	
	<i>f</i>	<i>Sig</i>	<i>f</i>	<i>Sig</i>	<i>f</i>	<i>Sig</i>	<i>f</i>	<i>Sig</i>	<i>f</i>	<i>Sig</i>	<i>f</i>	<i>Sig</i>
Demographics												
Age	2.281	0.10	4.26	0.02*	3.79	0.02*	1.20	0.31	4.40	0.00*	3.29	0.02*
Sex	.64	0.20	1.40	0.24	0.89	0.33	0.63	0.43	3.63	0.06	3.25	0.07
Marital Status	2.08	0.13	1.55	0.21	1.52	0.22	0.50	0.61	1.35	0.26	1.41	0.25
Education	0.90	0.44	0.41	0.74	1.27	0.29	0.08	0.97	0.15	0.93	0.37	0.78
Occupation	5.92	0.00*	5.26	0.06	4.49	0.01*	4.90	0.00*	2.47	0.08	5.45	0.00*
Psychographic												
Social Status	2.28	0.05	1.75	0.14	1.62	0.17	2.02	0.09	1.72	0.14	2.39	0.051
Personality	1.10	0.36	0.83	0.51	1.23	0.30	2.02	0.09	1.13	0.34	1.39	0.24
Behavioral												
Recently of visit	1.27	0.28	1.85	0.12	1.54	0.19	0.75	0.56	1.98	0.10	1.58	0.18
Usage	6.50	0.002*	6.19	0.002*	3.26	0.04	2.65	0.07	1.97	0.16	4.49	0.01*
Duration of stay	1.98	0.09*	1.58	0.18*	2.51	0.05	2.09	0.08	1.48	0.21	2.58	0.05
Transport Cost	1.24	1.25	1.14	1.13	1.57	1.09	0.83	0.91	1.11	1.11	1.26	1.04

*significant at 95% level of confidence

Table 7.1
Tourists' Perceived Level of Worthiness of Public Transportation by Age

Dependent Variable	Least Square Difference					95% Confidence Interval	
	(I) Grouped Age	(J) Grouped Age	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Total Safety	18-35	36-55	.07539	.13693	.582	-.1938	.3446
		56 and above	.67847*	.32279	.036	.0438	1.3131
	36-55	18-35	-.07539	.13693	.582	-.3446	.1938
		56 and above	.60308	.34134	.078	-.0680	1.2742
	56 and above	18-35	-.67847*	.32279	.036	-1.3131	-.0438
		36-55	-.60308	.34134	.078	-1.2742	.0680
Total Convenience	18-35	36-55	.02960	.13684	.829	-.2394	.2986
		56 and above	.94191*	.32257	.004	.3077	1.5761
	36-55	18-35	-.02960	.13684	.829	-.2986	.2394
		56 and above	.91231*	.34110	.008	.2417	1.5830
	56 and above	18-35	-.94191*	.32257	.004	-1.5761	-.3077
		36-55	-.91231*	.34110	.008	-1.5830	-.2417
Total Reliability	18-35	36-55	.07247	.16304	.657	-.2481	.3930
		56 and above	1.05401*	.38432	.006	.2984	1.8096
	36-55	18-35	-.07247	.16304	.657	-.3930	.2481
		56 and above	.98154*	.40641	.016	.1825	1.7806
	56 and above	18-35	-1.05401*	.38432	.006	-1.8096	-.2984
		36-55	-.98154*	.40641	.016	-1.7806	-.1825
Total Value for Money	18-35	36-55	-.00305	.12969	.981	-.2580	.2519
		56 and above	.45541	.30571	.137	-.1456	1.0565
	36-55	18-35	.00305	.12969	.981	-.2519	.2580
		56 and above	.45846	.32328	.157	-.1771	1.0941
	56 and above	18-35	-.45541	.30571	.137	-1.0565	.1456
		36-55	-.45846	.32328	.157	-1.0941	.1771
Total Availability	18-35	36-55	.16183	.13558	.233	-.1047	.4284
		56 and above	.99414*	.31959	.002	.3658	1.6225
	36-55	18-35	-.16183	.13558	.233	-.4284	.1047
		56 and above	.83231*	.33796	.014	.1678	1.4968
	56 and above	18-35	-.99414*	.31959	.002	-1.6225	-.3658
		36-55	-.83231*	.33796	.014	-1.4968	-.1678
Total Worthiness Rating all	18-35	36-55	.06725	.12746	.598	-.1834	.3179
		56 and above	.82479*	.30046	.006	.2340	1.4155
	36-55	18-35	-.06725	.12746	.598	-.3179	.1834
		56 and above	.75754*	.31773	.018	.1328	1.3822
	56 and above	18-35	-.82479*	.30046	.006	-1.4155	-.2340
		36-55	-.75754*	.31773	.018	-1.3822	-.1328

*. The mean difference is significant at the 0.05 level.

Table 7.2
Tourists' Perceived Level of Worthiness of Public Transportation by Occupation

Dependent Variable	(I) n	Occupatio	Least Square Difference				95% Confidence Interval	
			(J) Occupation	Mean Difference (I-J)	Std. Error	Sig	Lower Bound	Upper Bound
Total Safety	Professional/Employee	Bus person	House/Student/None	.14501	.16565	.382	-.1807	.4707
			Professional/Employee	-.36916*	.10762	.001	.1576	.5808
	Bus Person	House/Student/None	Professional/Employee	-.14501	.16565	.382	-.4707	.1807
			House/Student/None	.22415	.16483	.175	-.0999	.5482
	House/Student/None	Professional/Employee	Bus person	-.36916*	.10762	.001	-.5808	-.1576
			Bus person	-.22415	.16483	.175	-.5482	.0999
Total Convenience	Professional/Employee	Bus person	House/Student/None	.24189	.16700	.148	-.0864	.5702
			Professional/Employee	-.34900*	.10849	.001	.1357	.5623
	Bus person	House/Student/None	Professional/Employee	-.24189	.16700	.148	-.5702	.0864
			House/Student/None	.10711	.16617	.520	-.2196	.4338
	House/Student/None	Professional/Employee	Bus person	-.34900*	.10849	.001	-.5623	-.1357
			Bus person	-.10711	.16617	.520	-.4338	.2196
Total Reliability	Professional/Employee	Bus person	Professional/Employee	.14473	.19912	.468	-.2468	.5362
			House/Student/None	.38590*	.12936	.003	.1316	.6402
	House/Student/None	Professional/Employee	Professional/Employee	-.14473	.19912	.468	-.5362	.2468
			Bus person	.24117	.19813	.224	-.1484	.6307
	Professional/Employee	Bus person	House/Student/None	.13403	.15714	.394	-.6402	-.1316
			House/Student/None	.31902*	.10209	.002	-.6307	.1484
Bus person	Professional/Employee	House/Student/None	-.13403	.15714	.394	-.1749	.4430	
		House/Student/None	.18499	.15637	.238	.1183	.5197	
House/Student/None	Professional/Employee	House/Student/None	-.31902*	.10209	.002	-.4430	.1749	
		Bus person	-.18499	.15637	.238	-.1224	.4924	
Total Availability	Professional/Employee	Bus person	House/Student/None	.13564	.16707	.417	-.5197	-.1183
			House/Student/None	.24123*	.10854	.027	-.4924	.1224
	Bus person	Professional/Employee	House/Student/None	-.13564	.16707	.417	-.1928	.4641
			House/Student/None	.10559	.16624	.526	.0278	.4546
	House/Student/None	Professional/Employee	House/Student/None	-.24123*	.10854	.027	-.4641	.1928
			Bus person	-.10559	.16624	.526	-.2213	.4325
Total Worthiness Rating All	Professional/Employee	Bus person	House/Student/None	.16026	.15528	.303	-.4546	-.0278
			House/Student/None	.33286*	.10088	.001	-.4325	.2213
	Bus person	Professional/Employee	House/Student/None	-.16026	.15528	.303	-.1451	.4656
			House/Student/None	.17260	.15452	.265	.1345	.5312
	House/Student/None	Professional/Employee	Bus Person	-.33286*	.10088	.001	-.4656	.1451
			Bus person	-.17260	.15452	.265	-.1312	.4764
Professional/Employee	Bus person	Bus person	.31173	.18	.18	-1.3822	-1328	

*. The mean difference is significant at the 0.05 level.

Table 7.3
Tourists' Perceived Level of Worthiness of Public Transportation by Usage

Dependent Variable	(I) Usage	(J) Usage	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total Safety	Light	Medium	.16847	.20156	.404	-.2278	.5648
		Heavy	.40308*	.11198	.000	.1829	.6233
	Medium	Light	-.16847	.20156	.404	-.5648	.2278
		Heavy	.23461	.21244	.270	-.1831	.6523
	Heavy	Light	-.40308*	.11198	.000	-.6233	-.1829
		Medium	-.23461	.21244	.270	-.6523	.1831
Total Convenience	Light	Medium	.21599	.20260	.287	-.1823	.6143
		Heavy	.39281*	.11255	.001	.1715	.6141
	Medium	Light	-.21599	.20260	.287	-.6143	.1823
		Heavy	.17682	.21353	.408	-.2430	.5966
	Heavy	Light	-.39281*	.11255	.001	-.6141	-.1715
		Medium	-.17682	.21353	.408	-.5966	.2430
Total Reliability	Light	Medium	.39557	.24289	.104	-.0820	.8731
		Heavy	.30049*	.13494	.027	.0352	.5658
	Medium	Light	-.39557	.24289	.104	-.8731	.0820
		Heavy	-.09508	.25599	.711	-.5984	.4082
	Heavy	Light	-.30049*	.13494	.027	-.5658	-.0352
		Medium	.09508	.25599	.711	-.4082	.5984
Total Value for Money	Light	Medium	.28320	.19219	.141	-.0947	.6611
		Heavy	.21385*	.10677	.046	.0039	.4238
	Medium	Light	-.28320	.19219	.141	-.6611	.0947
		Heavy	-.06935	.20256	.732	-.4676	.3289
	Heavy	Light	-.21385*	.10677	.046	-.4238	-.0039
		Medium	.06935	.20256	.732	-.3289	.4676
Total Availability	Light	Medium	.21716	.20348	.287	-.1829	.6172
		Heavy	.20056	.11304	.077	-.0217	.4228
	Medium	Light	-.21716	.20348	.287	-.6172	.1829
		Heavy	-.01660	.21446	.938	-.4383	.4051
	Heavy	Light	-.20056	.11304	.077	-.4228	.0217
		Medium	.01660	.21446	.938	-.4051	.4383
Total Worthiness Rating all	Light	Medium	.25608	.18931	.177	-.1161	.6283
		Heavy	.30216*	.10517	.004	.0954	.5089
	Medium	Light	-.25608	.18931	.177	-.6283	.1161
		Heavy	.04608	.19953	.817	-.3462	.4384
	Heavy	Light	-.30216*	.10517	.004	-.5089	-.0954
		Medium	-.04608	.19953	.817	-.4384	.3462
Grouped Total Worthiness Rating all	Light	Medium	.38437	.23085	.097	-.0695	.8383
		Heavy	.34287*	.12825	.008	.0907	.5950
	Medium	Light	-.38437	.23085	.097	-.8383	.0695
		Heavy	-.04151	.24331	.865	-.5199	.4369
	Heavy	Light	-.34287*	.12825	.008	-.5950	-.0907
		Medium	.04151	.24331	.865	-.4369	.5199

*. The mean difference is significant at the 0.05 level

Correlations between the Study Variables

The data in Table 8 shows the correlation test results on the study variables. Results show that only the tourists' civil status, occupation, and usage have significant correlations with their assessment of worthiness of public transport services to Guimaras Island. This means that in terms of demographic factors, being single,

married and widowed and their occupation need to be considered, whereas in terms of psychographic, their usage rate such as light user, medium or heavy users should be considered in enhancing the transport services.

The civil status and occupation of tourists can influence their perceived value and satisfaction with public transport. Tourism authorities should

consider these demographic factors when enhancing and developing targeted marketing strategies and service enhancements to include offering special promotions, discounts for married couples or specific occupational groups can increase their satisfaction and encourage repeat business (Chen, 2020).

Therefore, by considering civil status, occupation and usage rates, transportation providers can customize services to meet diverse needs and preferences

Regression Models

A regression model was generated to determine which of the independent variables can significantly predict the tourist assessment of the worthiness of transport services to Guimaras Island. Results show (Table 9 to 9.1), that Model three has the highest R value of 0.243 and R-squared value of almost 6% with a significant value of 0.048. Tourists' evaluation of transport services' worthiness is best predicted by combining these three predictor variables. Knowing the tourist civil status, occupation, and usage rate would enable the identification of the worthiness

of the transport services. The worthiness of transportation services is rated higher by single tourists than married and widowed individuals, while professionals or employees are rated higher than business-persons, housewives, or students. Moreover, individuals who are light users of transportation services have a higher opinion of the worthiness of the transportation services, as opposed to those who are medium to heavy users.

According to Correia et al. (2013), various demographic factors such as age, education, income level and occupation play crucial roles in shaping residents attitudes towards tourism development. Understanding these predictors can help policy makers and tourism planners tailor strategies and policies that address concerns and preferences of tourist that will ensure sustainable tourism growth

It can be noted that with the differences in demographic characteristics will have varying concerns and attitudes towards transport services. The policymaker should ensure that the needs and preferences of the tourists are considered that can contribute to higher satisfaction and enhance the competitiveness of the Island as a whole.

Table 8
Correlations among Study Variables

Indicators	Worthiness	
	Pearson's r	Sig
Age	-.053	.436
Sex	.008	.003*
Civil	-.078	.190
Educational	.045	.051
Average Monthly Income	.152	.232
Type of tourist	.037	.000*
Occupation	-.170	.227
Personality	-.038	.241
Recent Visit	-.036	.003*
Usage	-.139	.077
Duration	-.072	.076
Overall	.073	.151

Table 9
Model Summary for the Worthiness of Transport Services to Guimaras Island as assessed by Tourists

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.170 ^a	.029	.027	1.13428	.029	11.539	1	386	.001
2	.222 ^b	.049	.044	1.12383	.020	8.211	1	385	.004
3	.243 ^c	.059	.052	1.11957	.010	3.938	1	384	.048

- a. Predictors: (Constant), Occupation
- b. Predictors: (Constant), Occupation, Usage
- c. Predictors: (Constant), Occupation, Usage, Civil

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.846	1	14.846	11.539	.001b
	Residual	496.626	386	1.287		
	Total	511.472	387			
2	Regression	25.216	2	12.608	9.983	.000c
	Residual	486.256	385	1.263		
	Total	511.472	387			
3	Regression	30.152	3	10.051	8.019	.000d
	Residual	481.319	384	1.253		
	Total	511.472	387			

- a. Dependent Variable: Grouped Total Worthiness Rating all
- b. Predictors: (Constant), Occupation
- c. Predictors: (Constant), Occupation, Usage
- d. Predictors: (Constant), Occupation, Usage, Civil

Table 9.1
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	3.722	.110		33.946	.000
	Occupation	-.104	.031	-.170	-3.397	.001
2	(Constant)	3.937	.132		29.803	.000
	Occupation	-.106	.030	-.173	-3.483	.001
	Usage	-.090	.032	-.142	-2.865	.004
3	(Constant)	4.270	.213		20.006	.000
	Occupation	-.119	.031	-.194	-3.836	.000
	Usage	-.082	.032	-.129	-2.581	.010
	Civil	-.249	.125	-.101	-1.984	.048

- a. Dependent Variable: Grouped Total Worthiness Rating

Baseline Tourism Transport Service Index

Table 10 shows the resulting BTTSI for 2020-2021. To establish the Baseline Tourism Transport Service Index (BTTSI), the researcher identified the areas of transport services that needs enhancement based from the data on the tourists' assessment on the worthiness of the transport service in the five dimensions of the public transport services. The transport services like tricycles, and vans were rated conveniently "slightly". Further, worthiness factors like reliability, availability of information that of tricycle, steel boats, jeepneys and vans were "slightly" rated. As to over-all rating of worthiness, transport services like RORO, tricycle,

steel boat were rated as "worthy". The jeepneys, and vans were "slightly" rated by the respondents. Information is recognized as very important for visitors when using public transport (Friman, Edvardsson, and Garling 2001). According to Thompson (2004), tourists require more information that residents. One reason could be much transport information is linked to local knowledge (e.g., train station location, departure and arrival points), whereas tourists are unfamiliar with the place and the systems. Second, there are differences in terms of information sources referred. Real-time information was considered most important by local public transport users (Molin and Timmermans 2006). Conversely,

tourists tend to rely on traditional information sources such as a tourist information center, word-of-mouth, attraction leaflets, the Internet, and hotel reception (Thompson 2004).

It can be implied that there is a need to revisit the three factors under worthiness of transport services to include the reliability factor (like punctuality of transport services, service frequency, time schedule, and buying of tickets); convenience factor (like comfort while waiting at the terminals, seat availability, cleanliness of the transport services, accessibility and ease of use); and availability of information factor (like tourist information counter, marketing collaterals, departure and arrival information, internet connectivity along ports and terminals) of the transport services in order to enhance their services

or worthiness. Therefore, ease of use of a public transportation systems is essential for passengers (Dziekani, 2003). Thompson and Schofield (2008) suggested ease of use is more important for visitors than efficiency and safety. Service quality is defined as the intended level of perfection and control over that level of excellent to meet client needs (Tjiptono, 2008). Also, customers will readily and pleasantly visit an area if it is convenient to get to and is strategically placed. Without thinking that getting there was difficult. As previously mentioned, a key element that affects the effectiveness of service is frequently the placement of services facilities. Due to the fact that the area has a strong relationship with the prospective market for service providers (Tjiptono, 2011).

Table 10
Baseline of tourism Transport Service Index for 2020-2021

Worthiness Rating	Safety	Convenience	Reliability	Value for Money	Availability of Information	Overall
Overall rating	Worthy	Worthy	Worthy	Slightly	Slightly	Worthy
<i>RORO</i>	Worthy	Worthy	Worthy	Worthy	Worthy	Worthy
<i>Tricycle/HH</i>	Worthy	Slightly	Slightly	Worthy	Worthy	Worthy
<i>Steel boat/ Ferry</i>	Worthy	Worthy	Slightly	Worthy	Slightly	Worthy
<i>Jeepney</i>	Worthy	Worthy	Slightly	Worthy	Slightly	Slightly
<i>Van/Others</i>	Worthy	Slightly	Slightly	Worthy	Slightly	Slightly
Demographic						
Age	Young	Young	Young	Young	Young	Young
	Old	Old	Old	Old	Old	Old
Sex	-	-	-	-	-	-
Marital Status	-	-	-	-	-	-
Education	-	-	-	-	-	-
Monthly Income	High	-	-	-	-	-
	low					
Geographic						
Type of tourist	-	-	-	-	-	-
Residence	-	-	-	-	-	-
Psychographic						
Occupation	Housewife student	Housewife student	Housewife student	-	-	Housewife student
	Professional	Professional	Professional			Professional
	private employees	private employees	private employees			private employees
Purpose of travel	-	-	-	-	-	-
Behavioral						
Recently of visit	-	-	-	-	-	-
Frequency of visit	-	-	-	-	-	-
Duration of stay	Sometimes/almost	Sometimes/almost	-	-	-	-
Cost of service	always	always	Shorter	-	-	Shorter
	-	-	longer			longer

Common Problems Identified and proposed solutions of the tourist-respondents

Data in Table 11 shows the identified problems and proposed solutions as observed and suggested by the tourists. The researcher collected common problems identified by tourist-travelers while visiting Island of Guimaras as well as their suggestions in order to have a solution to the problems. They have identified problems such as unavailability internet connectivity inside the ports or terminals or a free WIFI access, no time schedule of departure for both land and sea transports, no enough boat, long waiting lines (queuing), expensive special trips, non-wearing of life-jackets by passengers, old model of jeepneys and tricycles, ventilations issues while waiting inside the port/terminal. From the identified problems, the following solutions were suggested; The LGU must source out funds in order to install WIFI connectivity inside the port; provide time schedules of departure both sea and land transport services; regulate fare that are in minimum; revisit the policy of modernization act pertaining to land transportation of public vehicles. Service frequency is a major factor to customer satisfaction

with public transport. This aspect consistently appeared in studies on public transport service assessment (Budiono 2009; Del Castillo and Benitez 2012; Tyrinopoulos and Antoniou 2008; Redman et al. 2013). However, the decision of increasing services might be affected by several factors, including finance and budget. Various studies have shown that commuting can cause considerable stress whether by public private vehicle (Tse et al. 2000; Baht and Sardesai 2006; Wener et al. 2005). This stress can spill over into commuters work and home life (Wener et al. 2005), as well as affect the over-all quality of life of commuters (costal et al. 1988). Unreliable arrival/departure ties have been found to be one of the main factors discouraging people from using public transport (Nolan 2007).

On the other hand, providing more services in major tourist routes could be one possible solutions including basic services such as free WIFI access, good ventilation, queuing systems, fair fare, wearing of life jacket on-board, time schedules of transport services can create problems to the travelers.

Table 11

List of Common Problems Identified and proposed solutions of the tourist-respondents.

Common Problems	Proposed Solutions
1. Long queuing of passengers during peak hours	LGU must develop time schedule of PUJ departure to avoid long waiting
2.No specific time schedule of departure for boat/jeep/tricycle	LGU/PT should provide time schedule and should be posted.
3.Old jeepneys/tricycles	consider changing/ buying new trike and PUJ and revisit the modernization act for land transportation
4.No internet connectivity inside the port/free WIFI	Consider budget allocation for FREE WIFI connectivity
5.No enough boat available	There should have a scheduled trips and purchase additional boat
6.Special trips are too pricey	LGU may provide regulated fares or at minimum price
7.The boat captain fails to inform passengers to wear the life jacket before departure	Boat Captain and Boatmen should strictly imposed no life jacket no travel.
8.Very warm port/terminal	Installation of good ventilation is suggested.

Conclusions

The worthiness rating of tourists is significantly different depending on their age and occupation. Travelers of different ages tend to have lower worthiness ratings than younger tourists. In light with this, there is a need to identify strategies that will enhance the perception of older tourists of the transport services. The absence of any significant differences in other

dimensions means that strategies can be developed that cover transport service dimensions without focusing on demographics, except for age and monthly income.

Strategies can be developed to target housewives, students, professionals, and private employees in terms of psychographic and transportation service dimensions, as their

worthiness ratings are significantly different. There is a need to revisit factors like convenience (cleanliness, availability of seats while waiting and accessibility), reliability (punctuality and service frequency of transport service, ticket availability) and value for money (fare promotion and discounts, lower fare, advanced booking/online payment systems) can be enhanced in order to deliver hassle free, affordable and fast travel experience to the tourists while enjoying the Island of Guimaras.

The model that best explain the tourist assessment of the worthiness of transport services to Guimaras Island include civil status, occupation, and usage rate.

As to behavioral and transport service dimensions, strategies maybe developed

specifically to those who frequently visited the Island and those that have shorter stays in the Island. Overall, the tourists' perceived worthiness of public transportation to Guimaras Island is worthy.

In terms of frequent concerns mentioned by tourist-travelers, it should be emphasized that such problems should be considered by the Local Government Unit of Guimaras in order to create better strategies and improve their transportation services both by land and water journeys. This is to guarantee that strong public transportation encourages mobility, good enterprises, and provides a safe and effective travel experience for public commuters.

Recommendations

Based on the conclusions above, the following are the recommendations to the following groups of individuals and authorities:

PTCAO/Department of Tourism. The Baseline Tourism Transport Service Index may be used to guide the development of better and targeted strategies to address areas for improvement for a sustainable tourism industry. They use the insights from this study as well as inputs to enhancing their tourism development plan.

Land Transportation Office/LTFRB. The Baseline Tourism Transport Index for 2020-2021 may be used as valuable inputs to Land Transportation Office strategic plan in enhancing the quality of public transport services being provided to tourists and to inform their decisions and policies particularly on maintaining road safety, security, and convenience of passengers.

Local Government Unit of Guimaras. Results of the study particularly on the worthiness of tourism transport services may be used as bases to enable them develop or enhance existing policies to improve public transport services and to work collaboratively with the Department of Tourism and Land Transportation Office so that their strategies are gearing towards addressing the needs of the tourists for public transport services.

MARINA. They may use the results to review their water transport system and enhance their services to ensure the safety concerns

pertaining to vessel construction, and the enforcement of maritime laws to safeguard the local and foreign tourists crossing the island of Guimaras.

Tricycle Franchising Management Office. Tricycles, along with jeepneys, have long been the main form of transportation in many provinces and towns. When it comes to collecting fees from their commuters, tricycle drivers are becoming crazy. The office of the TFMO needs to closely supervise and control tricycle operator fees and carry out a thorough inquiry into the minimum fare that needs to be charged to every commuter as well as for special excursions, and or trips. The office must publish and put into effect the fare matrix, and together with the Guimaras LGU, it must create the minimum fare legislation.

Academe. The academe will be provided with empirical data on how customers' perceived the transport services provided to them, thus enriching the data bank of business models and theories that can be used for the enhancement of knowledge, processes and practices.

Future Researchers. Results of the study will become a baseline information for venturing topics related to transportation, destination and perception of the tourists on the aspect of traveling from one place to another in which transportation plays a vital role in bridging the gap between tourists and tourism related products and services.

