

DIVER SATISFACTION WITH SCUBA DIVING IN TIOMAN ISLAND FROM
PERSPECTIVE OF OPERATOR SERVICES

NOOR SHUHAILA BINTI ABD HALIM

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All the praises and Thanks be to Allah

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ABSTRACT

Scuba diving has experienced a gradual increase in its demand globally. This phenomenon has also affected the Tioman Islands, which was one of the most popular dive destinations in Malaysia. Although the tourism sector has seen bloomed in Tioman, the local dive industry was remaining stagnant in its performance with a continued decrease in the number of tourist arrival for diving activities since 2016. Dive operator service performance was seen as a strong motivation for dive destination selection that ought to be improved to ensure divers satisfaction and a continuous visit to the destination. However, most of the existing literature has paid little attention to diver perception toward dive operator service performance and most of the previous researcher tends to concern on environmental issues instead of managerial ones. Therefore, this study focuses to understand the divers' satisfaction towards the operator in Tioman Islands from service provider perspectives. A total of 133 divers participate in the survey of this study, using the questionnaire as the main data collection tool. Respondents consist of scuba divers who are mostly intermediate and international divers express their perception of dive operator service performance. Evaluation of dive operator service performance shows that attributes such as staff, safety, dive site, and boat are among those that satisfied by divers. This is mainly due to the professionalism of the staff at the dive site as a willingness to assist scuba diver all times. The finding also indicated that the most important attributes that contribute towards diver satisfaction were safety, price and rental equipment. Despite moderate satisfaction by the diver, these attributes give a significant impact on the dive consumption experience. Hence, the dive operator needs to take the improvement of these attributes into consideration when managing the scuba diving business. This study offers a recommendation for dive operators or other key stakeholders to take into account that related to diver perception in-service operators so that the dive experience can be improved and scuba diving tourism in Tioman achieved a high level of diver satisfaction. Acknowledging the perception of dive operator service performance helps in understanding the influence of dive operator service performance on diving satisfaction. Acquiring the information assist dive operator in promoting accurate services in order to promote higher diver satisfaction during their dive trip.

ABSTRAK

Selam skuba telah mengalami peningkatan secara mendadak dari segi permintaannya di seluruh dunia. Fenomena ini turut terkesan di Pulau Tioman merupakan antara destinasi menyelam paling popular di Malaysia. Walaupun sektor pelancongan dilihat berkembang di Tioman, industri menyelam tempatan masih dilihat prestasinya tidak berubah dengan kadar penurunan ketibaan pelancong untuk aktiviti menyelam sejak tahun 2016. Namun, kebanyakkan kesusasteraan yang ada memberi sedikit perhatian terhadap persepsi perkhidmatan selam skuba dan penyelidik terdahulu lebih cenderung untuk mengupas isu alam sekitar berbanding isu berkaitan pengurusan. Maka, kajian ini tertumpu untuk memahami kepuasan penyelam skuba terhadap operator di Pulau Tioman dari perspektif penyediaan perkhidmatan. Sebanyak 133 penyelam skuba mengambil bahagian dalam tinjauan ini menggunakan soal selidik sebagai alat pengumpulan data utama. Responden terdiri daripada penyelam skuba yang kebanyakannya penyelam pertengahan dan antarabangsa dengan menyatakan persepsi mereka terhadap prestasi perkhidmatan selam skuba. Penilaian prestasi perkhidmatan selam skuba menunjukkan faktor seperti pekerja, keselamatan, lokasi menyelam dan bot antara faktor yang memberi kepuasan kepada penyelam skuba. Ini disebabkan oleh pekerja bersikap profesional di lokasi menyelam sebagai ketersediaan untuk membantu penyelam skuba sepanjang masa. Penemuan ini juga menunjukkan bahawa faktor penting menyumbang kepada tahap kepuasan penyelam ialah keselamatan, harga dan peralatan sewa. Walaupun, tahap kepuasan berada di tahap sederhana, faktor ini memberi impak yang ketara ke atas pengalaman penyelam skuba. Kajian ini menawarkan cadangan kepada pengendali selam skuba atau pihak berkepentingan yang lain untuk mengambil kira hal berkaitan dengan persepsi penyelam skuba terhadap perkhidmatan supaya pengalaman menyelam dapat dibaiki dan pelancongan menyelam di Tioman mencapai kepuasan menyelam yang tinggi. Persepsi terhadap prestasi perkhidmatan menyelam membantu memahami kepuasan menyelam dan membantu mempromosikan perkhidmatan yang tepat untuk menggalakkan kepuasan menyelam yang tinggi semasa mereka melakukan pengembaraan selam skuba.

TABLE OF CONTENTS

	TITLE	PAGE
	DECLARATION	iii
	DEDICATION	iv
	ACKNOWLEDGEMENT	v
	ABSTRACT	vi
	ABSTRAK	vii
	TABLE OF CONTENTS	viii
	LIST OF TABLES	xii
	LIST OF FIGURES	xiv
	LIST OF ABBREVIATIONS	xv
	LIST OF SYMBOLS	xvi
	LIST OF APPENDICES	xvii
CHAPTER 1	INTRODUCTION	1
1.1	Introduction	1
1.2	Background of Study	4
1.2.1	Definition of Scuba Diving	4
1.2.2	Classification of Divers	6
1.2.3	Characteristics of Divers	7
1.2.4	Diving Certification Agencies	13
1.2.5	Scuba Diving Courses and Certification Levels	16
1.2.6	Dive Tourism Development in Malaysia.	19
1.2.7	Dive Tourism in Tioman, Pahang	22
1.2.7.1	Unethical Dive Operator and Freelance Divemaster	25
1.3	Problem Statement	26
1.4	Research Gap	28
1.5	Aim and Objective of the Research	29
1.6	Research Question	29

1.7	Scope of Research	30
1.8	Significant of the Study	30
1.9	Structure of the Thesis	31
1.10	Chapter Summary	32
CHAPTER 2	LITERATURE REVIEW	33
2.1	Introduction	33
2.2	Service Quality Performance	33
2.3	Measurement of SERVPERF	34
2.4	Divers Satisfaction	38
2.4.1	Attributes Affecting Divers' Satisfaction with Dive Operator Service Performance	39
2.4.1.1	Perceived Crowding	40
2.4.1.2	Value (Price)	44
2.4.1.3	Dive Site and Boat	44
2.4.1.4	Safety and Security	45
2.4.1.5	Staff	46
2.4.1.6	Rental Equipment	46
2.5	Chapter Summary	47
CHAPTER 3	RESEARCH METHODOLOGY	49
3.1	Introduction	49
3.2	Research Framework.	50
3.3	Research Paradigm	51
3.4	Research Methods	53
3.4.1	Questionnaire	53
3.4.2	Sampling Approach	56
3.4.2.1	Non-Probability Sampling	58
3.4.2.2	Purposive Sampling	59
3.4.3	Sample size	60
3.4.4	Pre-Testing Questionnaire	62
3.5	Data Analysis	65
3.5.1	Descriptive Analysis	65

3.5.2	Pearson Correlation Analysis	68
3.5.3	Multivariate Analysis of Variance (MANOVA)	69
3.5.4	Paired Sample T-Test	69
3.5.5	Standard Multiple Regression	70
3.6	Research Ethics	71
3.7	Chapter Summary	72
CHAPTER 4	ANALYSIS AND FINDING	73
4.1	Introduction	73
4.2	Demographic Profile of Respondents	74
4.2.1	Gender	74
4.2.2	Divers by Nationality	75
4.2.3	Age	76
4.2.4	Monthly Income	77
4.2.5	Education	78
4.3	Scuba Diving Experience	78
4.3.1	Correlation Between Demographic Profile and Diving Experience	80
4.4	Frequencies on- site characteristics of scuba diver.	83
4.4.1	Correlation Between Demographic Profile and On-Site Characteristics	85
4.5	The factor of Service Performance	87
4.5.1	The interrelation between divers' background and factors of diving satisfaction.	96
4.5.2	Relationship between Perception on Factor of Service Performance Toward Diving Activities in Tioman.	98
4.5.3	The factor of Dive operator servicer performance in predicting overall diver satisfaction	99
4.6	Chapter Summary	101
CHAPTER 5	DISCUSSION, CONCLUSION, AND RECOMMENDATIONS	103
5.1	Introduction	103

5.2	Summary of the Research Findings	103
5.3	Discussion of Study	103
5.3.1	Discussion for Research Question 1: How do divers perceive dive operator performance in Tioman Island?	104
5.3.2	Discussion for Research Question 2: What is the level of overall divers' satisfaction at Tioman Island?	106
5.3.3	Discussion for Research Question 3: What is the most influential factor of dive operators' services that contribute to diving satisfaction?	108
5.4	The Implication of the Study	110
5.5	Research Limitation and Recommendation for Future Study	111
5.6	Concluding Remarks	112
	REFERENCES	115

LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 1.1	Possible continuum of diving tourists	12
Table 1.2	Statistic of Tourist Arrival 2011-2018 (Source: Tourism Pahang,2018)	26
Table 2.1	Research framework	41
Table 3.1	List of Tioman Dive Operators	56
Table 3.2	Method of analysis applied in this study	68
Table 3.3	The strength of correlation coefficient (source: Cohen,1988)	68
Table 3.4	The strength of ETA squared values (Source: Cohen,1988)	69
Table 4.1	Demographic Profile Based on Gender	74
Table 4.2	Respondents' by nationality	75
Table 4.3	Respondents' by age	77
Table 4.4	Respondents' monthly income	78
Table 4.5	Education levels of respondents	78
Table 4.6	Diving experience in Tioman	79
Table 4.7	Correlation between the demographic profile and diving	81
Table 4.8	The strength of correlation coefficient (Source: Cohen, 1988)	81
Table 4.9	Cross-tabulation between experience with gender	82
Table 4.10	Cross-tabulation between diving experience and age	83
Table 4.11	Frequencies on - site characteristics of scuba diver	84
Table 4.12	Correlation between the demographic profile and on-site characteristics	85
Table 4.13	Cross-tabulation between demographic profile with dive experience	86
Table 4.14	Cross-tabulation between demographic profile and type of dive activities	87
Table 4.15	Frequency and percentage of staff attributes	89

Table 4.16	Frequency and percentage of safety attributes	90
Table 4.17	Frequencies and percentage of the dive site and boat attributes	92
Table 4.18	Frequencies and percentage of rental equipment attributes	93
Table 4.19	Frequencies and percentage of rental equipment attributes	94
Table 4.20	Frequencies and percentage of perceived crowded attributes	96
Table 4.21	MANOVA test between dive logged and factors of dive operator service performance	97
Table 4.22	Mean and standard deviation between logged dive and rental equipment	98
Table 4.23	Paired sample t-test between perception and dive operator service performance attributes.	98
Table 4.24	Mean of overall satisfaction	100
Table 4.25	Standard multiple regression between the factor of dive operator performance and overall satisfaction	101

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
Figure 1.1	Scuba Diving Courses and Certification Levels	16
Figure 1.2	Dive Site in Tioman Island.	23
Figure 1.3	Comparison of Domestic, ASEAN and International Tourist (Source: Tourism Pahang, 2018)	27
Figure 3.1	Conceptual Framework	50
Figure 4.1	Percentage of demographic profile based on gender	75
Figure 4.2	Respondents' country of origin	76
Figure 4.3	Mean score of dive operator service performance attributes	88
Figure 4.4	Mean responses toward the staff attribute	89
Figure 4.5	Mean responses toward safety attributes.	90
Figure 4.6	Mean responses toward dive site and boat attributes	91
Figure 4.7	Mean responses toward rental equipment attributes	93
Figure 4.8	Mean responses towards price attributes	94
Figure 4.9	Mean responses towards perceived crowded	95

LIST OF ABBREVIATIONS

B2B	-	Business-To-Business
BSAC	-	British Sub-Aqua Club
CMAS	-	Confederation Mondiale des Activites Subaquatiques
DEMA	-	Diving Equipment and Marketing Association
FOST	-	Fear of Statistics Test
IANTD	-	International Association of Nitrox and Technical Divers
ISO	-	International Organization for Standardization
MANOVA	-	Multivariate Analysis of Variance
MIDE	-	Malaysian International Dive Expo
MOA	-	Ministry of Agriculture and Agro-Based Industry
MOTAC	-	Ministry of Tourism, Arts and Culture
MSDA	-	Malaysia Scuba Diving Association
NAUI	-	National Association of Underwater Instructors
PADI	-	Professional Association of Diving Instructors
SCUBA	-	Self-Contained Underwater Breathing Apparatus
SDI	-	Scuba Diving International
SSI	-	Scuba School International
SPSS	-	Statistical Package for the Social Science
TDI	-	Technical Diving International
TEV	-	Total Economic Value
VIF	-	Variance Inflation Factor
WRSTC	-	World Recreational Scuba Diving Training Council
WTO	-	World Tourism Organization

LIST OF SYMBOLS

df	-	Degree of Freedom
e	-	Probability on committing an error
F	-	Univariate F-Test
N	-	Population Size
n	-	Sample Size
R^2	-	R square value
r	-	Pearson correlation coefficient
β	-	Beta Values
ρ	-	Significance Value
σ	-	Standard Deviation
\bar{x}	-	Mean Values

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
Appendix A	Questionnaire Form	121

CHAPTER 1

INTRODUCTION

1.1 Introduction

One of the main contributors to the growth of the tourism industry is the appeal of a seaside holiday to escape the pressures of working life. Tourist has long visited coastal areas to enjoy the quality and natural beauty of the outdoor environment. Several tourists are also looking for marine life experience. Scuba diving is one of the most appealing for such experience as divers can be submerged underwater and explore marine flora and fauna in close proximity. Furthermore, one of the most important reasons for motivating tourists to scuba dive is the opportunity to witness rare or endangered marine species. Some researcher adds that scuba divers are pulled in to the experiences to be submerged with marine natural life such as dolphin, sharks, and turtles (Thirumoorthi, Wong, Mun, & Musa, 2013).

The growing demand for an interest in being involved in natural environments has motivated entrepreneurs to venture to provide tourism business for scuba diving, particularly given the potential economic rewards. In the recent decade, the popularity of recreational scuba diving has risen to the point that scuba diving and the business activity that supports it has become significant tourism industries that stimulate a global industry worth a billion-dollar. Consequently, continues demand for scuba diving was driven by the desire of divers to witness and experience aquatic nature. Simultaneously increased access to attractive underwater sights through advances in technology, practice, education, and equipment has created a booming Scuba Diving Tourism industry that promotes diving activity. Locations with attractive and high-quality marine resources may wish to offer scuba diving, creating greater variety in the supply of tourism products and services in the areas. Hence, the scuba diving industry opens up access to the new tourism market in combination with establishing partnerships with other tourism sectors (Thirumoorthi, Wong, Mun, et al., 2013).

Scuba divers tend to rely heavily on a wide range of industry operators to provide scuba diving experiences that are affordable and satisfying. Therefore, the Scuba diving tourism industry emphasizes on suppliers of scuba diving facilities (scuba diving operators, charter activities, scuba diving education and training, and scuba diving services). Nonetheless, the scuba diving industry also depends on a wide range of related services and tourism industries that provide access and essential services related to tourism (such as providers of information, marketer, hotels, transportation, food and beverage facilities, souvenir shops, stores, medical services, other scuba divers' services more generally). Such industry providers are not only based in destination areas, but also in transit routes and regions growing around the world and increasingly online (Dimmock & Musa, 2015).

The purchase of experience of scuba diving requires an agreement between the diver and dive operator, which allows the service provider to provide a level of care and responsibility for security and risk management. Such obligations were upheld by law which the industry plays a major role in professional training and development of skills. Nevertheless, the current systematic approach for training and certification may not be sufficient to ensure low impact diving in order to develop diver skills and experiences across the international community. According to Dimmock & Musa (2015), noted that the development of scuba diving business competitive advantage required a qualified divemaster with a broad range of experience. Nevertheless, large numbers of divers with varying levels of skill can make it challenging for operators to satisfy a broad base of demand and skills.

Besides training, the facilities of scuba diving may include a charter boat ride to the site and the underwater management of divers which must be under supervision of the expertise. In this way, it enables the divemaster to monitor the real risk while controlling and tempering perceived risk and enabling divers to maintain the excitement and exploration divers are looking for. This can be supported by Thirumoorthi, Wong, & Musa (2013) noted that divemaster who concentrated on professionalism and prioritize safety and security during scuba diving exploration bring more trust and encouragement to divers. Such features also make a significant contribution to the divers' satisfaction as a part of the service delivery. This claim can

also be supported by similar research done by MacCarthy, O'Neill, & Williams (2006) referred such features as related aspects of scuba diving experience that include dive operator service and skill along with the teamwork developed within the diving group and divers.

Furthermore, dive operator service performance can be identified with both tangible and intangible aspects. Building all aspects of diver safety into the marine experience includes the use of the underwater buddy system where people are taught in pairs or teams and watch each other for safety and comfort reasons. In this way, issues of trust and social comfort play a role in satisfaction and can lead to ongoing involvement in diving. Eventually, a major satisfaction with scuba diving depends on the quality performance in the marine environment.

Conversely, a few parts of the marine environment are beyond the control of the service provider. For reference, divers expect high-quality marine flora, fauna, good weather, and ocean conditions and may decline in adverse conditions. In fact, considered the effect of externalities such as climate and ocean conditions to be major environmental concerns that may disrupt scuba diving excursions and challenge scuba diving operators in achieving their business goals and satisfaction of the divers. In fact, Dimmock (2003) considered the effect of externalities such as climate and ocean conditions to be major environmental concerns that may impede scuba diving excursions and challenge scuba diving operators in achieving their business goals and satisfaction of the divers.

