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The social media usage
behaviour of scuba divers to
Portofino
MPA

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This research forms part of the Green Bubbles RISE Project

Green Bubbles

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Contents

1. Introduction

The Portofino Marine Protected area in Liguria District in Italy, Portofino is nestled on a peninsula on the Italian Riviera, south-east of Genoa. This MPA contains some of the richest diversities of marine life in the Mediterranean. The seabed consists of various vertical walls where various forms of marine life can be observed. Another unique aspect of this area is the underwater statue called Christ of the Abyss. When taking this information into account, it becomes clear what this MPA has become a haven for various forms of scuba divers. Currently, this MPA provides divers with the opportunity to choose between 20 dive sites as well as visibility, which range between 16 and 20 meters. Water temperatures can range between 12° C in the winter months to 26° C in the summer months. Suggested times to dive are from March to October.

Green Bubbles is dedicated to recreational scuba diving, an activity in which millions of people worldwide engage; however, this is poorly studied within the European context. Green Bubbles aims to maximise the benefits associated with diving while minimising its negative impacts, thus achieving the environmental, economic and social sustainability of the system with a specific focus on the European diving industry.

In order to assist the dive operators who operate in the Portofino MPA to optimally reach their current, as well as future markets, it was decided that a social media survey should be conducted with the main aim to better understand the social media behaviour of scuba divers as well as what they expect from scuba dive operators' social media pages in order to actively follow their sites and build a relationship with the operators. Such relationships are excellent ways in which businesses can sustain their growth, and also, such relationships can be used to outweigh the competition.

2. Research aims

This research project had the following primary aims:
- To determine the divers' socio-demographic information
- To determine scuba divers' general diving behaviour
- To determine scuba divers' overall social media usage behaviour
- To make recommendations about social media site management for improved marketing and customer relations

3. Method of research

To achieve these aims, the following approach was implemented: Firstly, a questionnaire was developed and administered by a researcher from TREES at the North-West University in collaboration with the diving operators in Portofino. This survey took place from 1 September 2016 to 20 September 2016. The areas of Santa Margherita, Rapallo and Camogli formed part of the survey. Respondents were approached, and the aims of the study were explained. After they had given their consent, the questionnaires were handed to them for completion. As a result of the off-peak season, there were many repeat divers, meaning that only 81 completed questionnaires were obtained.

During the second part of the study, the questionnaire was ported online onto Google Forms where a link to the questionnaire was generated that could be shared with potential respondents. The questionnaire was available in both English and Italian. The link to the online questionnaire was shared to various scuba diving groups and pages on Facebook as well as Twitter from 15 September 2016 to 15 October 2016. During this period, 388 questionnaires were completed by anonymous respondents from various countries around the world. The data from the two surveys were pooled together, after which descriptive statistics were done in SPSS.

The results of this survey are discussed in the next section.

Section A: Socio-demographic information

4.1 Gender

The majority of respondents (62%) were male, while 38% were female.
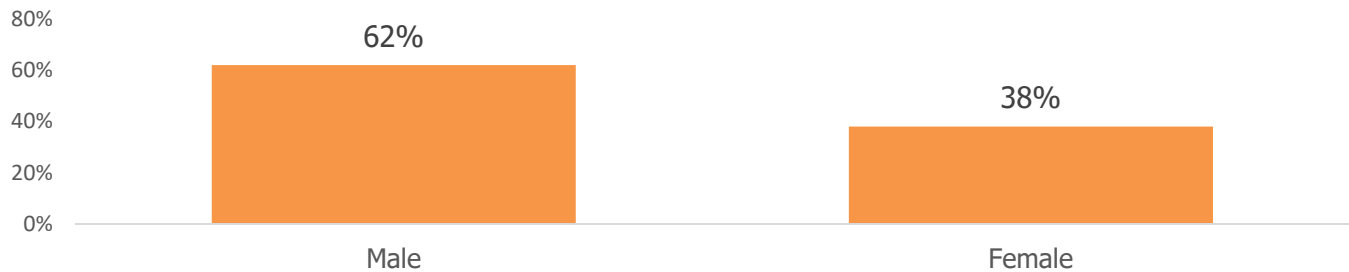
4.2 Age

The largest category of respondents was in the 31 to 40 years age range (26%), followed by those in the 41 to 50 years (24%) and 51 to 60 years (20%) age ranges. On average, respondents were 41 years of age.

Age	%
>15 years	1%
16 to 20 years	4%
21 to 30 years	19%
31 to 40 years	26%
41 to 50 years	24%
51 to 60 years	20%
61+ years	6%
Average age	40.83 years

DID YOU KNOW?