Acknowledgements

This research paper could not have been possible without the participation and assistance of all the employees of the Department of Tourism Region VI and Province of Guimaras during the conduct of the study despite travel restrictions brought by COVID-19.

To Central Philippine University-School of Graduate Studies Dean Dr. Rowena M. Libo-on,

Dr. Mary 'O Penetrante- Dissertation Adviser, Dr. Irving Rio- Chairman, Dr. Luis Abioda- Member for the valuable suggestions and recommendations to make this study more relevant and beneficial to the people of Guimaras.

To the Family, Friends and colleagues of the researcher, for their moral and financial support to finish this study.

References

- A Priori Segmentation Methods. MM Marketing Mind.* (n.d.). www.ashokcharan.com.
<https://www.ashokcharan.com/Marketing-Analytics/~sg-a-priori-segmentation.php#gsc.tab=0>
- Bei, L.-T., & Chiao, Y.C. (2001). An integrated model for the effects of perceived product, perceived service quality, and perceived price fairness on consumer satisfaction and loyalty. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 14, 125–140.
- Beirão, G., & Sarsfield Cabral, J., (2007). Understanding attitudes towards public transport and private car: A qualitative study. *Transport Policy*, 14(6), 478–489.
- Eboli, L., & Mazzulla, G., (2007). Service quality attributes affecting customer satisfaction for bus transit. *Journal of Public Transportation*, 10(3), 21–34.
- Eriksson, L., Friman, M., Ettema, D., Fujii, S., & Garling, T., (2010). Experimental simulation of car users' switching to public transport. *Transportation Letters*, 2(3), 145–155.
- Isra, J. M., & Trenggana, A. F. M. (2017). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Konsumen Pada Uber Car (Studi Pada Konsumen Uber Car di Kota Bandung). *eProceedings of Management*, 4(3), 2922–2929.
- Junghwa Kim, Jan-Dirk Schmöcker, Jeong Whon Yu, & Jung Yoon Choi. (2018). *Service quality evaluation for urban rail transfer facilities with Rasch analysis, travel Behaviour and society*, 13, 26-35, ISSN 2214-367X, <https://doi.org/10.1016/j.tbs.2018.05.002>.
- Kim, S. H., Chung, J. H., Park, S., & Choi, K. (2017). Analysis of user satisfaction to promote public transportation: A pattern-recognition approach focusing on out-of-vehicle time. *International Journal of Sustainable Transportation*, 11(8), 582–592.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson.
- Kotler, P., & Keller, K. L. (2009). *Marketing Management*. New Jersey: Person Education: Inc.
- Lai, W.-T., & Chen, C.-F. (2011). Behavioral intentions of public transit passengers-The roles of service quality, perceived value, satisfaction and involvement. *Transport Policy*, 18(2), 318–325. <https://doi.org/10.1016/j.tranpol.2010.09.003>
- Mansfield, 2018. *Marketing Theory: Understanding Customer Value*.
- Parthady, M. I. S., & Rahyuda, I. K. (2019). Peran Kepuasan Pelanggan Memediasi Kualitas Produk Dan Persepsi Harga Dengan Loyalitas Pelanggan. *E-Jurnal Manajemen Universitas Udayana*, 8(5), 2669. <https://doi.org/10.24843/ejmunud.2019.v08.i05.p03>
- Pasharibu, Y., Paramita, E. L., & Febrianto, S. (2018). Price, service quality and trust on

online transportation towards customer satisfaction. *Jurnal Ekonomi Dan Bisnis*, 21(2), 241–266.
<https://doi.org/10.24914/jeb.v21i2.1965>

Prasetio, A. (2012). Pengaruh kualitas pelayanan dan harga terhadap kepuasan pelanggan. *Management Analysis Journal*, 1(1), 1–8.

Vu, T. (2021). *Dissertation - Travis Vu Nguyen Khanh Duy.pdf*. Figshare.com.
https://figshare.com/articles/thesis/Dissertation_Travis_VU_Nguyen_Khanh_Duy_pdf/17089454

Sustainability and Viability of Community-Based Coastal Tourist Destinations: A Working Example of a Local Community in Aklan

Ernesto B. Templo¹, Aklan Catholic College, Aklan
Carmen N. Hernandez², Central Philippine University, Jaro, Iloilo City
Luis A. Abioda², Central Philippine University, Jaro, Iloilo City
Gymnyn G. Gumban², Central Philippine University, Jaro, Iloilo City
Rowena M. Libo-on², Central Philippine University, Jaro, Iloilo City

Abstract

This study sought to determine the sustainability and viability of community-based coastal tourist destinations in a local community in the Province of Aklan. There were 9 key informants as participants included in this study who were selected using purposive sampling and the data were collected using researcher-made semi-structured interview guide. The study utilized qualitative research design employing constructionism epistemological perspective. The use of Creswell method of data analysis was used in interpreting the qualitative aspect of the study by obtaining information and insights from the participants. For concrete coding process, the researcher made use of a computer-aided software NVIVO. The researchers have drawn the following conclusions: the community-based coastal tourist destinations in Aklan is characterized by potential tourist attraction and amenities; the sustainability of community-based coastal tourist destinations in Aklan is supported by funding for Development Projects through donation from foreign source and projects initiated by Non-Government Agency. Environmental initiatives include total clean up, tree planting and mangrove planting, guardian against illegal activities are undertaken in the community, and marine conservation like sanctuary support and coral planting are continuously pursued; the viability of community-based coastal tourist destinations in Aklan is evidenced by the community engagement such as fishermen livelihood, employment and local support, resort collaboration, security services, and cultural events particularly balsa race and the economic diversification is fish drying, community grouping for economic benefit and poultry and egg production, and there are recognized challenges and issues such as deforestation, diminishing fish catch, extinction of blue starfish but the local government unit, resort owners and the community offer solutions, interventions and strategies such as reforestation, waterfall preservation, waste management attendance, kiosk design, sanitation, and community organizing.

Keywords: sustainable tourism, ecotourism, economic viability, tourism development

Introduction

Background and Rationale of the Study

The Philippines is undeniably a beautiful nation gifted with lush biodiversity, both flora and fauna. More than that, our country is lucky to have picturesque sceneries in the place we call “home”. No wonder people from around the globe fly to the Philippines all-year round to visit local tourist spots. These provide employment and other economic benefits which favor our country’s interest. However, deterioration due to human activities threatens our country’s treasures. Protecting areas of natural and cultural heritage

while simultaneously promoting appreciation makes ecotourism fit the puzzle of sustainability. Ecotourism puts premium on community participation, environmental education, and indigenous traditions while earning economic benefits for the community and its conservation (PCARRD, 2010).

In the Municipality of Tangalan in the province of Aklan, Philippines, there are several popular tourist destinations that provide a variety of natural attractions, and unique experience where a diversity of marine species is visible. Said tourist

destinations are managed by the Department of Tourism of the municipality with the collaboration and cooperation of the different local government agencies and other stakeholders. The residents make significant contributions to the tourism industry in their area since they promote the beauty, and significance of the municipality by inviting, and providing information to their acquaintances, and to other people that have not yet known about it. The local residents of this municipality mostly rely on tourism, fishing, home services, and trading their native products, thus they have a lot to offer to tourist visitors, from waterfalls, reefs, beaches, native foods, and hospitality.

Despite of the good characteristics, however, sustainable, and viable development of tourism some areas still remains in planning, and only for a while still in vision, due to the negative impacts of the many forms of tourism activities, either directly, or indirectly have on the environment, also with the local economy, and society. Like other coastal tourist locations, the unfavorable outcomes of tourism may be summarized as environmental degradation, modification of natural coastal processes, socio-cultural degradation, and economic inequality among residents are also the issues faced by the local government. These issues continue to grow due to the increasing numbers of tourists arriving, and visiting the area, but there are still further developments to meet the needs of the local tourism industry. On the other hand, local government in some barangays, and local citizens think that the support is not enough, thus the community-based participation in such an effort to further develop the tourism industry in their respective areas is insufficient. The researcher had the interest to study the impact and its benefits of community-based coastal tourist destination in terms of economy, environment, socio-cultural, and bio-diversity from the opinion of participants.

Significance of the Study

The results of this study will be beneficial to the following:

Local Community. The result of the study would benefit the local community in Tangalan, Aklan because it will help them in improving the quality of living in the community.

Local Government Units. The implementation of various activities will encourage, and motivate the local community to

be active, and supportive of tourism activities in their respective locality.

Private Sectors. The findings of the study will help the private sector in identifying investment opportunities in a community-based coastal tourist destination.

Department of Tourism. It will form a baseline for formulating policies, guidelines, and plans for sustainable community-based coastal tourism development regarding participation, benefits, and community/private partnership.

Department of Environment and Natural Resources. This will help the department in addressing such potentials, concerns, issues, and challenges hence enhancing the use of community-based coastal tourism in the area, as a tool for developing positive attitudes towards the sustainable, and viable coastal tourist destination in the area.

Academe Sectors. The role and participation of the academe in tourism is crucial because they will provide education to the community about its significance in terms of economic, culture and social aspects.

Future Researchers. This study may serve as a reference for future researchers who may dwell on similar investigations into the status, sustainability, and viability of the community-based coastal tourist destinations in the Province of Aklan.

Purpose of the Study

The general purpose of this study revolved around the sustainability and viability of community-based coastal tourist destinations in a local community in Aklan. On one hand, tourism supports the sustainability, and viability and acquires many benefits to the local communities, particularly it provide them livelihood, but as progress and development continue, concerns, and issues cannot be avoided especially on some tourist destination spots of the area where it may have positive or negative impacts. It is necessary to devise strategies, and action plans in every aspect relating to the development of tourist destination to reduce negative consequences that directly affect the local community when it was considered as part of destination in the Province of Aklan. On the other hand, despite of this, there are still many opportunities for tourism, because at least some local and foreign tourists are willing, or interested to visit the municipality.

Epistemological and Theoretical Perspective of the Study

This study was anchored on the Constructionism Epistemological Perspective. Constructionism is the “making of meaning” (Crotty, 2020). This suggests that before humans give meaning to specific things, those things do not hold any antecedent relevance or sense. This means that every object, topic, or phenomenon has no inherent meaning not unless somebody comes up with one. As humans interact with the world they are trying to interpret, they are highly capable of not only ‘creating’ but constructing their meanings by using tools, with which they have to work first (Crotty, 2020). Critical narrative inquiry was used in this study. As emphasized by Clandinin (2013), narrative inquiry is the study of experience interpreted by and through stories of practice. Stories embody knowledge accumulated and experience over time. In the process of telling a story, the researcher will stage and paint the landscape as vividly as possible to portray the essence of the study.

Additional micro theories used in this study included the CIPP Model, Olson’s Collective Action Theory, Sustainable Development Theory, and the Viable System Model

Delimitation of the Study

This study sought to determine the sustainability and viability of community-based coastal tourist destinations in the Municipality of Tangalan, as a working example of a local community in the Province of Aklan from December 2022- July 2023. There were 9 key informants as participants included in this study. This involved the mayor, municipal project development officer, tourism officer, municipal environment and natural resources officer, barangay captain, private sector, NGO, and some community residents (fisherfolks) who are actively participating in community-based coastal tourism in different tourist attractions in the Municipality of Tangalan.

Permission to conduct the study, instrument validity, and one-on-one interviews with participants are all part of the research procedure. The use of Creswell method of data analysis was used in interpreting the qualitative aspect of the study by obtaining information and insights from the participants. All participants were given pseudonym initials for their privacy, and confidentiality. For concrete coding process, the

researcher make use of a computer-aided software NVIVO.

Review of Related Literature/Studies

In 1991, the Department of Tourism (DOT), in collaboration with the United Nations Development Program (UNDP) and the World Tourism Organization (WTO) prepared the Philippine Tourism Master Plan. Series of seminars discussed sustainable tourism and ecotourism concepts and elements of sustainable tourism framework were identified. As such, ecotourism has evolved as conservation of community. It has brought the promise of achieving conservation goals, improving the well-being of local communities, and generating new businesses. (PCCARD, 2010).

Community-based tourism should be looked upon, or view, and perceive in the context of specific parameters, and specific characteristics. Various characteristics, and challenges, such as the issue, that community-based tourism, should be an indigenous effort, that it should be aimed at the individual, and community well-being, that communities often lack financial resources, and capacities, and that community-based tourism often has difficulties in marketing, or market access (Giampiccoli & Saayman, 2016).

In Western Visayas, Tangalan is one of the municipality in Region VI known for local people with majestic waterfalls and picturesque beaches that are a perfect hot spot for domestic and international tourists. The municipality is notable for its abundance of natural resources and beautiful landmarks. The municipality’s potential to cater to tourists positively remarks for more benefits to the locality. Natural attractions undergo development to support the increasing popularity and demand. The attractions offered by the municipality are the clean and wide beaches, unexplored caves, waterfalls, and hot springs (Municipality of Tangalan, 2022).

The preference of Sun, Sea and Sand tourism has been analyzed for different locations. In the Philippines, found that coastal tourist chose the coast for vacationing because of fresh air, water and recreation activities, and in a minimum percentage because of the scenic beauty. Besides, tourism in Aklan (especially Sun, Sea and Sand tourism) has been considered a national priority because of the extensive coastline and abundance of sandy beaches made of corals in the formation of sand. The policies that have promoted coastal

tourism during the previous decades have resulted in the creation of major international tourism destinations through the establishment of large hotel groups (mainly national and international chains) of global relevance, which leads to the arrival of tourists.

While the tourism industry is a driving force for both social and economic development, it also has potential to create sociocultural and environmental damage and other problems (Almeida-García, et al., 2016) such as biodiversity and habitat damage, pollution, climate change, loss of amenity, seasonality and sensitivity of demand, lack of community engagement and gains. Specifically, the advantages and disadvantages of coastal tourism development in new emerging regions make the situation more critical for sustainable tourism. Handling this type of tourism in a sustainable form, it could even be more challenging when tourism is perceived as a driving force for a coastal area, which results in fast and

excessive growth, excessive workforce migration, excessive use of natural environment, and high-spending tourist flows. According to WTO (2018), this means 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”.

The study of Mendoza, et al. (2015) about the tourism in Sugar Beach Coastal Area in the City of Sipalay revealed that it created a positive impact on the host community, since it improved the residents' quality of life through the work/income it gives to the residents. Furthermore, the residents near the coastal area of sugar beach were pro “Sustainable Tourism,” and considered the carrying capacity of the place. The residents also perceived a positive social impact on cultural identity, and discovered the benefits of Tourism Development is likely to provide an incentive for the conversion of natural resources.

Methodology

Research Design

This research paper utilized a qualitative research design. Wyse (2011) mentioned that qualitative data is primarily critical narrative inquiry. It is used to gain an understanding of the underlying reasons, opinions, and motivations. It provides insights into the problem, or helps to develop ideas for potential descriptive research. O'Toole (2018) mentioned that narrative inquiry as a research design used to explore the perceptions and personal stories of participants.

The study used narrative inquiry, since the researcher conducted an interview with the municipal mayor, municipal planning officer, tourism officer, Municipal Environment and Natural Resources officer, barangay captain, tourism manager and some fisher folks using the researcher-made semi-structured guide to gather information based on the experiences of the phenomenon.

Analysis of the Study

All qualitative data were analyzed using Creswell method of analysis, by taking down the participants' opinions, views, insights, and knowledge about the topic through an unstructured interview session. Their responses to the interview

questions were gathered, recorded through video or audio recorder.

For concrete coding process, the researcher make use of a computer-aided software NVIVO, as it visually presented the correspondence between the encoding items and the original text items, as well as adjust and can be change anytime in the coding system, while reporting the coding process of each category. The encoded results were then converted into imports of files so that qualitative interview analysis can be transformed into quantitative analysis.

For open coding, after repeatedly reading the interview data subject, the researcher proposed the theme contained in each object, the sub-theme under the theme, the concept category existing in the sub-theme and the relationships between the concept category and the theme, and analyzed the thinking in the process. The findings were recorded in the coded notes of each of the interview subject. Open coding begins and the comprehensive thematic analysis and comparison of data were made.

When the themes and sub-themes were created, the same were subjected to validation by the different stakeholders in order to make sure that the concepts in the initial interview were the real concepts in the creation of the themes. After

which, the researcher finalized the themes and subthemes of the study for interpretation.

Validity and Reliability of the Study

This academic paper was submitted to the Research Ethics Review Board of a private higher education institution in Iloilo City to ensure that there was a strong and proper adherence to the institution’s ethical policies on research studies.

Results

There were 9 participants in the interview. As to sex, 5 out of 9 or 56% were male and 4 or 44% were female. As to age, 5 out of 9 or 56% were above 50 years old and 4 or 44% are below 50 years old. When categorized as to civil status, 8 or 89% are married and only 1 or 11% is single. As regards to educational attainment, 7 or 78% are

bachelor’s degree holders and 2 or 22% are high school graduates. Finally, as to the sector they are representing, 5 or 56% represent the local government of Tangalan, Aklan, 1 or 11% from the private sector, 1 or 11.5% from the NGO and 2 or 22% from community (fisherfolks).

Table 1
Profile of the Participants

Profile	n	%
Sex		
Male	5	56
Female	4	44
Age		
above 50 years old	5	56
Below 50 years old	4	44
Civil Status		
Married	8	89
Single	1	11
Educational Attainment		
Bachelor’s Degree	7	78
High School Graduates	2	22
Sector Represented		
LGU	5	56
Private Sector	1	11
NGO	2	22
Community	2	22

Table 2
The three SSS (sun, sea and sand) that community-based coastal tourist destinations in Aklan offer

Theme	Subthemes
1 – Potential Tourist Attraction and Amenities	1 - Picturesque White Sand Beach
	2 - Presence of resorts and restaurants
	3 - Jawili Falls
	4 - Abundant Seafoods and Delicacy

Theme 1: Potential tourist attraction and amenities

The potential for coastal-tourist destination is evidenced by the abundant natural attractions in the area such as the immaculate white beaches, distinctive wave rock formations, scenic Jawili Falls. It is complemented wide-range of recreational opportunities and various services of resorts and restaurants. The multifaceted topography of Tangalan, which includes coastal areas, cascades, and elevated terrains, offers a wide range of recreational opportunities for tourists.

In Mendoza, Haguisan III and Ituriaga (2015) study, they discovered that the tourism in Sugar Beach Coastal Area in the city of Sipalay has

a positive impact on the host community, since it improved the residents' quality of life through the work/ income it gives to the residents. Furthermore, the residents near the coastal area of sugar beach were pro “Sustainable Tourism,” and considered the carrying capacity of the place. The residents also perceived a positive social impact on Cultural identity, and discovered the benefits of Tourism Development is likely to provide an incentive for the conversion of natural resources.

In the study of Mendoza-Gonzalez et al., (2018), it was revealed that sustainable sun, sea and sand tourism revealed that ocean view and proximity to the beach are environmental amenities for which hotels charge and tourists are

willing to pay. In this present study, the subthemes derived were the following:

Sub-theme 1: Picturesque White Sand

Beach

Jawili beach is renowned for its picturesque white sand beach ideal for sunbathing and unwinding along the coastline. According to the resort manager, *“the serene ambiance of this location appeals to tourists seeking a private beach encounter in contrast to more renowned and congested sites”*.

Sub-theme 2: Presence of resorts and restaurants

The establishment of resorts and restaurants in the three barangays contributed to the increasing number of local and foreign tourists visiting the area. According to the informant, *“Ang mga resort sa Tangalan ay nakatuon sa pagbibigay sa mga bisita ng kasiya-siyang accommodation na madaling ma-iugnay sa natural na kapaligiran. Ang mga restaurants ay naglalagay ng malaking halaga sa pagpapalaganap ng regional cuisine sa pamamagitan ng pagpapahalaga sa paggamit ng lokal na seafood at tradisyonal na mga recipe”*.

The eco-friendly resorts and restaurants boost tourist satisfaction and the local economy. The informant added, *“sa pamamagitan ng*

pagsuporta sa lokal na produkto, ang mga establisamentong ito ay tumutulong sa pangkabuhayan ng barangay”.

Sub-theme 3: Jawili Falls

As per the participant's account, *“Jawili Falls is visited because of its serene ambiance. Even locals come for strolling, picture-taking and picnicking. The observation platforms and pedestrian pathways are established in close proximity to the waterfalls to preserve and protect its natural surroundings”*.

Sub-theme 4: Abundant Seafoods and Delicacy

A participant narrated that *“the considerable appeal of the coastal-tourists destination is also attributable to its wide array of culinary experiences and abundant seafood selections at cheaper price compared to Boracay. The recently harvested seafood sourced locally are prioritized because of its freshness”*. This practice not only sustains the local fishing sector but also offers tourists an unparalleled food encounter. *“The resort manager said, “After the pandemic, many customers come for family excursions for birthdays, and reunion. Also, educational sessions centering on traditional seafood cuisine”*.

Table 3
Sustainability of Community-based Coastal Tourist Destination

Themes	Subthemes
2- Funding for Development Projects	1 - Donation from foreign source 2 - Promotion by Non-Government Agency
3- Community Engagement	1 - Fishermen Livelihood 2 - Employment and local support 3 - Prioritization of local economy 4 - Strengthening of cultural events – Balsa Race 5 - Resort collaboration 6 - Security services

Theme 2: Funding for Development Projects

The significance of securing financial resources for the development initiatives is underscored by a local informant. *“The local government is aggressively pursuing financial help through various means like as government subsidies, environmental and development awards, and public-private partnerships. It is*

emphasized that the prudent utilization of these monies is of utmost importance in securing a successful and environmentally sustainable future. Financial resources are required to support a diverse array of endeavors, encompassing the preservation of the environment, the advancement of tourism, the enhancement of community health, and the expansion of the economic foundation”.

The common objectives of sustainable development are to expand the societies' economic welfare, provide more business occasions and to increase life quality. In order to succeed this aim, a balance should be met among social, economic and environmental requirements. The most important contributions are increase in income level, employment, infrastructural progress, environmental consciousness and investment, cultural heritage reservation, and the contribution to sustainable social lives (Alrwajfah, Almeida-García & Cortés-Macías, 2019).

Sub-theme 1: Donation from foreign source

According to an informant, *“Donations from abroad are highly valued, because they contribute considerably to the town's development projects. These foreign funds, which originate from international non-governmental organizations (NGOs), governments, and organizations on a global scale, are crucial to supports a variety of endeavors, including infrastructure development, cultural preservation, and environmental protection. Furthermore, the informant emphasizes the criticality of diligent oversight and openness regarding the allocation of these funds in order to gain the trusts of the donor”*.

Sub-theme 2: Promotion by Non-Government Agency

An informant claims that non-governmental agencies, or NGAs, play a crucial role in promoting community activities and advancing development. These organizations make contributions in a number of areas, including as coastal-area development, cultural preservation, and environmental conservation, through funding, knowledge exchange, and capacity building. By filling in the gaps with community-focused activities, they support governmental initiatives. The informant does, however, recognize the difficulty in striking a balance between the community's demand for long-term sustainability and independence and the assistance given by NGAs. *For our town, working together with NGAs is essential to achieving sustainable and all-encompassing development.*

Theme 3: Community Engagement

The active participation of local residents, Civil Society Organizations (CSOs), and Non-Governmental Organizations (NGOs) in municipal

planning and decision-making processes demonstrates this engagement. The informant places significant emphasis on how the involvement of these entities guarantees that development endeavors, specifically those pertaining to tourism, are in harmony with the desires and requirements of the community. The informant emphasizes that through the implementation of a collaborative approach, the residents are fostered a sense of ownership, and the benefits of tourism and development are distributed in a fair and just manner. Consequently, this enhances the general welfare and advancement of the coastal community.

Local community participation in development initiatives has been a trend for years now. Despite conventionally being viewed, as solely falling under government responsibility, successful tourism development requires community participation. The interaction of each local community is important in ensuring sustainable tourism development. In the same manner, Okazaki (2018) highlighted, community participation is important in pursuing sustainable tourism.

Sub-theme 1: Fishermen Livelihood

The informant said that *“the livelihood of fishermen in the three (3) barangays is a significant component of the economic and cultural fabric of the community”*. Because of its closeness to a wealth of maritime resources, the city's physical location has traditionally been favorable to the development of a robust fishing sector. The local fishing population participates actively in fishing operations on a daily basis. These activities serve not only as a method of generating a living but also as a cultural tradition that has been passed down through the years. The fish drying and selling that goes on in this business is one of the most common processes, and the local economy is dependent on it.

The Local Government Unit underlines the significance of responsible management of marine resources as a means of ensuring the long-term viability of this means of subsistence in the marine environment. The economic benefits of fishing activities are being considered with the imperative to maintain and preserve the variety of marine species, and efforts are being made to find a balance between the two. *“These efforts include the establishment of fishing rules, coral planting, and planting of mangroves are done with the*

intention of preserving the health of marine ecosystems”.

