

**MARKET SEGMENTATION BASED ON PUSH
AND PULL FACTORS AMONG LOCAL SCUBA
DIVERS ON DIVE DESTINATION**

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MARKET SEGMENTATION BASED ON PUSH AND PULL FACTORS AMONG LOCAL SCUBA DIVERS ON DIVE DESTINATION

by

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**SEGMENTASI PASARAN BERASASKAN FAKTOR TOLAKAN DAN
TARIKAN DALAM KALANGAN PENYELAM SCUBA TEMPATAN
TERHADAP DESTINASI SELAMAN**

ABSTRAK

Tourism Malaysia melaporkan bahawa 76.8% daripada responden memilih pulau dan pantai sebagai tarikan utama untuk melawat di Malaysia, dan salah satu aktiviti yang terlibat ialah menyelam SKUBA. Pelancong lebih cenderung melawat kawasan pantai di Malaysia kerana persekitaran marin dan pantai yang bersih menjadi tarikan penyelam dan bukan penyelam. Menyelam SKUBA telah menunjukkan peningkatan yang ketara sebagai aktiviti rekreasi di Malaysia. Tourism Malaysia dan Persatuan Menyelam SKUBA mempamerkan selam SKUBA sebagai salah satu aktiviti penting dalam mempromosikan destinasi pelancongan di Malaysia, dan menyokong pengusaha selam SKUBA sebagai segmen pasaran tertentu. Namun begitu, ketiadaan data statistik khusus merupakan limitasi pengendali selam SKUBA untuk strategi pemasaran mereka dengan berkesan. Limitasi kajian terdahulu dalam faktor- faktor mempengaruhi motivasi skuba penyelam Malaysia dan pemilihan destinasi penyelam di Malaysia. Oleh itu, matlamat utama kajian ini adalah untuk mengenal pasti faktor-faktor mempengaruhi motivasi di kalangan penyelam SKUBA tempatan yang mempengaruhi pemilihan destinasi menyelam di Malaysia. Pengkaji menggunakan kaedah kuantitatif dengan menggunakan soalselidik secara talian terhadap penyelam SKUBA tempatan yang pernah melawat destinasi selaman di Malaysia. Pautan dalam talian diedarkan ke platform media sosial dan persatuan penyelam SKUBA. Maklumbalas yang boleh digunakan ialah 321, dan data telah dikodkan dan dianalisis menggunakan perisian SPSS. Kajian ini melaksanakan empat

kaedah analisis: ujian 'reliability', analisis deskriptif, analisis faktor dan analisis varians (ANOVA). Tiga (3) kluster dbangunkan daripada analisis: *Pro-Divers*, *Advanced-Divers*, dan *Novice-Divers*. Faktor - faktor motivasi utama di kalangan penyelam SKUBA Malaysia untuk memilih destinasi menyelam adalah bersosial dan bersantai, diikuti oleh produk dan perkhidmatan pengendali selaman. Penjadualan silang dan keputusan ANOVA juga menunjukkan bahawa faktor yang dikenal pasti adalah signifikan, dan terdapat hubungan yang signifikan antara kelompok berdasarkan kelayakan dan motif menyelam mereka. Penemuan mencapai tiga (3) objektif kajian: menentukan profil dan ciri penyelam SKUBA, faktor motivasi tolakan dan tarikan serta hubungan antara penunjuk ciri penyelam (Tahap Pensijilan, Bilangan Selaman yang telah Direkodkan dan Jumlah Tahun Menyelam Peserta) dan faktor motivasi. Implikasi penyelidikan menyumbang kepada kajian empirikal mengenai motivasi penyelam SKUBA dan faktor asas dalam memilih destinasi SKUBA di Malaysia. Sumbangan praktikal mencadangkan bahawa destinasi semula jadi untuk pelancongan harus menyediakan produk dan perkhidmatan berkualiti untuk kumpulan penyelam SKUBA yang telah di bahagikan untuk meningkatkan motivasi dan niat untuk melawat semula destinasi.

MARKET SEGMENTATION BASED ON PUSH AND PULL FACTORS AMONG LOCAL SCUBA DIVERS ON DIVE DESTINATION

ABSTRACT

Tourism Malaysia reported that 76.8% of the respondents chose islands and beaches as the main attractions to visit Malaysia, and one of the activities involved is SCUBA diving. Tourists prefer the coastal area in Malaysia because of the pristine marine environment and long-stretched beaches, which attract both divers and non-divers. SCUBA diving has shown a notable surge in popularity as a recreational pursuit within the Malaysian context. Tourism Malaysia and Malaysia SCUBA Diving Association highlighted SCUBA diving as one of the essential activities in promoting tourism destinations in Malaysia, and they advocate for the SCUBA dive operators to actively promote their products and services to the respective market segments. Nonetheless, the absence of significant statistical data challenges the SCUBA diving operators to strategize their marketing initiatives effectively. Thus, the main aim of this study is to identify the most important segmentation of demographic variables and motivations among SCUBA divers that influences their selection of diving destinations. The researcher adopted the quantitative method by using an online survey of SCUBA divers who had visited diving destinations in Malaysia. The online survey was distributed via social media and the SCUBA divers' association. The usable responses were 321, and the data were coded and analysed using SPSS software. This study implemented four analysis methods: reliability test, descriptive analysis, factor analysis, and analysis of variance (ANOVA). Three (3) clusters emerged from the analysis: Pro-Divers, Advanced-Divers, and Novice-Divers. The key motivation factors among SCUBA divers to select dive destinations were socialising and

relaxation, followed by the dive operator's products and services. The cross-tabulation and ANOVA results also show that the identified factors were significant, and there were significant relationships between the clusters based on their dive qualification and motives. The findings achieved the three (3) research objectives: determining SCUBA diver's profiles and characteristics, push and pull motivational factors, and the relationship between diver characteristics indicators (Certification Level, Number of Logged Dives, and Years of Diving) and motivation factors. The implication of the research contributes to the empirical research on SCUBA divers' motivation and the underlying factors in selecting SCUBA destinations in Malaysia. The practical contribution suggested that the natural destination for tourism should provide quality products and services for a segmented group of SUBA divers to enhance the motivation and revisit intention.