The average respondent was 41 years old

3

4.3 Home language

English was the language spoken by most respondents (60%), followed by Italian (19%), German (5%), Malay (3%) and Spanish (2%). Afrikaans, Dutch, French, Indonesian, Mandarin and Polish each account for 1% of spoken languages, respectively. Other languages included: Albanian, Arabic, Catalan, Czech, Finnish, Greek, Gujarati, Hebrew, Hungarian, Korean, Luxembourgish, Portuguese, Romanian, Russian, Serbian, Slovak, Thai and Turkish.
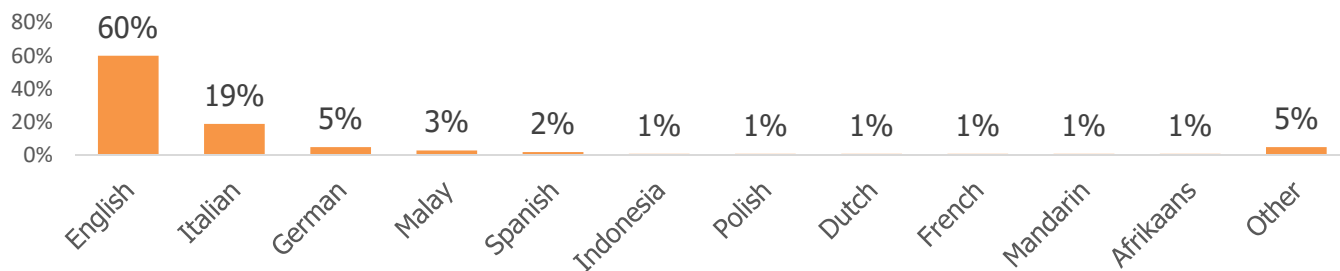
4.4 Occupation

Students (10%), support staff, management, and engineers (7, each) were the most prominent forms of occupation indicated by the respondents. This is followed by those who work in health care, those who are pensioners and those who are diving instructors (5%, each). Thirty-nine percent (39%) indicated other diverse occupation types.
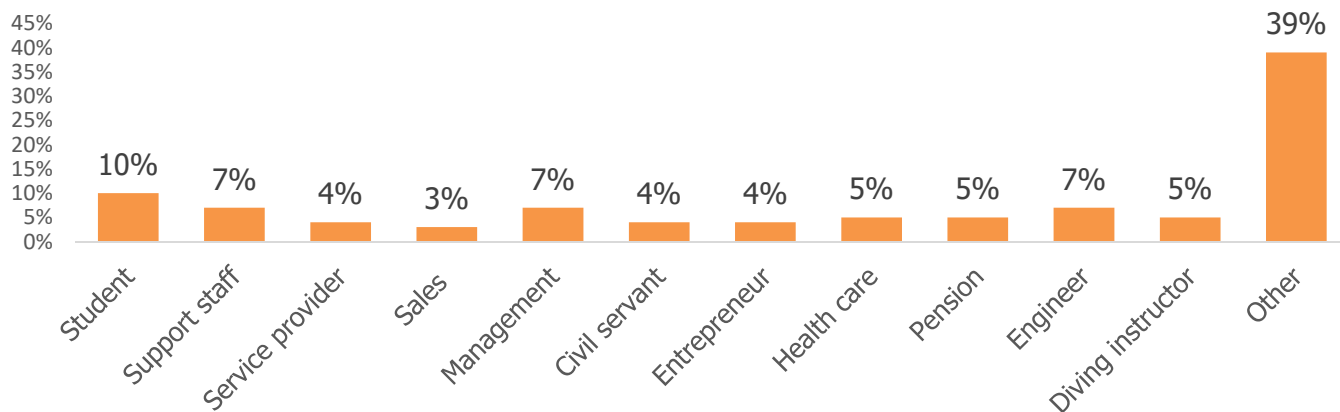


4.5 Country of origin

The largest group of respondents represented the USA (28%), followed by 18% from Italy, 10% from Australia and 7% from Malaysia and the UK, respectively. Other countries (14%) not included in the figure were Belgium, Belize, China, Colombia, Czechia, Finland, France, Greece, Hellas, India, Indonesia, Japan, South Korea, Luxembourg, Mexico, Namibia, Netherlands, Peru,