The communication between divers and the diving industry was enabled by the growing use of technology like social media which insists meet demand and enhance diver training and networking across the diving community. Social media platform functions to expands word-of-mouth advertising and through diverse channels spreads the knowledge of diving destinations, sites, and underwater experiences. Therefore, the scuba diving industry must put as much effort to develop successful relationships with scuba divers and other sectors in the supply diving training, rental equipment, service quality, perceived crowding, price, dive sites, safety, staff, in enhancing scuba diver satisfaction. In addition, the challenges the scuba diving industry confronts are

complex. Thus, when dive operator to focus on seeking business success while handling individuals who may not be happy with their service can lead to a decrease in the number of visitors to the destination.

1.2 Background of Study

Historically, scuba diving has been considered a high-risk activity undertaken by hard adventurers, creating much less business want to take the risk to get involved in this type of business but nowadays it becomes the anticipating activity for the hardy adventure tourist. Formerly, several scuba diving providers may have been a lifestyle entrepreneur, inspired to begin their business to create an income stream that helps them to pursue a particular lifestyle. In Contrast, contemporary trends indeed the cost of service delivery which expected by dive leads to the breed of dive operators entering the scuba diving industry. Globally, small business of scuba diving is a prominent feature of the scuba diving industry which confronts significant challenges in the new competitive marketplace. The two important tasks that need to be performed by the operators are the need to have access to high-quality dives sites along with effective security and risk management processes (Garrod & Gössling, 2008).

Diving is known as a recreational activity for at least 75 years. For illustration, sport divers in the Mediterranean chased fish by holding their breath in the 1930s. Basic types of diving, such as free diving or known as ‘breath-hold’ diving and snorkeling require a minimum of equipment typically including on a mask, snorkel equipment, fins, and some weight. The difference between free diving and snorkeling is that snorkelers mostly float on the water surface, while free divers sink and hold their breath for one or two minutes. Interestingly, scuba diving requires portable air suppliers air tanks in order to remain submerged for a longer period of time and achieve greater depths (Garrod & Gössling, 2008)

1.2.1 Definition of Scuba Diving

Generally, ‘scuba’ is an acronym (SCUBA), which stands for ‘self-contained underwater breathing apparatus’ although the term is now so well known that it has

been interpreted as a common noun in many languages such as scuba diving, scuba gear and other. Traditionally, Jacques-Yves Cousteau and Emile Gagnan developed the first prototype scuba diving equipment, known as the aqua-lung, in the early 1940s. this equipment is still the most widely used in recreational scuba diving, which consists of an underwater tank containing high-pressure water and a regulator supplying to the diver in order to reduce pressure (Garrod & Gössling, 2008)

There are a few technologies that dive underwater, including ORB which know as a diving helmet that uses modern technology called “rebreathing” to reuse diver oxygen to breathe underwater. This equipment is a more lightweight snit that is in small and easier to move with while most scuba diver equipment commonly heavy, bulky and uncomfortable. The outcome is comfortable and increases the diving experience. Therefore, ORB is fitted with built-in Bluetooth to interact and socialize in the underwater atmosphere with other divers.

There is also ‘Amphi’ the world-first underwater mover machine (Spotmydive, 2019). Amphi is a monofin that complete with thruster that pushes the diver through the water. It is dual power, which partly powered by human muscles and partly by an electric thruster. It same idea as an electric bike but it only for underwater use. The diver at attaches their feet to the Amphi system that enabling the diver transition comfortably between muscle-powered and electrical propulsion. Amphi senses the kick strength and thereby adds or subtracts energy. This equipment allows the human to switch between offensive, sport-like system and relaxed mode.

Many new innovations in scuba diving equipment include ‘Air Buddy’, considered the smallest and lightest respiratory in the world which gives unimagined flexibility for divers as well as battery-powered handheld diving which floats above the water and guides the diver along with the scuba activities. The Air Buddy is a rotating mini-compressor that helps divers to remain underwater for at least 45 minutes through a supply hose attached to the regulator. It is very lightweight and therefore allows motion underwater to be more smooth. Air Buddy provides a credible alternative to snorkeling, freediving, and deep diving. before being used, the Air

Buddy necessarily requires a good knowledge of the basic rules of scuba diving (Spotmydive, 2019).

Furthermore, advancing technology will greatly influence the development of promoting new recreational equipment by increasing underwater recreational activities. The main reason for the development of Scuba Diving equipment because of the effects of technological development which discovered the advanced technology in scuba diving is that enabling people to breathe underwater, but more significantly it gives human access to the marine world.

1.2.2 Classification of Divers

As mentioned by MacCarthy et al. (2006) indicated that professional scuba divers usually belong to one of five classes for identification purposes as listed below.

- (a) The first group is a certified training agency that has trained and certified the first group. These divers are classified as 'dive certified' and are easily identified by their qualifying card, which is normally required to be displayed before any licensed diving activity can take place.
- (b) The second group they classify as being in the training process. Before certification can be granted, these divers must demonstrate their competence in both artificial and open water environments.
- (c) The third group of divers is better known as opportunists and people who have participated in a regulated method of diving while on holiday or other recreational activities. The focus is on safety and giving the individual a taste for scuba as an activity, closely monitored in a controlled environment by certified instructors which usually training at a swimming pool in the hotel.
- (d) The fourth group of divers comprises licensed instructors and divemasters running their own diving charter/instruction company or being hired on a seasonal basis by a dive operator.
- (e) The final group of divers can be described as those interested in leisure diving at a distance from normal business activities. While these divers are

certified for dive in most circumstances, many are not certified by divers having their own equipment and want to experience diving at the actual dive site.

Since scuba divers have different motivations and backgrounds, research has been conducted to distinguish between divers groups (MacCarthy et al., 2006). These two studies have classified divers into three types: 'Hardcore' divers are those who are searching for indifferent destination diving challenges. 'Tourist' is the one who set scuba diving as part of a vacation. Finally, those who want to know and try something new are known as 'potential divers'.

However, Ince and Bowen (2011) have argued that the classification of scuba divers there are four types. They are "experienced," "specialist," "dedicated" and involved divers." This scuba divers' classification is based on the level of skill that each individual scuba diver requires. This is consistent with the claims made by Orams (2002) that divers require different levels of skill to perform various underwater recreational activities such as scuba diving and snorkeling. Those divers are going to match their threat and risk level if the skill they are taking. For example, the 'potential diver' has fewer skills and is less experienced compared to the 'hardcore diver'. This also supported by a study by Ince and Bowen (2011), reported that the classification of scuba divers has different skill levels.

1.2.3 Characteristics of Divers

According to Ince and Bowen (2011), dive tourism is best categorized as a subset of sport tourism, which itself is a major part of special interest tourism. Meanwhile, the moving market is perpetually changing and in the present market cannot be categorized in this way. For some experienced recreational divers, it is best defined as their favored activities, which diver can participate in during on their vacation and it related to diver special interest with a high level of devotion and involvement. For other tourists, it may just be related to the sun, sand, and sea tourism. Therefore, the dive tourism movement showcase despite the fact that it has proceeded

with the development of special interest tourism sports tourism and adventure tourism in general.

The characteristics who are known as divers are traditionally been a male-dominated sport. The researcher often notes that diving visualizes the tough and macho image that tended to accompany the diving sport or physical demands requires for moving around in heavy scuba equipment in order to make an underwater descent. Therefore, assessment related to dive continued show a high proportion of male respondents. For example, Tabata (1992) cites a readership survey conducted in 1989 by the US magazine *Skin Diver*, indicating that about 65% of all scuba divers were male. This result was verified in a Tourism Queensland study (2006) stating that two-thirds of all PADI accredited divers are male (Garrod & Gössling, 2008)

Male dominance may be even greater in certain cases. Ditton & Baker (1999) for example, have performed surveys related to the divers on an artificial reef in Texas, 81% of whom were Texas natives and noted that the majority were white males aged between 21 and 39 years. Thus, Musa (2002) found that in Sipadan, Malaysia, males made up almost 65% of his survey of diving visitors. However, (Musa, Kadir, & Lee, 2006) contend that the male-dominated stereotype of scuba diving is shifting, representing an increasing proportion of females interested in scuba diving tourism. The study reported that among diving visitors in Layang Layang, Malaysia, women were better represented that reach up to 46.9% of the total.

According to Garrod and Gössling (2007), most of the diver's survey indicated that the sport dominated by those in their 30s and 40s. This supported by Mundet and Ribera's (2001) study revealed that 56 percent of Spanish Medes Islands divers were between 31 and 45 years of age by link this result to the purchasing power requirement. The equipment and training needed to participate in scuba diving mean it can be a costly hobby that tends to limit its appeal to older participants who have built up sufficient finances. Secondly, Mundet and Ribera claimed that the restriction of older people due to the issue of physical fitness (often but not always) which scuba diving is well known required physical to conduct that activity.