CHAPTER 1

INTRODUCTION

1.1 Tourism Overview

The tourism industry plays a significant role in a country's economy as it contributes to the rate of employment, business opportunities, and foreign exchange. Based on the statistics from United Nations World Tourism Organization (UNWTO) Tourism Highlights, 2020 edition 2019, international tourist arrivals (overnight visitors) worldwide grew by 4% in 2019 to reach 1.5 billion. World tourism continues to rise even though slower phase compared to the year 2018 (+6%). Tourism demand was slower, mainly in advanced economies, particularly in Europe (UNWTO 2020). In 2019, Asia and the Pacific was the fastest growing region for international tourist arrivals by +5% (363.6 million) compared to the previous year, recording 347 million tourist arrival by 25% share market. According to (World Travel Organization 2019), in the year 2018, the main purpose of travel were mainly for recreation, leisure and holiday (56%), visiting friends and relatives (VFR) (27%), health or religious purposes (27%), Business and Professional (13%) and Not Specified (4%). The share of leisure travel grew from 50% in 2000 to 56% in 2018 (World Travel Organization 2019).

In 2019, tourism contributed RM86.14 billion to Malaysia's economy, with 26.1 million tourists arriving in 2019, a small positive growth of +1% compared to 2018. The total tourist receipts contribution grew by +2.4%, with the average length of stay climbing by +0.9 nights to 7.4 nights (Tourism Malaysia, 2020). Islands and Beaches are the top attributes and priorities among tourists destination in Malaysia (Tourism Malaysia, 2020). Based on Tourism Malaysia (2020), tourists voted Island and Beaches as the highest rank, with a total of 76.8%. It shows that natural beauty and water features

are essential or pull factors among tourists in decision-making as their top list attributes in travelling. Therefore, it can be stated that domestic tourists prefer to visit natural beauty areas particularly near to the water areas.

Table 1.1: Top 10 Attributes of Attractions in Malaysia among Tourists

NO	ATTRACTIONS	PERCENTAGE
1	Island & Beaches	76.8%
2	Food Haven	72.2%
3	Value for Money	67.8%
4	Multiracial Country	57.8%
5	Eco-Tourism	57%
6	Culture/Festival Diversity	54.6%
7	Easy Access	46.9%
8	Greenery	45.7%
9	Muslim Friendly	45.2%
10	Historical Rich Destination	45.1%

Note: Strategic Planning Division, Tourism Malaysia, 16th April 2020)

Activities related to marine and coastal tourism, such as surfing, kayaking, sailing, diving, and angling, are also known as adventure marine tourism (Geldenhuis 2018). Orams (1999) defined marine tourism as *“all recreational activities involving a person travelling away from his residence to a destination where the host or focus is the marine environment.”* According to Halpenny (2002), marine tourism sectors include adventure tourism, nature tourism, recreational tourism, and cruise ship. Meanwhile, adventure tourism is defined as a trip that includes at least two out of three elements, namely, physical activity, natural environment, and cultural immersion, and

having to travel away from own residents for more than 24 hours (Adventure Travel Trade Association (ATTA) 2016). Among other tourism segments, adventure tourism is the fastest-growing category because most countries focus on the adventure tourism market since this segment may contribute significantly to a country's ecological, cultural, and economy (UNWTO 2014).

Malaysia offers a variety of activities, from mass to adventure tourism. It promotes diverse cultural and natural activities such as white-water rafting, jungle trekking, mountain hiking, sailing, angling, snorkelling, and diving. Malaysian Tourism Promotion Board (Tourism Malaysia) highlighted SCUBA Diving as one of the significant components in promoting tourism destinations in Malaysia. Tourism Malaysia aggressively promotes places such as Sipadan Island and Tunku Abdul Rahman Park as World Class diving destinations (Zainal Abidin & Mohamed, 2014).

1.2 Research Background

1.2.1 Adventure Tourism

Adventure tourism is an opportunity to preserve past remains, existing cultural identities, and ecological wonders for countries blessed enough to possess excellent natural and cultural features (Adventure Travel Trade Association (ATTA), 2016). Adventure tourism is one of the growing tourism segments that is getting attention from researchers from various fields (McKay 2013). Adventure tourism activities can be divided into two main categories: 'Hard' and 'Soft' (UNWTO, 2014). 'Hard' adventure tourism activities involve high-risk levels, requiring adequate training and advanced skills. Meanwhile, 'Soft' adventure tourism activities refer to a low level of risk, minimal commitment from participants, and commonly, the activities involved will lead by an experienced guide (Van der Merwe et al., 2011).

