

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines



Canet, Lena¹, Manansala, Jefferson², Dela Cruz, Maybelle³, Panaligan, Bernadette⁴, Balingit, Aleli Joy⁵, Mendiola, Ivy⁶, Ramos, Allyssandra⁷

ABSTRACT: The study was conducted on the Municipality of San Rafael Bulacan, Philippines. It focused on recognizing the impact, determined the relation and identified the effectiveness of Social Media such as Facebook, Instagram, and TikTok as advertisements towards tourist destinations in the Municipality of San Rafael Bulacan, Philippines. San Rafael is a first-class municipality in the Philippine province of Bulacan. It has a population of 103,097 people according to the 2020 census. With Metro Manila's ongoing expansion, San Rafael is now part of the Greater Manila built-up suburb area, which extends all the way to San Ildefonso, Bulacan in the North. San Rafael is 60 kilometers (37 miles) from Manila, the country's capital.

A descriptive correlational design is used in the research study. The respondents were 50 working employees and 50 tourists from San Rafael River Adventure, The Spot, The Viewpoint Grape & Dragon Fruit Farm + Bambu Cafe, Hey Brew Cafe and Bypass Grill & Restaurant.

Facebook is the most effective platform for looking for and promoting tourist destinations on social media. Twice a week is how often the respondents post and see the promotion of tourist destinations, and between 12:01 p.m. and 6:00 p.m. is the time when respondents usually see and post the promotion of tourist destinations on social media. The image-based, audio-based and text-based content sometimes attracts the interest of the respondents. While, video-based always attracts their interest when looking for a tourist destination. Owned is the most seen and used nature of post according to the findings of the study. Natural paid promotion is the most seen than paid promotion. In addition, the actual tourist is the one who endorses the tourist destinations and Facebook is the most effective platform for looking for and promoting tourist destinations on social media in boost according to the findings of the study.

KEYWORDS: social media, tourist destination, descriptive correlation, tourism, tourism promotion

INTRODUCTION

According to World Tourism Organization (UNWTO), tourism is the act of traveling primarily for recreational or leisure purposes, as well as the provision of services in support of this act. However, tourists are defined as individuals who "travel to and stay in areas outside their typical surroundings for leisure, business, and other objectives unrelated to the execution of a remunerated activity inside the place visited for no more than one year in a row." According to Walton 2022, Tourism is the act and practice of spending time away from home for the purpose of recreation, relaxation, and pleasure while utilizing commercial services provided. Consequently, tourism is a product of modern social structures, having originated in 17th-century Western Europe, although it has roots in classical antiquity. It contrasts from exploration in that tourists follow the "worn road," profit from established systems of provision, and are generally insulated from difficulty, danger, and shame, as would befit a pleasure-seeker. On the other hand, tourism intersects with other activities, interests, and processes, such as pilgrimage.

According to Turisme Proactiu in 2018, two pioneers of tourism research provided one of the earliest conceptual definitions of tourism; it is stated that tourism is the collection of relationships and phenomena resulting from the trip and stay of non-residents, provided that the stay does not lead to permanent residence and is unrelated to any permanent or temporary gains activity. The British Tourism Society provides a clearer definition that tourism is defined as any activity involving the temporary relocation of individuals from their customary locations of employment. and their activities while in these destinations. A conceptual definition is offered for a social view of tourism that warrants special attention: tourism is a sort of relaxation that entails leisurely travel to a less familiar destination or community.

The human desire to communicate and advances in digital technology have inspired the rise of social media. According to Boyd (2014), social media refers to platforms and services that appeared in the early 2000s, such as social networking sites, video-

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

sharing sites, blogging and microblogging platforms, and associated technologies that enable users to create and share their personal content. Furthermore, social media allows users to participate in online communities. Users can contribute information, ideas, and content on social media platforms through these channels and mediums, which also help to establish a virtual world of communication.

Massive user communities demonstrate that social media has become a daily occurrence for many people (Kemi, 2016). It has brought people from all over the world closer together by facilitating the creation, sharing, and exchange of information and ideas via virtual communities and networks. These social networking sites generate very dynamic platforms using web-based technology. The platform is undeniably simple to get and employ. Currently, everyone is connected to social media at an alarming rate. Some major social media platforms, such as Facebook and Twitter, have enabled everyone to communicate with others, forge better ties with friends and acquaintances we cannot meet in person, and keep up with their lives. Some programs, such as YouTube, Instagram, and WhatsApp, have made it possible to exchange photos and videos with friends and family who live faraway places. Furthermore, there is a strong connection between social media and tourism. According to Sharma et al. (2017), as an information-based economy, tourism greatly benefits from social media. The information that consumers require will help them plan their trips and make decisions on the destinations they will visit and other travel-related goods. Social media has also increased the reach of businesses because it makes it simple for them to target clients who are located far away without even meeting.

Based on Tjoe (2022), due to their shared emphasis on sharing experiences, social media and tourism complement one another nicely. For younger groups, social media's influence on tourism can be extremely powerful. In addition to Facebook posts, 46% of Generation Z travelers claim that Instagram influences their trip choices. With 51% of millennials claiming that Facebook interactions have impacted or inspired their travel selections, it is clear that this generation is equally open to social media. In addition, according to him, when you take into account how much individuals like sharing and recounting their travel experiences online, the significance of social media in the tourism business becomes abundantly evident. A social media post from friends or relatives may be enough to motivate you to book your next vacation. Social media posts may be an enormously essential source of social proof. Moreover, According to Gohil (2015), one of the best tools for destination marketing and advertising available today is social media. Social media turned out to be a significant means of communication that quickly spread throughout the area. Based on Tjoe (2022), due to their shared emphasis on sharing experiences, social media and tourism complement one another nicely. For younger groups, social media's influence on tourism can be extremely powerful. In addition to Facebook posts, 46% of Generation Z travelers claim that Instagram influences their trip choices. With 51% of millennials claiming that Facebook interactions have impacted or inspired their travel selections, it is clear that this generation is equally open to social media. In addition, according to him, when you take into account how much individuals like sharing and recounting their travel experiences online, the significance of social media in the tourism business becomes abundantly evident. A social media post from friends or relatives may be enough to motivate you to book your next vacation. Social media posts may be an enormously essential source of social proof. Moreover, According to Gohil (2015), one of the best tools for destination marketing and advertising available today is social media. Social media turned out to be a significant means of communication that quickly spread throughout the area. Tourism is one of the industries that has profited the most from the internet. As a result, social media has become an integral part of any national or regional tourism promotion or planning. However, on the contrary, social media may both aid and threaten the tourist business since it has a bad and good impact on traveler decisions. This is because social media users' comments and personal experiences have a significant impact on traveler decisions (Sharma et al. 2018).

Consequently, numerous research papers have explored the effect of social media advertisements on tourism marketing. However, this study focuses on social media as a tool for promoting tourist spots in the San Rafael, Bulacan, municipality. The study's primary objective was to determine whether social media promotion had an effect and impact on promoting tourist sites in the municipality of San Rafael, Bulacan.