The participant indicated that *“it is critically important to incorporate the fishing community into the overarching strategy for the growth of tourism industry. This opens up the possibility of diversifying revenue streams by studying ecotourism opportunities, such as guided fishing excursions or educational programs centered on the biology of the local maritime environment. This strategy not only helps fisherman maintain their livelihoods but also adds to the attractiveness of the place to other tourists”.*

Sub-theme 2: Employment and local support

According to the informant, *“the local residents appreciate the necessity of establishing job opportunities and cultivating community support, particularly with the growing importance of the tourism sector. The major purpose is to create jobs in the community, notably in industries like hospitality, tour guiding, and the manufacture of locally handcrafted goods. This technique not only stimulates the local economy but also ensures that the benefits of tourism are felt directly by the residents”.* Additionally, there is a great emphasis on supporting local businesses, with resorts and tourist attractions favoring the purchase of goods and services from local providers whenever possible.

Sub-theme 3: Prioritization of local economy

The coastal-tourist destination is primarily reliant on the local workforce. That is why, skills development efforts concentrate upon expanding work possibilities for residents in industries such as tourism, hospitality, and the arts and crafts industry. This initiative is intended to ensure that local communities may benefit from increased tourism without neglecting their own livelihoods.

As the informant stressed, a fundamental responsibility is to prioritize the local economy wherever possible. This not only strengthens the economy but also encourages long-term, sustainable growth. Active community participation in decision-making processes is critical for instilling a sense of ownership over their surroundings and culture. According to the information presented, this guarantees that development is in line with local needs and values.

Sub-theme 4: Strengthening of cultural events – Balsa Race

According to the informant, *Tangalan’s* annual Balsa Race is culturally significant since it promotes local pride, protects long-standing traditions, and draws tourists. This festival promotes traditional marine skills while also instilling a sense of community pride and engagement across generations. Local businesses and craftspeople in the area can benefit from the area’s reputation as a tourist destination. However, it is critical to design the event in an environmentally-friendly manner, to manage infrastructure to accommodate people, and to maintain the tradition’s authenticity. The informant emphasizes that the Balsa Race provides a valuable chance for cultural enrichment as well as economic prosperity. Its success is dependent on strong community involvement, and diversification of associated activities.

Sub-theme 5: Resort collaboration

The informant emphasizes the considerable economic, ecological, and socio-cultural benefits of collaborating with resort owners and management. This cooperation contributes financially by hiring local residents and distributing money within the community. It also encourages sustainable tourism through collaborative activities between the community and resorts, such as beach clean-ups and reef preservation.

In terms of social and cultural preservation, the relationship is critical in preserving local customs and traditions while fostering meaningful connections between residents and visitors. It is critical to overcome problems such as setting shared objectives, maintaining open communication, and implementing eco-friendly policies in order to accomplish successful collaboration.

Sub-theme 6: Security services

The informant emphasized the critical nature of security service provision in safeguarding the welfare and safety of both visitors and the local populace. The barangay officials and *tanods* were able to develop close collaborations when it comes to local law enforcement and resort security. These security-oriented measures foster improved relations and trust between the resorts and the local populace. It is important to acknowledge that the successful implementation of these security

measures safeguards privacy, maintains safety, and complies with cultural norms. In essence, effective security services are vital in cultivating a

safe, amicable, and cooperative atmosphere that is advantageous to every individual present, including visitors and residents.

Table 4

Viability of Community-based Coastal Tourist Destination

Theme	Subthemes
4 – Economic Diversification	1 - Fish drying 2 - Community grouping for economic benefit 3 - Poultry and egg production
5 - Environmental Initiatives	1 - Clean up Drive 2 - Tree planting and mangrove planting 3 - Guardian against illegal activities
6 - Marine Conservation Efforts	1 - Sanctuary support and coral planting

Theme 4: Economic diversification

As per the participant's account, the Local Government is implementing a comprehensive approach to achieve economic diversification such as supporting the farmers, fishermen by implementing alternative means of subsistence, assisting community-owned businesses, and prioritizing environmental preservation. The principal objectives encompass enhancing the sustainability of the fisheries and agriculture industries, cultivating natural and cultural wonders to generate tourism revenue, and expanding sources of income via ventures such as poultry and egg production. Moreover, in order to promote entrepreneurship, the participant emphasized the significance of community-skill development and assistance for local enterprises.

Agam, Maryoni and Sigi (2021) outlines the benefits, and characteristics of natural, and human resources as a proponent of the development of marine coast tourism based on community empowerment. It also analyze the benefits of resources, the viability and suitability of tourism area which is supporting the attraction of tourists facto to come to Bahri Jawai Beach, and to develop a strategy for developing the marine tourism areas of Sambas Regency based on the natural resource potential, perceptions, participation, and aspirations of tourists, and the community local. The development strategies in their study shows strengthening marine tourism management, optimizing promotion, and socialization on internet media, optimizing institutional roles in improving coastal security systems, and health, development of accessibility such supporting facilities for coastal facilities, and infrastructure. For this study the following were

the subthemes in line with the viability of the community-based coastal tourism destinations in Tangalan, Aklan:

Sub-theme 1: Fish drying

According to the informant, “*the process of fish drying, carries substantial economic significance by enhancing the value of the fishing sector. This process entails the preservation of fish through the reduction of moisture content, utilizing techniques such as sun-drying, smoke-drying, and mechanical-drying. By employing this method, it prolongs the durability of the fish, hence facilitating its distribution in wider marketplaces*”.

In brief, the process of fish drying holds significant importance in the local economy as it combines ancient methods with contemporary requirements for sustainable practices and enhanced market reach.

Sub-theme 3: Poultry and egg production

The participant informed “*the community is shifting towards poultry and egg production in response to the dwindling fish catches*”. This move is strategic, aiming to reduce the local economy's reliance on fishing by introducing a sustainable alternative for income and employment. The informant noted that raising chickens and producing eggs are enhancing food security and nutrition in the area. To ensure the success of this venture, education and training is provided by the local government, but not enough. The initiative also presents opportunities for empowering women economically. However, challenges such as disease management and market volatility must be addressed. Overall, the informant believes that poultry farming is a promising avenue for

economic stability as traditional fishing faces challenges.

Theme 5: Environmental Initiatives

An indigenous fisherman in Tangalan, Aklan, believes that the area's environmental activities especially increasing garbage contributes to the depleting fish catch. That is why, the people in the community involved themselves in mangrove reforestation and preservation of coastal ecosystems. These environmental measures are essential to maintaining the biodiversity and distinctive natural beauty of the coastal community, as well as the long-term viability of the fishing economy and growing tourism sector.

Cutting back on plastic waste help combating marine pollution and advancing the regeneration of coral reefs. These initiatives are a direct reaction to the depletion of fish stocks and the destruction of habitat brought on by the expansion of resorts and rising levels of human activity.

According to Catibog-Sinha, and Wen (2018), natural and cultural landscapes values form of basis for coastal tourism. These values includes geographical position, microclimatic conditions, existence of water, natural beauties, existence of natural vegetation, existence of wildlife, surface features, geomorphologic structure, local food, festivals and pageants, traditional agricultural structure, local handicrafts, regional dress culture, historical events and people, heritage appeals, architectural variety, traditional music and folk dance, artistic activities and so on. As environmental initiatives, the following were implemented in the coastal area of Tangalan, Aklan:

Sub-theme 1: Clean up Drive

The Clean-Up Campaign is a local initiative that aims to conserve the area's marine and coastal ecosystems, according to an informant. Regular clean-up events are planned by this initiative, which brings together businesses, government agencies, and members of the community to gather and get rid of waste, especially that which poses a harm to marine life. The informant emphasizes how crucial the program is to protecting the environment, drawing tourists, and raising locals' understanding of environmental issues. They appreciate the intimate relationship between the health of these ecosystems and the prosperity of the local fishing and tourism sectors. The

informant also highlights the difficulties in maintaining community involvement and making sure there are enough resources to support these conservation initiatives.

Sub-theme 2: Tree planting and mangrove planting

A local from Tangalan, Aklan, highlights the significance of their tree and mangrove planting initiatives. According to the informant, “we emphasize the community's active participation in these programs, which cultivates a culture of environmental responsibility. These programs are critical for community protection and environmental conservation, but as of the moment still needs to be intensified”. The informant points out that mangroves are vital for maintaining shoreline integrity, preventing coastal erosion, and supporting marine ecosystems, which in turn benefits the fishing industry.

Sub-theme 3: Guardian against illegal activities.

The participant describes the formation of "Sea Guardians" as a strategic move to combat environmental crimes like illegal fishing and deforestation along the coast. These local conservationists monitor the area for such activities, collaborating with law enforcement to safeguard marine ecosystems and biodiversity. The informant stressed, “our work is vital to maintain the community's traditional livelihoods that rely on a healthy environment. It is very challenging to balance enforcement with support for those affected by restrictions, equipping guardians with proper resources and training, and gaining support from community”. Overall, the informant views the "Sea Guardians" as key players in protecting environmental health and promoting a sustainable relationship between people and nature.

Theme 6: Marine Conservation Efforts

The diverse marine life and thriving coral reefs are the focus of these conservation efforts, which also aim to protect the economies that depend on them (such fishing and tourism). The critical need to protect these underwater ecosystems for future generations brought about by threats from overfishing, habitat damage, and pollution is evidenced by the people's recognition that their personal well-being and economic success are attributed to the health of their oceans.

Sub-theme 1: Sanctuary support and coral planting

According to a participant, “*the emphasis is not only to promote a culture of conservation but also increase public awareness as it is needed to solve many problems to achieve sustainable management, secure the necessary funds, and establish successful partnership with environmental organizations*”. As per the account of a participant, “*the practice of coral planting is regarded as a crucial endeavor in marine conservation*”. The endeavor is a collective undertaking that encompasses the participation of

community members, governmental entities such as the Bureau of Fisheries and Aquatic Resources (BFAR), and environmental non-governmental organizations (NGOs). The participant emphasized the interdependence between industries such as fishing and tourism that includes recreational activities like snorkeling and diving. The informant asserted that the dissemination of knowledge regarding the significance and vulnerabilities of coral reefs is vital for ensuring the long-term viability of the initiative and the economic well-being of the coastal community.

Table 5

Challenges, Interventions, Strategies, and Solutions For Community-based Coastal Tourist Destinations

Theme	Subthemes
7 – Challenges and Issues	1 - Deforestation 2 - Diminishing fish catch 3 - extinction of blue starfish
8 – Solutions and Intervention	1 - Reforestation and Waterfall preservation 2 - Water management assistance 3 - Augmenting the Aesthetic Appeal through Kiosk Design 4 - Ensuring Public Health through Sanitation

Theme 7: Challenges and Issues

In the study conducted by Achrekar (2021) on sustainable coastal tourism, it was revealed that there is a greater percentage of residents who perceive that the environmental, and socio-cultural sustainability is negatively impacted due to massive growth of tourism activity in this part of Goa’s coastal belt, while for the perception on economic sustainability the results are mixed.

A participant in this study said that “*the area has seen substantial expansion and development in recent years. However, a number of problems affecting the environment, the economy, and society and culture have emerged as a result of this development. The local ecosystem has been damaged because of the increasing resorts and the resulting influx of visitors leading to decreased fish populations and increased marine pollution*”. The local fishing industry is struggling under the weight of declining fish numbers and rising living costs. From a socio-cultural aspect, the influx of tourists and the development of resorts have the potential to alter local rituals and community dynamics. Conservation and management issues, such as how to keep sanctuaries in good shape and

whether or not environmental initiatives are making a dent in persistent pollution, only add to the difficulty. In response to these challenges, people explore alternative sources of income.

Sub-theme 1: Deforestation

A participant said, “*The recent flooding is brought about by massive cutting of trees in the mountains. You see, there hardly comes water running*. While tree planting is encouraged, yet only few survived because of lack of water supply”. According to the informant, it is critical to protect the waterfalls in Jawili due to its critical role in protecting biodiversity and attracting tourists. These waterfalls are important for ecological, cultural, and recreational reasons. However, environmental degradation pose threats to their preservation.

Sub-theme 2: Diminishing fish catch

The question of decreasing fish capture is a subject of considerable worry, as it carries notable environmental and socio-economic implications, as expressed by an individual with vested interest in the matter. The decline in marine biodiversity can be ascribed to overfishing, habitat degradation

arising from pollution, and disturbances induced by the rise of tourist and resort activities. The decrease in fish capture presents potential risks to the stability of food supply. To effectively tackle this matter, it is important to safeguard critical marine ecosystems, implement pollution mitigation strategies, and actively engage local communities in conservation initiatives.

The informant emphasized the significance of addressing these issues in order to maintain the biological well-being of marine ecosystems and support the economic sustainability and welfare of the local community, which is dependent on fishing as a means of life.

Sub-theme 3: Extinction of Blue Starfish

“The extinction of the Blue Starfish is a substantial illustration of the susceptibility of marine ecosystems brought about by degradation of habitats, pollution, and overexploitation of the sea”, as stated by an informant. Due to their critical role in sustaining the health of coral reefs and other marine habitats, the Blue Starfish's extinction has far-reaching consequences for biodiversity. This circumstance emphasizes the critical nature of increasing public consciousness regarding the significance of conserving marine life, implementing stricter conservation regulations, and encouraging environmentally conscious conduct in coastal communities.

Theme 8: Solution and Intervention

The environmental problems such as the decline or extinction of important species like the Blue Starfish has long been observed in the community. *“The reduction of marine pollution and the promotion of sustainable fishing methods are all examples of conservation initiatives. Community involvement and inspiring people through local activities to take environmental responsibility are primary goals of education and awareness campaigns.* These plans are essential for protecting the coastal community”.

Garcia (2001) explained that for instance, a conflict between fishers from these neighboring municipalities over territorial boundaries of common fishing grounds in Pangayawan, and Pungtod reefs has not been resolved over the years. Likewise, the introduction of aquasilviculture in mangrove areas may become a potent source of conflict among resource-users who maintain informal rights over the mangrove resource. The

overall state of coastal resources in these municipalities is in immediate need of a unified plan to promote both their preservation, and conservation. To achieve this end, a joint resource management council representing all resource-users from both municipalities must be organized, and convened. These strategies include community-based approaches of co-managing resources, such as “no-take zones” (sanctuaries), ecotourism development, and livelihood schemes to mitigate, in part, the pressure of over-exploitation of fishery resources (Garcia, 2001). In this study, the following were the suggestions made in order to address environmental concerns:

Sub-theme 1: Reforestation and Waterfall preservation

Reforestation, according to the informant, is a critical intervention aiming at addressing environmental deterioration and restoring ecological balance. *“The key project entails the planting of native tree species in deforested areas to avoid soil erosion. It is critical to actively engage the local population in conservation activities in order to effectively preserve the waterfalls. These safeguards are necessary to ensure that future generations continue to benefit from these significant natural resources and tourism attractions”*.

Sub-theme 2: Water management assistance

Improving waste management in coastal community is crucial to resolving environmental health concerns and boosting the area's appeal, particularly given the importance of tourism to the local economy. Recycling initiatives, effective trash collection and disposal systems, and new waste management facilities are all part of the package of aid being provided. Educational and awareness programs play a crucial role in promoting responsible garbage disposal system among both local inhabitants and tourists.

Sub-theme 3: Augmenting the Aesthetic Appeal through Kiosk Design

From an informed standpoint, the implementation of uniform kiosks carries considerable importance in augmenting the aesthetic appeal and operational efficiency of dried fish vendors. The design of purpose-built kiosks integrate local cultural features and architectural styles, effectively highlighting the distinctive

legacy of Tangalan as a fishing community. These multifunctional kiosks encompass the sale of locally created goods. In essence, the aforementioned kiosks assume a crucial function in the advancement of indigenous culture and commercial activities.

Sub-theme 4: Ensuring Public Health through Sanitation

“The critical significance of sanitation is stated to be the determining factor in ensuring public health, environmental preservation, and the sustainability of the tourism industry”, according to the informant. Critical components comprise the efficient execution of waste management systems,

guaranteeing access to potable water, assuring appropriate treatment of wastewater, and furnishing sufficient public restroom facilities, particularly in along the road frequented by a great deal of tourists. It is critical to educate and foster comprehension regarding hygiene and sanitation protocols among both the local populace and visitors in order to effectively mitigate the spread of diseases. Nevertheless, this endeavor presents notable obstacles, such as the requirement to construct adequate infrastructure to accommodate the interests of both inhabitants and tourists, encourage community participation in upholding sanitation protocols, and institute and enforce pertinent regulations.

Acknowledgement

The authors would like to acknowledge the members of their family who showed support in this study. Special appreciation also goes to Aklan Catholic College and Central Philippine University who helped the researchers in their quest for knowledge about this study. Finally, the researchers would like to acknowledge the LGU

Municipal officials headed by its dynamic Municipal Mayor, Municipal Planning and Project Officer, Tourism Officer, MENDRO Officer, Coastal Community stakeholders for their all-out support by assisting the researchers especially for the valuable data needed.

References

- Abanilla-del Mundo, S. J. (2019). Status of the sun and beach tourism industry in the Province of Batangas, Philippines. *International Journal of Advanced Research and Publications*, 2(12). <http://www.ijarp.org/published-research-papers/dec2018/Status-Of-The-Sun-And-Beach-Tourism-Industry-In-The-Province-Of-Batangas-Philippines.pdf>
- Bell, S. & Morse, S. (2018). Sustainability indicators measuring the immeasurable? London: Earthscan. https://www.u-cursos.cl/ciencias/2015/2/CS06067/1/material_docente/bajar?id_material= 1210909
- Catibog-Sinha, C., & Wen, J. (2018). Sustainable tourism planning and management model for protected natural areas: Xishuangbanna Biosphere Reserve, South China. *Asia Pacific Journal of Tourism Research*. <https://doi.org/10.1080/10941660802048431>.
- Department of Tourism – Aklan (2022). <https://aklan.gov.ph/tourism/>
- Global Sustainable Tourism Council (2022). GSTC2022 Global Conference. <https://www.gstcouncil.org/> on April 12, 2023.
- Haynes, S. (2018). Boracay island closure: Residents feel the pinch. Time. <https://time.com/5262455/boracay-island-philippines-tourists-closure-duterte/>.
- Hengky, S.H. (2019). Challenges sustainable coastal tourism on Panjang Island. *Journal of Aquaculture & Marine Biology*, 8(5), 180-184. <file:///C:/Users/user/Downloads/Dialnet-CoastalTourismDevelopmentInSinopAsAnEmergingRuralID-7763796.pdf>
- Kamst, C. (2021). Environmental management in sustainable tourism development.

- <https://www.linkedin.com/pulse/environmental-management-sustainable-tourism-cecilia-austria>.
- Mowforth, M., & Munt, I. (2018). Tourism and sustainability: New tourism in the 3rd World. http://tourism.epage.ir/images/tourism/production/tourism_and_sustainability.pdf
- Mubarok, B.A.M., & Lokaprasidha, P. (2020). Community-based tourism (CBT) as a model of tourism and self-reliance development of coastal villages Jember, Indonesia. <https://eudl.eu/pdf/10.4108/eai.1-11-2019.2293990>
- O' Toole, J. (2018). Institutional storytelling and personal narratives: reflecting on the value of narrative inquiry. *Institutional Educational Studies*, 37(2), 175-189. <https://doi.org/10.1080/03323315.2018.1465839>
- Raup, M. R. (2020). A phenomenological study of the influence of teambuilding activities on employee engagement. A dissertation. Pennsylvania State University.
- https://etda.libraries.psu.edu/files/final_submissions/21849
- Republic Act No. 9593. "The Tourism Act of 2009." 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 the policy, and appropriating funds therefor. [http://www.tourism.gov.ph/Downloadable%20Files/Updated_RA_9593_and_IRR_\(as_of_01_Nov_2020\).pdf](http://www.tourism.gov.ph/Downloadable%20Files/Updated_RA_9593_and_IRR_(as_of_01_Nov_2020).pdf)
- Spanou, E. (2017). The impact of tourism on the socio-cultural structure of Cyprus. www.seagrant.umn.edu
- United Nation World Tourism Organization (2022). Sustainable development UNWTO". www.unwto.org
- World Tourism Organization (2018). Tourism Highlights 2018 Edition. <https://www.e-unwto.org/doi/pdf/10.18111/9789284419876>

Model Analysis of the Human Resource Crisis Management among DOT-Accredited Hotels in Western Visayas, Philippines

Walter M. Sosmeña¹, Iloilo Science and Technology University, Lapaz, Iloilo City

Mary 'O T. Penetrante², Central Philippine University, Jaro, Iloilo City

Carmen N. Hernandez³, Central Philippine University, Jaro, Iloilo City

Abstract

The study aimed to analyze and synthesize the human resource crisis management model adopted by DOT-accredited hotels in Western Visayas, Philippines. A predictive non-experimental research design was used utilizing a researcher-made survey questionnaire to 67 managers representing the 67 DOT-accredited hotels in Western Visayas. Generally, the hotels have very good crisis management practices in pre-crises, during crises, and post-crisis, and the hotels' human resource crisis management performance was rated very good, by the managers. No significant differences in the managers' level of knowledge, skills, and attitude towards human resource crisis management when grouped by profile indicators while a significant difference in the hotels' human resource crisis management in pre-crises when grouped by type of guests, specifically commercial and MICE guests. A strong positive correlation between the managers' level of knowledge, skills, attitude, and the hotels' human resource crisis management performance exists which indicates that when the knowledge, or skills are increased or when there is a more positive attitude, the hotel's human resource crises management performance is expected to increase. The hotels' pre-crisis practices were found to be the strongest significant predictor of the hotels' human resource crisis management performance.

Keywords: *human resource crisis management, practices, knowledge, skills, attitude, model analysis, human resource management performance*

Introduction

Background of the Study

The Philippine Department of Tourism (2020) reported USD 9.31 billion in tourism earnings in 2020, a 20.81% increase from USD 7.71 billion in 2018, before the COVID pandemic. The rise in international visitors and domestic travel is expected to boost demand for new products, facilities, and services, creating investment opportunities. However, the global tourism industry faces challenges from economic volatility, social issues, and environmental problems, such as natural disasters, civil unrest, disease outbreaks, and technological failures, which threaten its long-term profitability (Gurtner, 2018).

A crisis is defined as a condition of instability or danger in social, economic, political, or international affairs, leading to decisive change or emergencies that disrupt organizations and

society (Razone, 2020). Immediate action is often necessary to address crises, as they significantly impact profitability and stability (Rongier et al., 2022; Human Resource Management Association, 2021). Crises are high-impact, often unexpected events caused by organizational structures, people, technology, economics, or natural disasters.

The hotel industry, a major tourism sector, is vulnerable to crises due to its high employment, investment, and infrastructure demands. This has led to increased interest in developing effective crisis management systems to prevent or mitigate negative consequences (Gurtner, 2018). Tourism firms prioritize staff and customer safety, brand image, and cash flow, often through proper crisis management systems (Sigala, 2020; Chan et al., 2019). Human resource responsibilities in crisis management include issue resolution, change management, intervention, design, empowerment,

and human capital development (Ritchie & Jiang, 2019).

Human resource problems can negatively impact an organization's performance during crises, making it vital to have strategies to manage operations with minimal losses and disruptions. HR managers play a critical role in developing and implementing crisis management plans to respond immediately to potential threats. Crisis management skills are essential for HR managers to lead successful organizations and maintain their jobs during challenging times (Department of Management Services, 2020).

Several models enhance organizational capacity to foresee, prevent, and mitigate crises, emphasizing proactive rather than reactive strategies. These include the structural-functional system highlighting communication, the diffusion of innovation model for information sharing during emergencies, and the unequal human capital model addressing workplace inequality (Marker, 2020; Zulkarnaini & Sarip 2019).

Recent studies on crisis management focus on business restoration, recognizing the importance of people in crisis management. This study aims to analyze human resource crisis management models used by DOT-accredited hotels in Western Visayas, providing evidence of effective crisis management strategies.

Objectives of the Study

Generally, this study aimed to analyze and synthesize the human resource crises management models adopted among DOT accredited hotels in Western Visayas.

Specifically, the study aimed to:

1. describe the hotel personnel profile in terms of age, sex, education, number of years in service, and number of years in current position.
2. describe the hotel profile in terms of size, number of years of operation, number of employees, type of guests, type of service, and type of ownership.
3. determine the level of crisis management knowledge, skills, and attitude of human resource personnel among DOT-accredited hotels in Western Visayas.
4. determine the human resource crisis management practices among DOT-accredited hotels in Western Visayas in terms of pre-crisis, during a crisis, and post-crisis.

5. determine the level of human resource crisis management performance among DOT-accredited hotels in Western Visayas.

6. determine whether there are significant differences in the level of knowledge, skills, and attitudes on human resource crisis management of respondents when grouped by respondents' profile indicators.

7. determine whether there is significant differences in the pre-crisis, during-crisis, and post-crisis management practices among DOT-accredited hotels when classified in terms of hotel profile indicators.

8. determine whether significant correlations exist between the respondents' level of knowledge, skills, attitude, hotel human resource management practices, and human resource crisis management performance.

9. determine which of the study variables is a significant predictor of human resource crisis management of DOT-accredited hotels.

Hypotheses

Given the aforementioned objectives, the following hypotheses were advanced:

1. There are no significant differences in the respondents' level of knowledge, skills, and attitude on human resource crisis management by profile indicators.
2. There is no significant differences in the pre-crisis, during-crisis, and post-crisis management practices among DOT-accredited hotels when classified by hotel profile indicators.
3. No significant correlations exist between the respondents' level of knowledge, skills, attitude, hotel human resource management practices, and human resource crisis management performance.
4. None of the study variables is a significant predictor of human resource crisis management performance among DOT-accredited hotels.