Philippines, Portugal, Romania, Serbia, Singapore, Spain, Switzerland, Taiwan, Turkey, UAE, and Venezuela.
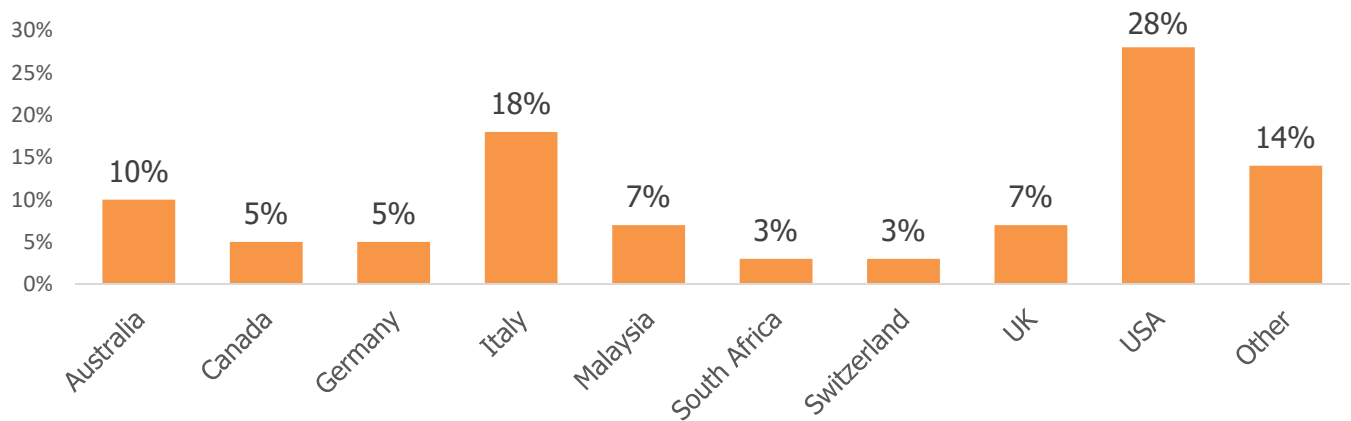
4.6 Level of education

More than half of the respondents (54%) had obtained some form of tertiary education, with 36% who had obtained a degree, and 9% who respectively either obtained a post graduate or professional qualification. Thirty percent (30%) of respondents had complete high school.

Level of education	%
No school	1%
Primary school diploma	1%
Junior high school diploma	14%
Graduated from high school or equivalent	30%
Degree (e.g. 3 years, specialised)	36%
Postgraduate education	9%
Professional qualification	9%
Other	0%

DID YOU KNOW?
54% were well educated

Section B: Scuba diving behaviour

4.7 Biggest influencer for scuba diving

The majority of respondents (62%) decided for themselves to start scuba diving, followed by 19% of respondents who were influenced by friends, and 11% by their family. It is interesting to note that marketing media did not influence any respondents to begin scuba diving.
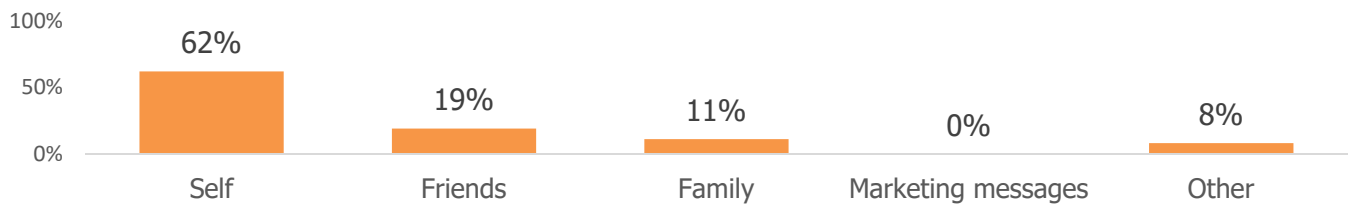
4.8 Time of scuba diving trip decision

When making a decision to travel to a specific destination for scuba diving purposes, 47% of respondents indicated that they made their decision to go more than a month in advance, while the second largest group (36%) made a spontaneous decision to travel to such a destination. Seventeen percent (17%) made their decision a month in advance.
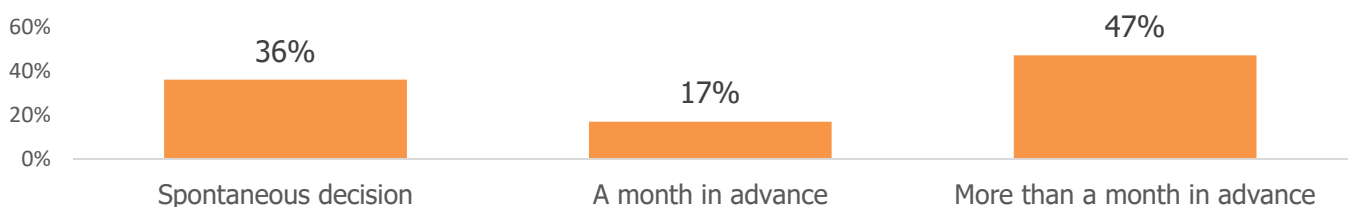
4.9 Number of destinations visited in 2016

Nineteen percent (19%) of respondents indicated that they would visit three destinations for scuba diving purposes in 2016, followed by those who visited two (18%), four (14%) or five destinations (9%). Those who visited eight or more destinations account for 18% of respondents. On average, respondents indicated that they would visit a total of five destinations for diving purposes in 2016.