The study was conducted on the Municipality of San Rafael Bulacan, Philippines specifically the tourists and working personnel at San Rafael River Adventure, The Spot, The Viewpoint Grape & Dragon Fruit Farm + Bambu Cafe, Hey Brew Cafe and Bypass Grill & Restaurant. There are total of 50 working personnel and 50 tourists. The study focused on recognizing the impact, determined the relation and identified the effectiveness of Social Media such as Facebook, Instagram, and TikTok as advertisement towards tourist destinations in the Municipality of San Rafael Bulacan, Philippines. San Rafael is a first-class municipality in the Philippine province of Bulacan. It has a population of 103,097 people according to the 2020 census. With Metro Manila's ongoing expansion, San Rafael is now part of the Greater Manila built-up suburb area, which extends all the way to San Ildefonso, Bulacan in the North. San Rafael is 60 kilometers (37 miles) from Manila, the country's capital.

Different literatures were classified in this part of the study to give important background of the study, to set the structure and to justify the variables in the research study. According to the book "Understanding Social Media" by Priya Kanwar in 2012, social media refers to websites that allow users to exchange information, multimedia, and so on. Friendster, Facebook, MySpace,

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

and other popular social media networks are wonderful examples. Social media also includes YouTube, Photobucket, Flickr, and other image and video sharing sites. The social media category also includes news gathering and online reference sites such as Digg and Wikipedia. Twitter and other microblogging platforms are types of social media. In other words, there are many social media platforms that allow users to communicate with others from all over the world.

Based on Christian FuchsNow's book *Social Media: A Critical Introduction* (2013), individuals must comprehend the positive and negative aspects of social media more than ever before. Critical thinking abilities are required to help individuals understand the problems and challenges of today's complicated media world. Only then can people make appropriate decisions about what is happening in the media and why. As a result, addressing the issue of the social media users' perception is beneficial. Social media networks offer the ability to communicate with millions of individuals in real time across countries. It also has the capability to make life simpler and easier.

According to Denicolai et al. (2019) in Douglas G. Pearce's book "Tourist Destinations: Structure and Synthesis" in 2020, a tourist destination is a local network that generates value chain processes. Their subsequent empirical study of networked core competencies, however, concentrated on tourism firms and public institutions. Moreover, according to Musso (2021), a tourist destination is a site of interest that is frequented by tourists, typically for its inherent or shown natural or cultural worth, historical significance, natural or man-made beauty, or to give recreation and pleasure.

As stated by Gohil (2015), due to the internet's aggressive presence in modern life, social media can be one of the most efficient marketing and advertising platforms for destinations. Social media turned out to be a significant means of communication that quickly spread throughout the area. Tourism is one of the industries that has profited the most from the internet. As a result, social media has become an integral part of any national or regional tourism promotion or planning. In addition, according to Dean (2021) word of mouth is one of the most potent strategies employed by advertisers to market their brands. However, there are 4.48 billion people currently using social media. It quickly spreads information everywhere. On the other hand, based on Buted et.al (2014) social media is a terrific usage to advertise your expertise, products and services. Social media use made it easier and more affordable. It is now being utilized to promote the tourism business through network sites where people generally communicate and meet new ventures.

KÜTÜK (2016) declared that users can contribute a variety of information, images, videos, and text comments about numerous topics via social media sites. One of the fields most closely associated with the internet and social media is tourism. All of these social media are currently used by local and international tourism enterprises to advertise their products and services. Future purchases of goods and services as well as decision-making are significantly influenced by social media engagement with customers. Moreover, Angelkova, et. al (2017), states that the key answer to how social media can boost the tourism promotion of the destination itself is the larger target group. Social media is a 24/7 marketing platform for travel destinations, and every user who visits social media is a potential traveler. When a potential visitor sees pictures or videos of a beautiful location, they may decide to go there without having made any prior plans.

Buted et al. (2014) recognized the social networking platforms that people and the hospitality industry often use, including Facebook, Twitter, YouTube, blogs, and websites. In addition, Cvijanovi et al. (2018) also note that Facebook and Instagram are the most popular social media sites, with people using them primarily to share photos of travel and tourist destinations as well as to make destination decisions. Furthermore, according to Azpeitia, (2021), social media platform TikTok is a platform that offers chances for companies to expand through marketing. Marketing changes as technology does, and firms must modify their marketing tactics as audiences change in order to match their target audiences' growth.

Asuncion et al. (2019) stated that social networking is a very useful and practical marketing tool. Moreover, they responded to online consumer reviews in the same way and said they almost didn't have any major challenges encountered when using social media as a marketing strategy. On the other hand, it is also stated by Buted et al. (2014) that to prevent using social media in a harmful way, one needs to be knowledgeable about the various social media programs. Tourism-related sectors may utilize social media as a marketing tool consistently, but they should be prepared to respond quickly to any issues that may occur.

According to Ghorbanzadeh et al. (2022), since the internet and social media platforms are now two of the most widely used information channels for prospective visitors and are now one of the primary sources of online travel information, the role of social media in the expansion of the tourism sector cannot be overlooked. In addition, based on Gebreel and Shuayb (2022), platforms for social media play a sensitive and crucial role in how well tourism is marketed to and promoted among all users of these media. Additionally, social media platforms have the capacity to give users reliable information about their destinations, enabling them to make informed decisions about their travel plans and the tourist attractions they intend to visit and social networking sites have a significant influence on tourists' ultimate decisions. The ultimate decision made by tourists is directly influenced by social media platforms.

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

Based on Sharma et al. (2017), social media is crucial to the tourist sector, which is built on information. Consumers require information that will help them plan their trips and make judgments on the destinations they will visit and other travel-related goods. Social media has helped businesses reach a wider audience because they can now easily target customers who are located far away without really meeting them. However, the use of social media in tourism marketing can be both helpful and dangerous because it has a dual impact on the industry, possessing both positive and negative impacts on the decisions of prospective tourists who are greatly influenced by the posts and personal experiences of other social media users.

Methods and Techniques of the Study

A descriptive correlational design is used in the research study. According to IvyPanda (2022), utilizing a descriptive correlational methodology, the objective is to create static depictions of occurrences and establish the relationship between variables. Furthermore, it is claimed that in correlational study, two variables, such as an individual's height and weight, are examined to determine their link. The purpose of this method is to determine the relationship between social media promotion and tourist destinations in the municipality of San Rafael, Bulacan. A selfconstructed questionnaire was created by the researchers to inquire about the data collection method of the respondents. Data collection is important to the study because it aims to determine the relationship between social media promotion and its impact on tourism attractions in the municipality of San Rafael, Bulacan.

The respondents were 50 working employees and 50 tourists from San Rafael River Adventure, The Spot, The Viewpoint Grape & Dragon Fruit Farm + Bambu Cafe, Hey Brew Cafe and Bypass Grill & Restaurant. The total number of respondents in this research is one hundred (100). Random sampling techniques were applied to address the research problems given during data collection. According to research-methodology.net, simple random sampling is the purest and most straightforward probability sampling approach (also known as random sampling). This

Tourist destination in San Rafael, Bulacan	Working Personnel	Tourist
San Rafael River Adventure	10	10
The Spot	10	10
The Viewpoint Grape & Dragon Fruit Farm + Bambu Cafe	10	10
Hey Brew Cafe	10	10
Bypass Grill & Restaurant	10	10
Total	50	50

Method is considered to provide the most unbiased portrayal of the population.

Research Instrument

The study used a self - constructed questionnaire and likert scale questionnaire. The structured questionnaire is a quantitative data collection strategy in which the researchers will ask the working personnel and the tourists in the Municipality of San Rafael Bulacan. There would be one set of questionnaires, which would be described based on platform, frequency, content, nature of post, boost, popularity, and sales.