The finding related to the decline in the participant of older people is confirmed by other studies of scuba divers and indeed diving tourists. Some researcher cites a Skin Diver magazine readership survey mentioned that the median age of US divers was 35.5 years. However, these figures are probably not accurately representative of divers, especially if the older diver is more likely to read diving magazines. Conversely, this finding is backed by a number of studies. For instance, Musa (2002) found that in Sipadan, Malaysia, the average age of divers was 34.9 years, while in Layang Layang, Malaysia Musa et al. (2006) discovered the average age is 38.5 years (Garrod & Gössling, 2008)

Moreover, based on the report of Tourism Queensland (2006) claimed that 60% of all PADI certified divers are between the ages of 15 and 34. It relevant based on the above statement due to the need for spending power to remain an active participant in diving activity by expecting divers to develop their diving career at an earlier age than they start diving vacations. In contrast, the age range mentioned in the report clearly refers to divers who are beginning their careers rather than those who have earned certification and are advancing as experienced divers through their diving careers.

Interestingly, scuba diving tends to attract more highly educated participants. For example, Tabata (1992) cites the Skin Diver magazine readership survey indicated that 84.2% of U.S. divers attended college or beyond. Only 35.6% of Americans had received a college education during that time. This result was supported in a survey by Todd (2004), who estimated that 75% of New York State divers attended college. While Cater (2007) quotes a PADI survey that stated that 80% of newly qualified drivers have a college education. The domination of scuba diving by highly educated people is often related to the high cost of sport participation, only those with well-paid jobs can bear the large and continuing costs of equipment and training (Garrod & Gössling, 2008)

As mentioned by Garrod & Gössling (2007), there is evidence that this pattern is being transferred to diving tourism. This can be supported by studies from Musa (2003) found that 71% of Sipadan diving tourists had a college education of at least a few years. Meanwhile, Musa et al. (2006) reported that 66.3% of diving visitors to

Layang Layang, Malaysia had a degree or postgraduate qualification. In placing more emphasis, Garrod et al. (2007) found that a college degree was held by 58% of diving and snorkeling tourists in Mauritius. Nevertheless, these results may be influenced by the fact that Malaysia and Mauritius tend to be destinations for high-cost tourism. Thus, the market is generally limited to those with high income associated with higher education qualifications.

The researcher continues to indicate that divers usually have a higher than average earning reflecting the high cost of equipment and training relative to the sport. Hence, Todd (2004) estimates that at least \$60,000 a year was received by half of those diving and staying in New York State. While Ditton and Baker (1999) discovered that the average diver's earning on an artificial reef in Texas was 81% of which were Texan residents were ranged from \$60,000 to \$69,000 per year. For instance, WTO (2001) indicates that 78% of international diving tourists are in full-time employment compared to 55% other international tourists. Meanwhile, US diving tourist average income is \$80,000 per year which according to the report is significantly higher than other traveler's average income (Garrod & Gössling, 2008)

A report by Garrod & Gössling (2007) also shows that diving tourists, in particular, are generally more experienced than certified divers. This can be supported by Mundet and Ribera (2001) reported that 57% of divers in Spain Medes Islands had advanced diving skills and 23.4% qualifications. In addition, 60% had at least 6 years of diving experience and about one-third had 10 or more years of diving experience. only about a quarter of diver's diving for the first time. In Musa et al. (2006) research of diving tourists in Layang Layang, 51% of the survey was considered themselves as experienced divers and 37.8% considered themselves as intermediate divers (known as divers that dive no deeper than 40 m). only 8.2% of the divers considered themselves as novices (beginner diver holding a basic Open Water certificate).

However, the study by Queiroz Neto, Lohmann, Scott, and Dimmock (2017), Use the total number of logged dives only to separate the sample into the various experience levels. The experience accumulated on the basis of the number of involvements of a participant in an activity is more effective than the mixture of other

factors. For example, a diver with a diving certificate of more than 20 years and less than 50 dives are no more qualified than a diver with a certification of two years and 250 dives. Thus the study used three levels of experience, i.e. low (50 or less logged dives), average (between 51 and 250 logged dives) and high (above 251 logged dives), for the amount of logged dives to segment divers. The low-level group (under 50 registered dives) consists of only non-professional diving participant that mostly are supervised or novice divers; the medium-level group of experts (between 51 and 250 registered dives) consist mainly of autonomous divers and divers (entry for the recreational sector professionals), and the highly experienced group (more than 251 registered dives).

Also, diving tourist tends to have well-developed careers in tourism. Thus, WTO (2001) reported that one in three divers frequently take an overseas diving holiday. This can be emphasized by Mundet and Ribera (2001) noticed that two-thirds of Spain's Medes Islands diving tourists had previously visited the area twice or more. Hence, the previous study clearly defined socio-demographic profiles for divers. Divers vary significantly in terms of their motives both to engage in diving and to on diving based holiday, their particular interests and specialties in terms of the division between recreational and professional diving, the centrality of diving to their lifestyle and so on.

Thus, a diving tourist has a number of scales or continuums that could theoretically have different categories of diving tourists. For example, diving tourists can be distributed on a scale based on their main motivation for travel. In the end, the individual would be mainliner 'for whom the primary motivation would be diving', while on the other side, there would be sideliners 'who for certain reasons are mostly going holiday, but if they have a chance to go to diving they may choose to do so'. Most of the diving tourist is likely to be somewhere between these polar extremes, with their tourism motivations based on a mix of diving and non-diving factors.

Based on Garrod & Gössling (2007) claimed that generally diving tourists are not a homogeneous group hence it frequently be confused with divers. In addition, the characteristics, motivation, and activities of the sub-set of divers who choose to go on

diving holidays or preferably holiday diving are not necessarily specifically reflect those of divers in particular. Therefore, in order to understand the spectrum of diver motives, the researcher proposes that it is possible to distinguish fanatics and dabblers, experienced divers and novices, highly qualified divers and ‘try’ divers, specialists and generalists, mariners and socialisers, independents and group divers, learners, and enjoyers, as well as ‘homies’ and ‘remoties’. For an overview of the proposed continuums, see Table 1.1

Table 1.1 Possible continuum of diving tourists

Mainliner-Sideliners	Those for whom the travel motivation is primarily diving vs. those for whom tourism is the main motivation
Fanatics–Dabblers	Those for whom diving is central to their lifestyle vs. those for whom it is peripheral
Highly qualified–‘Try’ divers	Those who are highly trained vs. those who are completely untrained
Specialists–Generalists	Those who specialize in one diving activity, e.g. underwater photography vs. those who like to participate across the full range of diving specialties
Mariners–Socialisers	Those primarily interested in marine encounters and experiences vs. those putting a high value on social contacts and interaction
Independents–Group divers	Those diving by themselves or with a partner vs. those preferring to dive in organized groups
Learners–Enjoyers	Those trying to expand their knowledge of marine environments vs. those who are primarily interested in the dive experience itself
Homies–Remoties	Those regularly and mostly diving at home vs. those diving abroad, often in remote locations

This approach works on the basis that the market for diving tourists can be subdivided into statistically distinct subgroups based on the depth of their participation in the activity as can be seen by their knowledge, equipment, preferences from activity setting and so on. Additionally, on the basis of the ‘travel careers’ of diving tourists could be pursued in market segmentation. This approach was used by Pearce which argue that tourist typically goes through a travel career in which their demographic characteristics, motivations, and behaviors can be different systematically. Whereas, another method is called the benefit segmentation. This is based on the observation

that various types of diving tourists usually pursue different benefits from the various aspects of diving tourism products. Nevertheless, there are no conceptual and practical reasons why these different approaches might be better used to combine the approach. It can be inferred by calling for a significant and comprehensive diving tourism industry segmentation to be carried out (Garrod & Gössling, 2008).

1.2.4 Diving Certification Agencies

Generally, there are over 50 certification agencies worldwide for scuba diving which follow the diving standard set by the governing body under the World Recreational Scuba Diving Training Council (WRSTC). The industry is in terms of philosophy, teaching methods and each certification level scheme, each of the agencies differs slightly, but essentially all agencies teach the same fundamentals at the beginner level. Below is a list of the world's best-known scuba diving training agencies.

The first one is the British Sub-Aqua Club (BSAC), the leading dive club in the United Kingdom and the national governing body of scuba diving. BSAC delivers an internationally recognized diver training and development program through a network of diving schools throughout the United Kingdom and worldwide list of the world's most recognized scuba diving certification agencies. It was founded in 1953, the club has more than 50,000 members. Because the UK waters are relatively cold and have limited visibility, the leaders find BSAC dive practice to be more rigorous than some. In general, it puts very early emphasis on rescue training in the course (Diviac, 2019)

As mentioned from (Diviac, 2019), the Confederation Mondiale des Activites Subaquatiques (CMAS) or know as World Underwater Federation is the next agencies that provide courses for scuba diving certification. It was established in 1959, it now comprises more than 130 federations from five regions. It is at the forefront of technical and scientific research and development as well as organizing international aquatic sporting events. It can also be linked to the invention of the oldest and most

comprehensive dive training system. CMAS is based in Rome, Italy and has a unique star-level scuba certification program.