Table 1.2: ‘Hard’ and ‘Soft’ Adventure Tourism Activities

ACTIVITY & TYPE	
HARD ACTIVITIES	SOFT ACTIVITIES
White-Water Rafting	Wildlife-Based Tourism
Abseiling	Whale Watching
SCUBA Diving	Shark Cage Diving
Bungee Jumping	Trekking
Mountain Climbing	Nature Photography
Astrotourism	Cycling

Note: George, 2014 as cited in Van der Merwe et al. (2011) journal

Several studies related to adventure tourism have been conducted on various areas, such as Opportunities and Challenges in Managing the Destination (Buckley and Buckley 2016; McKay 2013), Tourist Behaviour, Motivations, and Marketing (Guliyev and Nuriyeva 2018; Kane and Tucker 2004; Lötter and Welthagen 2020) and Sustainable Management (Meisel-Lusby & Cottrell, 2008; Steynberg & Grundling, 2005). A literature study by Buckley (2006) summarised various research themes on adventure tourism: i. **Psychological**, including thrills, conflicts, and norms; ii. **Safety**, including injuries, illnesses, and insurance; iii. **Impacts**, whether ecological, social, or economic; and iv. **Participation and Management**. Thus, he has suggested several research priorities that other researchers can consider in their studies, including *Operational Audits; Commercial Statistics; Client Characteristics; Site Geography; Equipment Manufacture; Safety and Insurance; Recreation Ecology; Adventure Destination Marketing; and Links with Amenity Migration and Lifestyle*. Marine Adventure Tourism is another scope of adventure tourism that offers adventure

activities that undertake a unique experience within the marine environment (Orams 2013). Activities within marine adventure tourism include sea kayaking, rafting, SCUBA diving, snorkelling, sailboarding, and whale watching. Thus, this study is focused on the segmented group of SCUBA divers, as these adventure tourists are an emerging market in the tourism industry.

1.2.2 SCUBA Diving Activity

Based on the report by the Diving Equipment and Marketing Association (DEMA, 2021), approximately there are six (6) million active SCUBA divers worldwide currently. Meanwhile, a United States Sports and Fitness Industry Association (SFIA) statistic indicated that the U.S. had 2.8 million active SCUBA divers in 2019, representing 46.6 % of the total SCUBA diver populations worldwide (SFIA, 2021). According to PADI (the Professional Association of Diving Instructors), in the year 2016, the average number of PADI-certified divers was 900,000 people. In 2018, the number increased to 1 million certifications worldwide (PADI, 2019). Thus, the SCUBA diving population is growing due to several factors.

1.2.3 SCUBA Diving Destinations

There are several studies related to SCUBA diving destinations and behaviours. Scholars mainly focused on topics such as the Impacts of Marine Life (Mota, 2016; Skoufas et al., 2017), Sustainable Management of SCUBA diving destinations (Dimmock & Musa, 2015; Naidoo et al., 2018; Trujillo et al., 2017), willingness to pay by SCUBA divers (Emang et al., 2016) and SCUBA Divers' Underwater Behaviour (Fatt & Musa, 2012; Hasim & Mat Som, 2019; Masud & Kari, 2015; Salim et al., 2013).

Dive tourism has been integral to Malaysian domestic and international travel (Zainal Abidin & Mohamed, 2014). Ramli et al. (2011) point out that diving activity in Malaysia continues to grow in popularity and demand. This can be proven by the ongoing efforts of the Government and private agencies promoting SCUBA diving activities to domestic and international markets. Ministry of Arts, Culture and Tourism Malaysia (MOTAC) recognises the diving industry as one of the niche segments contributing significantly to the socio-economy. MOTAC's agency, namely Malaysia Tourism Promotion Board, or Tourism Malaysia, keeps on aggressively promoting the diving destination in Malaysia as the top dive destination in the world (Tourism Malaysia, 2021). The recent promotional effort by MOTAC was participating in Moscow Dive Show 2021 in Russia and Cuti Cuti Malaysia (CCM) 'Jom Dive' campaign launched by MOTAC in April 2021.

Apart from that, there are several studies related to SCUBA diving tourism that have been conducted in Malaysia, such as the willingness to pay by SCUBA divers (Chia, Emang, Lundhede, & Thorsen, 2016; Faizana, Sasekumara, & Chenayah, 2016), Marine Life and Marine Park Management (Lee & Lin, 2018; Qiu, 2016; Emang, Zhang, Chung, & Chung, 2019), SCUBA Divers' Satisfaction (Musa, Kadir, and Lee, 2006), SCUBA Divers' Underwater Behaviour (Hasim & Som, 2019; Masud & Kari, 2015; Salim, Bahauddin & Mohamed, 2013; Ong & Musa, 2012). Thus, the increase in various research studies shows that the growth of SCUBA diving tourism will attract more researchers to conduct studies related to SCUBA diving, particularly in Malaysia (Ramli et al., 2011). Nevertheless, among previous studies related to SCUBA diving, less attention was given to factors motivating SCUBA divers in selecting diving destinations in Malaysia.

1.2.4 SCUBA Diving Segmentation

Market segmentation is a widely explored subject of interest among researchers across various academic disciplines. The topic is also beneficial for SCUBA diving operators and destination marketing organizations (DMO) since it enables them to gain insights into the profile and characteristics of SCUBA divers for marketing purposes based on their motivations (Albayrak et al., 2021; Brian Garrod, 2008; Marna (Herbst) Swanepoel & Peet van der Merwe, 2023). Previous studies have indicated that the selection of SCUBA diving destinations among divers is influenced by their demography and level of diving experience (Queiroz Neto et al., 2017; Zhang et al., 2023). Several measures were used to categorized SCUBA divers according to their level of experience as identified in their characteristics such as level of certification, years of diving and number of logged dives (Queiroz Neto et al., 2017). The scuba diving experience has the potential to influence various aspects of divers' motives, preferences, attitudes, underwater behaviours, and perceptions regarding the quality of the diving environments (Lucrezi et al., 2013). However, there is a limited number of studies that have examined the segmentation of the SCUBA diving market in terms of the motivational variables that influence divers in their selection of dive destinations, particularly from a Malaysian perspective. Further details related to the topic will be discussed in the literature review chapter.