Data Gathering Procedure

The researchers get the formal endorsement letter that was signed by the research professor, research adviser, and department head of hospitality and tourism management to present to the tourist destinations of San Rafael, Bulacan. The researchers provide a primary tool in collecting and gathering data in this study which is one set of a self-structured Likert-scaled questionnaire that is intended for all the respondents which are the working personnel and the tourists. The researchers conduct a face-to-face, closed-ended survey with a sample of respondents picked at random. The set of self-constructed questionnaires that is intended for the employees and tourists which would be described based on frequency, content, nature of post, boost, popularity and sales.

Data Processing and Statistical Treatment

To answer the questions set forth in this study, data were subjected to both descriptive and inferential statistics. While to determine the descriptive statistics, frequency distribution and percentages were used. The statistical treatment that used in the

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

study is descriptive statistics and Pearson's r correlation. According to Bakshi (2021) descriptive statistics are used to characterize the fundamental characteristics of the study's data. It is also stated that it provides simple summaries about the sample and the measures. These are the foundation of almost any quantitative data analysis, along with simple graphics analysis. Descriptive statistics are used to present qualitative data in an understandable form. Additionally, according to Turney (2022), the Pearson correlation coefficient (r) is the most often used method of measuring a linear connection. This is a number between negative one (-1) and positive (1) that measures both direction and strength of the relationship between two variables. Furthermore, the Pearson correlation coefficient is a descriptive statistic, which means it summarizes the properties of a dataset. In general, it demonstrates the strength and direction of a linear connection between two numerical variables.

RESULTS

Table 1: Social media platform use in promoting/looking for a tourist destination

Social Media Platform		
Platform	F	%
Facebook	92	57%
Instagram	34	21%
Tiktok	27	17%
Others	8	5%

Table 1 depicts 100 respondents' perceptions of tourist destinations in San Rafael Bulacan's social media promotion used in promoting or searching for tourist destinations. The respondents were asked what social media platform they use. A total number of 92 or 57% respondents uses Facebook, 34 of them or 21% uses Instagram, while TikTok has 27 or 17% users, and 8 or 5% respondents uses other platforms. It can be assumed that Facebook is the most used platform by the respondents when it comes to promoting/looking for tourist destinations.

Table 2: Posting/seeing the promotion of tourist destinations weekly on social media

Frequency							
What time do you usually post and see the promotion of tourist destinations on social media?	F	%	M	MD	MO	SD	VI
Once a week	52	52%					
Twice a week	18	18%	1.99	1	1	1.19	Between 12:01 pm to 6:00 pm
Thrice a week	13	13%					
Others	7	7%					

Table 2 shows the 100 respondents' perception in posting/seeing the promotion of tourist destinations weekly on social media. The respondents were asked how often they post or see promotions of tourist destinations in social media. A total number of 52 or 52% of respondents answered once a week, 16 or 16% of them answered twice a week, 13 or 13% of the respondents answered thrice a week, whilst 7 or 7% of them answered others. Thus, it has heterogenous standard deviation of 1.19 meaning that the answers varied individually and can be assumed that the respondents post and see promotions of tourist destinations twice a week as indicated by the computed mean of 1.99.

Table 3: Time of posting/seeing the promotion of tourist destination on social media

Frequency							
What time do you usually post and see the promotion of tourist destinations on social media?	F	%	M	MD	MO	SD	VI
Between 6:01 am to 12:00 pm	12	12%					
Between 12:01 pm to 6:00 pm	43	43%	2.4	2	2	0.79	Between 12:01 pm to 6:00 pm
Between 6:01 pm to 12:00 am	38	38%					
Between 12:01 am to 6:00 am	7	7%					

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

Table 3 depicts 100 respondents' perceptions of the time of posting/seeing the promotion of tourist destinations on social media. The respondents were asked what time they saw and posted the promotion of tourist destinations on social media. A total number of 12 or 12% respondents answer between 6:01 am to 12:00 pm, 43 of them or 43% answer between 12:01 pm to 6:00 pm, while between 6:01 pm to 12:00 am has 38 or 38% respondents and 7 or 7% respondents answer between 12:01 am to 6:00 am. Thus, it has homogenous standard deviation of 0.79 which means that the answer of individuals is same and can be assumed that between 12:01 pm to 6:00 pm is the time were respondents usually see and post the promotion of tourist destinations on social media as indicated by the computed mean of 2.40.

Table 4: Social media content that attracts/publishes on social media for promoting tourist destinations

Content	Response	F	%	M	MD	MO	SD	VI
Image based	Never	0	0%	3.34	4	4	0.61	Sometimes
	Rarely	6	6%					
	Sometimes	34	34%					
	Always	60	60%					
Video based	Never	0	0%	3.51	4	4	0.58	Always
	Rarely	4	4%					
	Sometimes	41	41%					
	Always	55	55%					
Text based	Never	5	5%	2.94	3	3	0.78	Sometimes
	Rarely	18	18%					
	Sometimes	55	55%					
	Always	22	22%					
Audio based	Never	10	10%	3.34	4	5	1.61	Sometimes
	Rarely	33	33%					
	Sometimes	40	40%					
	Always	17	17%					

Table 4 shows 100 respondents' perceptions of social media content that attracts/publishes on social media promoting tourist destinations. The respondents were asked what social media content attracts their interest when looking at a tourist destination and publish on social media promotion of tourist destinations. In image-based content the total number of 0 or 0% respondents answer never, 6 of them or 6% answer rarely, while sometimes 34 or 34% answer and 60 or 60% respondents answer always. Thus, it has a homogeneous standard deviation of 0.61, which means that the answers of individuals are the same, and it can be assumed that in image-based content, it is sometimes that which attracts or is published on social media for promoting tourist destinations, as indicated by the computed mean of 3.34.

While, in video-based content, the total number of 0 or 0% respondents answer never, 4 of them or 4% answer rarely, while sometimes 41 or 41% answer; and 55 or 55% respond always. Thus, it has a homogeneous standard deviation of 0.58, which means that the answers of individuals are the same, and it can be assumed that in video-based content, it is always that which attracts or is published on social media for promoting tourist destinations, as indicated by the computed mean of 3.51.

Furthermore, in text-based content, the total number of 5 or 5% respondents answer never, 18 of them or 18% answer rarely, while in sometimes 55 or 55% answer, and 22 or 22% respond always. Thus, it has a homogeneous standard deviation of 0.78, which means that the answers of individuals are the same, and it can be assumed that in text-based content, it is sometimes that which attracts or is published on social media for promoting tourist destinations, as indicated by the computed mean of 2.94.

Finally, in audio-based content, the total number of 10 or 10% respondents answer never, 33 of them or 33% answer rarely, while sometimes 40 or 40% answer, and 17 or 17% respond always. Thus, it has a homogeneous standard deviation of 0.88, which means that the answers of individuals are the same, and it can be assumed that in audio-based content, it is sometimes that which attracts or is published on social media for promoting tourist destinations, as indicated by the computed mean of 2.64.

Table 5: Nature of posts that publish and see on social media

Nature of Post	F	%
Owned	51	48%
Collaboration	19	18%
Grabbed (tourist-made)	33	31%
Others	3	3%

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

Table 5 depicts 100 respondents' perception of the nature of posts that they see and publish on social media. The respondents were asked on what nature of post they saw on social media promotions. 51 or 48% of the respondents answered owned, 19 or 18% of them are collaboration, while 33 or 31% of the respondents answered grabbed or tourist made and 3 or 3% of them answered others. Therefore, it can be assumed that owned is the most seen and used nature of post.