8+ destinations	18%
7 destinations	2%
6 destinations	6%
5 destinations	9%
4 destinations	14%
3 destinations	19%
2 destinations	18%
1 destination	12%
None	2%
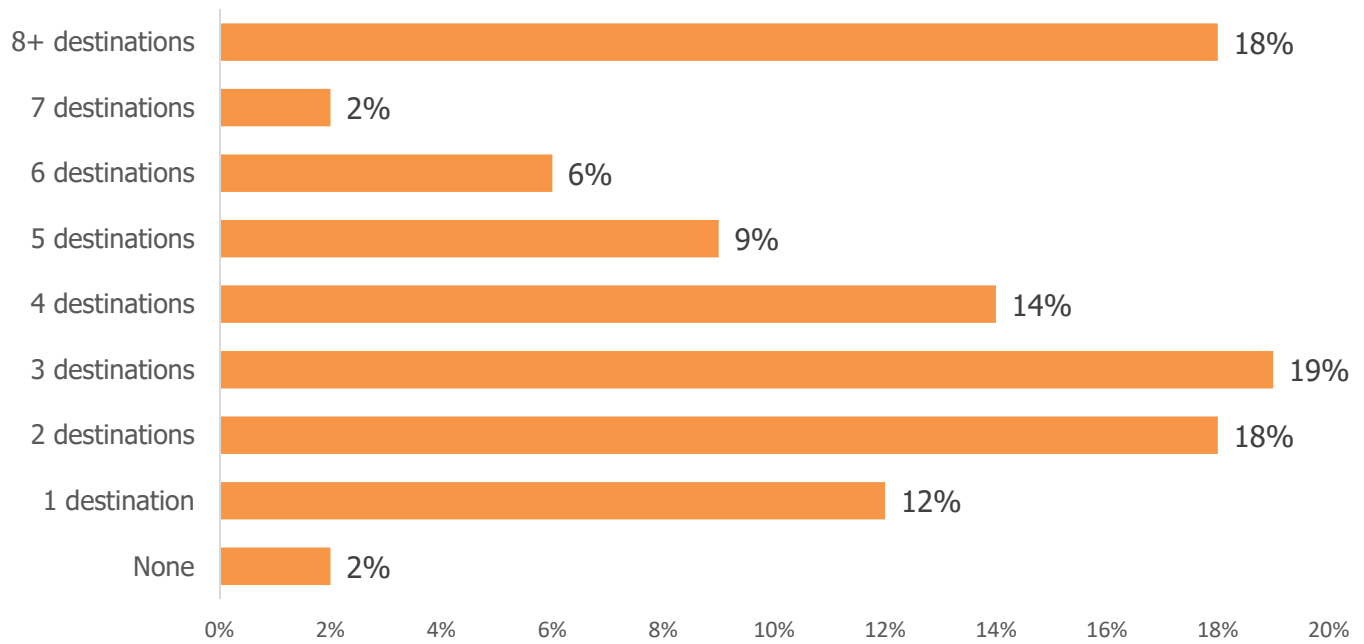
4.10 Number of diver per annum

The largest group of divers, dive 10 times or fewer per year (23%), followed by those who dive between 11 and 20 times (18%) or between 21 and 30% or 41 and 50 times (13%, each). Ten percent (10%) dive 100 times or more per year. On average, respondents dive 55 times per annum.

Number of dives	%
< 10 dives	23%
11 to 20 dives	18%
21 to 30 dives	13%
31 to 40 dives	9%
41 to 50 dives	13%
51 to 60 dives	3%
61 to 70 dives	2%
71 to 80 dives	3%
81 to 90 dives	1%
91 to 100 dives	5%
100+ dives	10%
Average	55 dives

Section C: Dive operators and social media

4.11 Marketing of dive operators

The aim of this section was to determine the most influential sources of information on dive operators, as well as how scuba divers react towards them on social media.

4.11a Source of information on dive operator

The best sources of information on dive operators were word-of-mouth (38%) as well as respondents who had previously made use of the operator's services (30%). This reveals the importance of creating loyalty amongst customers (divers) by ensuring that they receive value for their money as well as excellent service delivery. Another good source of information was social media (17%). Seeing as no other sources of information are seen as significant, it becomes clear that these three main sources should be properly managed to retain and grow dive operators' client base.

Information sources	%
Guide (Books)	2%
Magazine	2%
Previously used their services	30%
Word-of-mouth (from someone else)	38%
Social media	17%
Television	1%
Radio	0%
Newspaper	0%
Stumble upon operator while exploring area	8%
Other	21%

**4.11b Follow dive operators on social media**

Respondents were asked to indicate if they follow dive operators on social media. This question was focused on the dive operators of which respondents made use of their services most recently. The majority (78%) indicated that they do follow the dive operators.
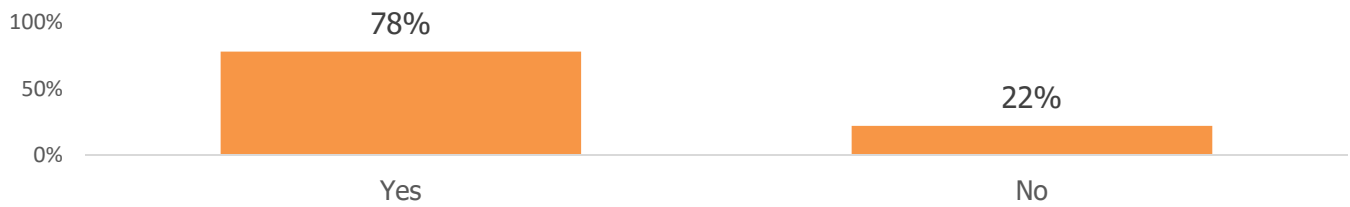
4.11c Recommend dive operators?