The third agency involved is the International Association of Nitrox and Technical Divers (IANTD) which has been the center of diver training for over 30 years and was the first training agency to deliver technical diving courses worldwide. IANTD continues to dominate the industry in meeting the need of the diving community through branches and instructors in more than 60 countries. The diving training offers a full range of diving programs from Open Water Diver to Expedition Trimix by using open and closed circuit equipment. The training programs and theory of IANTD have a strong focus on the knowledge and skills of in-depth diving (Diviac, 2019)

National Association of Underwater Instructors (NAUI) also one of the top scuba diving agencies known as one of the world's largest non-profit diving certification organizations. NAUI founded in 1959 as a collaboration of members and organized to support and promote “Dive Safety Through Education,” and NAUI remains a recognized leader in innovative education. NAUI Worldwide affiliates offer a complete package diving certificate course from skin diver through instructor course director with hundreds of expertise courses including nitrox and practical diving (Diviac, 2019).

Scuba Diving International also well-known agencies for scuba diving training was starting in 1998 that grew out of the popularity of its sister company Technical Diving International (TDI), which specialized in more forward in terms of dive training disciplines. The strict approach offered by the SDI training system has been embraced by both students and instructors. The streamlined course materials allow students to learn the essential academics with a focus on practical diving skills learned both in the pool and in the open water environments. SDI is the only scuba training and certification agency that requires students to be taught from the beginning of the training with modern dive computers, solo diving, and eLearning (Diviac, 2019).

Next, Technical Diving International (TDI) is the world's largest certification agency for technical diving. As one of the first agencies to provide training in mixed gas diving and rebreathers, TDI is seen as an innovator in new diving techniques that had not been available to the general public before. Hence, to ensure quality training throughout the world, TDI's professionals are held to the highest standard. It means that the instructor has the opportunity to document their experience and knowledge before reaching the rating as a diver taking a TDI course. Thus, TDI is committed to providing the highest quality education with the most up-to-date information and strategies assisted by the new resources. The articles from TDI are written by writers who practice the style of diving they write about intensely. Those same materials are improving as the technology and equipment change (TDI, 2019).

Subsequently, the diver can obtain a scuba diving certification in Scuba School International (SSI) that was started in 1970. SSI has well-developed by including more than 30 service centers and more than 2,500 international locations in more than 110 countries. SSI is the only certification organization for scuba diving that requires dive professionals to work with professional dive centers or resorts. SSI headquarters are located in Germany, with training facilities that are widely spread in Europe, North America and Southeast Asia (Diviac, 2019)

Finally, the Professional Association of Diving Instructors (PADI) is the world's leading certification organization for scuba diving. With more than forty years of experience, over 136,000 PADI professionals and 6,200 dive schools around the world, PADI training materials, and services provide opportunities to diver experience scuba diving at any potential place in the world. The PADI system consists of modules divided into theory and practical skills development with standardized learning goals. The theory is mainly conveyed through the use of manuals or online learning through self-study. Mastery of practical skills is achieved through confined water training (pools or relatively shallow water) and open water performance assessments.

1.2.5 Scuba Diving Courses and Certification Levels

The increasing demand for dive tourism has opened the eyes of the government to develop this type of recreational tourism. For instance, international tourists visiting Australia has expanded where the state government associations have recognized dive tourism as a noteworthy explicit market section. By using dive tourism as developing tourism is not a new method. For instance, Truk Lagoon that located in the Pacific relying on scuba diving activities as primary developing tourism in those areas. An accurate number of divers participates are hard to decide, but PADI as the largest recreational dive training and certifying tourism in that industry has estimated that the number of divers is over 10 million with 1 million divers has been certified in a year (Ince & Bowen, 2011).

To participate in dive tourism, there are various types of courses available for scuba diving. Divers can find a specialization course to satisfy their interest from the initial open water certification to technical diving certification. Indeed, scuba diving certification typically works in a line of the level. Divers need to obtain open water qualification before progressing with advanced certification and so on. There are five main levels with more advanced options reflecting the sequence of professional diving certifications.

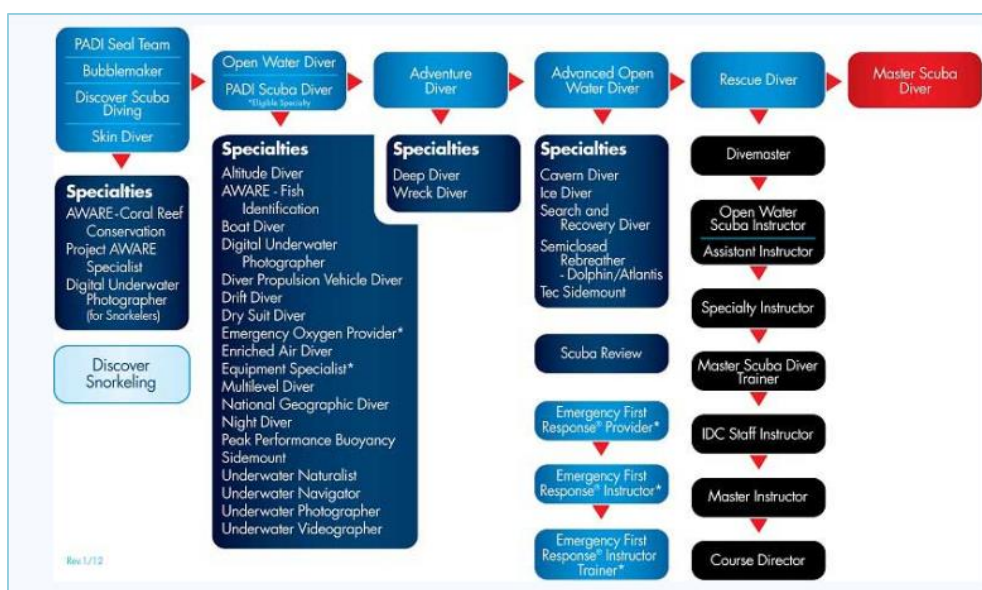


Figure 1.1 Scuba Diving Courses and Certification Levels

The Open Water certification is the first level of diving certification that will consider the participant as a scuba diver. This course includes a combination of knowledge development (theory), confined water dives (practical training) and open water dives (experience). Divers acquire basic knowledge of scuba diving techniques, equipment, and theory at a required depth of approximately 18 meters (60 feet). The Open Water Diver certificate is available from a variety of diving colleges, resorts, and liveaboards (Diviac, 2019).

Scuba divers are required to take training courses that have been offered by a professional scuba dive training center. Furthermore, as mentioned by (PADI, 2019) there are three significant stages to get a scuba certification. Firstly, it requires advance knowledge of scuba diving. In the first stages, there is a key standard or requirement that should be considered of scuba diving, for instance, choosing the scuba gear, and key signals procedures in diving. After obtaining this knowledge, the second phase is confined water dives. This is the first phase that covers fundamental scuba skills. These skills include setting up scuba gear, using a mask, entering and exiting the water, buoyancy control, how to navigate underwater, and some other safety procedures. Lastly, it completed off by doing in an open water dive. Scuba dive learners will apply essential skills learned from confined dive which usually in a pool for the beginner to dive in an open water environment.

The Advanced Open Water Diver certification is the second step in the scuba diving certification sequence. The participant enjoys further development of the knowledge of scuba diving (theory) and exploration of scuba diving specialties during this course. Many agencies enabling divers to choose from interesting topics such as underwater photography and navigation as part of the course for open water dives. In addition, to further developing the skills and principles of a diver, the Advanced Open Water Diver qualification requires divers to dive to 30 meters (100 feet) after complete the qualification (Diviac, 2019)

The third level of scuba diving certification is Rescue Divers which often being labeled as the most challenging and yet most rewarding of the qualification courses for scuba diving. Divers learn how to avoid and treat accidents underwater during these

courses. This program encourages students to develop the skills required in difficult situations to support others (Diviac, 2019). It also provides more tools to manage themselves while under pressure. The course combines self-study in enclosed water and open water environments with realistic ability tests. The diving qualification requires that participants in the last two years have completed an Emergency First Responder class.

Forth level is related to Divemaster certification is the point of entry for scuba diving profession and getting charged to dive. Through training in this intensive course, divers will improve their understanding of scuba diving, fine-tune their expertise in scuba diving and rescue diving and become a leader in the field of scuba diving (Diviac, 2019). Once the divers complete the certification, divers can supervise scuba diving operations, collaborate with dive instructors in the scuba industry and act as a role model for trained divers. The qualification Divemaster includes training lessons, pool sessions and open water sessions where a diving instructor is assisted by the participants. Typically, this course requires a significant investment of time that frequently in range one month or more.