Table 6: Kinds of promotion utilize/see in social media

Boost							
What kind of promotion do you utilize and see in social media?	F	%	M	MD	MO	SD	VI
Natural Promotion (unpaid promotion, people promote)	86	86%	1.14	1	1	0.35	Natural Promotion (unpaid promotion, people promote)
Paid Promotion	14	14%					

Table 6 depicts 100 respondents' perception in the kinds of promotion they utilize and see in social media. The respondents were asked what kind of promotion they utilize and see on social media, 86 or 86% of respondents answered that they utilize and see natural promotion (unpaid promotion, people promote), while 14 or 14% of respondents answered paid promotions. On that account, it has homogeneous standard deviation of 0.35 meaning it has the same answer of individuals and can be assumed that natural promotion is the most utilized and seen in social media promotion by the computed mean of 1.14.

Table 7: The endorsers of tourist destinations promotion that post/see in social media

Boost		
Who endorses the tourist destination's social media promotion strategies that you post and see?	F	%
Influencers	35	26%
People/Actual Tourist	70	52%
Employees	25	19%
Others	4	3%

Table 7 shows 100 respondents' perceptions of the endorsers of tourist destinations promotion that post/see in social media. The respondents were asked who endorses the tourist destinations promotion that they see and post in social media. A total number of 35 or 26% respondents answer influencers, 70 of them or 52% answer people or the actual tourist, while employees have 25 or 19% answers, and 4 or 3% respondents answer others. Thus, it can be assumed that people or actual tourists are the one who endorses the tourist destinations promotion that post/see in social media.

Table 8: Social media platform use to find tourist destinations

Boost		
In what way did you find this tourist destination?	F	%
Through Facebook	86	59%
Through Instagram	26	18%
Through Tiktok	24	16%
Others	10	7%

Table 8 depicts 100 respondents' approach in social media recommendations used in finding tourist destinations. The respondents were asked in what way they found out about these tourist destinations. 86 or 59% of them saw it through Facebook, 26 or 18%

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

of respondents through Instagram, while 24 or 16% of them found it through TikTok and 10 or 7% of them on other platforms. It can be assumed that the respondents use social media platforms through Facebook to find tourist destinations.

Table 9: Effects of social media promotion on popularity of tourist destination

Popularity	Response	F	%	M	MD	MO	SD	VI
Using social media promotion helped me select a destination for my next getaway	Strongly Agree	57	57%	1.45	1	1	0.56	Stongly Agree
	Agree	42	42%					
	Disagree	0	0%					
	Srongly Disagree	1	1%					
My travel decision making is affected by social media promotion.	Strongly Agree	38	38%	1.7	2	2	0.64	Agree
	Agree	56	56%					
	Disagree	0	0%					
	Srongly Disagree	2	2%					
Social media helps the tourist destination to be known.	Strongly Agree	67	67%	1.35	1	1	0.54	Stongly Agree
	Agree	32	32%					
	Disagree	0	0%					
	Srongly Disagree	1	1%					
My travel decision making is affected by social media promotion.	Strongly Agree	67	67%	1.41	1	1	0.55	Stongly Agree
	Agree	32	32%					
	Disagree	0	0%					
	Srongly Disagree	1	1%					
Social media promotion helped in increasing the number of people visiting the tourist	Strongly Agree	61	61%	1.31	1	1	0.53	Stongly Agree
	Agree	38	38%					
	Disagree	0	0%					
	Srongly Disagree	1	1%					

Table 9 illustrates the effect of social media promotion on the popularity of tourist destinations. When the respondents were asked if social media promotion helped them select a destination for their next getaway, a total of 57 of them, or 57%, answered strongly agree, 42 of them, or 42%, agreed, while 0 or 0% answered disagree, and 1 or 1% responded strongly disagree. Thus, it has a homogeneous standard deviation of 0.56, which means that the answers of individuals are the same, and it can be assumed that the respondents strongly agree that social media promotion helped them select a destination for their next getaway, as indicated by the computed mean of 1.45.

In the question to the respondents if social media promotion affects their travel decision making, a total number of 38 or 38% answered strongly agree, 56 of them or 56% answered agree, while 0 or 0% answered disagree and 2 or 2% responded strongly disagree. Therefore, it has a homogeneous standard deviation of 0.64, which means that the answers of individuals are the same, and it can be assumed that the respondents agree that social media promotion affects their travel decision, as indicated by the computed mean of 1.70.

In the question to the respondents if social media helps the tourist destinations to be known, a total number of 67 or 67% answered strongly agree, 32 of 32% answered agree, while 0 or 0% answered disagree and 1 or 1% responded strongly disagree. Thus, it has a homogeneous standard deviation of 0.54 which means that the answers of individuals are the same and can be assumed that the respondents strongly agree that social media promotion helps the tourist destinations to be known as indicated by the computed mean of 1.35.

Furthermore, in the question asked of the respondents if social media promotion helped in increasing the number of people visiting the tourist destination, a total of 61 or 61% answered strongly agree, 38 of 38% answered agree, 0 or 0% answered disagree, and 1 or 1% responded strongly disagree. Thus, it has a homogeneous standard deviation of 0.55, which means that the answers of individuals are the same, and it can be assumed that the respondents strongly agree that social media promotion helped increase the number of people visiting the tourist destination, as indicated by the computed mean of 1.41.

Finally, in the question to the respondents about whether social media promotion is a great way to attract visitors to a tourist destination, a total of 71 or 71% answered strongly agree, 28 or 28% answered agree, 0 or 0% answered disagree, and 1 and 1% responded strongly disagree. Therefore, it has a homogeneous standard deviation of 0.53 which means that the answers of individuals are the same and can be assumed that the respondents strongly agree that social media promotion is a great way to attract visitors to a tourist destination as indicated by the computed mean of 1.31.

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

Table 10: Effects of social media promotion on tourist destination in terms of sales

Sales	Response	F	%	M	MD	MO	SD	VI
Social media gives you a competitive advantage over competitors who still use traditional techniques.	Strongly Agree	56	56%	1.48	1	1	0.59	Strongly Agree
	Agree	41	41%					
	Disagree	2	2%					
	Strongly Disagree	1	1%					
Social media promotion helps develop relationship with potential customers	Strongly Agree	57	57%	1.45	1	1	0.56	Strongly Agree
	Agree	42	42%					
	Disagree	0	0%					
	Strongly Disagree	1	1%					
Social media promotion can help you reach out to the right prospect and brand awareness	Strongly Agree	63	63%	1.39	1	1	0.55	Strongly Agree
	Agree	36	36%					
	Disagree	0	0%					
	Strongly Disagree	1	1%					

Table 10 depicts 100 respondents' perception of the effects of social media promotion on tourist destinations in terms of sales. When the respondents were asked if social media gives a competitive advantage over competitors who still use traditional techniques, a total number of 56 or 56% answered strongly agree, 41 of them or 41% answered agree, while those who disagree have 2 or 2% answers and 1 or 1% respond strongly disagree. Thus, it has a homogeneous standard deviation of 0.59 which means that the answers vary individually and can be assumed that it is strongly agreed that social media gives a competitive advantage over competitors who still use traditional techniques as indicated by the computed mean of 1.48.