1.2.5 SCUBA Diving Motivations, Push and Pull Factors

There are also research studies on motivational topics, such as underwater satisfaction (Yoon & Hwang, 2016), individual motives to engage in SCUBA diving activity (Fuchs, Reichel, & Shani, 2016), and push and pull factors in diving destination choice (Albayrak et al., 2019; Carvache Franco et al., 2020; Dolinting et al., 2015; Herbst, 2019; Yousaf et al., 2018). Even though there are similar studies on SCUBA diving motivation, the studies investigated different perspectives, such as the type of respondents and study locations. Relatively no research has been done related to this study on factors influencing divers in selecting a diving destination, particularly in Malaysia.

Motivations are biological and spiritual needs and want that encourage individuals or groups to carry out certain activities (Crompton & McKay, 1997). Motivation is a set of needs that are keys to a traveller's decision-making (Yolal et al., 2015). Understanding the motivating factors of traveller's behaviour could assist the stakeholders in adjusting their marketing strategies and travel packages to become more attractive base on the traveller's needs and wants (Hsu et al., 2010; Tseles & Theocharis, 2016; Wong, 2013; Yousaf et al., 2018). There are a range of renowned traveller motivations model and theories addressed by researchers, such as Maslow's Hierarchy of Needs (1943), Dann's Theory of Push and Pull Motivations (1977), Plog's Psychocentric and Allocentric Model of Motivation (1974), Crompton's Theory Motivation (1979) and Travel Motivation Model by Iso-Ahola (1982). Previous researchers applied and adapted those theories and models listed to identify traveller motivations to travel and the decision to choose a destination (Hsu et al., 2010; Tseles & Theocharis, 2016; Yousaf et al., 2018). Several researchers have adapted Push and Pull Motivation theories in their studies, particularly in the SCUBA diving context, as

listed in Table 3. Therefore, referring to the literature, it is essential to adapt Push and Pull Factors for this study since Hsu, Cai & Li (2010) mentioned this is one of the theories that are most prominent than other types of theories and have a better capacity to anticipate behaviour. It is mainly used for a particular purpose. Several researchers further mention that the push and pull factors from the theory of motivation are considered the most essential among the many theories used to explain the motivations to travel and choose a destination (Albayrak et al., 2019; Carvache Franco et al., 2020; Crompton & McKay, 1997; Dolintina et al., 2015; Herbst, 2019; Prayag & Hosany, 2014; Yousaf et al., 2018).

According to Carvache Franco et al. (2020), in most literature, the push and pull factors are most described in tourist motivation. The push and pull theory was initiated by Dann (1977). He mentioned that push factors identified as internal tourist desires to escape stress or escape from daily routine and surrounding environment. It is one factor that entices tourists to visit a particular destination for a holiday. Meanwhile, the pull factors are identified as external desires of tourists, particularly the destination attributes or characteristics that attract the tourist to the destination. Detailed information regarding push and pull theory will be discussed in chapter two. The main aim of this study is to identify significant factors that influence SCUBA divers to select diving destinations, particularly in Malaysia. Thus, this study is essential to identify the primary motivations that cause divers to choose a dive destination. The following section will discuss the problem statement, research questions, research objectives, significance of research to the industry, and research scope.