Theoretical Framework of the Study

The crisis Management Theory outlines how organizational communication relies on a structured network and hierarchy for information flow and management. Crisis management is crucial for preventing or mitigating damage to an organization and its stakeholders (Coomb's, 2007 as cited in Masu, 2018). It encompasses leaders' actions and communication to reduce crisis likelihood, minimize harm, and restore order

(Bundy & Pfarrer, 2015; Pearson & Clair, 1998 as cited in Masu, 2018).

In human resource management (HRM), the Ability, Motivation, and Opportunity (AMO) theory is widely used to explain the relationship between people management and performance outcomes. The theory posits that an individual's performance (P) is a function of their ability (A), motivation (M), and opportunities (O) ($AMO = P$), which in turn influences organizational performance. The AMO model also helps understand the link between HR initiatives and performance improvements (Purcell et al., 2003). It groups various practices into three performance dimensions, suggesting their interaction can predict numerous outcomes (Kellner, A et al., 2019).

Resource-based theory posits that resources that are valuable, rare, difficult to imitate, and non-sustainable are key to a company's long-term success. These resources form the basis for developing company skills that enhance performance over time. The resource-based view (RBV) has long been discussed in strategic management, identifying critical resources and their impact on competitive advantage and other organizational issues like environmental performance, profitability, and strategic alliances (Zulkarnaini, 2019). RBV emphasizes the importance of valuable, rare, unique, and irreplaceable human resources for creating a competitive edge (Evanz et al., 2021).

Conceptual Framework of the Study

Based on the theoretical perspectives presented above, it is assumed that the crises management knowledge, skills, and attitudes of employees and the organization's human resource crisis management practices (pre-crisis, during crises, and post-crisis) may influence its human resource crisis management performance. In addition, it is assumed that the knowledge, skills, and attitudes of human resource personnel differ by personal profile so does the human resource crisis management of hotels by their structural indicators. Analyzing the relationships that exist between these variables and determining the predictive ability of each of these variables to the human resource crisis management performance would enable the development of a crisis management model adopted by these DOT-accredited hotels. Moreover, the researcher assumed that organizations under study operate in a very volatile business environment where environmental shocks or crises like disasters, calamities, epidemic, and the like happen every now and then, which may threaten the business operation and its sustainability and that to mitigate the negative effect of these crises, the management implement crises management programs. It is in this context the researchers aimed to analyze and synthesize the human resource crises management model adopted by DOT-accredited hotels in Western Visayas. Figure 1 below depict the conceptual framework of this study.

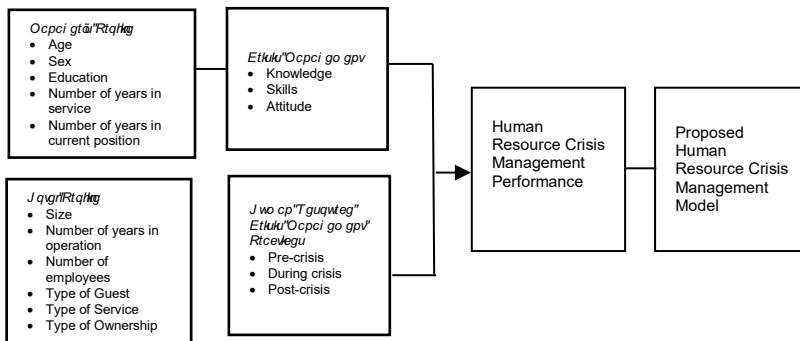


Figure 1. Model Analysis of the Human Resource Crisis Management among DOT-Accredited Hotels in Western Visayas, Philippines

Scope and Limitation of the Study

This research study is a model analysis of the human resource crisis management of 67 DOT

accredited hotels in Western Visayas, Philippines conducted in 2022-2023. A quantitative research methodology was used utilizing a survey among 67 DOT-accredited hotels represented by their

respective human resource manager as respondents. The inclusion criteria included hotels with at least five years of operation in Western Visayas and had experience human resource crises in the last five years. Non DOT-accredited hotels and accommodation establishments and those outside Western Visayas were excluded from the

population. The managers' knowledge, skills, and attitude on human resource crisis management, the human resource pre-crises, during-crises, and post-crises practices, and the hotel's human resource crisis management performance were included in addition to the profile indicators of managers and hotels.

Methodology

The study used the survey predictive non-experimental research design among the 67 DOT-accredited hotels in Western Visayas represented by their respective human resource manager. These 67 hotels is the total population of DOT-accredited hotels in Western Visayas in 2023 that have been in operation for at least five years and have encountered crisis in the last five years.

Research Instrument

A researcher-made questionnaire was used which undergone content and construct validation by five-panel jurors and has reliability Cronbach Alpha of 0.98. A 5 point Likert Scale was used to measure the skills, knowledge and attitude of managers which were transformed into three levels of measurement - high, average, and low. Likewise, the same levels of scale were used to measure the human resource crises practices and performance.

Ethical Consideration

To ensure ethical compliance on the conduct of the study, a permission to conduct the research were secured from each hotel management as well as the respondents' consent on the use of their information. Anonymity of the participating hotels and of the respondents were observed and a no conflict of interest disclosure statement was also made by the researcher.

Results and Discussion

Profile of Managers

The data presented in Table 1 indicate that the majority of hotel managers share several key characteristics. Specifically, 76% of the managers are 35 years old or younger, and 75% are female. Furthermore, a significant portion, 84%, hold a bachelor's degree. Regarding their tenure, 85%

Data Gathering and Processing Procedures

The researcher personally distributed and collected the filled-in survey instrument from each of the human resource managers of the hotels. The collected data were reviewed by the researcher as to completeness, consistency, and validity. Then the cleaned data were encoded and analyzed using Statistical Package for social Sciences software. Frequencies and central tendencies were used to describe the profile of the respondents and hotels, measure their level of knowledge, skills and attitudes on human resource crises managements as well as the hotels pre-crises, during, and post crises management practices and the assessment of human resource crisis management performance.

A normality test was performed to determine data homogeneity. After it was determined that the data are normally distributed, tests of differences in group mean scores such as t-test and ANOVA were used while Pearson's r coefficient was used to test if there are significant correlations among study variables. Linear regression analysis was used to determine significant predictors of the human resource management performance. Test of stability was also performed to determine how stable the model was. All tests were set at 95% level of confidence and 5% margin of error.

have been in service for 10 years or less, and 63% have held their current position for 5 years or less. These findings suggest that hotel managers tend to be young, well-educated women with a notable amount of experience in the industry, albeit relatively new to their current roles.

Table 1

Profile of the Managers

Variables	f	%
Entire Group Age	67	100
35 years old and below	51	76
36-45 years old and above	11	16
46-55 years old and above	5	8
Sex		
Male	17	25
Female	50	75
Education		
With units in bachelor's degree	8	12
Bachelor's Degree Holder	56	84
With units in master's degree	3	4
Number of years in service		
5 years or less	27	40
6-10 years	30	45
11-15 years	7	10
16 or more years	3	5
Number of years in current position		
5 years or less	42	63
6-10 years	21	31
11 years and more	4	3

Table 2

Profile of DOT Accredited Hotels

Variables	f	%
Entire Group Age	67	100
Size of an enterprise		
Small (150 rooms or less)	56	83
Medium (151-299 rooms)	9	13
Large (300 or more rooms)	2	3
Number of years in operation		
5 years or less	12	18
6-10 years	25	47
11 years or more	30	35
Number of employees		
1-20 employees	2	3
21-50 employees	56	82
51 or more employees	10	15
Type of Guests		
Commercial	21	32
MICE	23	34
Resort	23	34
Type of Service		
Economy	8	12
Standard	12	18
First Class	37	55
Deluxe	10	15
Type of Ownership		
Sole Proprietorship	24	36
Partnership	4	6
Corporation	39	58

Profile of the Hotel

The data in Table 2 reveal that most of the hotels are small enterprises, with 83% having 150 rooms or fewer. The majority have been in operation for 6-10 years (47%) or over 11 years (35%). These hotels typically employ 21-50 staff members (82%). They cater to a diverse clientele, including commercial guests (32%), MICE (Meetings, Incentives, Conferences, and Exhibitions) attendees (34%), and resort visitors (34%). Additionally, 55% of these hotels offer first-class service. Regarding ownership structure, 58% are corporations and 36% are single proprietorships. This indicates a landscape dominated by small, established hotels providing high-quality service under varied ownership models.

Managers' Human Resource Crises Management Knowledge, Skills, and Attitude

The data in Table 3 indicate that hotel managers have a high level of knowledge regarding human resource crisis management, with a mean score (M) of 4.06 and a standard deviation (SD) of 0.649. Their skills in this area are also rated high, with a mean of 4.088 and an SD of 0.686. Furthermore, their attitude towards human resource crisis management is positive, reflected by a mean score of 4.092 and a very low SD of 0.057. The low variability (SD < 1.0) in their responses suggests that the managers' opinions are consistently close to the average. These findings suggest that managers are well-versed in human resource crisis planning and implementation. They are capable of devising effective solutions and strategies to mitigate the impacts of crises on the organization. Additionally, they are proficient in promoting crisis management awareness among employees, identifying the causes of crises, and breaking down solutions into manageable steps. They are also adept at detecting and identifying external hazards that could threaten the hotel's sustainability. As noted by Antonacopoulou et al. (2020), such knowledge and skills are crucial for preventing or averting crises, responding effectively when they occur, and aiding in the recovery process.

Table 3

Manager’s Human Resource Crisis Management Knowledge, Skills and Attitude

Variables	SD	Mean	Description
Level of Knowledge	0.649	4.06	High*
Level of Skills	0.686	4.088	High*
Attitude	0.057	4.092	Positive**

*Legend: 1.0-1.80 Very low; 1.81-2.60 - Low; 2.61-3.40- Moderate, 3.41-4.20 High; 4.21 – 5.00-Very high

**Legend: 1.0-1.80 Extremely negative; 1.81-2.60 - Negative; 2.61-3.40- Slightly positive, 3.41-4.20 Positive; 4.21 – 5.00-Extremely positive

Hotel Human Resource Crises Management Practices

The data in Table 4 indicate that the crisis management practices before, during, and after crises among DOT-accredited hotels in Western Visayas are rated as "Very Good," with mean scores ranging from 3.41 to 4.20 and standard deviations less than 1.0. This suggests that these hotels consistently apply effective crisis management practices throughout all phases of a crisis, and their responses are relatively uniform.

These practices encompass the identification and classification of crises, strategic planning, collaboration with employees and business partners, and quick response actions. The findings align with Luvita's (2018) study on the crisis management of MSMEs in Jakarta, which highlighted that even small organizations, such as hotels, can implement robust crisis management practices. Consequently, these practices are likely to reduce the impact and financial losses associated with disasters.

Table 4

Hotel’s Human Resource Crisis Management Practices

Variables	SD	Mean	Description
Pre-crisis management	0.630	4.033	Very good
During crisis management	0.811	3.457	Very good
Post-crisis management	0.694	3.870	Very good

*Legend: 1.0-1.80 Poor; 1.81-2.60 - Fair; 2.61-3.40- Good, 3.41-4.20 Very good; 4.21 – 5.00-Excellent

Hotels’ Human Resource Crisis Management Performance

The data in Table 5 showed that the human resource crisis management performance among the DOT accredited hotels in Western Visayas is “Very good”(M=4.056, SD=0.814) as assessed by the managers and their responses are homogeneous as reflected by the standard deviations. The indicators on human resource crises management among others, include the ability to minimize the negative impact of crises on business operation, the

management responded and managed the crises, organization immediately identified vulnerability or risks through scanning and impact assessment, the organization have formulated effective crisis management policy and crisis communication plan, and the organization have kept records of crisis and how it was addressed. This means that the hotel managers believed that the hotel has a “very good” human resource crises management performance as the result of very good human resource crises management.

Table 5
Hotel's Human Resource Crisis Management Performance

Variable/Questions	SD	Mean	Description
Overall human resource management performance	0.814	4.056	Very good
1. The organization have prevented and reduced the impacts of crisis.	3.940	.756	Very good
2. The organization have responded and managed the crisis.	4.059	.795	Very good
3. The organization have quickly and effectively recovered from the crisis.	3.910	.792	Very good
4. The organization have quickly identified (internal and external) and analyzed the crisis.	3.880	.749	Very good
5. The organization immediately identified vulnerability or risks through scanning and impact assessment.	3.761	.854	Very good
6. The organization have formulated effective crisis management policy and crisis communication plan.	3.895	.818	Very good
7. The organization have improved action plans.	3.835	.784	Very good
8. The organization have trained, tested, and insured means and ways for crisis management.	3.820	.845	Very good
9. The organization have conducted crisis management leadership initiatives.	3.806	.815	Very good
10. The organization have measured crisis team member performance.	3.925	.874	Very good
11. The organization have coordinated, measured, and monitored impacts of crisis.	3.820	.822	Very good
12. The organization have kept records of crisis and how it was addressed.	3.955	.833	Very good
13. After a crisis, the organization have formulated recovery goals, plans, and provide resources, define accountability, and improve internal and external communications.		.805	Very good

**Legend: 1.0-1.80 Poor; 1.81-2.60 - Fair; 2.61-3.40- Good, 3.41-4.20 Very good; 4.21 – 5.00-Excellent*

Differences in Human Resource Crises Management Knowledge, Skills, and

Attitude by managers' profile Indicators

The data in Table 6 show that all managers, regardless of age, possess a "high" level of knowledge on crisis management. Among them, those aged 20-35 years have the highest knowledge scores (M=4.11, SD=0.63). This suggests that younger managers have a better understanding of crisis management. However, the difference in mean scores is not statistically significant at the 95% confidence level, so the null hypothesis is retained, indicating no significant difference in knowledge levels across different age groups.

This finding also holds true when managers are grouped by sex, education, years of service, and years in their current position. Similar results were observed for the levels of skills and attitudes toward crisis management. The results reveal that the knowledge, skills, and attitudes of managers regarding human resource crisis management do not significantly vary based on these demographic factors. Therefore, the null hypothesis is retained due to insufficient evidence to reject it.

These findings contradict Cvetcovic's (2018) study, which found that men were more confident in their ability to cope with flooding and perceived greater individual preparedness compared to women.

Table 6
Differences in Human Resource Crises Management Knowledge, Skills, and Attitude of Respondents when grouped by managers' profile indicators

Variables	Knowledge			Skills			Attitude		
	SD	Mean	Description	SD	Mean	Description	SD	Mean	Description
Age									
20-35 years old	.63	4.11	High	.65	4.15	High	.60	4.17	Positive
36-45 years old	.66	3.94	High	.87	3.73	High	.70	3.87	Positive
46 years old and above	.78	3.73	High	.78	3.98	High	.85	3.62	Positive
<i>F-value</i>		2.79			2.09			1.48	
<i>p-value</i>		0.07			0.13			0.23	
<i>Decision</i>		Retain Ho			Retain Ho			Retain Ho	
Sex									
Male	.65	4.16	High	.74	4.18	High	.66	4.17	Positive
Female	.64	4.02	High	.66	4.05	High	.65	4.06	Positive
<i>t-Value</i>		0.77			0.66			0.58	
<i>p-value</i>		0.44			0.54			0.56	
<i>Decision</i>		Retain Ho			Retain Ho			Retain Ho	
Education									
BS Undergraduate	.89	3.90	High	.87	3.87	High	.80	3.98	Positive
BS Graduate	.62	4.09	High	.64	4.14	High	.63	4.12	Positive
With units in Maters	.43	3.73	High	.80	3.51	High	.69	3.75	Positive
<i>F-Value</i>		0.69			1.67			0.56	
<i>p-value</i>		0.54			0.97			0.57	
<i>Decision</i>		Retain Ho			Retain Ho			Retain Ho	
No. of years in service									
1-5 years	.66	4.10	High	.89	4.17	High	.67	4.14	Positive
6-15 years	.55	3.99	High	.58	3.95	High	.54	4.01	Positive
16 years and above	.94	3.97	High	1.0	3.95	High	.98	3.93	Positive
<i>F-Value</i>		0.25			0.54			0.13	
<i>p-value</i>		0.87			0.66			0.94	
<i>Decision</i>		Retain Ho			Retain Ho			Retain Ho	
No. Of years in current position									
1-5 years	.66	4.10	High	.71	4.12	High	.66	4.15	Positive
6-15 years	.46	3.74	High	.41	3.76	High	.45	3.69	Positive
16 years and above	.51	4.63	High	.39	4.72	High	.75	4.46	Positive
<i>F-Value</i>		0.56			0.73			1.26	
<i>p-value</i>		0.58			0.49			0.29	
<i>Decision</i>		Retain Ho			Retain Ho			Retain Ho	

*Legend: 1.0-1.80 Very low; 1.81-2.60 - Low; 2.61-3.40- Moderate, 3.41-4.20 High; 4.21 – 5.00-Very high

**Legend: 1.0-1.80 Extremely negative; 1.81-2.60 - Negative; 2.61-3.40- Slightly positive, 3.41-4.20 Positive; 4.21 – 5.00-Extremely positive

Differences in Human Resource Crises Management Practices of Hotels when group by profile indicators

The data in Table 7 illustrate the human resource crisis management practices among DOT-accredited hotels in Western Visayas during pre-crisis, during-crisis, and post-crisis phases, categorized by hotel profile.

a. Small hotels were rated "Excellent" in pre-crisis management (M=4.47, SD=0.63).

b. Medium hotels were rated "Very Good" in pre-crisis management (M=4.05, SD=0.56).

c. Large hotels were also rated "Very Good" in pre-crisis management (M=4.03, SD=0.49).

This suggests that medium-sized hotels have implemented very good pre-crisis management practices, including effective emergency response plans, timely information dissemination, and necessary actions to mitigate crises and protect individuals.

During the COVID-19 crisis, all hotel sizes received "Very Good" ratings for their crisis management practices, with mean scores ranging from 3.40 to 4.21 and a standard deviation greater than 1.0.

In the post-crisis phase, only large hotels were rated "Excellent" in human resource crisis management, while small and medium-sized

hotels were rated "Very Good." The consistency in ratings across respondents is supported by ANOVA test results, indicating no statistically significant variations in responses. Therefore, the null hypothesis is retained.

Other Factors: When categorized by the number of years in operation, number of employees, type of service, and type of ownership, respondents rated all hotels as "Very Good" in crisis management practices. However, in the pre-crisis phase, a significant difference was found in

the mean scores of hotels serving MICE guests compared to those serving commercial guests, with MICE-serving hotels rated better. Therefore, the null hypothesis in this regard was rejected.

Overall, these findings indicate that while hotel size influences pre-crisis and post-crisis management ratings, other factors such as years in operation, number of employees, and type of ownership show uniformity in ratings, except in the specific case of hotels serving MICE guests compared to commercial guests.

Table 7
Differences in Human Resource Crises Management Practices of Hotels when group by profile indicators

Variables	SD	Pre-Crisis	Description	SD	During Crisis	Description	SD	Post Crisis	Description
		Mean			Mean	Mean			
Size									
Small	.63	4.41	Excellent	.76	3.78	Very good	.68	3.80	Very good
Medium	.56	4.05	Very good	1.08	3.95	Very good	.75	4.17	Very good
Large	.49	4.03	Very good	.35	3.45	Very good	.21	4.45	Excellent
<i>F-value</i>		1.47			2.79			1.59	
<i>p-value</i>		.24			0.07			0.21	
<i>Decision</i>		Retain Ho			Retain Ho			Retain Ho	
No. of years in operation									
5 years or less	.83	4.11	Very good	.96	3.67	Very good	.87	3.96	Very good
6-10 years	.50	4.24	Excellent	.82	3.37	Very good	.65	4.05	Very good
11 years or more	.58	3.83	Very good	.75	3.44	Very good	.61	3.68	Very good
<i>F-Value</i>		0.77			0.66			0.58	
<i>p-value</i>		0.44			0.54			0.56	
<i>Decision</i>		Retain Ho			Retain Ho			Retain Ho	
No. of employees									
1-20 employees	.35	4.75	Excellent	.42	3.10	Very good	.28	4.40	Excellent
21-50 employees	.62	3.99	Very good	.82	3.55	Very good	.71	3.87	Very good
51 or more employees	.66	4.08	Very good	.63	2.97	Very good	.66	3.75	Very good
<i>F-Value</i>		3.329			.525			2.195	
<i>p-value</i>		0.042			.594			.120	
<i>Decision</i>		Retain Ho			Retain Ho			Retain Ho	
Type of guests									
Commercial	.70	3.77	Very good	.63	3.27	Very good	.64	3.47	Very good
MICE	.54	4.26	Excellent	.90	3.31	Very good	.68	4.10	Very good
Resort	.57	4.04	Very good	.79	3.76	Very good	.61	3.99	Very good
<i>F-Value</i>		3.593			2.763			5.805	
<i>Mean difference</i>		0.033*			0.071			0.055	
<i>Decision</i>	0.489	(Commercial and Mice)			Retain Ho			Retain Ho	
Type of service									
Economy	.55	4.08	Very good	.62	3.46	Very good	.49	3.80	Very good
Standard	.74	3.85	Very good	.75	3.09	Very good	.75	3.87	Very good
First class	.59	4.00	Very good	.77	3.54	Very good	.68	3.77	Very good
Deluxe	.68	4.33	Excellent	1.10	3.59	Very good	.75	4.26	Excellent
<i>F-Value</i>		1.13			1.03			1.31	
<i>Decision</i>		0.34			0.39			0.28	
		Retain Ho			Retain Ho			Retain Ho	
Type of ownership									
Sole proprietorship	.58	3.67	Very good	.63	3.47	Very good	.60	3.55	Very good
Partnership	.46	4.58	Excellent	.53	4.25	Excellent	.59	4.15	Very good
Corporation	.57	4.20	Very good	.89	3.37	Very good	.59	4.03	Very good
	.63	4.03	Very good	.81	3.45	Very good	.69	3.87	Very good

*Legend: 1.0-1.80 Poor; 1.81-2.60 - Fair; 2.61-3.40- Good; 3.41-4.20 Very Good; 4.21 – 5.00-Excellent

Correlations between Manager’s Level of Knowledge, Skills, Attitude, Hotels

Human Resource Crisis Management Practices and Performance

The data in Table 8 shows the results of Pearson’s correlation tests conducted to examine the correlations between the managers’ level of knowledge, skills, and attitude toward human resource crisis management, the hotels’ human resource crisis management pre-, during, and post-crisis practices, and performance.

The results indicated a strong positive correlation between the managers’ level of knowledge, skills, and attitude, and the hotels’

human resource crisis management performance. This means that the increase in knowledge, skills, or a more positive attitude is related to the hotel’s increased human resource crisis management performance. The strength of the relationship is strong ($r > .50 > .99$) and is statistically significant at 5% level ($p\text{-value} < .05$). This finding is consistent with the findings of Gigauri (2020), wherein, team spirit, friendship, collaboration, and cooperation are essential to survive in a changing environment and this can be done through training employees not only in skills required for performing current jobs, but also for developing those skills necessary for the future in case the circumstances change.

Table 8

Correlations between Managers’ Level of Knowledge, Skills, Attitude, Hotels’ Practices, and Performance on Human Resource Crises Management (N=67)

Variables	Knowledge (df=65)		Skills (df=65)		Attitude (df=65)		Pre-Crises (df=65)		During Crises (df=65)		Post Crises (df=65)	
	r	p-value	r	p-value	r	p-value	r	p-value	r	p-value	r	p-value
Knowledge	.70	.000*	-	-	-	-	-	-	-	-	-	-
Skills	.60	.000*	.82	.000*	-	-	-	-	-	-	-	-
Attitude	.75	.000*	.73	.000*	.761	.000*	-	-	-	-	-	-
Pre-Crises	.84	.000*	.65	.000*	.587	.000*	.70	.000*	-	-	-	-
During Crises	.37	.002*	.21	.093	.306	.012*	.36	.002*	.24	.046*	-	-
Post Crises	.78	.000*	.72	.000*	.598	.000*	.65	.000*	.74	.000*	.29	.017*

*Statistically significant at 5% level $r = +1$: Perfectly positively correlated, $r = -1$: Perfectly negatively correlated, $r = 0$: No linear relationship between variables, r between 0.30 and 0.50: Moderate correlation, r between .51-.99: Strong, r between 0 and 0.30: Negligible correlation (<https://sites.education.miami.edu/>)

Predictors of Hotels’ Human Resource Crises Management Performance

Table 9 presents the results of a stepwise regression analysis on various predictors of human resource crisis management performance in hotels, including managers’ level of knowledge, skills, attitude, and the hotels’ pre-crisis, during-crisis, and post-crisis practices. Each successive model incorporates additional predictors, enhancing the overall model fit.