In the question to the respondents, if the social media promotion helps develop relationships with potential customers, a total number of 57 or 57% answers strongly agree, 42 or 42% answers agree while disagrees have 0 or 0% answer and 1 or 1% respond strongly disagree. Therefore, it has a homogeneous standard deviation of 0.56, which means that the answers of individuals vary and can be assumed that it is strongly agreed that social media promotion helps develop relationships with potential customers as indicated by the computed mean of 1.45.

Finally, in the question to the respondents if social media promotion can help you reach out to the right prospects and raise brand awareness a total number of 63 or 63% answers strongly agree, 36 or 36% answers agree while disagree have 0 or 0% answer and 1 or 1% respond strongly disagree. Thus, it has a homogeneous standard deviation of 0.55, which means that the answers vary individually and can be assumed that it is strongly agreed that social media promotion can help you reach out to the right prospects and raise brand awareness as indicated by the computed mean of 1.39.

Table 11: The relationship between social media promotion and tourist destinations in the municipality of San Rafael, Bulacan

	p1	f1	f2	ci	cv	ct	ca	n1	b1	b2	b3	p1	p2	p3	p4	p5	s1	s2	s3
p1	1.00																		
f1	0.18	1.00																	
f2	0.06	0.18	1.00																
ci	0.26	0.19	0.03	1.00															
cv	0.22	0.39	-0.03	0.27	1.00														
ct	0.05	-0.06	0.04	-0.04	-0.18	1.00													
ca	0.09	-0.02	-0.21	0.05	0.03	0.47	1.00												
n1	0.17	-0.14	0.17	0.06	-0.09	0.18	-0.08	1.00											
b1	0.10	-0.08	-0.02	-0.31	0.24	-0.01	-0.10	0.01	1.00										
b2	0.19	-0.09	0.17	-0.13	-0.16	0.03	-0.03	0.11	-0.07	1.00									
b3	0.40	-0.02	0.04	0.15	0.13	-0.05	-0.04	0.05	0.06	0.36	1.00								
p1	0.22	-0.13	-0.05	-0.16	0.03	0.13	0.09	-0.16	0.14	-0.09	-0.30	1.00							
p2	0.12	-0.02	0.06	-0.02	-0.07	0.19	-0.09	0.00	-0.04	0.04	0.01	0.52	1.00						
p3	0.19	-0.26	0.02	-0.03	-0.13	-0.14	-0.20	0.12	-0.10	0.03	0.02	0.51	0.42	1.00					
p4	0.16	-0.21	0.11	-0.15	-0.19	-0.20	-0.15	0.04	-0.04	0.11	-0.06	0.38	0.38	0.73	1.00				
p5	0.14	-0.24	0.09	-0.15	-0.09	-0.13	-0.15	0.07	-0.02	0.13	-0.05	0.42	0.37	0.72	0.78	1.00			
s1	0.10	-0.08	0.06	-0.14	-0.07	0.02	-0.03	0.06	0.06	0.03	-0.14	0.38	0.43	0.45	0.50	0.52	1.00		
s2	0.08	-0.05	0.16	-0.07	0.03	-0.05	-0.10	0.11	0.09	-0.07	0.01	0.28	0.38	0.45	0.44	0.52	0.56	1.00	
s3	0.09	-0.10	0.20	-0.18	-0.12	-0.04	-0.15	-0.04	0.08	0.02	-0.03	0.35	0.39	0.46	0.53	0.59	0.60	0.77	1.00

P1: Social media platform use in posting/looking for tourist destination

F1: Posting/seeing the promotion of tourist destinations weekly on social media

F2: Time of posting/seeing the promotion of tourist destination on social media

CI: Image based content that publish/attracts the interest of the respondents in social media

CV: Video based content that publish/attracts the interest of the respondents in social media

CT: Text based content that publish/attracts the interest of the respondents in social media

CA: Audio based that publish/attracts the interest of the respondents in social media

N1: Type of nature of post that publish/see on social media

B1: Promotion that utilize/see in social media

B2: Endorsers of the promotion that post/see in social media

B3: Social media platform use to find tourist destinations

P1: The use of social media promotion to help select a destination for the next getaway

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

P2: Social media promotion influences travel decisions

P3: Social media aids in publicizing the tourism location

P4: The help of social media promotion in increasing the visitors of tourist destination P5: Visitors to a tourism destination are drawn in by social media promotion

S1: The advantage of social media users over those who still use traditional techniques

S2: The help of social media promotion in developing relationships with potential customers

S3: Social media promotion as a tool for having the right prospects and brand awareness

The Pearson r correlation table interpretation:

.00 - .30 - negligible

.31 - .50 - low

.51 - .70 - moderate

.71 - .90 - high

.91 - 100 - very high

Based on the Pearson R correlation test the following: show low to high positive negative correlation.

The CI, which stands for "image-based content," is the first variable that demonstrates the type of media content that piques the interest of vacationers while they are searching for new places to visit. On the other hand, B1, also known as the first question in Boost, is the second variable that inquiries into the manner of promotion that the respondents make use of and observe on social media. Based on the Pearson r correlation computation with a total of -0.31 that was done between CI and B1, the image that was based on the content has a negative low correlation on Boost 1, which refers to the different forms of promotion that are utilized and viewed in social media.

	B1: Promotion that utilize/see in social media	
C1: Image based content that publish/attracts the interest of the respondents in social media		-0.31

	P1: The use of social media promotion to help select a destination for the next getaway	
S3: Social media promotion as a tool for having the right prospects and brand awareness		0.35

The first question in the Platform section or P1, inquires of respondents as to which platform they consult first when looking at potential tourist destinations. When it comes to reaching out to the right prospect and increasing brand awareness, the S3 or question number 3 in Sales asks respondents to indicate whether they Strongly Agree, Agree, Disagree, or Strongly Disagree that social media marketing can help. Based on Pearson r correlation computation with a total of 0.35 indicates that the P1 or question 1 in platform has a positive low correlation in the S3 or Sales question number 3, which indicates that it has a variable that is rarely associated.

	B2: Endorsers of the promotion that post/see in social media	
B3: Social media platform use to find tourist destinations		0.36

B2, also known as question 2, is the second variable in Boost. It is the first variable that asks who encourages the social media advertising methods that tourist destinations publish and see. In the meantime, B3, which is the third question in Boost, is the second variable that inquires as to how the tourist destination was discovered by the respondents. If you heard about it through a friend or through social media. It has a positive low correlation to each other, suggesting that the promotion techniques they post and observe are rarely associated to how they found out about the tourist locations, based on Pearson r correlation with a computed total of 0.36, which indicates that it has a positive low correlation to each other.

	P2: Social media promotion influences travel decisions	
P5: Visitors to a tourism destination are drawn in by social media promotion		0.37

The second question in the Popularity section or P2 asks respondents to indicate whether they strongly Agree, Agree, Disagree, or Strongly Disagree with the statement that the promotion they see on social media influences their travel decisions. The fifth question in the Popularity section or P5 asks whether or not the use of social media is an effective strategy to entice people to visit a certain tourist area. Based on Pearson correlation computation, which was 0.37, it has a positive low correlation, which indicates that their travel decision making is hardly related in social media promotion and is hardly related as to great ways of attracting a visitor in a tourist destination. This indicates that social media promotion is hardly related as a great way of attracting a visitor in tourist destinations.