Next is a Dive Instructor which this scuba diving is the next phase in a scuba career and allows divers the opportunity to find a job of scuba diving. The dive instructor certification offers the opportunity for divers to express their passion with others by offering a variety of scuba diving lessons. In addition, the instructor course is split into two sections, first assistant instructor courses and the second one is an open water instructor course. After being qualified to offer Open Water classes, instructors received licenses to teach a range of other fiving courses until the student becomes a professional or known as the technical diving instructor (Diviac, 2019). The certification as a dive instructor requires in range ten days to two weeks of time commitment and requires that each potential instructor pass a final examination. For those searching for scuba diving career, this is the qualification that will best opportunities to find one.

Experienced divers might want to add to their diving skills an additional adventure by taking a technical diving course. Through the use of specialized

techniques and equipment, this series of diving certifications allows divers to go beyond the limits of recreational diving. Typically diving certification agencies use a series of courses to expose scuba divers to practical diving. These courses are similar to the certification for recreational diving. For instance, PADI has 18 courses for technical diving and 8 courses for the technical diving instructor. Each of these levels introduces new techniques for practical application in open water through classroom work and new equipment (Diviac, 2019)

1.2.6 Dive Tourism Development in Malaysia.

Like other developing countries, Malaysia is particularly rich in various natural attractions that are becoming an asset to the tourism industry in the country. Sports tourism is also considered a driving force in the development of the tourism industry apart from other tourist attractions in Malaysia. Growth of island tourism in Malaysia started to be recognized after the Ninth Malaysia Plan 3 (1985-1990) with an emphasis on the development agenda to strengthen the island's development on the east coast of Peninsular Malaysia to attract visitors to the Klang Valley (Mapjabil, Yusoh, Hussin, Ibrahim, & Som, 2016). Furthermore, in The edge markets media group (2013) have mentioned that the government will implement tax exemption for organizers of approved international recreational sports competition and conference. Hence, Malaysia's sports tourism can be divided into hard-sport tourism, which includes international sporting events, while soft-sport tourism includes diving, snorkeling, hiking, skiing and so on.

Like any other marine parks in neighboring countries like the Philippines, Indonesia, and Thailand, Malaysia is blessed with idyllic islands that shelter diverse aquatic lives and coral reefs. Marine Park is a coastal protected area at the lowest tides which distance one to two nautical miles from the coast (Department of Marine Park Malaysia, 2012). Marine parks in Malaysia are currently managed by the Department of Marine Park under the Ministry of Agriculture and Agro-Based Industry (MOA) with a total of 53 islands that have been gazetted as marine parks including Sabah and Sarawak. Out of the total, 42 marine parks are located in the Malaysian Peninsula and were formed under federal legislation. According to the 1985 Fisheries Act (amended

1991) gazetted marine parks in Malaysia around island clusters in Pulau Payar (Kedah), Pulau Redang (Terengganu), Pulau Tioman (Pahang), and Pulau Tinggi (Johor) Labuan as well.

Marine parks in Malaysia have significant socio-economic dimensions that endorse a wide range of tourism and recreational activities such as snorkeling, scuba diving, recreational boating, sailing, hiking, camping, guided interpretive walks and audio-visual program at marine park centers. Hence, marine parks are being developed in Malaysia as tourist destinations to enhance economic growth in Malaysia. According to Zainal (2019) estimated 800,000 tourists visit the award-winning marine parks of Malaysia every year. Indeed, Marine parks have extremely high quality according to a Total Economic Quality (TEV) research conducted by Universiti Utara Malaysia with assistance from the Department of Fisheries. Research has found that the Labuan TEV for Pulau Payar (Kedah), Pulau Redang and Pulau Perhentian (both in Terengganu), Pulau Tioman (Pahang), Pulau Tinggi (Johor) and Pulau Taman Laut ranged from RM174 million to RM3.6 billion per year (Zainal, 2019).

Indeed, most beaches and sea seeker tourists favor the eastern coast of Peninsular Malaysia, which has many idyllic islands with white sand beaches and safe coral reefs allowing tourists to enjoy the natural beauty. Likewise, divers who typically have unique recreational interests can make a direct route to Sabah province lies in Sipadan, Terengganu popular with Perhentian and Redang, and Pahang which is situated in Tioman which is regarded as a world-renowned diving destination and Malaysia's only oceanic island.

Diving in Malaysia is fitted for all degrees of divers as the waters are generally calm and reefs are protected. Typically, Peninsular Malaysia's eastern coast is open for diving from March to September, while diving in year-round in eastern Malaysia. Water temperatures in dive sites are often warm at 82-86 ° F (28-30 ° C) and most of the destination can be reached by using speed boats no need to dive using the liveaboard vessel. Islands such as Redang, Perhentian, Lang Tengah, Tenggol and Tioman are suitable for the new diver on the east coast of Peninsular Malaysia, making it popular dive sites for experienced divers as well. There are a lot of dive operators

who offer the diver option to select the best dive instructor based on diver's interests and the diver can get opportunities to experience to explore the rich habitat of marine life such as green ocean turtle, hawksbill ocean turtle, and leatherback sea turtle. Apart from turtles, divers can find blacktip sharks, panther sharks and huge few groups of yellowtail snappers.

Indeed, Malaysia is home to the world's best diving spots and offers different diving courses. For beginners, the diving conditions are splendid, and there are many dive spots available to enjoy right after the Scuba Diving course has been completed. As Malaysia's island destinations are known for calm waters and a wealth of marine life. Indeed, Tourism Malaysia plays a major role in supports professionals with skills in promoting local diving water sports, and island trips. Tourism Malaysia offers publicity and marketing assistance to your marine tourism business by inclusion in numerous events and exhibitions by collaborating with Malaysia Scuba Diving Association (MSDA) in order to make Malaysia being chosen as a global dive destination.

MSDA play role in promotes the Malaysian Dive Industry and the conservation of Malaysian underwater heritage by providing Malaysian Dive Industry with a Malaysian identity and national representative at Dive Events. Hence, MSDA offering the Malaysian Dive Industry medium to highlight Malaysia's dive travel, training, product, services and ensuring compliance with internationally recognized by Dive Safety Standard that was developed by the International Organization for Standardization (ISO) standard of Recreational Diving Services. MSDA also involved in collecting data for industrial development purposes and collaborate with MOTAC, Tourism Malaysia and the National Recreational Scuba Diving Council to facilitate agencies in issues of policy and industry development (Mannison, 1979). Therefore, MSDA works with Malaysia dive operators to adopt and implement the best international marine conservation practices (Tourism Malaysia, 2018).

Tourism Malaysia has participated in several international events to promote diving in Malaysia, including the Diving Equipment and Marketing Association (DEMA), the world's largest trade event for companies engaged in scuba diving, ocean

water sports, and adventure/dive travel industries. DEMA has attracted nearly 10,000 professionals from the dive and travel industry as well as 590 companies from all over the world. Tourism Malaysia also participated in the Malaysian International Dive Expo (MIDE), an annual Malaysian dive exhibition. B2B sessions between local dive operators and resort operators were also arranged in order to encourage the production of Malaysian scuba diving packages to be sold worldwide (Tourism Malaysia, 2010).

1.2.7 Dive Tourism in Tioman, Pahang

As scuba diving activity usually carried out on warm water islands and shown a growth of special interest products in Malaysia. Tioman Island is one of the popular destinations for scuba diving and it needs to remain competitive to ensure divers satisfaction. Tioman Island is situated off the east coast of Pahang State of Peninsular Malaysia (Tioman Development Authority, 2010). In previous years, the island has been attracting divers from all over the world especially those with a special interest to encounter the most impressive coral reef. Thus, Tioman are well known as a diving and snorkeling paradise just like Perhentian and Redang in the east coast peninsular Malaysia.

The island can be accessed by ferry from Mersing's coastal town or Tanjung Gemok. Tourism has been the main industry on this island since the 1990s and is focused almost entirely on tourism. Therefore, tourism operations become an important source of income for their local communities and most employment opportunities such as hotels, small restaurants, nature guides, and boat operators. The island is home to beautiful and diverse coral reefs and has become a popular destination for tourists, particularly among underwater explorers. There are other sports on Tioman Island such as bird watching, boat sailing, jungle trekking, and rock climbing. Thus, the islands also suitable for tourists to enjoy the 3S's (sun, sea, and sand). However, between December and early February, the island experiences the monsoon season. Therefore, during this period, some resorts are forced to close their businesses (Chia, Ramachandran, Ho, & Ng, 2018).