Model 4, which includes all variables (managers’ knowledge, skills, attitude, and pre, during, and post-crisis practices), shows the highest correlation ($R = 0.897$). This model explains 80.5% of the variance in human resource crisis management performance ($R^2 = 0.805$). The close values of adjusted R^2 (0.785) and R^2 (0.805) indicate a good fit

of the model. The regression value for Model 4 is 26.350, suggesting that 26.35% of the variation in crisis management performance can be attributed to this model. The F-value of 41.178 with a p-value of .000 signifies a strong, significant overall model fit. These results lead to the rejection of the null hypothesis, demonstrating that the managers’ knowledge, skills, and positive attitude, along with effective pre, during, and post-crisis human resource management practices, are significant predictors of the hotels’ crisis management performance.

This finding aligns with established crisis management models, which emphasize that employees’ knowledge, skills, and attitudes, combined with practical crisis management experience, can significantly predict an organization’s crisis management performance.

Table 9.1
Predictors of Hotels' Human Resource Crises Management Performance (N=67)

Models	R	R ²	Adj R ²	F-Change	df	p-value of change	Regression	Residual	F	p-value
1	.835 ^a	.698	.693	150.094	65	.000	22.853	9.897	150.094	.000
2	.870 ^b	.757	.749	15.62	64	.000	24.794	7.956	99.728	.000
3	.887 ^c	.788	.777	9.022	63	.004	25.790	6.959	77.827	.000
4	.897 ^d	.805	.785	41.178	60	.000	26.350	6.399	41.178	.000

*Statistically significant at 5% level ^a Predictor: Pre-crisis ^b Predictors: Pre-crisis, Post crises ^c Predictors: Pre-crisis, Post crises, Attitude ^d Predictors: Knowledge, Skills, Attitude, Pre-crisis, during crises, post crises

When the beta coefficients of each variable in Model 4 were tested against the human resource crisis management performance of hotels, the results revealed the following insights

Pre-crisis practices emerged as the strongest significant predictor ($\beta = .493$, p-value = .000). This indicates that for every unit change in pre-crisis practices, there is a corresponding .493 unit change in the hotel's human resource crisis management performance.

Managers' attitude towards human resource crisis management was the next significant predictor ($\beta = .267$, p-value = .020). This means that a unit change in managers' attitude results in a .267 unit change in performance.

Post-crisis practices also significantly contributed ($\beta = .241$, p-value = .017), suggesting that a unit change in post-crisis practices leads to a

.241 unit change in performance.

Other variables, including knowledge, skills, and during-crisis practices, showed some contribution but were not statistically significant (p-value > .05). This implies that knowledge and skills, as well as during-crisis practices, need to be integrated with attitude, pre-crisis, and post-crisis practices to be effective predictors of human resource crisis management performance. Therefore, the study suggests that knowledge, skills, or practices alone may not be sufficient to predict crisis management performance. Instead, a combination of knowledge, skills, positive attitude, and comprehensive practices across all crisis phases (pre, during, and post-crisis) can significantly enhance the hotels' human resource crisis management performance.

Table 9.2
Coefficient of Managers' Knowledge, Skills, Attitude, Hotels' Pre, during, and Post Crises practices on Human Resource Crises Management Performance (N=67)

Model 4	Beta	Standardized Beta	t	Sig
Knowledge	.190	.175	1.502	.138
Skills	.174	.169	1.533	.138
Attitude	.267	.250	2.397	.020*
Pre-Crises	.493	.440	4.626	.000*
During Crises	.099	.114	1.813	.075
Post Crises	.241	.238	2.449	.017*

*Statistically significant at 5% level

Conclusions

The human resource departments of DOT-accredited hotels in Western Visayas are predominantly staffed by women with at least five years of experience in their roles. These positions do not typically require a post-graduate degree. The HR managers possess high levels of

knowledge, skills, and a positive attitude, enabling them to effectively manage and mitigate the impact of crises on their hotels. They have successfully implemented crisis management programs and action plans, allowing the hotels to sustain operations during crises.

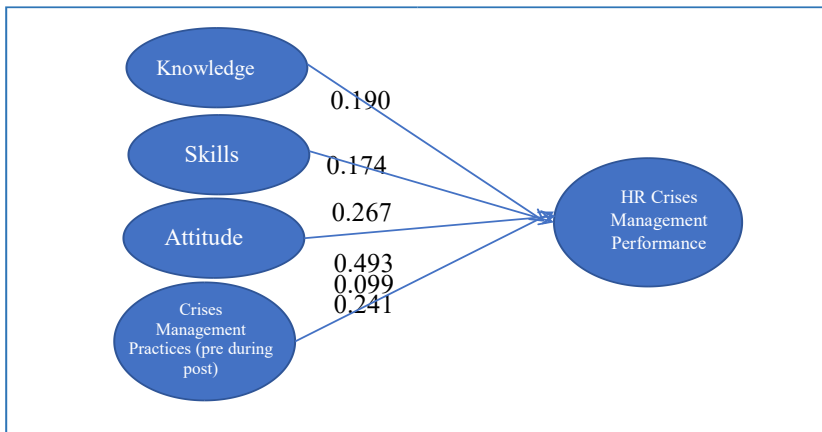
The hotels demonstrate excellent crisis management practices across all phases: pre-crisis, during the crisis, and post-crisis. Managers reported having updated and reliable information, with employees being well-informed about crisis management programs. They have also practiced business continuity plans to mitigate negative effects and have identified and detected various warning signs during crises, indicating strong preparedness.

The high knowledge, skills, and attitudes of the HR managers contribute significantly to the hotels' robust crisis management performance. Their effective human resource practices include pre-crisis preparation, damage control, and recovery plans. Developing and maintaining a crisis communication plan was a major challenge due to the time and effort required, but the hotels have managed this well.

All department heads, including general managers, frequently meet to discuss issues and

developments, collaboratively contributing to crisis solutions and plans. They have formulated formal, specific crisis management plans to address future crises, aiming to minimize their impact on employees, operations, the environment, and society.

The human resource crises management model adopted by the DOT-accredited hotels can be described having the construct of knowledge, skills, attitude, and crisis management practices in pre-crisis, during, and post crises as predictor variables of the outcome variable crisis management performance, wherein a unit change in the level of knowledge, or skills, attitude, and management practices, a corresponding unit change of 0.190, or 0.174, 0.627, 0.493, 0.099, and 0.241 are expected in human resource crisis management performance respectively. This model is best described below:



Legend:
 Predictor variables: Knowledge, skills, attitude, and crisis management practices
 Dependent variable: HR Crises management performance
 Values indicate the Beta coefficient indicating the predictive ability of each of the predictor variables
 Line and arrows indicate the direction of the relationship

Figure 2. The human resource crises management model adopted by the DOT-accredited hotels in Western Visayas

Recommendations

Based on the findings and conclusions, the following recommendations are advanced:

1. *Diversifying HR Management.* Consider hiring more male HR managers to promote gender equality in the field. Additionally, prioritize advanced educational qualifications for HR manager positions to enhance professionalism and expertise.

Implement programs to increase the retention of HR managers.

2. *Hiring Practices.* DOT-accredited hotels should optimize staffing levels during the hiring process to meet service standards and guest expectations effectively.

3. *Training and Development.* Employees should regularly attend training, seminars, and orientations on crisis response to improve their knowledge and crisis management skills. Maintaining professional attitudes, skills, and practices is crucial for effective crisis handling and guest loyalty.

4. *Crisis Management Updates.* Hotels should continually update their crisis management practices adapting to changing environments. Develop specific, actionable plans to address various crises, ensuring effective execution and rapid recovery.

5. *Crisis Management Performance.* Continuously enhance crisis management performance to deliver quality service and maintain global competitiveness. Employees should focus on improving their crisis

management skills and maintaining a positive attitude during crises.

6. *Professional Development.* Hotel personnel should engage in ongoing professional development to handle crises effectively, creating positive impacts for guests.

7. *Consistent Crisis Management Practices.* Maintain strong crisis management practices during pre-crisis, crisis, and post-crisis phases to ensure guest satisfaction and quick restoration of normal operations.

8. *Employee Support.* Hotels should support employees in overcoming trauma caused by crises, fostering a resilient workforce.

9. *Positive Impact Programs.* Develop crisis management programs with a positive impact on all stakeholders. Adopt crisis management models to minimize crisis effects, ensuring clear response strategies to protect profitability, reputation, and operations.

10. *Community Awareness.* Educate the community on crisis management to reduce property loss and enhance overall crisis preparedness. Community officials should adopt crisis management models and raise awareness among citizens.

11. *Future Research.* Researchers should explore additional crisis management models to benefit hotels worldwide. Future studies could examine other factors affecting hotel crisis management, involving more respondents from various tourism and hospitality sectors, including food and beverage, recreation, and travel and tours.

Acknowledgment

The researchers would like to extend their profound gratitude and appreciation to all the respondent-managers of hotels, panel of jurors who reviewed this work, the DOT Region 6 officers

who extended their assistance all throughout the conduct of the study, and to all those who in one way or the other contributed to the completion of this research work.

References

- Antonacopoulou, E. *et al.* (2020). *Professional ineptitude: The strategic role of human resource management in crisis prevention*. <https://journals.aom.org/doi/10.5465/AMBPP.2020.13940abstract>
- Athamne, S. (2018). HR planning for crisis management. Researchgate. https://www.researchgate.net/publication/327629010_HR_Planning_for_Crisi_Management
- Channa, N.A, Shah, S.M.M. & Ghumro, N.H. (2019). Uncovering the link between strategic human resource management and crisis management: Mediating role of organizational resilience. *Annals of Contemporary Developments in Management & HR (ACDMHR)*, 1(2), 2019. https://www.researchgate.net/publication/334865492_Uncovering_the_Link_between_Strategic_Human_Resource_Management_and_Crisis_Management_Mediating_Role_of_Organizational_Resilience
- Gigauri, I. (2020). Influence of Covid-19 crisis on human resource management and companies' response: The expert study. *International Journal of Management Science and Business Administration*, Inovatus Services Ltd., 6(6), 15-24
- Human Resources Association, Welcome to SHRM the Voice of All Things Work. <https://www.shrm.org/home>
- Koo, J. (2018). *Human resource management to overcome the crisis during the depression*. <http://scholar.dkyobobook.co.kr/searchDetail.laf?barcode=4010026983788>
- Oriordan, J. (2017). *The practice of human resource management*. https://www.ippa.ie/_fileUpload/Documents/THE_PRACTICE_OF_HRM.pdf
- Philippine Department of Tourism. (2020). Annual tourism earnings report. (tourism.gov.ph)]
- Rongier, C., Gourc, D., Lauras, M. & Galasso, F (2022). Université de Toulouse, Mines Albi, Centre Génie Industriel, Route de Teillet, 81000 Albi, France. 978-3-642-15961-9_22.pdf (springer.com)
- Saragi, R. & Prasetyo, A. (2020). *Engagement: The mediating roles of organizational support*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3551058
- Simões, M.M. (2013). *Human resources management in crisis: Effects on the employees*. <https://repositorio.iscteul.pt/bitstream/10071/10218/1/Tese%20de%20Mestrado.pdf>
- Versus Crisis Management Explained. Project Management Consulting, Training and Project Team Services (pm-alliance.com)
- Zulkarnaini, N., Shaari, R. & Sarip, A. (2019). Crisis management and human resource development: Towards research agenda. *Advances in Human Factors, Business Management and Leadership*, Conference paper, 542-552. https://link.springer.com/chapter/10.1007/978-3-030-20154-8_50
- Zulkarnaini, N.A. S., Sarip, A., Shaari, R. & Rajab, A. (2019). Crisis management and human resource development (HRD): An integrated conceptual framework. *International Journal of Recent Technology and Engineering (IJRTE)* ISSN: 2277-3878, 8(1C2). <https://www.ijrte.org/wp-content/uploads/papers/v8i1C2/A10860581C219.pdf>

Socio-cultural, Environmental, and Economic Factors Associated with Sustainable and Regenerative Coastal Tourism in the Province of Iloilo: Bases for a Model Development

*Febe Rose Libe-Torres¹, John B. Lacson Foundation Maritime University-Molo, Inc.
Carmen N. Hernandez², Central Philippine University, Jaro, Iloilo City
Rowena M. Libo-on², Central Philippine University, Jaro, Iloilo City
Luis A. Abioda², Central Philippine University, Jaro, Iloilo City*

Abstract

It is essential to identify the socio-cultural factors, environmental factors, and economic factors of sustainable and regenerative coastal tourism to minimize environmental degradation and ensure viability by improving resource allocation and ensuring long-term economic benefits while creating a mutually beneficial relationship among key tourism stakeholders and creating a sustainable tourist hotspot in the country's profound coastal tourism destination. Tourism necessitates a flexible framework that can adapt to changing global trends and endorse comprehensive policies for the future (Hussain & Haley, 2022). Coastal tourism is the largest sector of the maritime economic subdivisions and often raise arguments regarding the environmental impacts (Papageorgiou, 2016). Hence, the purpose of this study was to determine the socio-cultural, environmental, and economic factors associated with sustainable and regenerative coastal tourism in the Province of Iloilo as a basis for the development of a sustainable and regenerative coastal tourism model. Socio-cultural, environmental, and economic factors have a positive impact on sustainable coastal tourism, sustainable coastal tourism has a positive impact on regenerative coastal tourism, and economic factors have a positive impact on regenerative coastal tourism.

Keywords: *socio-cultural factors, coastal tourism, community involvement, model development*

Introduction

For a coastal tourism destination like the Province of Iloilo to manage and promote tourism more effectively, it is crucial to involve tourism stakeholders in conversations regarding the issues that affect tourism. A sustainable and regenerative coastal tourism model that incorporates the perspectives and assessments of coastal tourism stakeholders is crucial for achieving a balanced approach that benefits the environment, local communities, and the tourism industry. Their input can help shape policies and strategies that are sustainable, inclusive, and responsive to the needs of both the industry and the local community. It guarantees the responsible, long-term viability, and resilience of tourism development in coastal. As a social movement, tourism had roots that went all the way back to the eighteenth century (Rasoolimanesh, et.al, 2020). Coastal towns face unique challenges compared to their inland counterparts, and they depend on the

popularity of the beaches to draw tourists (Cash, 2022). In essence, regenerative tourism acknowledges the idea that tourists and destination managers are a part of a living system embedded in the natural environment, and it runs on principles that acknowledge the interconnectedness of different natural and social environments that are intended to return to people and land (Hussain, 2021). Our local, national, and international issues must be evaluated in the light of the regenerative development paradigm, a fresh approach to problem-solving and development (Grabel, 2015).

The main objective of the study was to determine the socio-cultural, environmental, and economic factors associated with sustainable and regenerative coastal tourism in the Province of Iloilo as basis to the development of a sustainable and regenerative coastal tourism model.

Specifically, this study sought the following objectives:

1. To determine if there are significant relationships among socio-cultural, environmental, and economic factors of sustainable and regenerative coastal tourism.
2. To determine if socio-cultural factors, environmental factors, and economic factors have a significant impact on sustainable coastal tourism.
3. To determine if sustainable coastal tourism has a significant impact on regenerative coastal tourism.
4. To determine if economic factors have a significant impact on regenerative coastal tourism.
5. To determine a coastal tourism model as an effect of this study.

Theoretical Framework

The study of coastal tourism is necessary, and this will be extensively explored using Butler's (1980) tourism area life cycle or TALC theory. According to Sahli (2020), tourism area life cycle is used to study the evolution of a particular tourism destination. The model suggests that a tourism area evolves through six predictable different stages, namely, exploration, involvement, development, consolidation, stagnation and decline or rejuvenation. Socio-cultural theory of Vygotsky looks at the ways that society impacts development and behavior, moreover, culture and beliefs are influenced by teachers, parents, and peers. Social interaction is key to learning and proper development (practicalpie.com). Thus, socio-cultural theory is also imperative in the study of identifying socio-cultural factors of sustainable and regenerative coastal tourism. The theory of capital by Pierre Bourdeau is also relevant on the study of factors as sustainable and regenerative coastal tourism. According to Huang (2019), cultural capital is gained mainly through an individual's initial learning and is unconsciously influenced by the surroundings. Moreover, the stakeholder theory of

Freeman (2001), is also essential to this study. He emphasized that stakeholder theory is essential for management to consider the interests of all stakeholders and maintain a balance among these interests.

Conceptual Framework

To maintain sustainable coastal tourism, the effects on coastal communities' physical, social, and cultural environments must be controlled (Ghosh, 2012). There is a growing understanding that seaside tourism must be developed sustainably in recent decades. This strategy reduces or completely avoids the negative effects of tourist growth and sets the stage for long-term enjoyment of the advantages. Sustainable development in the tourism sector involves two important considerations: preserving the environment, natural resources, and biodiversity, as well as preserving the living cultural legacy and customs. The state, businesses, and local communities should work together to develop sustainable tourism development initiatives.

The coastal environment of the Philippines is diverse, with a variety of ecosystems, a wealth of species, and high levels of productivity. The ecology is essential to the wellbeing of the coastal area and adjacent ecosystems. The coastal zone is one of the most vulnerable geographical areas because of this connection (Huttche, et al., 2002). Regenerative tourism has the potential to change how we value the act of tourism in a destination where the shift from a visitor economy to a resident economy that needs and values of local people are placed above that of temporary visitors. Given that our nation is an archipelago, sustainable coastal tourism can help coastal communities grow. As a result, assessing a sustainable coastal tourism model through the managers of coastal tourism establishments will show if the tourism industry is prepared to solve urgent coastal tourism issues and concerns encountered by tourism establishments and the coastal tourism industry.

Figure 1 below shows the conceptual framework of the study.

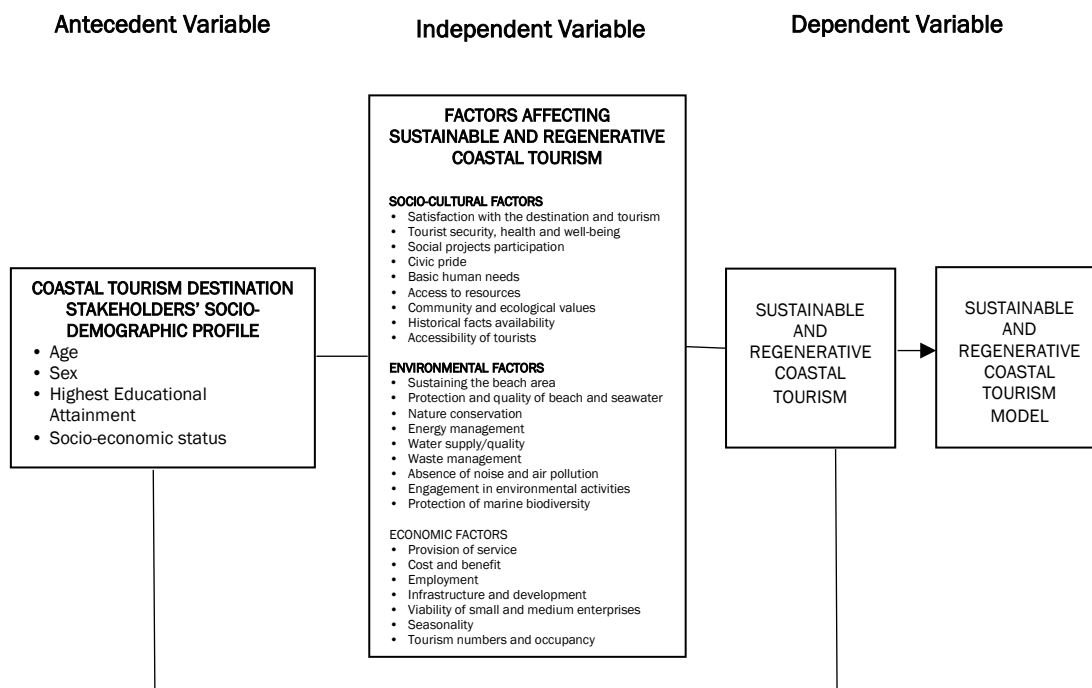


Figure 1. Socio-cultural, Environmental, and Economic Factors Associated with Sustainable and Regenerative Coastal Tourism in the Province of Iloilo as Basis for the Development of a Sustainable and Regenerative Coastal Tourism Model

The main objective of the study was to determine the socio-cultural, environmental, and economic factors associated with sustainable and regenerative coastal tourism in the Province of Iloilo as basis to the development of a sustainable and regenerative coastal tourism model.

The respondents of the study were the two hundred forty-three (243) coastal tourism stakeholders of coastal tourism in the municipalities of Ajuy, Concepcion, Carles, Guimbal, Miag,ao and San Joaquin in the Province of Iloilo. They were given a self-administered questionnaire or answered in a Google form link prepared by the researcher. Personal observations in the coastal communities were also done by the researcher. The study was conducted from December, 2022 to May, 2023.

The researcher-made Sustainable and Regenerative Coastal Tourism Questionnaire was used as the data-gathering instrument that had

undergone validity and reliability testing and undergone Ethics Review. The researcher also utilized Google forms with the aid of emails and Facebook messenger as communication channels with the informed consent to participate as well as personal interaction with the printed self-administered questionnaires which had been accomplished by the coastal tourism stakeholders mentioned above thru site visits and observations. The study is limited to the use of descriptive-correlational research using statistical tools such as percentage, frequency count, mean, and standard deviation, independent sample t-test, and one-way ANOVA. Confirmatory Factor Analysis was conducted to check the model fit of the tested variables to further undergo multiple regression analysis to identify the coastal tourism model of sustainable and regenerative coastal tourism in the Province of Iloilo.

Significance of the Study

This study is relevant and has significant benefits to the Department of Tourism, tourism Enterprise and Entrepreneurs or Investors, Local Government Unit Officials and Barangay Council, Tourism Officers of Coastal Municipalities in the country, the Local coastal community, Tourists and Future researchers who may significantly needing the results for further plans and improvement of local projects and initiatives.

Review of Related Literature

Sustainable tourism concepts shown by different studies discuss its benefits and how it will answer the pressing social, environmental, and economic impact of coastal tourism. Ghosh (2012) emphasized that several international conventions apply to the coastal tourism industry in an attempt to make it more sustainable and the notable ones include the United Nations Convention on the Law of the Sea. Lal Mukherje (2020) mentioned the following advantages of sustainable coastal tourism, which include financial gain that benefits the state. Some studies suggested that environmental assessment of sustainable tourism is to use the criteria set by GSTC (Tiu, 2013). Moreover, integrated methodology made it possible to understand how to manage beaches so that both the experiences of visitors are maximized, and the ecosystem is protected (Lukoseviciute & Panagopoul, 2021). Raub and Martin-Rios (2019) created a model with features that acknowledges that the hospitality sector must actively participate in forging partnerships with stakeholders to find solutions to the huge sustainability issues.

Regenerative Tourism as considered as the maturation of sustainability concepts is an integral idea that coastal tourism sector must adapt to maintain the concept of sustainability as a driver of growth in the coastal tourism of the country being an archipelago. Imperative with the concepts of regenerative tourism, studies revealed

that sustainable tourism is attainable with the awareness and concerns of the tourism stakeholders (Hussain, 2021). Postma (2021) said that it concentrates on the things in life that are truly important where it improves the quality of life for locals by meeting their basic requirements and assisting communities and tourist destinations in ongoing self-renewal. Regenerative tourism discourses take a comprehensive approach, considering the viewpoints of the destination, the community, and the environment (Glusac, 2021).

Socio-cultural, environmental and economic factors discussed by various authors focuses on the development of more resilient ecosystems, communities, and economic endeavors, cleanliness of beach environments and safety, and valuing the concept of regenerative tourism in the development of communities. Travelers' responsible environmental behavior toward sustainable coastal tourism by Sultan et al. (2020) found that user-generated content's cognitive and affective causes have an impact on travelers' environmental concerns and attitudes. Beach management and beach nourishment where development of coastal tourism is a feasible strategy for enhancing the regional economy and coastal tourism is conducive to the development of economic structure in Xiamen (Yang, et. al, 2021).

In the Philippine context, being a archipelago rich on marine biodiversity, the value of sustainable coastal tourism equates with the responsible resource management and environmental knowledge and awareness that is imperative in the growth of tourism. This is also true in the other countries' experience like China wherein beach management and beach nourishment where development of coastal tourism is a feasible strategy for enhancing the regional economy and coastal tourism is conducive to the development of economic structure in Xiamen (Yang, et. al, 2021).

Methodology

This Chapter discusses the methodology of the factors associated to the sustainable and regenerative coastal tourism practices in Iloilo with the descriptive-correlation design.

Research Design

The research design implemented be a descriptive-correlational study using confirmatory factor analysis as statistical tool with the use of regression analysis. Correlation research investigates the relationship between two or more

variables. Fraenkel and Wallen (1993 in Garcia, 2017) it can also be associational research where the relationship of two or more factors are explored, without manipulating any of the variables being investigated.

The dependent variable in this study were sustainable coastal tourism and regenerative coastal tourism while the independent variables were socio-cultural factors, environmental factors, economic factors. In addition, socio-demographic personal factors such as sex, age, highest educational attainment, and socio-economic status were used as the antecedent variables.

Respondents of the Study

The research samples were taken using purposive sampling method where two hundred forty-three (243) of coastal tourism stakeholders comprises the tourists, local government officials or workers, residents and coastal establishments' manager/owner and workers of the coastal tourism municipalities with developing coastal tourism were selected and computed samples using the formula. The six (6) municipalities from coastal destinations of Iloilo, Philippines comprising the municipalities of Ajuy, Concepcion, and Carles from the Northern Iloilo and Guimbal, Miag-ao and San Joaquin from Southern, Iloilo were selected by the researcher looking unto the DOT figures and readings on different materials of the coastal destinations of Iloilo.