The majority of respondents indicated that they would recommend dive operators on their personal media pages.
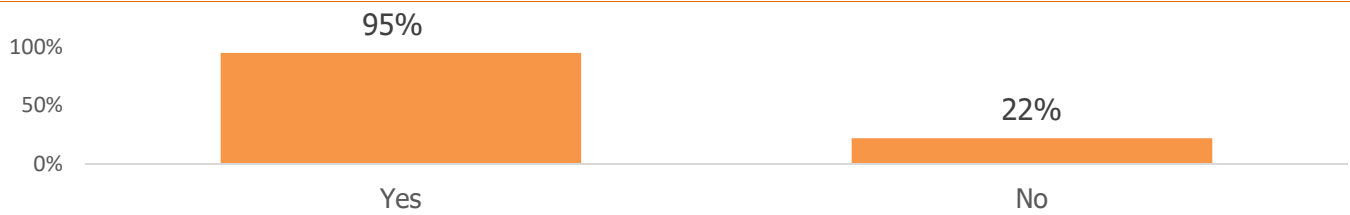
From this section it becomes clear that dive operators are dependent on divers' (clients') goodwill as previous experiences, word-of-mouth and social media are all influenced by the level of experience visitors had. It is, therefore, important for dive operators to ensure that they provide the best service possible, as well as after services such as social media comments, stories and follow-ups. To ensure that the best possible image is portrayed through social media, as well as to understand what scuba divers expect from dive operators on social media, it was decided to also analyse scuba divers' social media behaviour and expectations.

Section D: Scuba diver social media behaviour

4.12 Frequency of social media access

When asked how frequently the respondents access the types of social media pages as listed in the table below, it becomes clear that Facebook (3.69) is the social media platform most frequented by respondents. This is followed by YouTube (2.46) and Instagram (1.98). It is, therefore, important that dive operators be present on these social media platforms to reach scuba divers more efficiently. This question was asked on a five-point Likert scale where 1 = "not using/not registered" and 5 = "always connected".

Social media types	Mean value	Frequency of use
Facebook	3.69	Often (few times a day)
Twitter	1.56	Rarely (some days)

4

Google+	1.85	Rarely (some days)
YouTube	2.46	Rarely (some days)
MySpace	1.05	Not using/not registered
Blogs	1.40	Not using/not registered
LinkedIn	1.68	Rarely (some days)
Instagram	1.98	Rarely (some days)
Pinterest	1.43	Not using/not registered
Other	1.41	Not using/not registered

4.13 Social media reactions

In this section, the respondents' response time and connection mediums were analysed.

4.13a Instant social media message retrieval

When asked if respondents instantly receive social media notifications when there is social media activity involving the respondents, the majority (75%) indicated that they do instantly receive such information. A quarter (25%) of respondents does not immediately receive such correspondence.

4.13b Immediate reaction to instant messages

Of the 75% who do instantly receive messages (4.13a), the majority (59%) indicated that they do not immediately read/reply to these messages, while only 41% will immediately reply.
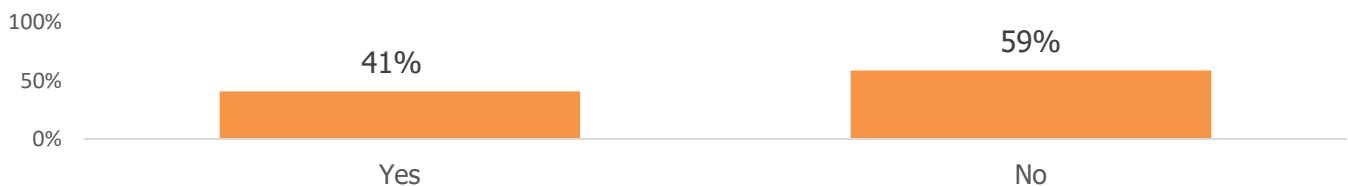
4.13c Device used most often for access

Smartphones (74%) are the devices most often used by respondents to access and react to social media messages. This is followed by those who access it on a desktop computer (11%) and those who do so on a laptop (8%). Only 7% make use of a tablet.