Table 1.3: Previous Studies on SCUBA Diver Motivations

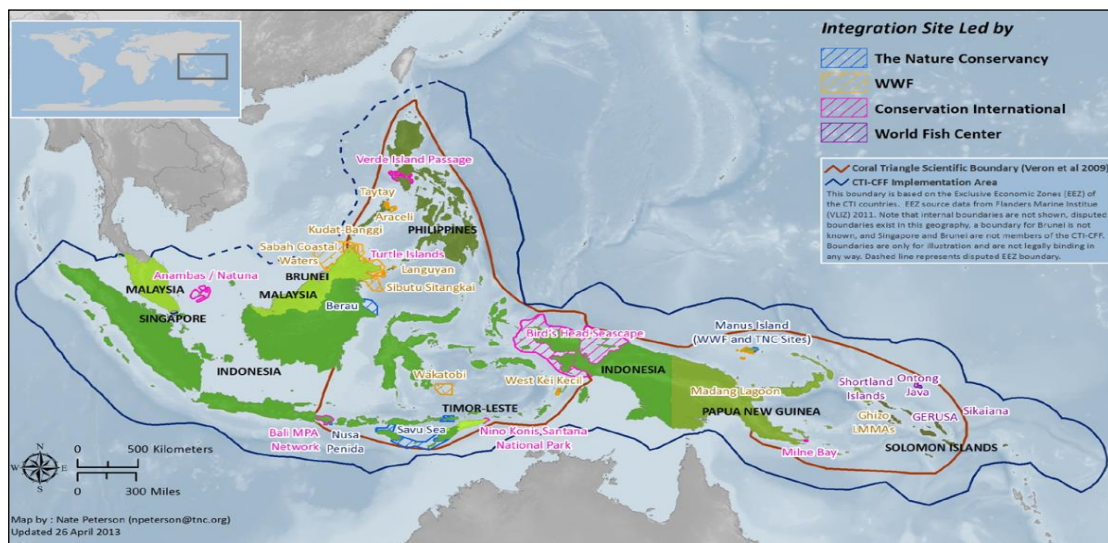
Authors	Years	Title
Albayrak, Tahir, Caber, Meltem, Cater, and Carl	2021	Mass Tourism Underwater: A Segmentation Approach to Motivations of SCUBA Diving Holiday Tourists
Melody, Bridget M, and Yale, Krisnle E.	2021	Motivational Factors in Selecting Tourist Destinations in Laguna
Carvache-Franco, M. Carvache-Franco, W. Carvache-Franco, O., and Hernández-Lara, A.B.	2020	Analysis Of Push and Pull Motivations and The Intentions to Return and Recommend a Coastal or Marine Destination
Herbst, Marna	2019	Motivation-Based Segmentation of SCUBA Divers at Ponta Do Ouro
Palau-Saumell, Ramon, Forgas-Coll, Santiago, Sánchez-García, Javier, Prats, and Lluís	2019	Motivation and Attachment to a Diving Destination: The Case of Medes Islands (Catalonia, Spain)
Neto, Ambrozio Queiroz, Dimmock, Kay, Lohmann, Gui, and Scott, Noel	2020	Destination competitiveness: how does travel experience influence choice?
Bentz, Julia Lopes, Fernando Calado, Helena Dearden and Philip	2016	Understanding Diver Motivation and Specialization for Improved SCUBA Management
Bentz, Julia Lopes, Fernando Calado, Helena Dearden and Philip	2016	Managing Marine Wildlife Tourism Activities: Analysis of Motivations and Specialization Levels of Divers and Whale Watchers
Fuchs, Galia Reichel, Arie Shani and Amir	2016	SCUBA Divers: The Thrill of Risk or the Search for Tranquillity
Dolinting, Erica E. Yusof, Aminuddin Soon, Chee Chen	2015	Application of Push and Pull Theory in Island Sport Tourism: A Study of Sipadan Island, Sabah

Note: Several Authors, as Mentioned Above

1.3 SCUBA Diving in Malaysia

Malaysia is home to some of Southeast Asia's most abundant coral reefs and marine resources (Masud and Kari 2015). It has become one of the most popular SCUBA diving destinations worldwide for its unique biodiversity, warm climate, beautiful islands, and crystal-clear water beaches (Ramli et al. 2011). The diversity of marine life, such as hammerhead sharks, barracudas, and various species of turtles, and unique marine species, such as frogfish and nudibranchs, provides satisfaction to SCUBA divers (Mapjabil et al. 2016). Reef in Malaysia comprises 50 corals genera and over 200 species of fish (Mapjabil et al., 2016). Map 1.1 shows the distribution of Marine ecosystems in Southeast Asia, including Malaysia.

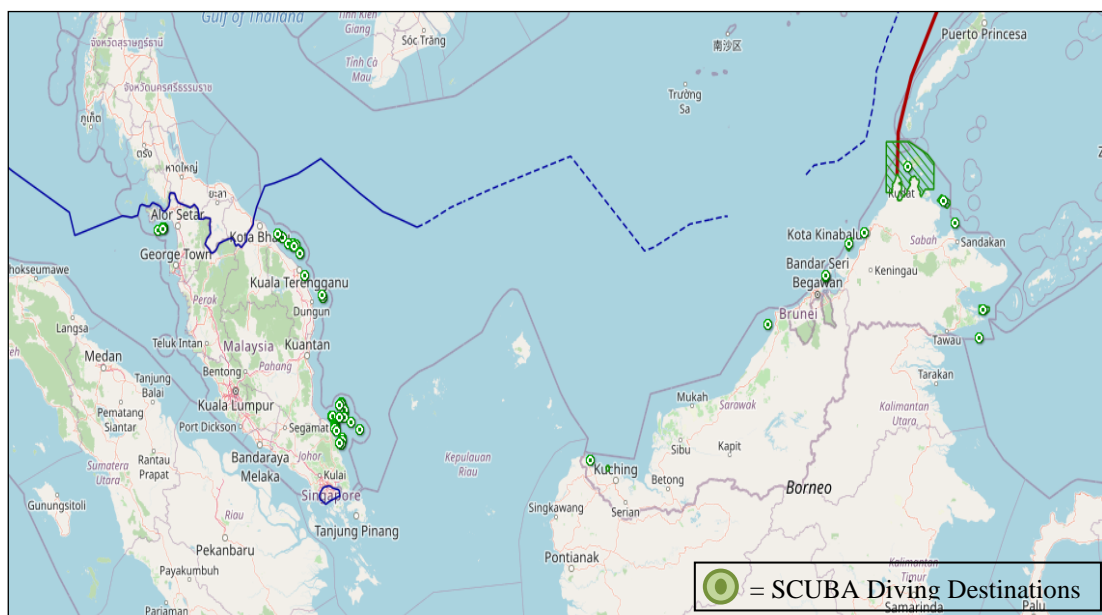
Map 1.1: Distribution of Marine Ecosystems in Southeast Asia



*Note: (Coral Triangle Initiative n.d.).
Website: <http://ctatlas.coraltriangleinitiative.org>*

The development of island tourism in Malaysia gained extreme attention from the Government after the 3rd Malaysia Plan (1985-1990) with a focus on the development agenda to strengthen the island development in Peninsular and East (Sabah, Sarawak, and Labuan) of Malaysia (Ramli et al. 2011). Most SCUBA diving sites in Malaysia are located on the islands, and some of these islands are gazetted under the Marine Park Areas (MPAs) by the Government. In Peninsular Malaysia, MPAs are governed by Federal Agency, namely Marine Park Department, and in East Malaysia, the MPAs are governed by State Agencies, namely Sabah and Sarawak National Parks (Asian Development Bank 2014). Currently, there are a total of 59 islands gazetted under the MPAs in Malaysia. 52 MPAs are located in the Peninsular, 5 MPAs in Sabah, and 3 MPAs in Sarawak. Map 1.2 shows significant diving destinations in Malaysia.