The study has the following inclusion and exclusion criteria: the coastal municipalities has existing coastal tourism establishments employees and managers has to be part of the business for at least five (5) years, the local government officials has to be working in any offices and the local barangay council, tourists must have visited the destinations from the last three (3) years, and years and all the respondents must be 18 years old. An Informed Consent Form will be part of the Self-Administered Questionnaire both in online forms and printed copies for the respondents to accomplish.

Sampling Technique

The sampling technique implemented was simple random sampling. Using the formula, two hundred forty-three (243) samples were computed out of six hundred fifty-three (653) total respondents consented to participate in the study. The respondents were the coastal tourism stakeholders of the coastal destination such as the

coastal destination's residents, local government unit officer and workers, managers and employees of coastal tourism enterprises/ establishments, and tourists of the coastal destinations of Iloilo, Philippines comprising the six (6) coastal municipalities of: Ajuy, Concepcion, Carles, Guimbal, Miag,ao and San Joaquin. The standard normal deviate of 1.96 corresponding to 95% level of confidence with proportion target of the population of 50% (0.05) estimated and a degree of accuracy or margin of error set at 0.05 or 5%.

The formula for computing the sample size is as follows:

$$n = \frac{NZ^2 (p(1-p))}{Nd^2 + Z^2 (p(1-p))}$$

Data-Gathering Instrument

Primary data was taken using a researcher-made self-administered Factors Associated with Sustainable and Regenerative Tourism Self-Administered Questionnaire in Google Form and printed SAQs. The questionnaire is an adapted Global Sustainable Tourism Council Questionnaire of the GSTC or Global Sustainable Tourism Council and Future of Tourism Guiding Principles criteria to test sustainable and regenerative tourism practices of the coastal destination and coastal tourism establishments. The Global Sustainable Tourism Council or GSTC establishes and manages global sustainable tourism standards with the aim of increasing sustainable tourism knowledge and practices among public and private stakeholders (gstccouncil.org). Regenerative tourism questions were the Guiding Principles set by the Future of Tourism, a coalition of various organizations like Center for Sustainable Travel and Destination Stewardship Center with the Advisory Committee who provides with expertise and guidance on areas that are strategic for the transformation of tourism (futureoftourism.org).

The self-administered questionnaire was given to the different coastal tourism stakeholders comprising the tourists, the residents, the tourism enterprises employees, and the local government unit officers. It will be divided into three (3) Parts. Part 1 asks about the socio-demographic profile of the respondents such as their age, sex, highest educational attainment and socio-economic status or family income. Part 2 is about the different factors associated with sustainable and regenerative coastal tourism and Part 3 is about the

sustainable and regenerative coastal tourism practices of coastal tourism stakeholders. The questionnaire was being translated into the local dialect or Hiligaynon by the *Sumakwelan* (a reliable local Ilonggo organization for literary works on a local language) representative. An ICF or informed consent form was also presented for agreement to the respondents before answering. The Informed Consent Form discusses that the records from the study will be kept as confidential as possible.

Rating scale on Socio-cultural, Environmental, and Economic Factors. To determine the respondent’s perception on the socio-cultural, environmental, and economic factors of sustainable and regenerative coastal tourism in their areas, a rating scale on Socio-cultural Factors with nine (9) items questions were utilized. For Environmental factors, nine (9) items were utilized while seven (7) items were used for Economic Factors.

The self-administered questionnaires have items provided with columns to put a check mark indicating their assessment or perception with the different factors of sustainable and regenerative coastal tourism. The respondent’s responses for each item were scored 5 for Strongly agree; 4 for Agree; 3 for Moderately agree; 2 for Disagree; and 1 for Strongly disagree.

To interpret the respondents’ obtained mean score, the researcher uses a scale of means and corresponding interpretation as reflected in Table 1. Each factor was thoroughly described in this study, measuring their specific mean per items.

Scale of Means for Socio-cultural, Environmental, and Economic Factors.

Scale of Means	Interpretation
4.21 – 5.00	Very high
3.41 – 4.20	High
2.61 – 3.40	Moderate
1.81 – 2.60	Low
1.00 – 1.80	Very low

Rating Scale on Sustainable Coastal Tourism and Regenerative Coastal Tourism.

To determine the respondent’s assessment about Sustainable Coastal Tourism, twenty-one (21) items questions were utilized. For Regenerative Coastal Tourism, thirteen (13) items were used.

The self-administered questionnaires have items provided with columns to put a check mark indicating their assessment or perception with the

different factors of sustainable and regenerative coastal tourism. The respondent’s responses for each items was scored 5 for Strongly agree; 4 for Agree; 3 for Moderately agree; 2 for Disagree; and 1 for Strongly disagree.

To interpret the respondents’ obtained mean score, the researcher uses a scale of means and corresponding interpretation as reflected in Table 1. Each factor was thoroughly described in this study, measuring their specific mean per items.

Scale of Means for Socio-cultural, Environmental, and Economic Factors.

Scale of Means	Interpretation
4.21 – 5.00	Very high
3.41 – 4.20	High
2.61 – 3.40	Moderate
1.81 – 2.60	Low
1.00 – 1.80	Very low

Degree of correlation for the variables

Scale of Means	Interpretation
0.91 – 1.0	Very high
0.71 – 0.90	High
0.51 – 0.70	Moderate
0.31 – 0.50	Low
0.00 – 0.30	Little or Negligible

The validity and reliability of the instruments was considered and pilot-tested in the Municipality of Tigbauan, Iloilo with thirty (30) coastal tourism stakeholders as respondents. The Ethical Review Board of the university was also sought to check the research instrument for ethical considerations.

Validity of the Questionnaire

The questionnaire have undergone validation with 5 panel of validators whereby the results showed that the following mean score of the following criteria: (1) items in the instrument are relevant to the objectives of the study is 5 (five); (2) the items in the instrument can obtain depth to constructs being measured is 5 (five); (3) the instrument has an appropriate sample of items for the construct being measured is 4.8 (four point eight); the items and their alternatives are nether or narrow nor limited in its content is 4.8 (four point eight); the items in the instrument are stated clearly is 5 (five); the items on the instrument can elicit responses which are stable, definite, consistent and not conflicting is 5 (five); the terms adapted in the scale are culturally appropriate is 5

(five); the layout or format of the instrument is technically sound is 5 (five); the responses on the scale show a reasonable range of variation is 4.8 (four point eight); the instrument is not too short or long enough that the participants will be able to answer it within a given time is 5 (five); the instrument is interesting such that the participants will be induced to respond to it and accomplish it fully is 5 (five); the instrument as a whole could answer its basic purpose for which it is designed is 5 (five); and the instrument is culturally acceptable when administered in the local setting is 5 (five). The three validators commented that to province in the title add in socio-cultural factors accessibility of the coastal destination and protection of marine biodiversity in the environmental factors, check tenses of verbs, and questions are very clear and will support needed necessary data for the study.

Reliability of the Questionnaire

The questionnaire for pilot-testing was administered in the Municipality of Tigbauan for pilot-testing with 30 participants. The researcher conducted a reliability test to test the internal consistency of the survey questionnaire. Cronbach's alpha is large (≥ 0.7) as recommended by Fornell & Larcker (1981); Nunnally & Bernstein (1994), indicating that the latent variables can generate reliable scores when they are used.

For socio-cultural factors which consists of nine (9) items under the socio-cultural factors, the Cronbach alpha is equal to .894 which is interpreted as "Good" in internal consistency. Based on the reliability statistics conducted, it is concluded that this factor passed the reliability test, and the researcher can use this factor to gather data from the chosen respondents. For environmental factor which consists of nine (9) items under the environmental factors, the Cronbach alpha is equal to .832 which is interpreted as "Good" in internal consistency. Based on the reliability statistics conducted, it was concluded that this factor passed the reliability test, and the researcher can use this factor to gather data from the chosen respondents. For the economic factors consisting of eight (8) items under the economic factors, the Cronbach alpha is equal to .882 which is interpreted as "Good" in internal consistency. Based on the reliability statistics conducted, it is concluded that this factor

passed the reliability test, and the researcher can use this factor to gather data from the chosen respondents. Lastly, the sustainable and regenerative tourism practices consisted of thirty-four (34) items under the sustainable and regenerative coastal tourism scale. The Cronbach alpha is equal to .974 which is interpreted as "Excellent" in internal consistency. Based on the reliability statistics conducted, it is concluded that this factor passed the reliability test, and the researcher can use this factor to gather data from the chosen respondents

Data Gathering Procedure

The data gathering procedure was simple random sampling wherein a total of two hundred forty-three (243) samples was acquired from the total of six hundred fifty-three (653) coastal tourism stakeholders which comprises the coastal tourism stakeholders of the coastal destination's residents, local government unit officer and workers, managers and employees of coastal tourism establishments, and tourists of the coastal destinations of Iloilo, Philippines of the six (6) coastal municipalities of: Ajuy, Concepcion, Carles, Guimbal, Miagao and San Joaquin. The coastal tourism stakeholders were made to answer a self-administered questionnaire with a consent to participate through filling-up Google forms or answering printed SAQs where they were reached by asking permission thru the respective Mayors or municipal executive thru the Municipal Tourism Officers of each municipality and resort owners or managers and indicated the questionnaire links and printed forms to be answered. Personal observations in the coastal communities were also done by the researcher.

When the self-administered questionnaires were retrieved, the obtained data was coded, tallied and run through the appropriate statistical tools to be analyzed and interpreted.

Data Processing Procedure and Analysis

The SPSS software was used to process the data gathered. The statistical tools to be used are percentage, frequency count, mean, and standard deviation to identify the descriptive results. Confirmatory Factor Analysis (CFA) was conducted and a multiple regression analysis to identify the model for sustainable and regenerative coastal tourism in the Province of Iloilo. Alpha level was set at 0.05.

Results

Relationship of socio-cultural, environmental, and economic factors of sustainable and regenerative coastal tourism

Data in Table 1 and Table 1.1 reveals that all socio-cultural factors have positive significant relationship with all the environmental and all economic factors. There are high correlation between satisfaction with the destination and basic human needs ($r = .721, p = .000$), nature conservation and protection and quality of beach and seawater ($r = .707, p = .000$) and protection of marine biodiversity ($r = .714, p = .000$); energy management and water supply/quality ($r = .746, p = .000$); engagement in environmental activities and protection of marine biodiversity ($r = .776, p = .000$); provision of service and absence of noise and pollution ($r = .706, p = .000$), cost and benefit and employment ($r = .706, p = .000$); infrastructure and development and viability of small and medium enterprises ($r = .776, p = .000$); and seasonality and tourism numbers and occupancy ($r = .724, p = .000$). Low correlation

(ranging from $r = .311$ to $r = .497$) among almost all variables except for social projects participation and infrastructure and development ($r = .265, p = .000$) and viability of small and medium enterprises ($r = .283, p = .000$); civic pride and energy management ($r = .255, p = .000$) and infrastructure and development ($r = .256, p = .000$); access to resources and seasonality ($r = .201, p = .000$); basic human needs and energy management ($r = .297, p = .000$); historical facts availability and energy management ($r = .287, p = .000$); accessibility of tourists and energy management ($r = .286, p = .000$); sustaining the beach area and social projects participation ($r = .300, p = .000$), and civic pride ($r = .304, p = .000$); protection and quality of beach and seawater and energy management ($r = .242, p = .000$); energy management and satisfaction with the destination ($r = .184, p = .000$), and seasonality ($r = .237, p = .000$); and absence of noise and pollution and energy management ($r = .252, p = .000$) has little/negligible to correlation.

Table 1
Pearson's r Results of the Correlation of Sociocultural, Environmental and Economic Factors of Sustainable and Regenerative Coastal Tourism

Categories	14		15		16		17		18		19		20		21		22		23		24		25	
	r	r prob	r	r prob	r	r prob	r	r prob	r	r prob	r	r prob	r	r prob	r	r prob	r	r prob	r	r prob	r	r prob	r	r prob
Accessibility of tourists	.565	-	.413	-	.525	-	.358	-	.286	-	.536	-	.486	-	.470	-	.378	-	.309	-	.426	-	.307	-
Basic human needs	.421	-	.388	-	.572	-	.401	-	.297	-	.428	-	.454	-	.461	-	.455	-	.381	-	.402	-	.333	-
Satisfaction with the destination & tourism	.505	-	.433	-	.498	-	.345	-	.184	-	.477	-	.497	-	.380	-	.476	-	.308	-	.357	-	.319	-
Tourists' security, health, and well-being	.444	-	.471	-	.511	-	.430	-	.386	-	.377	-	.416	-	.426	-	.447	-	.333	-	.424	-	.521	-
Civic pride	.465	-	.304	-	.439	-	.390	-	.255	-	.420	-	.414	-	.347	-	.342	-	.320	-	.363	-	.273	-
Historical facts availability	.514	-	.431	-	.593	-	.383	-	.254	-	.381	-	.453	-	.478	-	.464	-	.356	-	.445	-	.381	-
Community and ecological values	.537	-	.491	-	.631	-	.531	-	.461	-	.422	-	.538	-	.519	-	.555	-	.437	-	.482	-	.457	-
Social projects participation	.397	-	.300	-	.377	-	.415	-	.341	-	.344	-	.338	-	.321	-	.283	-	.434	-	.368	-	.265	-
Access to resources	.311	-	.384	-	.475	-	.581	-	.502	-	.201	-	.305	-	.324	-	.417	-	.538	-	.335	-	.323	-
Nature conservation	.620	-	.433	-	.606	-	.472	-	.278	-	.586	-	.563	-	.533	-	.424	-	.339	-	.453	-	.341	-

Table 1 Continued

Protection of marine biodiversity	.653	-	.371	-	.576	-	.427	-	.331	-	.468	-	.486	-	.600	-	.360	-	.242	-	.472	-	.363	-
Protection & quality of beach & seawater	.641	-	.412	-	.664	-	.451	-	.266	-	.461	-	.534	-	.601	-	.481	-	.403	-	.563	-	.416	-
Engagement in environmental activities	.706	-	.348	-	.622	-	.408	-	.306	-	.428	-	.471	-	.574	-	.376	-	.304	-	.546	-	.386	-
Absence of noise & air pollution		-	.390	-	.615	-	.422	-	.252	-	.468	-	.512	-	.492	-	.384	-	.274	-	.452	-	.351	-
Sustaining the beach area	.390	-		-	.532	-	.506	-	.471	-	.412	-	.465	-	.430	-	.543	-	.482	-	.499	-	.496	-
Waste management	.615	-	.532	-		-	.595	-	.494	-	.504	-	.663	-	.649	-	.573	-	.465	-	.551	-	.498	-
Water supply/quality	.422	-	.506	-	.595	-		-	.746	-	.322	-	.446	-	.491	-	.504	-	.625	-	.395	-	.388	-
Energy management	.252	-	.471	-	.494	-	.746	-		-	.237	-	.237	-	.493	-	.490	-	.577	-	.419	-	.417	-
Seasonality	.615	-	.412	-	.504	-	.322	-	.237	-		-	.724	-	.490	-	.433	-	.332	-	.533	-	.403	-
Tourism numbers & occupancy	.512	-	.465	-	.663	-	.446	-	.387	-	.650	-		-	.658	-	.650	-	.535	-	.686	-	.564	-
Cost and benefit	.492	-	.430	-	.649	-	.491	-	.417	-	.403	-	.658	-		-	.626	-	.403	-	.706	-	.605	-
Viability of small & medium enterprises	.384	-	.543	-	.573	-	.504	-	.490	-	.433	-	.650	-	.626	-		-	.625	-	.666	-	.776	-
Provision of service	.274	-	.482	-	.465	-	.625	-	.577	-	.332	-	.535	-	.603	-	.654	-		-	.521	-	.520	-
Employment	.452	-	.499	-	.551	-	.395	-	.419	-	.533	-	.686	-	.706	-	.666	-	.339	-		-	.624	-
Infrastructure and development	.351	-	.496	-	.498	-	.388	-	.417	-	.403	-	.564	-	.505	-	.776	-	.77	-	.624	-		-

Model Analysis

Model Analysis of Sustainable and Regenerative Coastal Tourism

Confirmatory factor analysis. Data in Table 2 and Table 2.1, to confirm analysis of fit, a confirmatory factor analysis (CFA) was performed by using the first-order measurement model. Following Hair et al. (2006) and Hu and Bentler (1999) recommendations, control was done for multiple goodness-of-fit indices namely Chi-square (CMIN or χ^2) statistic/DF, Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residuals (SRMR), Comparative Fit Index (CFI), and Tucker-Lewis Index (TLI). To be able to say that the model is considered adequate fit, the comparative fit index (CFI) and Tucker-Lewis index (TLI) should be $>.90$ while $>.95$ for it to be considered good fit. Rootmean-square error of approximation (RMSEA) value of $<.08$ is considered adequate fit while $<.06$ is considered as good fit. The standardized root mean square residual (SRMR) is considered good fit if it is lower than $.80$ while acquiring a value of $.00$ is considered perfect fit (Hu and Bentler, 1999). All these indices met recommended guidelines so model fit was considered acceptable. Thus, the

measurement model had a good fit with the data (Hair et al. 2006; Hu and Bentler 1998).

The original measurement model involved 79 constructs for latent variables in five categories (Regenerative Coastal Tourism, Sustainable Coastal Tourism, Socio-cultural factors, Environmental factors, and Economic factors). Constructs that did not meet the correlation parameters were considered admissible and were removed from the model. This included each of the factor's categories with two items respectively and regenerative and sustainable coastal tourism with two items and ten items respectively. The modified measurement model, as presented in Table 7.2 Confirmatory factor analysis, is an approach to Structural Equation Modelling as specified by Schumacker and Lomax (2010), thus enabling the researcher to evaluate each individual scale item and to examine overall model fit.

Factor loadings. Data in Table 2.1 and 2.2 showed the fit measures and factor loadings of the variables. Looking at the modified model in more detail, the Regenerative Coastal Tourism (RT) construct comprised of 10 instead of 13 latent variables, Sustainable Coastal Tourism (ST) construct of 11 instead of 21, Economic factors (EC) of 7 items was retained, Environmental factors (E), and Socio-cultural factors (SC). The first dependent variables were hypothesized to

measure Sustainable Tourism (ST), the second to measure Regenerative Tourism (RT) and the last three to measure Socio-cultural factors, Environmental factors and Economic factors hypothesized to measure Sustainable coastal tourism with Economic factors and Sustainable

coastal tourism to measure Regenerative coastal tourism. At first glance, the modified model shows rather high standardized factor loadings with values exceed 0.7; thus high levels of validity can be expected (Groenland & Stalpers, 2012; Brown, 2015; Kline, 2005).

Table 2
Model Fit
Test for Exact Fit

χ^2	<i>df</i>	<i>p</i>
3037	769	< .001

Table 2.1
Fit Measures

CFI	TLI	SRMR	RMSEA	RMSEA 90% CI	
				Lower	Upper
0.908	0.902	0.0329	0.0672	0.0647	0.0697

Table 2.2
Confirmatory Factor Analysis of Factors Associated with Sustainable and Regenerative Coastal Tourism

Factor	Indicator	Estimate	SE	Z	<i>p</i>	Stand. Estimate
Regenerative Tourism (10 items)	RT2	0.610	0.0240	25.4	< .001	0.820
	RT3	0.630	0.0235	26.8	< .001	0.847
	RT4	0.623	0.0235	26.5	< .001	0.842
	RT5	0.635	0.0237	26.8	< .001	0.847
	RT6	0.634	0.0229	27.7	< .001	0.865
	RT7	0.655	0.0245	26.7	< .001	0.846
	RT10	0.664	0.0254	26.1	< .001	0.834
	RT11	0.623	0.0227	27.4	< .001	0.859
	RT12	0.620	0.0234	26.5	< .001	0.842
	RT13	0.646	0.0241	26.8	< .001	0.847
Sustainable Tourism (11 items)	ST3	0.661	0.0245	27.0	< .001	0.851
	ST5	0.640	0.0237	27.0	< .001	0.850
	ST6	0.689	0.0264	26.1	< .001	0.833
	ST7	0.668	0.0252	26.5	< .001	0.841
	ST10	0.672	0.0254	26.5	< .001	0.840
	ST12	0.653	0.0247	26.5	< .001	0.840
	ST14	0.681	0.0259	26.3	< .001	0.837
	ST15	0.707	0.0251	28.2	< .001	0.874
	ST19	0.647	0.0247	26.1	< .001	0.834
	ST20	0.666	0.0256	26.0	< .001	0.831
	ST21	0.635	0.0248	25.6	< .001	0.823
Economic (7 items)	EC1	0.592	0.0288	20.5	< .001	0.715
	EC2	0.611	0.0265	23.0	< .001	0.776
	EC3	0.690	0.0315	21.9	< .001	0.749
	EC4	0.635	0.0290	21.9	< .001	0.748
	EC5	0.667	0.0270	24.7	< .001	0.814
	EC6	0.558	0.0268	20.8	< .001	0.722
	EC7	0.643	0.0250	25.8	< .001	0.836
Environmental (6 items)	E2	0.603	0.0275	22.0	< .001	0.750
	E3	0.635	0.0275	23.1	< .001	0.777
	E6	0.603	0.0273	22.1	< .001	0.755
	E7	0.603	0.0269	22.4	< .001	0.762
	E8	0.634	0.0265	23.9	< .001	0.797
	E9	0.631	0.0258	24.4	< .001	0.808
Socio-Cultural (7 items)	SC1	0.500	0.0250	20.0	< .001	0.702
	SC3	0.579	0.0278	20.9	< .001	0.724
	SC4	0.595	0.0257	23.2	< .001	0.779
	SC5	0.593	0.0257	23.1	< .001	0.777
	SC7	0.602	0.0242	24.9	< .001	0.818
	SC8	0.645	0.0277	23.3	< .001	0.781
	SC9	0.557	0.0251	22.2	< .001	0.756

Data in Table 2.3 showed the factor estimates of the factors of sustainable and regenerative coastal tourism whereby regenerative tourism and sustainable tourism ($SE= 0.862, p= <.001$), with economic factors ($SE= 0.774, p= <.001$) at the top followed by environmental factors ($SE= 0.747, p= <.001$), and socio-cultural factors ($SE= 0.688, p= <.001$) as the bottom factor. While sustainable coastal tourism with economic factor ($SE= 0.821, p= <.001$) has quite good estimates followed by environmental factor ($SE= 0.798, p= <.001$), and socio-cultural factors ($SE= 0.750, p= <.001$) with somehow good estimates. Economic factors and environmental factors ($SE= 0.778, p= <.001$) has good estimates with socio-cultural factors ($SE= 0.737, p= <.001$). Environmental factors and socio-cultural factors ($SE= 0.805, p= <.001$) has also good estimates.

Correlation of variables. Data in Table 3 showed the relationship of the research variables. Correlations presented revealed positive and significant relationships between all research variables. However, a high value of correlation was found between socio-cultural factors and environmental factors ($r=0.723, p=.000$), while with economic ($r=0.665, p=.000$) and environmental factors ($r=0.704, p=.000$) are strongly correlated. Moreover, sustainable tourism and socio-cultural factors ($r=0.829, p=.000$), economic factors, ($r=0.829, p=.000$), and economic factors ($r=0.829, p=.000$) are also strongly correlated and strongly positively correlated with regenerative coastal tourism ($r=0.829, p=.000$).

Table 2.3

Factor Estimates of the Factors Associated with Sustainable and Regenerative Coastal Tourism

Factor	Estimate	Estimate	SE	Z	p	Stand. Estimate
Regenerative Tourism	Regenerative Tourism	1.000 ^a				
	Sustainable Tourism	0.862	0.0117	73.9	<.001	0.862
	Economic	0.774	0.0185	41.9	<.001	0.774
	Environmental	0.747	0.0204	36.6	<.001	0.747
	Socio-Cultural	0.688	0.0235	29.3	<.001	0.688
Sustainable Tourism	Sustainable Tourism	1.000 ^a				
	Environmental	0.821	0.0159	51.6	<.001	0.821
	Economic	0.798	0.0170	47.0	<.001	0.798
	Socio-Cultural	0.750	0.0199	37.6	<.001	0.750
Economic	Economic	1.000 ^a				
	Environmental	0.778	0.0199	39.0	<.001	0.778
	Socio-Cultural	0.737	0.0219	33.6	<.001	0.737
Environmental	Environmental	1.000 ^a				
	Socio-Cultural	0.805	0.0183	44.1	<.001	0.805
Socio-Cultural	Socio-Cultural	1.000 ^a				

^a fixed parameter

Table 3

Correlation Matrix of variables

Variable	1		2		3		4		5	
	r	r prob	r	r prob	r	r prob	r	r prob	r	r prob
Socio-cultural factors	-	-	-	-	-	-	-	-	-	-
Environmental factors	0.723	-	-	-	-	-	-	-	-	-
Economic factors	0.665	-	0.704	-	-	-	-	-	-	-
Sustainable coastal tourism	0.696	-	0.763	-	0.745	-	-	-	-	-
Regenerative coastal tourism	0.638	-	0.696	-	0.722	-	0.829	-	-	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Regression analysis results. This study was conducted to determine if various factors can impact sustainable tourism. It was hypothesized that socio-cultural, environmental, and economic factors will positively influence sustainable tourism. Thus hypothesis 1 (H1), Hypothesis 2 (H2) and Hypothesis 3 (H3) were tested by regressing these factors on sustainable tourism.