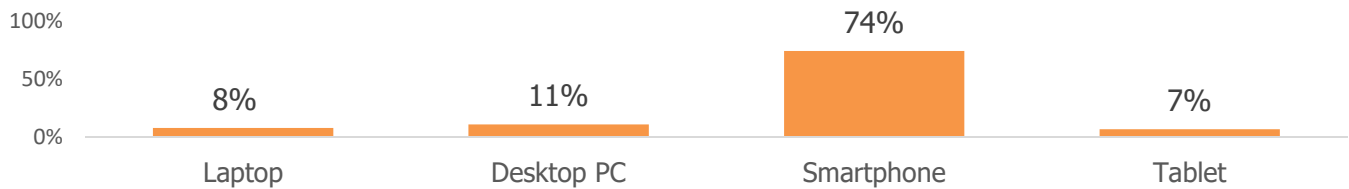From this section, it becomes clear that respondents mostly make use of mobile forms of technology (89%) which allows most of them 75% to instantly receive social media messages. This is important if dive operators would like to make urgent announcements or host competitions via social media platforms. However, only 41% of respondents immediately read or react to their social media messages received. It is, therefore, important to understand at what times of the day would be the most appropriate to reach the largest audience.

DID YOU KNOW?
Most respondents access social media on their
smartphones

4.14 Social media access times
This section takes a look at the times of day that respondents will most likely access social media, as well as the amount of time they spend on social media daily.

4.14a Amount of time
Thirty-five percent (35%) of respondents are on social media for approximately one hour per day, followed by 30% who access it for two hours and 14% for three hours. Seven percent (7%) access social media for six hours of more. On average, respondents spend two hours on social media on a daily basis.
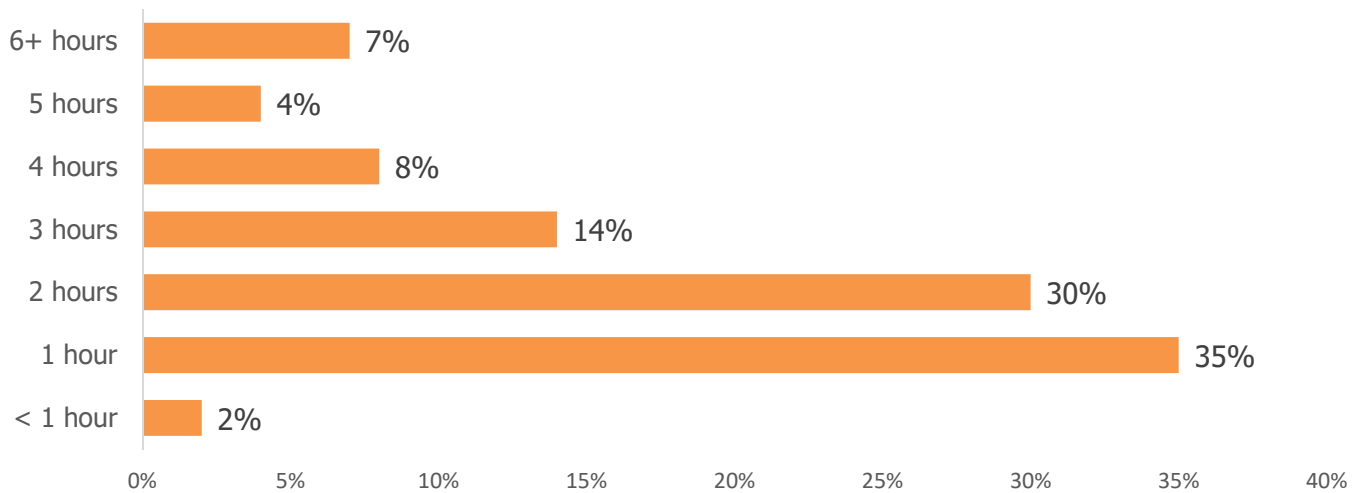
4.14b Time of day