	P1: The use of social media promotion to help select a destination for the next getaway	
P4: The help of social media promotion in increasing the visitors of tourist destination		0.38

P1, also known as the question number one in Popularity, asks respondents to indicate whether they strongly Agree, Agree, Disagree, or Strongly Disagree with the statement that the use of social media helps tourists choose their destination for their upcoming vacation. The fourth question in the Popularity section (P4) inquires as to whether or not the promotion of the tourist attraction through social media contributed to an increase in the number of persons who visited the location. Based on Pearson correlation computation, which was 0.38, the two have a positive low correlation, which indicates that the variables are hardly

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

related or that the social media promotion somewhat helps the tourist for their next destination and barely helps them in increasing the number of people visiting the tourist destination. In other words, the variables are hardly related to each other.

	P1: The use of social media promotion to help select a destination for the next getaway	
S1: The advantage of social media users over those who still use traditional techniques		0.38

P1, also known as question one in the Popularity section, is the first variable that determines whether or not the traveler strongly agrees or Agrees with the statement being made. Disagree, or strongly disagree if the use of social media enabled them to select a destination for their next getaway. While S1 or question one in the Sales section questions whether social media delivers a competitive advantage over competitors who still use traditional approaches. Based on Pearson correlation computed result of 0.38, the two have a positive low correlation, implying that the two variables are rarely associated with each other. The social media promotion didn't really assist them in choosing a location for their next vacation, but it does provide them with a slight advantage over competitors who continue to rely on traditional methods.

	P2: Social media promotion influences travel decisions	
P4: The help of social media promotion in increasing the visitors of tourist destination		0.38

The second question on the Popularity (P2) scale is the first variable, and it inquires as to whether or not the respondents' travel decisions are influenced by social media. The fourth question in the Popularity category, also known as P4, inquires as to whether or not the promotion of the tourist destination through social media helps to increase the number of people who visit the place. Based on pearson r correlation computation 0.38, which indicates that the two have a positive low correlation, which can be interpreted to mean that social media promotion with helping in selecting destination for next getaway and helping them in increasing the number of people visiting their tourist destination is hardly correlated with one another.

	P2: Social media promotion influences travel decisions	
S2: The help of social media promotion in developing relationships with potential customers		0.38

P2, also known as question number two in Popularity, is the first variable that examines whether or not the respondents' travel choice making is influenced by the marketing they see on social media. While S2, also known as the second question in Sales,

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

inquiries into whether or not advertising through social media can assist in developing relationships with prospective clients. Based on the Pearson r correlation computation 0.38, which indicates that it has a positive low correlation, which shows that their trip decision making and the development of interaction with the potential customers is barely associated in terms of social media advertising.

	F1: Posting/seeing the promotion of tourist destinations weekly on social media	
CV: Video based content that publish/attracts the interest of the respondents in social media		0.39

The F1 or Frequency 1 variable is the first one that demonstrates posting or seeing the promotion of tourist destinations weekly on social media. On the other hand, the CV or Content video-based variable is the second one that inquires about the media content that piques the interest of tourists when they are searching for tourist destinations. The computation between F1 and CV reveals that the posting or witnessing the advertising of tourist locations weekly on social media has a positive low on the Video based on Pearson r correlation of 0.39. This is since it has a positive low on the Video based on content.

	P2: Social media promotion influences travel decisions	
S3: Social media promotion as a tool for having the right prospects and brand awareness		0.39

The P2 or question number two in the platform of the social media promotion affected in their travel decision making in the first variable, and the S3 or the question number three in the sales to the respondents if social media promotion can help to reach out to the right prospects and raise brand awareness serves as the second variable in this study. The result of the computation between P2 and S3 shows a positive low correlation based on Pearson correlation computation of 0.39, which indicates that social media promotion has an effect on travel decision making. At the same time, social media promotion can help to reach out to the appropriate prospects and raise brand awareness.

	P2: Social media promotion influences travel decisions	
B3: Social media platform use to find tourist destinations		0.40

As the first variable, P1, also known as question number one, inquires of respondents as to which platform they consult first when looking at potential tourism locations. When it arrives in Boost 3, is the second variable that asks how the tourist location was discovered by the respondents. The purpose of this question is to gather more information about the respondents' travel

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

experiences. Based on the Pearson correlation computation between P1 and B3, it has a 0.40 positive low correlation, which indicates that it also helped tourists in selecting a tourist destination for the upcoming vacation by providing them with more alternatives, as well as reaching out to the appropriate prospects and increasing brand awareness. This was accomplished by providing them with more options.

	P1: The use of social media promotion to help select a destination for the next getaway	
P5: Visitors to a tourism destination are drawn in by social media promotion		0.42

P1, also known as question number one, is the name of the variable that asks respondents which platform they consult first while looking into suitable tourism places. This question is the first variable in the study. When it comes to population 5, the advertising of a tourist site through social media is an efficient method for luring visitors to visit that location. Based on Pearson correlation computation of 0.42 with a positive low correlation, which indicates that it helped tourists in selecting a tourist destination for the upcoming vacation by providing them with more alternatives at the same time social media promotion is an effective method of attracting tourists to a tourist destination. This finding was determined by the findings of the investigation.

	P1: The use of social media promotion to help select a destination for the next getaway	
P3: Social media aids in publicizing the tourism location		0.42

The P2 or question number two in the platform of the social media promotion affected in their travel decision making in the first variable, when it comes to Population 3, which stands for question number three in the popularity if social media helps the tourist destinations to be known serve as the second variable. As a result of performing the computation between P2 and P3, based on Pearson r correlation computation of 0.42, it has a positive low correlation, which indicates their travel decision making is hardly related in social media promotion is hardly related as to great way attracting a visitor in tourist destination at the same time social media promotion it helps the tourist destinations to be known.

	P2: Social media promotion influences travel decisions	
S1: The advantage of social media users over those who still use traditional techniques		0.43

The P2 or question number two in the platform of the social media promotion affected their travel decision making in the first variable, while S1 or question one in the Sales section questions whether social media delivers a competitive advantage over

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

competitors who still use traditional approaches. Based on the Pearson r correlation computation of 0.43, the two have a positive low correlation, which indicates their travel decision making is hardly related to social media promotion, which is a great way of attracting a visitor to a tourist destination at the same time giving a competitive advantage over rivals who still use traditional techniques.

	P4: The help of social media promotion in increasing the visitors of tourist destination	
S2: The help of social media promotion in developing relationships with potential customers		0.44

The fourth question on P4 inquires as to whether or not the promotion of the tourist destination through social media helps to increase the number of people who visit the place. While S2, also known as the second question in Sales, inquires into whether or not advertising through social media can assist in developing relationships with prospective clients. Based on the Pearson correlation computation of 0.44, the two have a positive low correlation, which indicates that helping them in increasing the number of people visiting their tourist destination is hardly correlated with one another and the development of interaction with the potential customers is barely associated in terms of social media advertising.

	P3: Social media aids in publicizing the tourism location	
S1: The advantage of social media users over those who still use traditional techniques		0.45

The P3 or the Population question three, which stands for question number three in popularity, if social media helps the tourist destinations to be known, serve as the second variable. While S1 or question one in the Sales section questions whether social media delivers a competitive advantage over competitors who still use traditional approaches. Based on Pearson correlation computation of 0.45, there is a positive low correlation, which indicates social media promotion, it helps the tourist destinations to be known and gives a competitive advantage over rivals who still use traditional techniques.