Map 1.2: Distribution of Major Diving Destinations in Malaysia



*Note: (Coral Triangle Initiative n.d.).
Website: <http://ctatlas.coraltriangleinitiative.org>*

Several studies related to SCUBA diving tourism have been conducted in Malaysia. Among them are Tioman Island (Lim & Spring, 1995), Payar Island (Lim, 1997), Mabul Island (AW, 2013; Mapjabil, 2010; Mapjabil et al., 2016; L. Y. Zhang et al., 2016), Sipadan Island (Dolinting et al., 2015; Emang et al., 2016, 2020; Mapjabil et al., 2016) and Layang-Layang Island (Musa et al., 2008). This shows that Malaysia's SCUBA diving tourism industry is gaining interest among researchers and tourists.

1.4 Problem Statement

Scuba diving has shown a notable surge in popularity as a recreational pursuit within the Malaysian context (Emang et al. 2016, 2020; Jaafar and Maideen 2012; Musa et al. 2008; Ramli et al. 2011). Tourism Malaysia and the Malaysian Scuba Diving Association (MSDA) are entrusted with marketing and facilitating the development of diving tourism in Malaysia. Thus, both agencies are advocating for dive operators to actively participate in the promotion of scuba diving products and services tailored to specific market segments (MSDA, 2020; Tourism Malaysia, 2022)

Data pertaining to motivations and demographics is relevant when categorizing domestic vacationers for marketing and promotional purposes (Dolinting et al., 2015). Nonetheless, the absence of those data poses a challenge for diving operators in their endeavour to strategize their marketing initiatives effectively (Jeyacheya & Hampton, 2017). The existing literature review indicates that there is a lack of current published statistical data pertaining to the diving industry, particularly in Malaysia. Thus, most small, and medium-sized dive operators encounter challenges when it comes to formulating and organizing their marketing plans (M Herbst, 2019; K. W. Tuttle, 2020).

Understanding travel motivations allows operators to convey a direct and specific message through marketing which eventually can help to increase diver

numbers (Green Bubbles, 2015, as cited in Herbst, 2019). Therefore, within the extant literature pertaining to the SCUBA diving sector in Malaysia, there is a literature gap in terms of comprehensive research on the demography and motivations of SCUBA diver segments. Thus, the main aim of this study is to ascertain the segmentation of demographic variables and motivations among SCUBA divers that influence their selection of diving destinations.

1.5 Research Questions

The research questions are as follows:

- i** What is the profiling of SCUBA divers in Malaysia?
- ii** What are motivational factors influence divers in selecting a dive destination in Malaysia?
- iii** Is there any significant relationship between the diver's level certification and experience towards motivational factors?

1.6 Research Objectives

Based on the research questions mentioned above, the following research objectives:

- i** To determine the profile and characteristics of SCUBA divers in Malaysia.
- ii** To investigate the motivational factors that influence SCUBA divers in their selection of dive destination by applying the push and pull factors framework.

- iii Examine the relationship between diver characteristics indicators (Certification Level, Number of Logged Dives, and Years of Diving) and motivation factors.

1.7 Significant of Research

Studies about traveller's motivation and decisions making towards selecting travel destinations are very subjective. The researcher believes this study will benefit from the knowledge and practical aspects of the industry. Thus, the results may contribute to each stakeholder, particularly in the tourism industry, such as Tourism Malaysia. Tour operators and other diving businesses will benefit from promotional and marketing strategies, such as developing packages and campaigns. Apart from that, this study may be a reference for future studies.

1.7.1 Government Agency

Government agencies, either from the Federal (Malaysian Tourism Promotion Board) or State Tourism, can focus on developing the destinations, such as improving infrastructure and facilities and keep promoting dive destinations in Malaysia aggressively to the right target market to sustain the chain of domestic tourism sectors.

1.7.2 Diving Businesses

Travel agents must gain information related to tourist or diver profiles, motivation, and behaviour because they can plan their marketing strategies to ensure the planning is aligned with the needs and wants of the divers. A successful business is

when tourists are satisfied with the product and services. Each travel company should know that the best marketing strategy is from ‘word of mouth.’

1.7.3 SCUBA Divers

When the products and services offered by Destination Marketing Organizations and stakeholders meet the traveller's expectations, needs, and wants, it will create a good image, particularly for the divers. Therefore, this study is vital to collect all the essential data for destination improvement. Eventually, the existing diver will return to the destination and disseminate positive information to other potential divers. Thus, in the end, it will be beneficial for all involved in the cycle of the tourism economy and eventually sustaining the sectors and will keep moving forward with solid support from domestic tourists as in this study context of the SCUBA divers.