Data in Table 3.1 reveal that the socio-cultural, environmental, and economic factors are significant predictors of sustainable coastal tourism. An *R* value of .829 and an *R*² value of .626 were obtained. This explains that socio-cultural factors as predictor contributed 62.6 of the variations of sustainable coastal tourism, *F*= 466, *p* = .000.

Table 3.1

Results of multiple regression analysis for the impact of Socio-cultural Factors, Environmental Factors, and Economic Factors on Sustainable Coastal Tourism

Values N=643	R	R ²	R ² Change	B	Beta	F	Sig.
Socio-cultural Factors	.829	.626	.681	.187	.037	466*	.000
Environmental Factors	.829	.626	.681	.681	.355	466*	.000
Economic Factors	.829	.626	.681	.355	.064	466*	.000

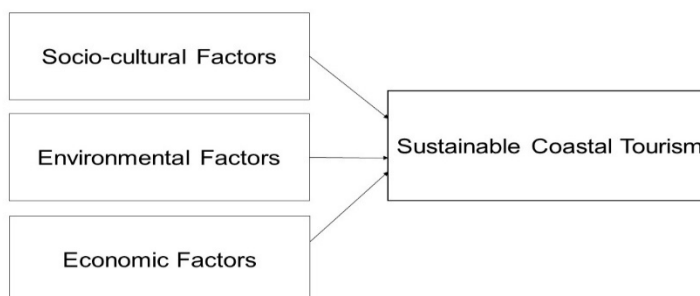


Figure 3. *Model of the analysis for the impact of socio-cultural factors, environmental factors, and economic factors on sustainable coastal tourism*

Separate linear regression analyses were conducted for Hypothesis 4 (H4) and Hypothesis 5 (H5). In testing Hypothesis 4 (H4), a regression analysis was performed, with sustainable tourism as an independent variable and regenerative tourism as the dependent variable. Table 5 presents the regression results used to test H4. In the testing of goodness of fit, the sustainable coastal tourism would be able to elucidate the *R*²

value of 0.687 of regenerative tourism, which had the capability of explanation of 68.7% of the variance of regenerative tourism.

As indicated in Table 4, sustainable tourism had a **significant impact** on regenerative tourism ($\beta = .829, p < .001$). Thus, Hypothesis 4 (H4) was supported. Figure of the model is shown in Figure 3.

Table 4

Results of regression analysis for the impact of sustainable coastal tourism on regenerative coastal tourism

Values N=643	R	R ²	R ² Change	B	Beta	F	Sig.
Sustainable Tourism	.829	.627	.687	.829	.020	1432*	.000

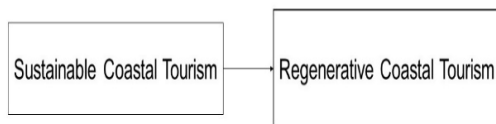


Figure 4. Model of the analysis for the impact of sustainable coastal tourism on regenerative coastal tourism

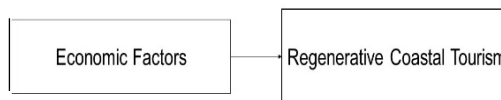


Figure 5. Model of the analysis for the impact of economic factors on regenerative coastal tourism

In testing Hypothesis 5 (H5), a regression analysis was performed, with economic factor as an independent variable and regenerative tourism as the dependent variable. Table 9 presents the regression results used to test H5. In the testing of goodness of fit, the economic factor would be able to elucidate the R² value of 0.521 of regenerative

tourism, which had the capability of explanation of 52.1% of the variance of regenerative tourism.

As indicated in Table 5, economic factor had a **significant impact** on regenerative tourism ($\beta = .722$, $p < .001$). Thus, Hypothesis 5 (H5) was supported.

Table 5

Results of regression analysis for the impact of economic factors on regenerative coastal tourism

Values N=643	R	R ²	R ² Change	B	Beta	F	Sig.
Economic Factors	.722	.521	.521	.722	.027	709*	.000

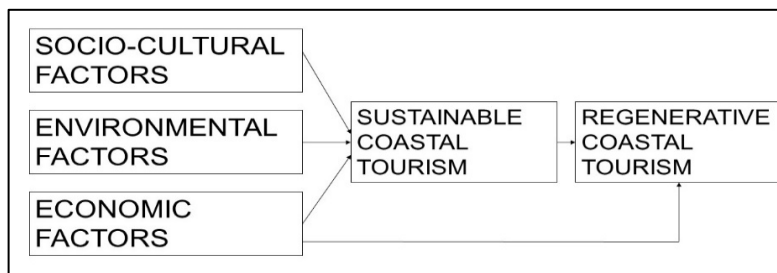


Figure 6. Model of Sustainable and Regenerative Coastal Tourism in the Province of Iloilo

In support of the findings of Mihalic (2014) on the Triple A Model of sustainability which combines the idea of sustainable tourism in

behavioral and political economics which has the three stages of awareness, agenda, and action.

Discussion

Coastal tourism is an important economic driver for the province of Iloilo. One of the sectors of the largest tourist industry in the world that is expanding is coastal tourism destinations where consequences of climate change have an impact on how coastal tourism affects the environment (Nara, 2014).

The results of the relationships among socio-cultural, environmental, and economic factors of sustainable and regenerative coastal tourism where socio-cultural factors have positive significant relationship with all the environmental and all economic factors. Alongside with the study of Nguyen, et.al (2020) in South Central Coast of Vietnam showed the factors that impact the

development of sustainable tourism in the South Central Coast namely: institutions and policies for tourism development, infrastructure, tourism resources, human resources for tourism, diversity of tourism services, relevant support services, activities of association and cooperation for tourism development, tourism promotion and encouragement, tourists' satisfaction, local community, and other factors wherein among these factors, institutions and policies for tourism development, infrastructure, tourism resources, and local community strongly impact the development of sustainable tourism in the region. There is a high correlation among variables such as satisfaction with the destination and basic human needs, nature conservation and protection and quality of beach and seawater and protection of marine biodiversity, energy management and water supply/quality, engagement in environmental activities and protection of marine biodiversity, provision of service and absence of noise and pollution, cost and benefit and employment, infrastructure and development and viability of small and medium enterprises and seasonality and tourism numbers and occupancy. This conforms in the Mediterranean study of coastal tourism industry of Mejjad, Rossi, and Pavel (2022) where they highlight the critical social and economic roles the coastal tourism industry plays while the steady and uncontrolled growth of this sector and related activities compromise these coastal countries' ecology and environmental quality. This requires the decision-makers and stakeholders' attention toward adopting new strategies and approaches toward greening the blue tourism industry to ensure sustainable economic, social and environmental growth of this industry.

The coastal tourism model formulated socio-cultural factors, environmental factors, and economic factors have a positive impact on sustainable coastal tourism. Tourism must be able to cohabit with other sectors to reduce the impact of its inherent susceptibility (Sunardi, et al., 2021). Mihalic (2014) noted in her study that sustainability calls for a thorough understanding of the steps involved in how a destination actually

implements a sustainability agenda where a theory called responsible tourism that uses a Triple A model to match the sustainability indicators and give guidance on how to put the sustainability concept into practice. Socio-cultural factors, environmental factors, and economic factors as perceived by the stakeholders are important in gauging the activities in the coastal destination, as Iloilo, to put sustainability practices in place and achieve better outcomes in sustainable tourism.

Sustainable coastal tourism has a significant impact on regenerative coastal tourism. Sustainable coastal tourism is indeed impacting regenerative coastal tourism; its indicators and factors can be the same and this supports the idea posed by Hussain (2021) that tourists and destination managers are a part of a living system embedded in the natural environment. It runs on principles that acknowledge the interconnectedness of different natural and social environments that are intended to return to people and land.

Economic factor having a positive impact on regenerative coastal tourism supporting Glusac (2021), who introduced that regenerative tourism improves the quality of life for locals by meeting their basic requirements and assisting communities and tourist destinations in ongoing self-renewal which takes a comprehensive approach, considering the viewpoints of the destination, the community, and the environment. Regenerative tourism, according to Hussain (2021), acknowledges that travelers and tourist sites are living systems integrated into the natural environment and permits the interconnectivity of various natural and social contexts, which also includes sustainable tourism niches. Moreover, Postma (2021), concentrates on the things in life that are truly important and regenerative tourism improves the quality of life for locals by meeting their basic requirements and assisting communities and tourist destinations in ongoing self-renewal. Regenerative tourism discourses take a comprehensive approach, considering the viewpoints of the destination, the community, and the environment (Glusac, 2021).

Conclusions and Recommendations

Given the findings, the following conclusions were drawn:

1. The sociocultural factors of satisfaction with the destination and basic human needs are imperatively related since satisfied stakeholders can also experience meeting their needs in the coastal destination. Moreover, the environmental factors of nature conservation and protection and quality of beach and protection of marine biodiversity as conservation activities involved protection of marine species and the beach area. Other environmental factors such as energy management and water supply/quality are highly related as the use of electricity is also equated in water supply for some coastal destinations that use reservoirs with electric pumps. Moreover, the environmental factors, engagement in environmental activities, and protection of marine biodiversity are highly related as coastal destinations conduct community activities that involve the protection of marine biodiversity and coastal resource management to protect the availability of marine resources for the community. The economic factors, provision of service, and the environmental factor, absence of noise and pollution, are related because the services provided relate to transportation and services that likely cause noise and pollution. Economic factors of cost benefit and employment are related since the value of spending in the destinations and available jobs for the locals are imperative. Infrastructure and development and viability of small and medium enterprises as economic factors are significantly related since SMEs also create infrastructure as they expand and grow. Lastly, the economic factors of seasonality and tourism numbers and occupancy are indeed related since the value of peak seasons correlates with higher tourist arrivals and higher rates of available accommodation. On the other hand, the sociocultural factor, social projects participation and economic factors infrastructure and development and viability of small and medium enterprises has nothing to do with each other since social projects would not affect the mentioned economic factors. The sociocultural factor of civic pride, the environmental factor of energy management, and the economic factor of infrastructure and development do not relate since the sense of place would not affect energy resources and use and infrastructure buildup. The

socio-cultural factor access to resources does not affect the economic factor of seasonality since resources in the coastal destinations are not a basis for the seasonality of the coastal tourism products. Additionally, the sociocultural factor of basic human needs, historical facts and availability, and accessibility of tourists, and the environmental factor of energy management do not relate since the use of energy may not affect the provision of basic needs of shelter and food and the historical significance of the places and its accessibility in the coastal destinations of the province of Iloilo. The environmental factor, sustaining the beach area, and socio-cultural factor, social project participation and civic pride does not relate since the value of the beach area may not be found relevant in the sense of place and community activities by the coastal tourism stakeholders.

2. Socio-cultural, environmental, and economic factors are the pillars of sustainable coastal tourism. Assessment of the critical coastal tourism stakeholders showed that these three factors, underscored by different indicators identified in this study, indeed impact sustainable coastal tourism.

3. Sustainable coastal tourism is indeed impacting regenerative coastal tourism; its indicators and factors can be the same and this supports the idea posed by Hussain (2021) that tourists and destination managers are a part of a living system embedded in the natural environment. It runs on principles that acknowledge the interconnectedness of different natural and social environments that are intended to return to people and land.

4. With the economic factor having a positive impact on regenerative coastal tourism, regenerative tourism improves the quality of life for locals by meeting their basic requirements and assisting communities and tourist destinations in ongoing self-renewal which takes a comprehensive approach, considering the viewpoints of the destination, the community, and the environment.

5. To conclude, the coastal tourism model of the Province of Iloilo for sustainable and regenerative coastal tourism comprises sociocultural factors, environmental factors, and economic factors which it positively impacts sustainable coastal tourism and economic factors impact regenerative coastal tourism with

sustainable coastal tourism positively impacts regenerative coastal tourism.

Based on the findings and conclusion, the following recommendations are advanced:

1. The sociocultural factors have to be intensified and consider grassroots knowledge, indigenous communities of the island communities, and other social and cultural factors that shape the coastal destinations, especially of the island communities. The environmental factors have to be broadened and consider scientific data and perspectives that measures the environmental aspects of the coastal destination, especially the water quality and marine biodiversity essential in the facts of sustainable and regenerative coastal tourism studies. The economic factors must be more extensive as they are relevant in regenerative coastal tourism concepts. It is essential to consider the lifestyle of coastal destinations and the lifestyle and behavior of tourists that shape the coastal tourism destination. It is relevant to study further the economic factors, especially the coastal tourism value chain that will guide the local government in implementing tourism campaigns and programs that will shape the coastal tourism development of the province of Iloilo.

2. Local tourism officers must be the key stakeholders to uphold the principles of sustainable development through sustainable tourism, especially in the coastal areas. Plans and programs for sustainable coastal tourism are to be led by the local tourism officers, developing local barangay council's actions as partners of the

coastal tourism establishment for sustainable coastal tourism as part of the priority. "Regenerative coastal tourism" must be imbibed by the respondents for the future and the development of coastal tourism in the province of Iloilo. Moreover, it is recommended to have more respondents to represent to have more relevant data.

3. It is recommended that regenerative coastal tourism and sustainable coastal tourism be the main agenda for developing the coastal tourism of the province of Iloilo and other coastal provinces of the country to develop as a cruise circuit hub not only in Asia but all over the world.

4. Regenerative coastal tourism has to be strengthened and initiated with the concept of seasonality in the coastal destinations where jobs and employment have to be the top priority of the local government, and investors have to be fostered for better coastal tourism in the coastal destinations of Iloilo especially those emerging destinations in the province.

5. This coastal tourism model could be a benchmark for Banate-Barotac Bay Resource Management Council, Inc. (BBBRCMI) as an inter-local government alliance composed of the municipalities of Anilao, Banate, Barotac Nuevo, and Barotac Viejo in the province. Sustainable and Regenerative coastal tourism must be the main agenda in the Integrated Coastal Management Strategies and Coastal Tourism Management Plans of the Province of Iloilo to be at the forefront and become the benchmark of the sustainable coastal tourism circuit in the Philippines.

Acknowledgement

The researcher would like to acknowledge and express extreme gratitude to the LGU and the local leaders and tourism officers of the municipalities involved in the study; the Provincial Tourism Officer of the Province of

Iloilo, John B. Lacson Foundation Maritime University-Molo, Inc and Central Philippine University administration who had been part of this endeavor.

References

Butler, R. (2006). The tourism area life cycle. *I(2). Bristol: Channel View Publications*

Cash, J. (2022). *Modus*. <https://ww3.rics.org/uk/en/modus/built-environment/homes-and->

[communities/turning-the-tide--coastal-regeneration-in-a-pandemic.html](#)

Chaudhary, H. (2023). Accesibility and its importance in tourim-hotel management.

- Mero Future Educational News and Blogs*.
<https://merofuture.com/accessibility-importance-tourism-hotel-management-grade-xi/>
- Chen, C.L. & Bau, Y.P. (2016). Establishing a multi-criteria evaluation structure for tourist beaches in Taiwan: A foundation for sustainable beach tourism. *Ocean & Coastal Management*, 121, 88-96.
<https://doi.org/10.1016/j.ocecoaman.2015.12.013>
- Ghosh, T. (2012). Sustainable Coastal Tourism: Problems and Management Options. *Journal of Geography and Geology*. 4. 10.5539/jgg.v4n1p163.
- Hussain, A. & Fusté-Forné, F. (2021). *Conscious travel paradigm and the future of tourism: The need for regenerative tourism*.
https://www.researchgate.net/publication/353632470_Conscious_travel_paradigm_and_the_future_of_tourism_The_need_for_regenerative_tourism
- Hussain, A. & Haley, M. (2022). Regenerative tourism model: Challenges of adapting concepts from natural science to tourism industry. *Journal of Sustainability and Resilience*, 2(1), article 4.
<https://digitalcommons.usf.edu/jsr/vol2/iss1/4>
- Gabel, M. (2015). Regenerative development: Going beyond sustainability. *Kosmos. Journal for Global Transformation*.
<https://www.kosmosjournal.org/article/regenerative-development-going-beyond-sustainability/>
- Glusac, E. (2021). Move over, sustainable travel. Regenerative travel has arrived. *The New York Times*. <https://www.nytimes.com/2020/08/27/travel/travel-future-coronavirus-sustainable.html>
- King, C. (2022). How can tourism be regenerative? *Blog*, Solimar International.
<https://www.solimarinternational.com/how-can-tourism-be-regenerative/>
- Kenter, J. O., O'Brien, L., Hockley, N., Ravenscroft, N., Fazey, I., Irvine, K. N. & Reed, M.S... (2015). What are shared and social values of ecosystems?. *Ecological Economics*, Elsevier. P86-99.
<https://doi.org/10.1016/j.ecolecon.2015.01.006>
- Tahiri, A. & Kovaci, I. (2017). *The theory of sustainable tourism development*. *Academic Journal of Business, Administration, Law and Social Sciences*, 3(1). IIPCCL Publishing, Vienna-Austria.
<https://iipccl.org/wp-content/uploads/2017/03/343-349.pdf>
- Mejjad, N., Rossi, A., & Pavel, A.B. (2022). The coastal tourism industry in the Mediterranean: A critical review of the socio-economic and environmental pressures & impacts. *Tourism Management Perspectives*, 44, 101007. Elsevier.
<https://doi.org/10.1016/j.tmp.2022.101007>.
- Nature conservation. *Law Insider*. <https://www.lawinsider.com/dictionary/nature-conservation>
- Niemisalo, N. (2014). Tourism safety and security: Findings from tourism intensive finnish lapland. *Arctic Yearbook*.
https://arcticyearbook.com/images/yearbook/2014/Briefing_Notes/3.Niemisalo.pdf
- Neumann, B., Ott, K. & Kenchington, R. (2017). Strong sustainability in coastal areas: A conceptual interpretation of SDG 14. *Sustain Sci*, 12(6), 1019-1035. DOI: 10.1007/s11625-017-0472-y. Epub. <https://pubmed.ncbi.nlm.nih.gov/30147766/>
- Nguyen, D., Imamura, F., & Iuchi, K. (2016). Disaster management in coastal tourism destinations: The case for transactive planning and social learning. *International Review for Spatial Planning and Sustainable Development*, 4(2), 3-17. ISSN: 2187-3666. http://dx.doi.org/10.14246/irspsd.4.2_3
- Nguyen, C., Ngo, T., Do, N., & Nguyen, N.N. (2020). Key factors affecting sustainable tourism in the Region of South Central

- Coast of Vietnam. *Journal of Asian Finance, Economics, and Business*, 7(12), 977-993. <https://doi.org/10.13106/jafeb.2020.vol7.no12.977>
- Papageorgiou, M. (2016). Coastal and marine tourism: A challenging factor in Marine Spatial Planning. *Ocean & Coastal Management*, 129, 44-48. *Science Direct*: Elsevier. <https://doi.org/10.1016/j.ocecoaman.2016.05.006>.
- Pololikashvili, Z. (2020). Tourism can help lead the world to recovery. United Nations. *UN Chronicle*. <https://www.un.org/en/un-chronicle/tourism-can-help-lead-world-recovery>
- Rocamora, J.A.L. (2022). PH pushes for 'regenerative tourism'. *Philippine News Agency*. <https://www.pna.gov.ph/articles/1173005>
- Adams, J., Greenwood, D., Thomashow, M. & Russ, A. (2018). The nature of cities. *Sense of Place*. <https://www.thenatureofcities.com/2016/05/26/sense-of-place/>
- Sahli, E. (2020). *Tourism destination development an application of Butler's (1980) tourism area life cycle model to Hammamet, Tunisia*. DOI:10.13140/RG.2.2.26359.55209
- Sainz, C. & Samorin, M.C.M. (2016). Sustainable tourism in Northern Iloilo: Perceived impact and prospects for development. *Tourism and Sustainable Development Review Journal (TSDR)*, 2(2), 30-39. DOI:10.31098/tsdr.v2i2.51
- Salahshouri, A., Fathi, S., Jiba, M., & Mohamadian, H. (2023). Psychometric of the interpersonal communication skills scale: A confirmatory factor analysis. *Research Square*. DOI: <https://doi.org/10.21203/rs.3.rs-2933967/v1>.
- Schormans, A.F. (2014). Social participation. In: Michalos, A.C. (eds) *Encyclopedia of Quality of Life and Well-Being Research*. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_2779
- Sawkar, K., Ligia, N., Mascarenhas, A. Chauhan, O.S. & Saeed, S. (1998). Tourism and the environment: Issues of concern in the coastal zone of Goa. *Environmental Science, Geography*. <http://environmentportal.in/files/wbi37134.pdf>
- Spatz, J. (2021). Regenerative tourism defined: 3 examples of destination stewardship. *Global Family Travels*. <https://www.globalfamilytravels.com/post/regenerative-tourism-defined-3-examples>
- Tahiri, A. & Kovaçi, I. (2017). Assessment of the quality of products in tourism. *European Journal of Multidisciplinary Studies*, 2(5). DOI: <https://doi.org/10.26417/ejms.v5i1.p62-72>
- Tourism seasonality. (20024). Excerpt from indicators of sustainable development of tourism destinations, a guidebook, *World Tourism*, p111-116. <https://www.unwto.org/sustainable-development/unwto-international-network-of-sustainable-tourism-observatories/tools-tourism-seasonality>
- Mai, A.V., Thi, K. C.N., Thi, T.N.N. & Le, T. (2020). Factors influencing on tourism sustainable development in Vietnam. *Management Science Letters*, 10(8). 1737-1742. DOI:10.5267/j.msl.2020.1.006
- Yun, D. & Pyo, S. (2016). An examination of an integrated tourist satisfaction model: Expectations and desires congruency. *Travel and Tourism Research Association: Advancing Tourism Research Globally*.14. https://scholarworks.umass.edu/ttra/2013/AcademicPapers_Oral/14
- Zafra, M. A. G. (2021). Developing the Philippine blue economy: Opportunities and challenges in the Ocean tourism sector. *ADB Working Paper 1291*. Tokyo: Asian Development Bank Institute. <https://www.adb.org/sites/default/files/publication/761906/adb-wp1291.pdf>

Zahedi, S. (2008). *Tourism impact on coastal environment*. Environmental Problems in Coastal Regions 7. *WIT Transactions on the built environment*, 99, WIT Press.
<https://www.witpress.com/Secure/elibrary/papers/CENV08/CENV08005FU1.pdf>

Zou, Y. & Yu, Q. (2022). Sense of safety toward tourism destinations: A social constructivist perspective. *Journal of Destination Marketing & Management*, 24, Elsevier BV. <https://doi.org/10.1016/j.jdmm.2022.100708>

The Use of ADDIE Model in the Development and Evaluation of a Training Module for Administrative Leadership and Decision Making in State Higher Education Institutions

Napoleon B. Marasigan III¹, Aklan State University, Aklan
Gynnyn G. Gumban², CPU

Abstract

This research aimed to find out the extent of administrative leadership and decision making (ALDM) practices and the least mastered topics of the respondents on leadership and decision making as bases for the development and evaluation of training module in ALDM. This study, which was carried out on the basis of evaluation research design, utilized the ADDIE model in the development of the training modules. The quantitative results were subjected to descriptive statistics which were mean scores, standard deviations, and ranks. The respondents in the analysis phase were the 35 permanent personnel of SUCs in Panay and there were 14 tryout participants in the implementation phase. The seven areas under the ALDM were generally perceived to be highly practiced by the respondents from the total rating of “Highly Practiced.” This shows that even though the respondents do not hold top management designations, they already demonstrated to a substantial extent their knowledge and skills necessary for a leader. The entirety of the training module was remarkably accepted as “excellent” by the tryout participants and experts. It can be concluded then that the developed training module is an effective and suitable training material to augment any trainings in ALDM.

Keywords: ADDIE model, training module, development and evaluation, administrative leadership, decision making

Introduction

Leaders in higher education must make sure that they coach and mentor their faculty in order to enable academic staff, administrative personnel, and faculty members to gain leadership abilities according to Varada (2022). Today, embracing continuous professional development is critical for faculty members, academic staff, and even graduate school students to survive and succeed. On the other hand, the effectiveness of the training materials determines the success of staff training initiatives. The efficacy of the training program is diminished if the course materials are not interesting and well-written. In addition to providing useful knowledge during new recruit onboarding, training materials enable departmental tasks in the absence of key workers by offering on-demand support to employees/participants, who will eventually become leaders and administrators.

In order to address the scarcity, if not complete lack, of validated training materials to support and strengthen professional development

trainings, such as in the area of administrative leadership and decision making specifically for state institutions of higher learning, the study pursued the direction on the development and evaluation of training modules based on the results on the extent of practices on administrative leadership and decision making of the participants and their least mastered topics on the stated topics.

Specifically, this study intends to ascertain the respondents' level of administrative leadership and decision-making practices as well as identify the administrative leadership and decision-making topics that they find most difficult. It also intends to develop an administrative leadership and decision-making training module based on the respondents' leadership and decision-making practices to cater the least mastered topics of the respondents; determine how acceptable is the developed training module as evaluated by the experts; and find out the evaluation of the participants on the training module.