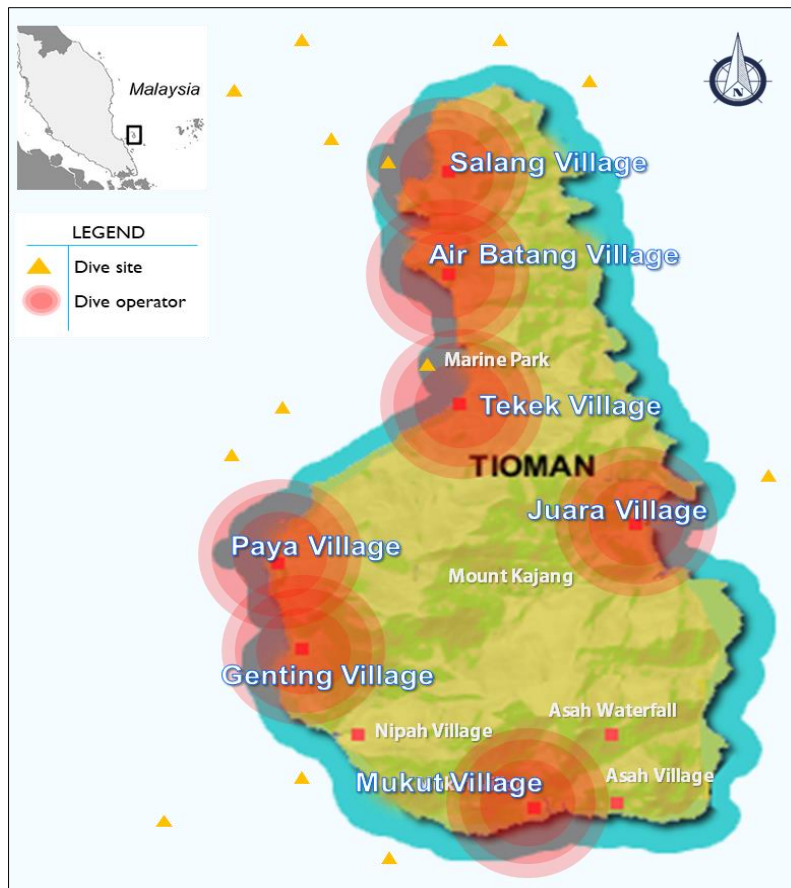


Figure 1.2 Dive Site in Tioman Island.

Tioman Island is an island in Rompin District, Pahang, Malaysia. It is situated 32 kilometers (20 miles) off the state's eastern shoreline and is about 21 kilometers (13 miles) long and 12 kilometers (7.5 miles) wide. It has seven towns with Kampung Tekek in the focal western coast being the biggest and most crowded. The densely forested island is scantily rich with different coral reefs, making it a famous spot for scuba diving, swimming, and surfing. Around the island there are numerous hotels and chalets for travelers, which this island also entitled as a duty-free status, providing tourists with duty-free shops.

Rompin's District Officer is responsible for the island's management and development. Tioman has wonderful beaches and marine surroundings. This island's scenery and elegance have drawn many visitors, both locally and abroad. The island's landscape and beauty have attracted many tourists, both locally and abroad, and once the island has been voted one of the world's ten most beautiful. Tourism has become a very important income-generating activity on the island in addition to fishing activities

Beside of Tioman beautiful beaches and marine ecosystems, the state government has gazetted Tioman to preserve its flora and fauna as a wildlife reserve. This gazette was created on September 28, 1972 (Pahang Gazzetta Vol. 25 No. 405) for the inland forest area covering a total area of 12,383 ha, but in 1984 part of this area (4,087 ha) was excised for the development of agriculture and tourism (Abdul, 1999). Hence, nowadays Pulau Tioman Wildlife Reserve, only 8,296 ha or 61 percent of the island remains.

In accordance with the Fisheries Act (1985), the marine area around Pulau Tioman and eight other nearby islands were also gazetted as marine parks and marine reserves. Pulau Tulai, Pulau Sepoi, Pulau Chebeh, Pulau Tokong Bahara, Pulau Sembilang, Pulau Sri Bulat, Pulau Labas and Pulau Gut are among the islands that have been gazetted. These offshore areas are limited for two nautical miles to the sea at the lowest tide. Marine parks and marine reserves are established to preserve and protect marine flora and fauna such as fish, coral reefs and aquatic flora from being destroyed by fishing and other human activities. Around Tioman and its neighboring islands are found the rare giant clam and several types of corals (Abdul, 1999).

In addition, tourists that visiting Marine Parks in Tioman need to pay entrance fees. According to Sim, Leoi and Randhawa, (2016) mention that the new Marine Park Conservation Fee required a foreign tourist will be charged RM30 for adults and RM15 for both senior residents and kids. The charges for local people stay at RM5 for adults and RM 2 for kids. Both Marine Park fee must be paid separately at two little kiosks before departing from Mersing and Tanjong Gemok ferry terminals. Therefore, for outdoors, camping, commercial, documentary filming, and research activities, as well as visits by dive operators and proprietors of personal yachts, the charges will go from RM10 to RM500. As indicated by a Marine Park Department official, exemptions were made for those living on islands close to the parks. Thus, the fees will flow to a trust subsidize that will utilize to manage and maintain the parks.

1.2.7.1 Unethical Dive Operator and Freelance Divemaster

During the intense growth of scuba diving, it can be seen the increasing number of dive instructor without a shop, a home-based dive service, by-appointment-only dive business, dive operator offering dive package without a committee approval of permits, or dive center that have recently used outdated or invalid license as a result of the rapid increase of diver in dive destination. Disqualified instructors and dive center were jumping from one agency to another agency. Plus, there some of the PADI dive centers that have their license revoke or expelled and that individuals that have been suspended by PADI (Orpheus dive, 2019).

Besides that, similar issues also being faced by dive tourism in Singapore. A common problem occurs at the dive center is diver making their purchase after perceived a bad experience of using ill-maintenance rental dive equipment. Therefore, some of the rental equipment are investment are hardly necessary and certain equipment are should not be placed on the rental shelves. Another remark that being highlighted is that many smaller dive operators' rentals their dive equipment to third parties. Due to these circumstances, if the dive equipment is not performing well, the divemaster will blame the dive center for the poor maintenance of dive equipment. When the dive center is brave enough to operate without a business license, it was possible for the freelance divemaster to carry out classes without adequate supports for logistics (Orpheus dive, 2019).

Generally, dive centers unethical during conduct the dive activities because they want to cut costs in diving courses. This unethical behavior of certain dive center can result in tragedies. Hence, divers and operators need to ensure that standards of quality are strictly upheld. This is happening due to the freelance divemaster tried to save money by using the same tank for more than one dive instead of getting a fresh tank of air for new divers. To avoid same tragedies, happen in Tioman, majority of dive center insists on charging for air tanks per tank rather than per tank. It was confirmed that the cost-cutting over renting air tank was about RM20 to RM30 each (Sia, 2013).

Furthermore, recently diving school in Tioman show a low training standard. A review on the previous diver mentioned that some divemaster produces divers with minimum skill rather than trying to help students sharpen their abilities. In reference, there is some dive centers are competing with each other and some of the dive centers take alternatives by hired divemaster who certified non-swimmer as a scuba diver. In other words, some of the dive centers in Tioman more prefer to choose quantity over quality to the reduced operation costing thereby they hired those divemasters which instructors are not qualified and certify by PADI standard. (Sia, 2013). It was appearing that scuba diving school has become a cut-throat industry with another diving school in Tioman

1.3 Problem Statement

According to the statistics from Tourism Pahang (2019), Tioman island has shown drastic changes especially in terms of tourism development in 2015. It received 270,164 tourist arrivals, an increase of (0.51) percent and positively increased 276,878 (2.49) percent over 2016 respectively. Meanwhile, in 2017 the number of tourists to visit Tioman has declined (-4.92) percent and in 2018, the number continuously decline (-2.73) respectively. From a tourism perspective, Tioman has natural resources that can be tourist attractions for coastal and marine tourism development. In this regard, the Pahang government considers coastal and marine tourism as one of the highest priorities in its tourism development strategic plan. Thus, research with regards to coastal and marine tourism for Tioman is still not properly organized.