1.8 Research Scope and Definition

This research will cover the following areas:

1.8.1 Marine Tourism

Marine tourism is “all recreational activities involving a person in travelling away from his *residence to a destination where the host or focus is the marine environment and coastal zone*” (Orams 1999). Marine tourism based on oceans and marine ecosystems has been a vital tourism segment that is overgrowing among other tourism sectors, especially in tropical countries (Philip, Bennett, and Rollins 2006)

1.8.2 Adventure Tourism

Adventure Travel Trade Association defined adventure tourism as a trip that includes at least two out of three elements, namely, physical activity, natural environment, and cultural immersion, and having to travel away from own residents for more than 24 hours (Adventure Travel Trade Association (ATTA) 2016). It is another emerging niche tourism segment in the tourism industry and has gained attention from researchers to understand tourist motivation and behaviour in engaging in the activities (R. Buckley, 2006; L.-L. Geldenhuys, 2018; UNWTO, 2014).

1.8.3 SCUBA Diving

SCUBA is an acronym for Self-Contained Underwater Breathing Apparatus, and diving is an underwater activity using special breathing equipment known as SCUBA. Thus, it means that a person carries special equipment not connected to the surface to breathe underwater for a certain period (Dimmock and Musa 2015; Martin 1997; Orams 1999). The main reason for people to engage in SCUBA diving is to enjoy the underwater environment (Meisel-Lusby and Cottrell 2008; Mota and Frausto 2015; Neto et al. 2020).

1.8.4 SCUBA Diver

A diver engages in SCUBA diving activity (Cambridge University Press 2021). There are several levels of certified SCUBA divers, from Beginners (Open Water Divers), advanced (Advance Open Water Diver), Adventure Diver, Rescue Divers, Dive Masters, and Dive Instructors. According to The Malaysia International Dive Expo

(MIDE) (2020), Malaysia has approximately 150,000 certified Malaysian divers from 8 to 45 years old and above.

Currently, the certification of divers yearly has reached a figure of approximately 18,000 divers, and a person can become an open-water diver as early as 13 years old. However, no official statistics claim the number of certified divers in Malaysia, as mentioned above. According to the report by Tourism Malaysia (2020), domestic tourism is significant in supporting the sustainability and growth of Malaysia's tourism industry, especially in the current unstable situation, such as Covid-19 outbreaks, war, and unstable politics and economy worldwide. Thus, focusing on local travellers, as in this study, the local divers are essential for the researcher to identify profiles, behaviours, and decision-making to benefit Malaysian stakeholders' marketing and promotional plans.

1.8.5 Market Segmentation

Market segmentation refers to the systematic procedure of categorising a market into discrete groups of consumers that possess diverse demands, features, or behaviours, hence necessitating distinct strategies of marketing (Philip Kotler & Gary Armstrong, 2018). Once clients are segmented, they may display homogeneity on one or more segmentation criteria while demonstrating heterogeneity on other factors. Market segmentation allows the identification of distinct groups, which allows the manufacture of more optimal, customised, and relevant products for targeted consumers. Research on tourist market segmentation can offer substantial insights to product owners that expand a variety of variables that can be used to segment consumers. These aspects include involvement patterns, personality attributes, demography, geographic location, and motive (Hennigs & Hallmann, 2015; M Herbst, 2019; Schoeman et al., 2016).

1.8.6 Travel Motivation

Travel motivation is one of the most significant psychological effects on visitor behaviour (Roger and Woodside 2005). On the other hand, motivations are a person's inner state, or basic needs and wants, which cause them to act or behave in a certain way, thereby maintaining energy levels in the human body and human behaviour (Vuuren and Slabbert 2011). As for the travellers to travel, they require information on the respective destination and select the place which suits their needs and wants. Various factors can influence the traveller's decision to choose their destination. It can be from internal factors such as interest, hobby, status, family and friends experiences, whereby external factors such as the destination's distance, facilities available, and environment will be the influential factors. The research on influential factors can be found in other related journals; however, in this study, the researcher will adopt Dann's push and pull factors to influence the divers to choose their dive destinations in Malaysia.

1.8.7 Push and Pull Factors

Based on two well-known researchers in motivational studies, push and pull factors are internal and external factors that drive visitors to decide to travel (Crompton, 1979; Dann, 1977). Push factors depict the drive for an individual to engage in tourist activities or the internal "igniter" that drives the tourist to travel outside of a person's daily environment (Crompton, 1979). Meanwhile, pull factors are the forces that attract tourists to choose a specific tourism product or service.

1.8.8 Destination Marketing

Destination marketing is defined as *“a continuous, sequential process through which a Destination Marketing Organisation (DMO) plans, researches, implements, controls and evaluates programs aimed at satisfying tourists’ needs and wants as well as the destination’s and DMO’s visions, goals and objectives”*(Sotiriadis 2020). The effectiveness of the marketing strategy depends on tourism suppliers and other stakeholder efforts and plans. This term means marketing as a management function that should be systematically implemented with the necessary approaches, tools, and methods (Sotiriadis 2020). Studies on destination marketing will provide valuable input for the stakeholders in order for them to plan their marketing strategies and reduce business risk (Kruja 2019).

1.8.9 Diving Destination in Malaysia

Malaysia is blessed with beautiful beaches and crystal-clear seawater. Several dive destinations can be found in Malaysia, especially on the northwest and east coasts of Peninsular and East Malaysia, especially in Sabah. The most popular dive destinations are in the island areas, such as Pulau Payar, Pulau Redang, Pulau Perhentian, Pulau Tioman, Tunku Abdul Rahman Parks, Pulau Mabul, and Pulau Sipadan. These islands have been gazetted as Marine Protected Areas (MPA). The federal government manages some MPAs, and the state government manages some. Those MPAs managed by the federal government under the Fisheries Department are known as Marine Parks. Currently, there are 42 Marine Parks in Malaysia, thirty-nine (39) islands in the Peninsular, and three (3) islands in Labuan. However, in Sabah, the Marine Parks are managed by the state government known as the Sabah Parks. There are six (6) major Marine Parks in Sabah: Tunku Abdul Rahman Parks, Pulau Tiga Parks,

Turtle Islands Park, Tun Sakaran Marine Park, Sipadan Island Park, and Tun Mustapha Park. Thus, this study will focus on Dive Destinations in Malaysia, particularly the islands under the management of the Fisheries Department and Sabah Parks.