	P3: Social media aids in publicizing the tourism location	
S2: The help of social media promotion in developing relationships with potential customers		0.45

The first variable is "P3," which stands for "question number three in the popularity if social media helps the tourist destinations to be known." The second variable is "S2," which stands for "question number two in the sales to the respondents: whether social media promotion helps develop relationships with potential customers." Based on Pearson correlation computation between P3

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

and S2, the result demonstrates a 0.54 positive low correlation, which indicates that the promotion of tourist sites through social media assists these locations in becoming more wellknown while simultaneously creating relationship with prospective clients.

	P3: Social media aids in publicizing the tourism location	
S3: Social media promotion as a tool for having the right prospects and brand awareness		0.46

The first variable is P3, or question number three in the popularity if social media helps the tourist destinations to be known, and the second variable is S3, or question number three, in sales to respondents if social media promotion helps reach out to the right prospects and raise brand awareness. Based on Pearson correlation computation between P3 and S3, it has a 0.46 positive low correlation, which indicates that the promotion of tourist destinations in social media helps the location to be known, as well as reach out to the appropriate prospects and increase brand awareness.

	CT: Text based content that publish/attracts the interest of the respondents in social media	
CA: Audio based that publish/attracts the interest of the respondents in social media		0.47

CT, also known as text-based media content, will serve as the first variable, while the CA, also known as audio-based media content, function as the second variable. Based on the Pearson correlation computation of between the variables CT and CA, there is a 0.47 positive low correlation, which indicates that text-based and audio-based content are types of media content that attract the interest of the respondents and are typically published in promoting tourist destinations through social media.

	P4: The help of social media promotion in increasing the visitors of tourist destination	
S1: The advantage of social media users over those who still use traditional techniques		0.50

The first variable is "P4", which stands for "question number four in the popularity if social media promotion helps to increase the number of people who visit the tourist destinations." The second variable is "S1," which stands for "question number one in the sales to the respondents if social media gives a competitive advantage over competitors who use traditional techniques." On the basis of the computation between P4 and S1, based on Pearson r correlation computation of 0.50, which is a positive low correlation, which indicates that in social media promotion, it helps to increase the number of people who visit the tourist destinations while at the same time giving a competitive advantage over rivals who still use traditional techniques.

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

	P1: The use of social media promotion to help select a destination for the next getaway	
P3: Social media aids in publicizing the tourism location		0.51

The P1 variable, also known as question one in the Popularity section, is the first one to demonstrate that the respondents' usage of social media promotion helped them in selecting a tourist destination for the next getaway. On the other hand, P3, also known as question three in popularity, is the second variable that demonstrates that the promotion of a tourist destination through social media helps to increase its level of popularity. Based on Pearson correlation computation between P1 and P3, there is a positive moderate that yields the value of 0.51. It is an indication that the promotion of a tourist destination helped it become widely known, and it also helped tourists in selecting a tourist destination for the upcoming vacation by providing them with more alternatives.

	The use of social media promotion to help select a destination for the next getaway	
P2: Social media promotion influences travel decisions		0.52

The P1, which is also known as question one in the Popularity section, is the first one to illustrate that the respondents' use of social media promotion helped them in selecting a tourist destination for the next getaway. This is demonstrated by the fact that the respondents' usage of social media promotion was significantly higher than the overall average. On the other hand, P2, also referred to as question two in popularity, is the second variable that reveals that social media advertising of a tourist destination has an effect on the decision-making process that tourists go through when selecting where to go on vacation. Based on the Pearson r correlation computation between P1 and P2, there is a positive moderate that results in the value of 0.52 being obtained? It shows that social media promotion of a tourist destination influences travelers' travel decisions and helps it become well-known.

	P5: Visitors to a tourism destination are drawn in by social media promotion	
S1: The advantage of social media users over those who still use traditional techniques		0.52

The P5 variable, also known as question five in the Popularity section, is the first variable to indicate that social media promotion is an effective technique for attracting tourists to a tourist destination. On the other side, S1, also known as question one in sales, is the second variable that reveals that social media provides an advantage over competitors that continue to promote a tourist destination using traditional techniques. Based on Pearson correlation computation between P5 and S1 is a positive moderate with

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

a value of 0.52. It indicates that social media promotion is superior to traditional strategies for promoting tourist destinations, and that social media promotion is an effective technique of attracting tourists to a tourist destination.

	P5: Visitors to a tourism destination are drawn in by social media promotion	
S2: The help of social media promotion in developing relationships with potential customers		0.52

The P5, also referred to as question five in the Popularity section, is the first variable indicating that social media promotion is an effective strategy for attracting tourists to a tourist destination. S2, often known as question two in sales, is the second variable indicating that social media facilitates the development of relationships with potential consumers. Based on the Pearson r correlation computation between P5 and S2 yields a positive moderate with a value of 0.52. It implies that social media promotion is an effective method for bringing tourists to a tourist destination, as well as a method for gaining and developing relationships with potential customers.

	P4: The help of social media promotion in increasing the visitors of tourist destination	
S3: Social media promotion as a tool for having the right prospects and brand awareness		0.53

P4, also known as question four in the Popularity section, is the first variable demonstrating that social media promotion contributed to an increase in the number of visitors to the tourist destination. S3, also known as question three in sales, is the second variable showing that social media promotion can assist in reaching the appropriate prospects and increasing brand awareness. Based on Pearson correlation computation between P4 and S3 is a positive moderate of 0.53. It is implied that promotion on social media helps in raising the number of people visiting the tourist destination. Additionally, promotion on social media may assist in reaching out to the appropriate prospects and improving brand awareness of a tourist destination.

	S1: The advantage of social media users over those who still use traditional techniques	
S2: The help of social media promotion in developing relationships with potential customers		0.56

S1, also referred to as question one in the Sales section, is the first variable used to demonstrate that promotion using social media gives a competitive advantage over competitors who continue to rely on traditional technique. The second variable showing that the use of social media makes it easier to create relationships with prospective customers is indicated by the S2. This variable is also referred to as question two in sales. Based on the Pearson r correlation computation of 0.56 is the outcome of the computation

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

that was performed between S1 and S2. It suggests that traditional promotion techniques for tourist destinations are being replaced by social media promotion as the preferable method. In addition, promotion on social media may be used as a tool for gaining potential customers and developing relationships with it.

	P5: Visitors to a tourism destination are drawn in by social media promotion	
S3: Social media promotion as a tool for having the right prospects and brand awareness		0.59

The P5 variable, which is also referred to as question five in the Popularity section, is the first variable that indicates that promoting a tourist destination using social media is an effective strategy for attracting visitors to visit a destination. S3, also known as question three in sales, is the second variable demonstrating that promoting through social media may help in reaching the suitable prospects and raising brand awareness. This variable is known as S3. Based on the Pearson r correlation computation between P5 and S3 yielded a result of 0.59, which may be interpreted as a positive moderate. It indicates that promotion through social media is an effective strategy for attracting tourists to a tourist destination. Furthermore, promotion through social media may help in reaching the suitable prospects and raising brand awareness.

	S1: The advantage of social media users over those who still use traditional techniques	
S3: Social media promotion as a tool for having the right prospects and brand awareness		0.60

S1, also known as question one in the Sales section, is the first variable used to demonstrate that social media advertising gives a competitive advantage over competitors who are still relying on traditional techniques. S3, also known as question three in sales, is the second variable indicating that promoting via social media may help in reaching the appropriate prospects and increasing brand awareness. Based on Pearson correlation computation between S1 and S3 was 0.60, which may be taken as a positive moderate. It demonstrates that traditional promotion approaches for tourist destinations are being surpassed by social media promotion as the best strategy, and social media promotion may help in reaching the relevant prospects and raising brand awareness.