Table 1.2 Statistic of Tourist Arrival 2011-2018 (Source: Tourism Pahang,2018)

YEAR	TOTAL	GROWTH
2011	236,811	1.23
2012	216,509	-8.57
2013	232,102	7.20
2014	268,784	15.8
2015	270,164	0.51
2016	276,878	2.49
2017	263,261	-4.92
2018	256,065	-2.73

NO	DESTINASI	ANTARABANGSA			ASEAN			DOMESTIK			JUMLAH PELANCONG		
		2017	2018	%	2017	2018	%	2017	2018	%	2017	2018	%
1	KUANTAN	83,099	57,403	-44.76	38,387	36,120	-5.91	2,309,509	1,797,743	-22.16	2,430,995	1,891,266	-28.54
2	CHERATING	59,736	29,763	-50.18	21,017	13,049	-37.91	217,813	312,562	43.50	298,566	355,374	15.99
3	SG. LEMBING	2,024	4,330	53.26	2,208	7,134	69.05	61,953	160,944	61.51	66,185	172,408	61.61
4	PEKAN	1,730	1,093	-36.82	1,111	1,562	40.59	31,944	49,749	55.74	34,785	52,404	33.62
5	TASIK CHINI	339	396	16.81	216	964	77.59	7,094	13,197	46.25	7,649	14,557	47.45
6	ROMPIN	3,752	2,890	-22.97	3,606	3,111	-13.73	141,519	106,851	-24.50	148,877	112,852	-31.92
7	PULAU TIOMAN	44,723	68,538	53.25	25,411	16,270	-35.97	193,127	171,257	-11.32	263,261	256,065	-2.81
8	MARAN	-	23		25	64	60.94	2,686	8,217	67.31	2,711	8,304	67.35
9	BERA	53	110	51.82	151	426	64.55	14,818	26,712	44.53	15,022	27,248	44.87
10	TEMERLOH	1,975	2,968	33.46	1,402	3,137	55.31	269,877	272,326	0.91	273,254	278,431	1.86
11	JERANTUT	11,153	4,761	-57.31	5,568	1,791	-67.83	105,349	133,177	26.42	122,070	139,729	12.64
12	TAMAN NEGARA	39,720	47,592	19.82	1,572	1,276	-18.83	48,461	34,482	-28.85	89,753	83,350	-7.68
13	LIPIS	1,418	894	-36.95	1,930	311	-83.89	76,856	52,267	-31.99	80,204	53,472	-49.99
14	RAUB	512	597	16.60	580	777	33.97	64,165	70,080	9.22	65,257	71,454	8.67
15	BUKIT FRASER	7,393	3,277	-55.67	3,331	2,193	-34.16	116,888	98,179	-16.01	127,612	103,649	-23.12
16	BENTONG	1,577	1,825	15.73	1,538	4,625	66.75	158,821	137,191	-13.62	161,936	143,641	-12.74
17	BUKIT TINGGI	5,445	3,407	-37.43	3,904	4,366	11.83	84,808	81,925	-3.40	94,157	89,698	-4.97
18	JANDA BAIK	1,791	2,322	29.65	1,623	1,667	2.71	79,973	125,672	57.14	83,387	129,661	35.69
19	GENTING HIGHLANDS	1,052,029	917,974	-12.74	1,184,817	1,512,945	27.69	6,893,177	5,520,988	-19.91	9,130,023	7,951,907	-14.82
20	CAMERON HIGHLANDS	257,503	150,345	-41.61	75,222	68,918	-8.38	999,532	1,277,109	27.77	1,332,257	1,496,372	10.97
	JUMLAH	1,575,972	1,300,508	-21.18	1,373,619	1,680,706	18.27	11,878,370	10,450,628	-13.66	14,827,961	13,431,842	-10.39

Figure 1.3 Comparison of Domestic, ASEAN and International Tourist (Source: Tourism Pahang, 2018)

The number includes 68,538 international tourists in 2018 representing an increase of (53.25) percent. Meanwhile, domestic tourists show a declining number of (-11.32) percent of tourist arrivals. More than half of international tourists visiting this coastal area, visit the islands, from which many foreign tourists go to snorkeling and scuba diving. The increasing international tourist arrivals and the rising number of tourism vendors have made the Tioman Islands more popular and gradually been developed. However, the statistic showed the declining number of Asian and domestic tourist which may be dissatisfied with the service that is offered in Tioman Island. That the main reason this research wants to identify whether scuba diving activities hugely contributed to the declining number of tourist arrival in the Tioman Islands. Therefore, by conducting this research, it is able to identify which factor and reasons behind the cause of the drop of tourist arrival by comparing the perception of divers toward dive operator service performance in the Tioman Islands.

1.4 Research Gap

This research concentrate on diver satisfaction in the travel industry. However, in a specific area of tourism which knows as dive tourism. Meanwhile, the impacts of scuba diving on the regular marine condition are well documented (Ince & Bowen, 2011), satisfaction in term of service performance by dive operator have so far gotten little research consideration. This gap in the literature needs to be filled particularly as marine tourism and recreation activity is a rapidly increasing phenomenon (Ince & Bowen, 2011).

In addition, based on a review of the literature related to scuba diving, there have been narrow research into the dive consumption experience from a tourism perspective. To more emphasize, there is limited research into the service attributes of dive tour operators and their impact on the dive consumption experience. Therefore, most of the researchers more concerned about general research conducted into the motivations of people wishing to scuba divers (O'Neill, Williams, Maccarthy, & Groves, 2000).

In a study conducted by Musa et al. (2006), mentioned that a current study focuses on diving underwater experience only. Therefore, the diver is less satisfied with the arrangement of marine life education facilities, rental equipment, lodging, and the lack of other activities. It is suggested that in order to ensure divers' satisfaction, the management should appropriately manage divers' expectations by acquired accurate data about Tioman using the most satisfactory scuba dive factor in the marketing messages.

In addition, there is still limited literature paying attention to service quality studies based on dive operator perspective and most of the researcher tends to concern on environmental issues instead of managerial ones. Thus, existing studies demonstrate a few factors that add to satisfaction among experienced recreational divers. However, the list is not comprehensive and does not examine which components could really different from others in terms of assurance of divers' satisfaction (Ince & Bowen, 2011). Moreover, satisfaction with regard to dive sites in Tioman has not been studied by the researcher which becomes the reason to justify investigative on this research.

1.5 Aim and Objective of the Research

The aims of this research to enhance the divers' satisfaction from service provider perspectives. The aim of this research can be achieved through the following objectives:

- I. To identify diver perception towards dive operator service performance.
- II. To understand the influence of dive operator performance on tourist diving satisfaction.

1.6 Research Question

To achieve the research objectives, the following research question was formulated and examined:

- I. How do divers perceive dive operator services in the Tioman islands?

- II. What is the level of overall divers' satisfaction at Tioman Island?
- III. What are the most influential factors of dive operator services that contribute to diving satisfaction?

1.7 Scope of Research

The purpose of this research is to focus on the diver satisfaction on both international and domestic visitors from service provider perspectives in the study area. As this research focus on Tioman Island, several variables that contribute to the diving satisfaction will be discussed in this research. This research will explore the level of divers' satisfaction which associated with service operators, factors service performance that contribute to diving satisfaction and suggest a recommendation for dive operator to improves their services. In the meantime, related methods to measure the satisfaction of divers also will be discussed in this research. This thesis focused on the adapted model from SERVPERF to measure the level of satisfaction of divers in Tioman. To achieve this research, the researcher uses a quantitative method to gain the data by using an online survey and questionnaire form as the instrument to capture respondent socio-demographic profiles, diver characteristics and experience and the last one related to the dive operator service performance attributes. In this survey, the researcher focuses on the Tekek village as a research location and target respondents focus on license divers who have experience scuba diving activities in Tioman. This research also highlighted the areas that require management attention by the dive center, in hopes that the finding of this research will assist the dive operator to enhance the quality of services provided at the Tioman Islands.

1.8 Significant of the Study

This research gives the divers, the researcher and the dive operators some potential benefits. Furthermore, the findings of this research are important for local dive operators ' further growth. The research data obtained can be used in the future for a more effective marketing strategy. Product and services could be developed and planned to better serve the potential and repeat divers. The shared information will help the dive operator to increase their strength and improve their weaknesses, particular when it comes to better planning. It is also beneficial for divers themselves

through involvement in this research that offers opportunities to share their through on various services provided at the sites as well as their perception of dive operator service and experience at Tioman dive sites. In addition, the potential improvements made may benefit future Tioman dive tourism.

As mentioned earlier, this research aims to strengthen the divers' satisfaction from service provider perspectives. In this context, the information gained will be useful for both Tioman Development Authorities and dive operators in Tioman. Based on the official website of Tioman Development authorities, the research does not obtain any data related to divers in Tioman. Hence, this report may be useful and lead for Tioman Development Authorities to obtain more accurate data allied on scuba diver. Which the agencies will be able to cooperate with the dive operator more effectively after evaluating the diver feedback on particular types of products and services. This research will able to enhance service performance since dive tourism in Tioman is one of the top development priorities in Tioman. As well as, having this research report will support the implementation of this strategy.

In addition, from an academic perspective, this research can develop student skills, knowledge, and experience as a researcher and of dive tourism within the wider field of coastal and marine tourism. The student will have an advantage by applying those skills, knowledge, and experiences to the workplace and on the completion of postgraduate studies.

1.9 Structure of the Thesis

The research includes five chapters, the first which is the introduction. The first chapter provides an introduction to the research and overview of scuba diving. then there was also an identified problem statement. In the following sections the purpose of the research was discussed, followed by the research scope and significance of this study. Next, chapter two provides an overview and summary of the relevant literature in which the researcher review previous studies on the subject, especially literature related to scuba diving tourism. Next, in chapter three, the research design emphasized how this research was conducted and analyses of the collected data. The researcher

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