The largest category of respondents indicated that they access social media platforms during the whole day (42%), followed by 37% who prefer to access it in the evenings, 19% when they wake up and 18% either late at night, or in the early morning hours. When taking into account that most respondents access social media throughout the day, the d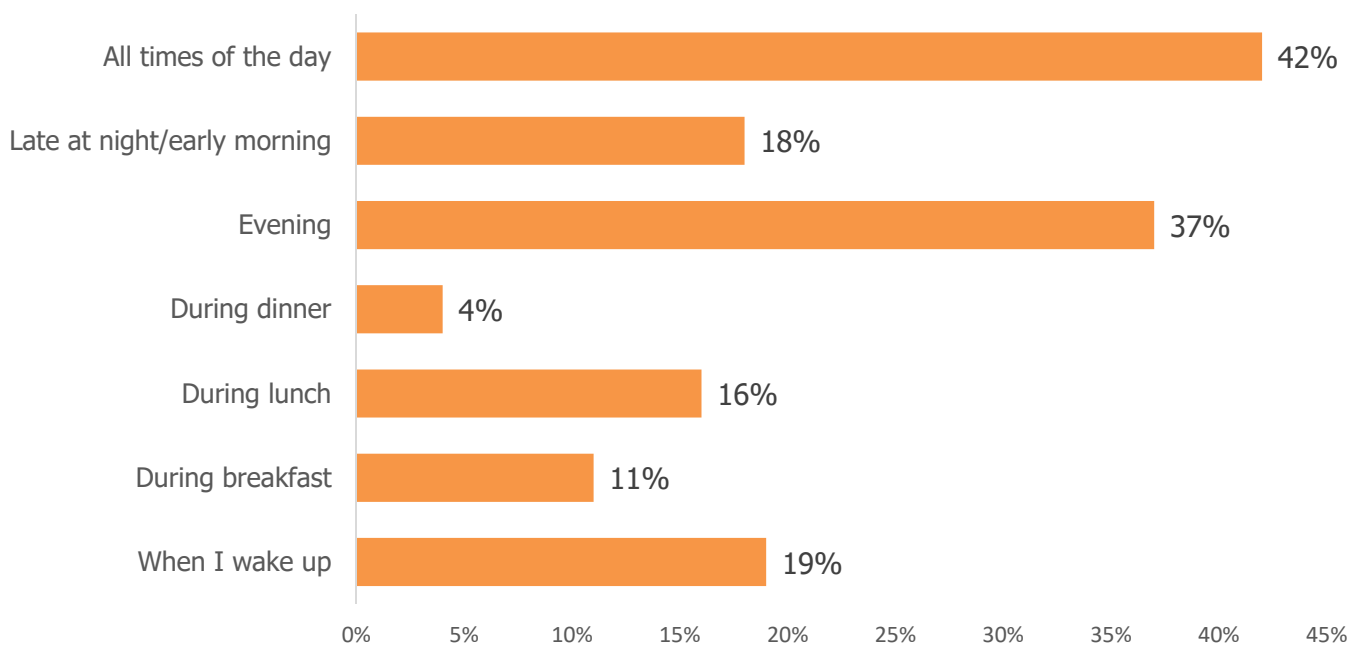ive operators can place messages on social media at any time. However, if they want to maximise their reach, they should set posts after dinner hours in the evening.

4.15 Social media activities

Respondents were asked to indicate on a five-point Likert scale, how often they perform certain activities on social media. The following activities were used most:

1. Look at photos/videos (3.79);

2. Seek information (3.59);

3. Read others' statuses (3.54);

4. Share posts (3.05); and

5. Upload photos/videos (3.04).

Types of activities	Mean value	Frequency of use
Share posts	3.05	Sometimes
Update status	2.75	Sometimes
Take part in discussions	2.80	Sometimes
Read others' statuses	3.54	Often
Read posts by businesses	3.01	Sometimes
Upload photos/videos	3.04	Sometimes
Look at photos/videos	3.79	Often
Seek information	3.59	Often
Leave comments on posts	3.00	Sometimes
Create/follow events	2.57	Sometimes

It is clear that respondents use social media mostly to look at photos and videos, to seek information and to read status updates. This should be taken into account when scuba diver operators make use of social media to maximise the chances of catching scuba divers' attention.

Section E: Social media site expectations

4.16 Aspects for a sustainable social media site

Respondents were asked to indicate on a five-point Likert scale, how often they perform certain activities on social media. The following activities were used most:

1. Sustainable scuba diving practices should be promoted (3.78);

2. The types of marine life found in the areas should be visible from this page (3.74);

3. The site administrators should reply as soon as possible to enquiries (3.73);

4. Social media site updates should take place regularly (3.61);

5. Rare/interesting sightings by other scuba divers should be posted (3.61);

6. Special rates for regular divers should be posted (3.55); and

7. Content should be visually pleasing (photos, videos, etc.) (3.54).

Social media site aspects	Mean value	Level of importance
1. The social media page should have a good layout	3.19	Important
2. Only information applicable to the operator/dive school should be shared	2.85	Important
3. Content should be visually pleasing (photos, videos, etc.)	3.54	Very important
4. The social media site should provide two-way communication between scuba diver and operator/dive school	3.49	Important
5. Operators should share personal experiences on social media	3.08	Important
6. All types of interesting information about scuba diving should be posted	3.30	Important
7. There should be testimonies from other who made use of the operator/dives school	3.28	Important
8. Social media site updates should take place regularly	3.61	Very important
9. The site administrators should reply as soon as possible to enquiries	3.73	Very important
10. Only high-resolution pictures/video should be shared	2.71	Important
11. Sustainable scuba diving practices should be promoted	3.78	Very important
12. I also want to get to know operators/dive school staff on a personal level through social media	2.73	Important
13. The page should provide the background/history of the operator	3.14	Important
14. Pages should be modern and exciting	3.28	Important
15. Competitions should be posted on a regular basis	2.26	Slightly important
16. The page should show how dive operators do their part to protect the natural environment	3.52	Very important
17. New developments in scuba diving (such as technological improvements) should be posted	3.34	Important
18. Cooperation with other scuba diving companies, should be posted	2.94	Important
19. The company's stance on sustainable scuba diving practices should be easily accessible	3.45	Important
20. The types of marine life found in the areas should be visible from this page	3.74	Very important
21. Rare/interesting sightings by other scuba divers should be posted	3.61	Very important
22. Special rates for regular divers should be posted	3.55	Very important
23. Social media posts should contain educational information	3.34	Important

5. Conclusions

5.1 Summary of study results

The results of this study are summarised in the table below.