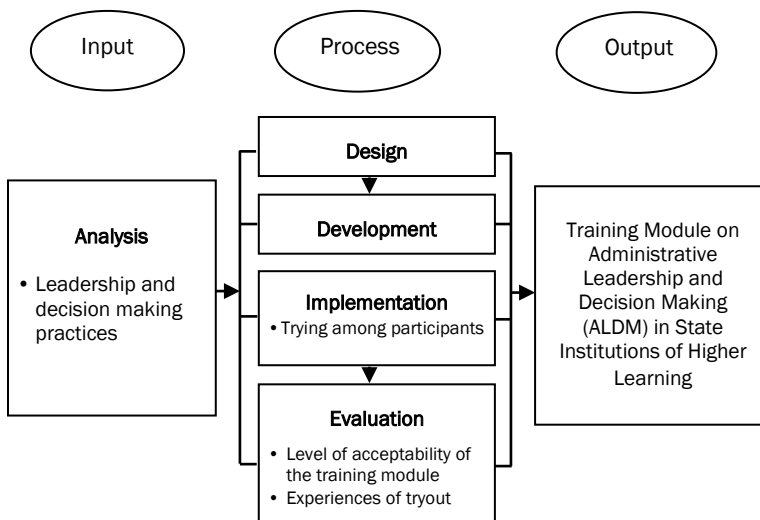


Figure 1. *The development and evaluation of the training module in administrative leadership and decision making using the ADDIE Model*

Significance of the Study

All SUCs may find great value in the study's conclusions, which aim to demonstrate the training module's contribution to administrative leadership growth and decision-making. Additionally, the study's findings might aid in their preparation and administration of the classroom. After reading the findings, faculty members may be encouraged to create training modules tailored specifically for higher education students, as they recognize the value of giving students leadership experiences during their time in college and teaching them how to define their identities, build relationships in teams, and complete tasks successfully.

Scope and Limitations of the Study

The main aim of the research was to ascertain the administrative leadership and decision making extent of practices and the least mastered topics of the respondents as bases for the development of training module in administrative leadership and decision making.

The ADDIE Instructional Model Design phases were adhered to in the development and assessment of the training module in ADLM.

The respondents in the analysis phase of the study were delimited to 35 personnel of state institutions of higher education in the whole

Panay; there were 14 participants for the tryout of the training module.

The research employed ADDIE (analysis-design-development implementation-evaluation) approach for evaluation research in order to build and assess the training module that would be applied to enhance and reinforce ALDM trainings.

Related Literature

Academic authors have given trainings a great deal of attention in their research because they have long been recognized. Many definitions of training have consequently been developed. According to Tian et al. (2016), training is the deliberate and methodical alteration of behavior through learning chances, initiatives, and programs that help participants acquire the abilities, competencies, and skill levels required to do their professions to the best of their abilities. The fact that academics are still debating the value of training research is a noteworthy development as the area is investigated further.

Some of these academics contend that the recent rise in the acceptance of the importance of training can be attributed in large part to the improved competitiveness and relative success of businesses that prioritize employee development. In keeping with the above, Walton and Zhang (2017) point out that organizational

transformation and technology improvements have gradually led to some employers, including presidents, realizing how important it is for them to invest heavily and continuously in their employees' skills and abilities in order to ensure their success.

In order to create successful instructional activities and programs, it is crucial to evaluate instructional materials, such as training modules. This is because it encourages material creators to be reflective practitioners (Schon, 2020) and actively consider what they need and want from their materials, how they are used in practice, and what impact they have. Pre-use, in-use, and post-

use are the three phases of the evaluation cycle that were developed. If materials are used in activities, training, or programs—that is, if they do not employ the dogma approach—then the evaluation of those materials is essential to moving forward, to continuously respond to the needs and wants of users, the micro and macro contexts, and in doing so, maintain the users' motivation and interest. The difficulty here is that, rather than only occurring during the selection phase when choosing materials for a course or training, evaluation is an intentional, ongoing process that occurs throughout the use of the content.

Methodology

Research Design

The study was conducted using an evaluation research design, which is defined by Kellaghan (2010) as a methodical, disciplined approach to systematic inquiry aimed at determining the assessment or appraisal of a system, material, program, practice, activity, or object. Both quantitative and qualitative methodologies, or a combination of the behavioral and social sciences, are used to characterize disciplined and methodical study.

The ADDIE development paradigm was used in this study for the training module's creation and evaluation.

Participants

There were three groups of participants who took part in this study.

Firstly, the 35 personnel of State Institutions of Higher Learning (SIHL) from the seven State College and Universities (SUCs) in Panay, Visayas, Philippines. They were determined using the purposive sampling due to the wide scope of data gathering considering the geographical locations of state universities in Panay. Secondly, the Experts. Evaluated the training module before the implementation. Lastly, the tryout Participants. They utilized the training module, and they also evaluated the material. The participants were 14 comprising of 13 graduate school students enrolled for the degree Master of Public Administration (MPA) in Second Semester of Academic Year 2022-2023, and their (1) subject professor.

The Research Instruments

There were two research instruments used in the study: (1) the validated Researcher-made Test on Administrative Leadership and Decision Making Practices; and (2) Generic Instrument for the Review, Evaluation, and Approval for the Use of Any Instructional Materials. The second instrument was adopted with permission from the University Policy and Guidelines Manual for the Preparation, Evaluation, and Approval for Utilization of the Instructional Materials Produced by the faculty of the Aklan State University.

Research Procedure

As this study adopted the framework of ADDIE in the development and evaluation of the training module, the procedure followed the sequence and the step in each phase. In the *Analysis* phase, the topics for content of the training module were identified. The *Design* phase followed after determining the topics to be modularized. After the identification of the design, *Development* phase then followed. The development of the training module started with putting together the information gathered in the previous phases. Next was the *Implementation* phase. This was the tryout of the training module to the participants. The last phase was the *Evaluation*. This refers to the output evaluation of the process and the product.

Data Analysis Procedure

For the descriptive data analysis procedure, frequency scores, mean scores, and ranks were used to determine the extent of practices of the respondents on leadership and decision making

and the least mastered topics after the test in ALDM was checked, and in the evaluation of the training module according to its (a) content; (b) format and presentation; (c) efficacy of material; and (d) performance measures.

Results and Discussion

The results show that the extent of administrative leadership and decision making practices of the 35 Personnel of state institutions of higher learning (SIHL) has an overall rating of “Highly Practiced” ($M = 3.96, SD = .433$). Results in most of the domains have the extent of “Highly Practiced” in the following: practicing ethical

decision making ($M = 4.00, SD = .685$), making decision making accordingly ($M = 3.91, SD = .742$), developing self and others ($M = 3.85, SD = .610$), leading with flexibility ($M = 3.54, SD = .610$), and managing state institutions of higher learning ($M = 3.42, SD = .608$).

Table 1

Results of the Extent of Administrative Leadership and Decision Making Practices of the Respondents

Indicator	SD	M	Description
Applying the foundations of leadership	.815	4.65	Extremely practiced
Enabling leadership	.490	4.37	Extremely practiced
Practicing ethical decision making	.685	4.00	Highly practiced
Making decision making accordingly	.742	3.91	Highly practiced
Developing others and self	.355	3.85	Highly practiced
Leading with flexibility	.610	3.54	Highly practiced
Managing state institutions of higher learning	.608	3.42	Highly practiced
Overall Rating	.433	3.96	Highly practiced

Note: Description is based on the following scale. 4.20-5.00: Extremely Practiced; 3.20-4.19:

Highly Practiced; 2.60-3.39: Practiced; 1.80-2.59: Somewhat Practiced; 1:00-1.79 Not Practiced

Table 1 may seem to show that the respondents’ strong knowledge on the foundations of leadership are practiced on a great extent. This proves the importance of mastering the fundamentals or the prior knowledge (Beyth-Marom et al., 1991; Fleishman, 2003; & Sternberg, 2013) helps a person achieve mastery in any skill or goal in whatever he or she pursues. Recent research shows that prior knowledge, or what you already know, is a key factor in performance, including decision making. Recent findings by decision scientists Bhargava, Loewenstein, and Justin (2017), for example, illustrate the difficulty of making good healthcare plan decisions without adequate and accurate prior knowledge (Vincent, Decker, & Mumford, 2002; Judge et al., 2004, Keller, 2006). Put differently, the effects of intelligence on leadership performance are mediated through expertise, knowledge, and skills for working with this

knowledge (Daly et al., 2015, Lord et al., 1986). Clearly, interventions can be developed to provide people with the knowledge they need to perform in complex tasks (Goldstein & Ford, 2002) – including leadership tasks. Moreover, the available evidence indicates that we can formulate interventions to provide people with the skills they need to work with this knowledge as they work on leadership tasks (Scott, Leritz, & Mumford, 2004).

On being an enabling leader, the results reveal that the respondents are already practicing to a great extent. In the study of Schulze & Pinkow (2022) on how enabling leaders create adaptive space, findings indicate that leaders predominantly achieve this by providing employees with head space and opportunities to connect with others and promote diversity within their organizations.

The findings also show that competence is a key determining factor for someone in producing excellent performance. In a collective situation, competence is a key determinant of success in organizations (Par et al., 2016). Employees are the driving force for the development and implementation of public services (Yusuf, 2021). The employees' development is a very important part of the process of increasing the capacity or ability of the employees (Par et al., 2016). However, weak abilities, insights, behaviors, and mindsets possessed by employees have an impact on the performance of public service delivery (Yusuf, 2021).

Further, the results may seem to reveal that the respondents are, to considerable extent, showing and practicing what flexible leaders are by embracing change, welcoming to new ideas, and by working with wide spectrum of people. The comparative studies find both similarities and differences in the essential activities and relevant behaviors for different types of positions. Research on managers at different levels found that the relevant roles and behaviors vary from first-line supervisors to top executives (Clark et al., 2016). Research comparing different types of management positions (e.g., staff vs. line position, sales vs. production) also finds important differences in the required skills and behaviors. The cross-cultural research on leadership provides

additional evidence of the need for flexibility in behavior when taking a management position in a different country (House et al., 2014). The research comparing managerial positions has implications for improving flexible, adaptive leadership. First, managers should proactively seek to reduce constraints, modify demands (role expectations), and expand their choices over time. Second, a person's ability to adapt to different requirements should be considered in making selection and promotion decisions. Third, a variety of different types of challenges and leadership positions early in one's career can help individuals become more flexible and adaptive. The research at CCL identified types of challenges that are relevant for developing different leadership skills (e.g., McCauley, Eastman, & Ohlott, 2005).

According to Koziol-Nadolna and Beye (2021) in their research on *Determinants of the Decision-making Process in Organizations*, the decision-making process is one of the most important elements of management in today's organizations, mainly because it affects the success or failure of the entity. According to Villanueva et al. (2019) competent government employees should be able to perform decision processes and make decisions with favorable effects that are considered favorable from both perspectives.

Table 2

Respondents' Least Mastered Topics in Administrative Leadership and Decision Making

Topics	M	SD	Rank
Managing state institutions of higher learning (Administrative leadership)	.608	3.42	7
Leading with flexibility (Styles of leadership)	.610	3.54	6
Developing self and others (Leadership competencies)	.355	3.85	5
Making decision making accordingly (Process of decision making)	.742	3.91	4
Practicing ethical decision making (Ethical decision making)	.685	4.00	3
Enabling leadership (Enabling leadership)	.490	4.37	2
Applying the foundations of leadership (Models and theories of leadership)	.815	4.65	1

Table 2 shows the results of the 35 respondents' least mastered topics in ALDM. Out of seven major topics as expressed through the different areas in the extent of ALDM practices, *developing self and others*, *leading with flexibility*, and *managing of state institutions of higher learning* ranked the least bottom three – fifth,

sixth, and seventh respectively. Thus, these three least mastered topics were used as the content topics for the developed training module in ALDM.

The process of finding out the least mastered topics of the respondents is the needs analysis in every development of any instructional materials

such as training manuals in education and business and industry sectors. Needs analysis is done in such a way that ultimately the organization or company can find out whether the problem really needs to be solved through a training program or not (Irianto, 2017). According to (Mangkunegara, 2015), training needs analysis is a systematic study of an educational problem by collecting data and information from various sources, to obtain problem solving or suggestions for further action. Training needs analysis is an analysis of workplace needs that is specifically intended to determine what the priority training needs are (McCauley, Eastman, & Ohlott, 2005; Blanchard, Nick, & Thacker, 2003). Information on these needs will be able to assist companies in using resources (time, funds, etc.) effectively while avoiding unnecessary training activities. Training needs analysis is a diagnosis to determine the current and future challenges that must be faced today and future challenges that must be met by training and development programs (Rivai dan Sagala, 2013).

The analysis of training needs is to identify problems that exist in the company or organization through training programs (McCauley, Eastman, & Ohlott, 2005; Blanchard, Nick, & Thacker, 2003). According to (Suwatno dan Doni, J, 2011), training needs analysis is one of the components of training that is useful for knowing the need for training that must be carried out in an analytical process, both at the organizational, position, and individual levels (Molenda, Pershing, &

Reigeluth, 2006; Kuzmits & Micahael, 2002). With this needs analysis, it will later assist organizations in utilizing existing resources effectively and efficiently (both time and cost) and prevent unnecessary training activities.

Designing the Training Module. After determining the topics to be modularized, the researcher structured the training module. The researcher structured the content whether the end-user may be as the trainer or as the trainee. In the process of developing the training module in ALDM, outlined procedures were adopted to achieve the purpose of this study. In determining the design of each training module, the researcher decided to adapt the institutionalized format used for any instructional materials development in the university where he is now connected.

The adapted format has now the following parts: (1) Title, (2) Scope, (3) Objectives, (4) Introduction (4) Discussion of Topics, (6) Self-Check Test, (8) Reflection Time, (9) Training Activities, and (10) References.

Development of the Training Module ALDM Based on the Design. In the Analysis Phase, the contents of the training module were identified, while in the Design Phase, the researcher decided to adapt the institutionalized format for IM development of Aklan State University (ASU) and this served as the framework of each training module that comprised the training module. These determined the criteria set forth the development of the training module.

Table 3

Evaluation Results for the Developed Training Module in ALDM as Evaluated by Tryout Participants

	SD	M	Evaluation
Physical aspects	.609	4.97	Excellent
Contents	.000	5.00	Excellent
Objectives	.035	4.96	Excellent
Instruction	.031	4.98	Excellent
Learning activities	.028	4.96	Excellent
Evaluate measures	.038	4.97	Excellent
Overall Ratings	.015	4.97	Excellent

Note: Description is based on the following scale. 4.51-5.00: Excellent; 3.51-4.50:

Very Good; 2.51-3.50: Good; 1.51-2.50: Fair; 1.00-1.50: Poor

Data in Table 10 reveal the level of acceptability of the developed training module in ALDM based on the evaluation of the participants with the rating of “Excellent” acceptability ($M =$

4.97; $SD = .015$). Results of each area of evaluation were also excellent in the following areas: physical aspects ($M = 4.97$; $SD = .069$), contents ($M = 5.0$; $SD = .000$), objectives ($M =$

4.96; *SD* = .035), instruction (*M* = 4.98; *SD* = .031), learning activities, (*M* = 4.96; *SD* = .028), and evaluative measures (*M* = 4.97; *SD* = .038).

These findings validate what Wentling (2016) stated that an effective training material depend on the well-defined training objective that will keep all involved on the right track throughout the training. They provide an important link between the needs assessment and the design and preparation of the training materials. The trainer can assess if the objectives were met, indicating whether the training was successful in meeting (University of Maryland, 2012). The result agrees with the findings of Inyang (1997) that training for employees is effective when the speaker make use of training manuals. On the other hand, in the field of education, Lance et al. (1999), Todd and Kuklthau (2004) confirmed a significant correlation between the presence and the use of library materials by the students and teachers with better performance. Similarly, Todd & Kuklthau

(2005) found a simple correlation between the employee’s inputs and better performance achievement. Analysis shows that the availability and the use of chalkboard, training modules and manuals, audio-visual aids, and the use of training kit have positive impact on the performance output of the new employees. Also, Emma & Ajayi (2004) asserted that “training equipment and materials have change over the years, not only facilitate employee training situation but also address the instructional needs of individuals and groups.” Okendu (2012) asserted that regular instructional supervision has a significant bearing on employees’ work performance. He also, affirmed that adequate supply of instructional resources has significant effect on employees’ performance. Onasanya and Omosewo (2011) confirmed that both standard and improvised instructional materials and training manuals have the same positive effects on users’ performances.

Table 4

Summary of the Results of Acceptability of the Training Module in Administrative and Decision Making as Evaluated by Experts

	Evaluator				SD	M	Evaluation	Rank
	1	2	3	4				
Physical aspects	4.83	5.0	3.84	5.0	.557	4.66	Excellent	4
Contents	4.83	5.0	4.17	5.0	.395	4.75	Excellent	2
Objectives	5.00	5.0	3.20	5.0	.900	4.55	Excellent	5
Instruction	4.83	5.0	4.83	5.0	.098	4.91	Excellent	1.5
Learning activities	4.83	5.0	4.83	5.0	.098	4.91	Excellent	1.5
Evaluative measures	4.83	5.0	3.60	5.0	.676	4.6	Excellent	3
Section Mean	4.85	5.0	3.98	4.97	.504	4.70	Excellent	

Note: Description is based on the following scale. 4.51-5.00: Excellent; 3.51-4.50: Very Good; 2.51- 3.50: Good; 1.51-2.50: Fair; 1.00-1.50: Poor

Data in Table 4 reveal the level of acceptability of the developed training module based on the evaluation of the experts with the overall rating of “Excellent” (*M* = 4.70; *SD* = .504). The results of the evaluation were also excellent in the following areas: physical aspects (*M* = 4.66; *SD* = .557), contents, *M* = 4.75; *SD* = .394), objectives, (*M* = 4.55; *SD* = 900), instruction (*M* = 4.91; *SD* = .098), learning activities (*M* = 4.73; *SD* = 308), and evaluative measures (*M* = 4.6; *SD* = 676). The results of the present study confirmed the conclusion made by Mullins (2017) in his study on the effectiveness of the training materials on employees’ performance that a well-constructed training manual is

necessary to ensure that the trainings are effective to make sure that employees are technically and socially competent for both departmental and management positions. If the instructional materials when properly used in teaching learning situations and even in trainings can accomplish a lot of complex tasks (Lowenstein, 2012). The instructional materials also offer real experiences in giving the trainers basis for thinking and understanding (Ismail & Aleem, 2013). At the same time, they overcome the limitations of time, space and size by helping the attendees to understand things that are too small or too big, or too slow or too fast (Adeniyi, 2011).

Luan (2019) stated that training materials must supplement trainings to enhance superior skills, knowledge, capabilities and outlook of the employees that results in effective performance of

the workers. Training should be viewed therefore as an integral part of the process of total quality management (Sabir, 2014).

Conclusions and Recommendations

The findings from the study show that the seven domains of administrative leadership and decision making (ALDM) were generally perceived to be highly practiced. Even though the personnel of state institutions of higher learning (SIHL) do not hold top management designations, they already demonstrated to a substantial extent their knowledge and skills on the process of evaluating and choosing among various approaches of decision making in a manner consistent with ethical principles when it comes to ethical decision making.

Administrative leadership is the least mastered topic as the respondents were from the academe and office staff and do not hold any top management designations.

The entirety of the developed training modules in ALDM has adequately covered all the aspects of the instruction and superior is the quality of work based on the excellently acceptable evaluation in the areas of physical aspects, contents, objectives, instruction, learning activities, and evaluative measures, according to

the evaluators: the experts and the tryout participants.

State institutions of higher learning may conduct annual review of their development and training plans to ensure that the needs of the personnel are properly and timely addressed.

Trainings on the development of the training modules, training materials, materials packages, and other similar instructional materials with emphasis on the development of blended training modules may be conducted periodically for the faculty members of higher learning and be encouraged to create and develop similar training materials not only about leadership because most of the state institutions of higher learning aspire to be a training provider.

State institutions of higher learning particularly those with public administration/management programs may consider offering short-term government courses and workshops which shall be designed not only for public administrators and civic leaders but also for those interested employees from any organizations.

Acknowledgements

The researcher acknowledges and expresses his sincere appreciation to his research mentors at the Central Philippine University (CPU), Iloilo City; namely, Dr. Rowena M. Libo-on, Dr. Gynnyn G. Gumban, Dr. Carmen N. Hernandez, Dr. Lucio T. Encio, and Dr. Luis A. Abioda. Without their guidance and persistence, this study would not have been possible.

The researcher expresses his sincerest appreciation to his respondents in the analysis phase of his study, the 35 Personnel of SUCs in Panay, them who took the time to answer and

return the rating scales via messenger and e-mail, without them, he would have no content for his training modules in ALDM; to the participants, for taking time in utilizing the training modules even if they have their class schedules and regular works, the researcher conveys his profound gratitude and appreciation.

Finally, the researcher thanks all the validators and experts who took the time to review the training modules and instruments and who contributed so thoroughly through their further comments and responses.

References

- Arsenault, P. M. (2017). A case study of a university leadership seminar. *Journal of Leadership Education*, 6, 14-24
- Appelt, K.C., Milch, K.F., Handgraaf, M.J.J. & Weber, E.U. (2011). The decision making individual differences inventory and guidelines for the study of individual differences in judgment and decision-making research. *Judgm. Decis. Mak.*, 6, 252–262
- Banks, G.C.; McCauley, K.D.; Gardner, W.L.; Guler, C.E. (2016). A meta-analytic review of authentic and transformational leadership: A test for redundancy. *Leadersh. Q.*, 27, 634–652
- Barbazette, J. (2006). *Training needs assessment: Methods, tools, and techniques*. USA: Pfeiffer
- Bhargava, S., Loewenstein, G., & Sydnor, J. (2017). Choose to lose: Health plan choices from a menu with dominated option, *The Quarterly Journal of Economics*, 132(3), 1319–1372
- Bass, A.E., Lichtenstein, B.B., Milosevic, I., Poelmans, S., & Sipahi-Dantas, A. (2018). *Leadership for organizational adaptability: Enabling the adaptive process*. In Academy of Management Proceedings Academy of Management: Briarcliff Manor, NY, USA; p. 11322
- Blanchard, N. P. & Thacker, W. J. (2003). *Effective training, system, strategist, and practices*. Michigan: Pearson Prentice Hall
- Caccam, L. (2014). *Development and acceptability of training module in switching logic*. <https://www.ijsrp.org/research-paper-1014/ijsrp-p3432.pdf>
- Clark, J., Quast, L.N., Jang, S., Wohkittel, J., Center, B., Edwards, K., & Bovornusvakool, W. (2016). GLOBE Study culture clusters: Can they be found in Importance ratings of managerial competencies? *Eur. J. Train. Dev.*, 40, 534–553
- David, W., Nicholas, Y., & Fisher, F. (1987). *Manual for training needs assessment in human settlements organizations, a systematic approach to assessing training needs*. The United Nations Centre for Human Settlements
- Dinh, J.E., Lord, R.G., Gardner, W.L., Meuser, J.D., Liden, R.C., & Hu, J. (2019). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *Leadership. Q.*, 25, 36–62
- Gandolfi, F., & Stone, S. (2017). The emergence of leadership styles: A clarified categorization. *Rev. Manag. Comp. Int.*, 18, 18
- Kellaghan, T. (2010). *Evaluation research*. <https://www.sciencedirect.com/science/article/pii/B9780080448947013269>
- Kuzmits, F. & Carrel, M. (2002). *Personnel management of human resources*. Ohio: Charles E Memil Publishing Company.
- Luan, S. Reb, J. & Gigerenzer, G. (2019). Ecological rationality: Fast-and-frugal heuristics for managerial decision making under uncertainty. *Acad. Manag. J.*, 62, 1735–1759
- McCauley, C. D., Eastman, L. J., & Ohlott, P. J. (2005). *Linking management selection and development through stretch assignments*. Human Resource Management
- Molenda, M., Pershing, J.A. & Reigeluth, C. (2006). *Designing instructional system*. New York. NY: McGraw-Hill
- Parr, A.D., Lanza, S.T., & Bernthal, P. (2016). Personality profiles of effective leadership performance in assessment centers. *Hum. Perform.*, 29, 143–157.

- Schön, D. (2020). *The reflective practitioner: How professionals think in action*. London: Temple Smith
- Schulze, J. & Pinkow, F. (2022). *Leadership for organizational adaptability: How enabling leaders create adaptive space*. <https://www.mdpi.com/2076-3387/10/3/37>
- Tian, M., Risku, M., & Collin, K. (2016). A meta-analysis of distributed training leadership from 2002 to 2019: Theory development, empirical evidence and future research focus. *Educ. Manag. Adm. Leadersh*, 44, 146–164
- Varada, M. (2022). *Importance of leadership in higher education*. <https://www.highereducationdigest.com/importance-of-leadership-in-higher-education/>
- Walton, D. & Zhang, N. (2017). An argumentation interface for expert opinion evidence. *Ratio Juris*, 29, 59–82
- Yusuf, N. R. W. N. (2021). Impact of human resource development on public service through employee performance of Center Mamuju. *Urnal Ad'ministrare*, 8(1), 129–142