1.9 Summary

This chapter will provide a basic overview of the SCUBA diving industry, motivational factors, and the selection of destinations by travellers. Many studies have been conducted on SCUBA diving, such as willingness to pay, safety, sustainability, health, motivation, and behaviour. However, less attention was given to studying factors influencing divers to choose diving destinations in Malaysia. Understanding the relevant literature related to traveller's motivations is crucial, and Dann's theory of Push and Pull Factors are most prominent to adapt in this study. Thus, the statement of problems has been stated, and the study's objectives have been formulated through the research questions that arise from the literature.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter will elaborate on the study's key theme: the factors that influence SCUBA divers' selection of dive destinations. The discussion is divided into three primary themes: a. Information on the SCUBA diving industry; b. Motivational factors influence the SCUBA diver's selection of dive destination, and c. Types and attributes of SCUBA diving destinations. The discussion will begin with a definition, history, and related SCUBA diving sectors, along with information on major SCUBA diver segments and profiles, SCUBA diving features, SCUBA diving business, and SCUBA diving personnel.

The second section will discuss the elements that influence divers' choice of dive destination. This section will examine the underlying theories that earlier studies about this article have adopted. Numerous prior scholars have identified several principal motivational elements, including Maslow's Hierarchy of Needs, Plog's Psychocentric and Allocentric Theories, Dann's Push and Pull Factors, Crompton's Theory of Motivation, and Iso-Ahola's Theory. Additionally, aspects of SCUBA diving destination types and attributes will be explored; dive destination marketing, dive locations, the characteristics of popular dive destinations, and diving destination in Malaysia will be discussed in the third section of this chapter.

2.2 Marine Adventure Tourism

Orams (1999) defined marine tourism as: “Those recreational activities that involve travelling away from one’s place of residence and have as their focus the marine environment (marine environment defined as waters which are saline and tide-affected).” The travel industry has become a mass experience where many travellers consistently look for leisure and recreation, especially in marine areas (Camilleri, 2018). Other researchers also identified marine tourism as coastal and marine tourism (Munien et al., 2019; Tonazzini et al., 2019), Nautical Tourism (Balata et al., 2019; Favro & Gržetić, 2008), Blue Tourism (Rahman, 2020; UNEP, 2015) and Sun, Sand, and Sea (Erkuş-Öztürk & Terhorst, 2017; Mendoza-González et al., 2018). There are varieties of sub-sectors under marine tourism, such as marine wildlife tourism, cultural tourism, leisure and recreation tourism, marine ecotourism, and marine adventure tourism (Herbst, 2019). The other category includes those involved indirectly in marine environments, such as beach resorts, food, and beverage outlets, equipment suppliers (rental and selling) companies, and transportation services (L.-L. Geldenhuys, 2018).

Meanwhile, adventure tourism is an outdoor activity that focuses on the natural environment, involves specialized equipment and operators, and has a risk element for the participants (R. Buckley, 2006). Adventure Travel Trade Association (ATTA) (2016) defined adventure tourism as “A trip must take an individual outside of his or her regular environment for more than 24 hours and no longer than one consecutive year and include at least two of the following three aspects: participation in a physical activity, a visit to a natural environment and a culturally immersive experience”. According to Buckley (2016), one of the leading regular characteristics of these adventure tours is that “different customers on the same trip may have different skills, demographics, emotions, expectations, and experiences, but all of them they still

purchased the same tour.” Adventure tourism activities include bungee jumping, skydiving, snowboarding, rock climbing, abseiling, caving, mountain climbing, skiing, whitewater rafting, diving, hot air balloon, and mountain biking other activities (Adventure Travel Trade Association (ATTA), 2016; R. Buckley, 2006). UNWTO (2014) classified adventure tourism activities into two categories: hard and soft adventure activities. Hard adventure activity involves high-risk levels and requires specialized skills and great engagement from the participant (Geldenhuys, 2018). Whereby soft adventure means those activities with perceived risk but containing low levels of actual risk, it requires minimal commitment or skills from the participants. Most activities are led by an experienced guide (Geldenhuys, 2018). Part of marine tourism activities is mentioned in adventure tourism activities that, make both tourism categories interrelated at a certain point. Thus, both categories may classify in one term known as marine adventure tourism, which means activities engaged within marine environments that involve a certain degree of risks, qualifications, and commitment of the participants.

Marine adventure tourism has become one of the essential tourism sectors in a country because it contributes significantly towards the socio-economy (Adventure Travel Trade Association (ATTA), 2016; CBI, 2021; Lucrezi et al., 2013; UNEP, 2015; UNWTO, 2014). Even though there is a range of preferences by coastal and marine visitors, nevertheless, there are two common preference areas that attract them: recreational activities and the magnificent beauty of the landscape (Mendoza-González et al., 2018). Marine adventure tourism consists of natural beaches, water sport activities, angling, and SCUBA diving is among tourism destination categories (Adventure Travel Trade Association (ATTA), 2016; Camilleri, 2018; European Commission (EC), 2018; L.-L. Geldenhuys, 2018; UNWTO, 2014). Based on the report