Aspects	Results 2016
Section A: Socio-demographic information	
Gender	Male (62%)
Age	41 years (average)
Home language	English (60%), Italian (19%), other (21%)
Occupation	Student (10%), support staff (7%), management (7%), engineers (7%)
Country of origin	USA (28%), Italy (18%), Australia (10%)
Level of education	Degree (36%), graduated from high school (30%)
Section B: Scuba diving behaviour	
Biggest influencer for scuba diving	Self (62%), friends (19%)
Time of scuba diving trip decision	More than a month in advance (47%)
Number of destinations visited in 2016	Five destinations on average
Number of dives per annum	55 dives on average
Section C: Dive operators and social media	
Source of information on dive operator	Word-of-mouth (38%), previously used their services (30%), social media (17%)
Follow dive operator on social media	Yes (78%)
Recommend dive operators	Yes (95%)
Section D: Scuba diver social media behaviour	
Frequency of social media access	Facebook (3.69); YouTube (2.46)
Instant social media message retrieval	Yes (75%)
Immediate reaction to instant messages	No (59%)
Device used most often for access	Smartphone (74%)
Amount of time on social media per day	Two hours on average
Times of day that social media is accessed	All times of the day (42%)
Social media activities	1. Look at photos/videos 2. Seek information 3. Read others' statuses 4. Share posts 5. Upload photos/videos

Section E: Social media site expectations	
Aspects of a sustainable social media site	1. Sustainable scuba diving practices should be promoted 2. The types of marine life found in the areas should be visible from this page 3. The site administrators should reply as soon as possible to enquiries 4. Social media site updates should take place regularly 5. Rare/interesting sightings by other scuba divers should be posted

5.2 Recommendations by researcher

To ensure that scuba dive operators reach the optimum number of respondents, the researcher proposes the following:

- The largest part of the market communicates in English. It is therefore recommended that dive operators who operate in areas with indigenous languages other than English, also post a percentage of messages in English.
- Respondents make their decision to dive at a specific destination more than a month in advance. It is therefore recommended that scuba dive operators advertise their prices and specials for a given period, further in advance as it will enhance the chances of scuba divers considering such dive operators.
- On average, respondents visit five destinations per year. This means that marketing on social media should take place continually during the year so that they can catch the travellers' attention.
- When it comes to marketing messages, word-of-mouth, previous visits and social media were the main contributors. It is, therefore, important that dive operators always provide an optimum experience for divers. One negative message from a customer to another potential customer, either in person or on social media, can be detrimental to the success of the business. Always monitor social media messages for negative comments so that they can be addressed immediately. Positive feedback should always be applauded. The majority of respondents indicated that they do follow the dive operators on social media, thereby showing how important proper management of social media sites is.
- Facebook and YouTube are the most popular social networks for divers. It is recommended that dive operators manage both types of social media. When posting a video on YouTube of sighting or recent trip, also post it on Facebook so that people can get to know and follow operators on YouTube. Facebook and YouTube post can be placed any time of day, but a slightly larger audience will be reached if posts are placed in the evenings.
- Some of divers' favourite social media activities include: looking at photos and videos, seeking information and to read others' statuses. By regularly posting photos, videos and information on the diver operator and dive sites, divers might be more inclined to read dive operators' posts.

- One of the most important parts of managing a sustainable, attractive social media site lies in knowing what followers are looking for to catch their attention. It was found that dive operators should share their sustainable scuba diving practices as divers deem it as important and need to see that operators adhere to such practices. Secondly, the divers are interested in the variety of marine life that can be found in the areas where the dive operators operate. Therefore, regular posts (photos, videos) should be made to show divers what they can expect when diving with the operators. Thirdly, divers expect to receive replies as promptly as possible from the site administrators. If the delay is too long, respondents will move on to the next available operator (pun intended). In this modern age, information moves very quickly. New information can become outdated or boring within a few hours. Therefore, the fourth aspect that divers are seeking is regular site updates. If they regularly see and hear about the operator, the operator will always be in the back of their minds when deciding on a scuba dive operators for their next trip. Also, because of the Facebook algorithm, the page followers will likely not see future posts as Facebook only shows information that page visitors' view on a regular basis. Lastly, unique and rare species sightings should be shared as it will entice divers to dive with the operator to see marine life that they would probably not seeing when diving in other areas or with other operators.

The latter are just some of the main recommendations that the researcher could draw from the study. It is suggested that scuba dive operators study the results and use at their own discretion.