	P3: Social media aids in publicizing the tourism location	
P5: Visitors to a tourism destination are drawn in by social media promotion		0.72

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

The first variable is P3, or question number three in the popularity if social media helps the tourist destinations to be known, and the second variable is P5, or question number five, in the popularity if social media promotion is a great way to attract visitors to a tourist destination. Based on Pearson correlation computation between P3 and P5, it has a 0.72 positive high correlation, which indicates that in social media promotion it helps the tourist destinations to be known and at the same time it is also a great way to attract visitors to a tourist destination.

	P3: Social media aids in publicizing the tourism location	
P5: Visitors to a tourism destination are drawn in by social media promotion		0.72

The P3, or question number three, in the popularity if social media helps the tourist destinations be known is the first variable; on the other hand, the second variable is the P4, or question number four, in the popularity if social media promotion helps increase the number of visitors to the tourist destinations. Based on Pearson correlation computation between P3 and P4, the result shows 0.73, which is a positive high correlation, which indicates that in social media promotion it helps to increase the number of visitors to the tourist destinations and at the same time helps them to be known.

	S2: The help of social media promotion in developing relationships with potential customers	
S3: Social media promotion as a tool for having the right prospects and brand awareness		0.77

The first variable is S2, or question number two, in the sales if social media promotion helps to develop relationships with potential customers, and the second variable is S3, or question number three, in the sales if social media promotion can help to reach out to the right prospects and raise brand awareness. Based on Pearson correlation computation between S2 and S3, it has a 0.77 positive high correlation, which indicates that in social media promotion, it helps to develop relationships with potential customers and at the same time helps to reach appropriate prospects and increase brand awareness.

	P4: The help of social media promotion in increasing the visitors of tourist destination	
P5: Visitors to a tourism destination are drawn in by social media promotion		0.78

The P4, or the question number four in the popularity if social media promotion helps to increase the number of visitors of the tourist destinations is the first variable, on the the other hand the second variable is the P5 or question number five in popularity if social media promotion is a great way to attract visitors to a tourist destination. Based on Pearson r correlation computations

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

between P4 and P5, it has a 0.78 positive high correlation, which indicates that in social media promotion, it is a great way to attract visitors to a tourist destination and at the same time help to increase the number of visitors to a tourist destination.

Summary Output

<i>Regression Statistics</i>	
Multiple R	0.17
R Square	0.03
Adjusted R Square	0.02

Standard Error 1.18 Observations 99.00

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1.00	4.26	4.26	3.05	0.08
Residual	97.00	135.74	1.40		
Total	98.00	140.00			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>	
Intercept	2.71	0.42	6.38	0.00	1.87	3.56	1.87	3.56	
	13.00	-0.06	0.04	-1.75	0.08	-0.13	0.01	-0.13	0.01

Statistically significant

Thus, reject the null hypothesis

There is statically significant relationship ($r = 0.17$, $p = 0.08$) between social media platform and promotion of tourist destinations in the Municipality of San Rafael, Bulacan.

DISCUSSION

According to the study's findings, Facebook, with 57% of responses, is the most popular platform for travelers searching for tourist destinations, as well as the most popular platform for social media promotion of tourist destinations. As supported in the study by Tjoe (2022), in which 51% of millennial claim that Facebook interactions have impacted or inspired their travel selections, this generation is equally open to social media. In addition, according to him, when you take into account how much individuals like sharing and recounting their travel experiences online, the significance of social media in the tourism business becomes abundantly evident. The data from the study reveals that the respondents post and see the promotions of tourist destinations twice a week, as indicated by the computed mean of 1.99. On the other hand, it also reveals that between 12:01 p.m. and 6:00 p.m. is the time when respondents usually see and post the promotion of tourist destinations on social media, as indicated by the computed mean of 2.40. These findings supported with what Cvijanović, et al. (2018) stated that social media is a 24/7 marketing platform for travel destinations, and every user who visits social media is a potential traveler. When looking at a tourist destination on social media, it sometimes piques the respondent's interest, according to the computed mean of 3.34 for image-based content. While video content has a computed mean of 3.51, it always attracts tourists who were looking for a destination on social media. Text-based content, on the other hand, with an indicated mean of 2.94, can be assumed to sometimes attract or publish content on social media for promoting destinations. Finally, audio-based content with a computed mean of 2.64 sometimes attracts tourists and respondents on social media for promoting tourist destinations. As stated, and supported by KÜTÜK (2016) study, users can contribute a variety of information, images, videos, and text comments about numerous topics via social media sites. One of the fields most closely associated with the internet and social media is tourism. All these social media are currently used by local and international tourism enterprises to advertise their products and services. In accordance with the perception of nature of post that the respondents see and publish on social media, it is found that owned is the most seen and used nature of post as indicated by the computed percentage which is 48%. As stated, and supported by Gohil (2015) social media can be one of the most powerful tools for destination marketing and advertising thanks to the Internet's aggressive presence in today's society. Also, social media turned out to be a significant means of communication that quickly spread throughout the area. According to the study's finding, natural promotion or unpaid promotion as indicated by the computed mean of 1.14 of responses is the promotion that is

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

utilized/seen in social media. Additionally, people/actual tourists with the 52% of responses are the ones who endorse the tourist destinations promotion that post and see in social media and lastly, Facebook with the 59% responses in social media platforms used to find tourist destinations. As stated, and supported by Gohil (2015) social media can be one of the most powerful tools for destination marketing and advertising thanks to the Internet's aggressive presence in today's society. Furthermore, social media turned out to be a significant means of communication that quickly spread throughout the area. According to the findings of the research study, social media promotion helped the tourists to select a destination for their next getaway. On this particular topic, fifty-seven (57) out of one hundred (100) respondents strongly agree. On the other hand, 56 of the 100 respondents agree that the promotion of a tourist destination through social media has an effect on a tourist's choice of selecting a certain place as a tourist destination. Sixty-seven (67) of the one hundred (100) respondents strongly agree that promoting a tourist destination through social media may help to make the destination more known. Sixty-one (61) of one hundred (100) respondents strongly agree in the statement that the promotion of the tourist destination through social media contributes to an increase in the number of tourists visiting the tourist destination. Seventy-one (71) out of one hundred respondents (100) also strongly agree in agreement that promotion through social media platforms is an excellent strategy to attract tourists to a tourist destination. This was supported by Gohil (2015) statement that social media has grown in popularity as a result of the Internet's aggressive presence in today's culture and may be one of the most potent tools for destination marketing and promotion. The tourist industry has benefited the most from the internet, and as a result, social media has become an integral component of any national or regional tourism planning or promotion. It is currently used to promote the tourist industry through network sites where individuals connect and seek out new tourist destinations. According to the study's findings, the effects of social media promotion on tourist destinations in terms of sales indicate that social media promotion gives a competitive advantage over competitors who still use traditional techniques. On this particular topic, fifty-six (56) out of 100 respondents strongly agree. On the other hand, fifty-seven (57) out of 100 respondents strongly agree that social media promotion helps to develop relationships with potential customers. In addition, sixty-three (63) out of 100 respondents strongly agree that social media promotion helps to reach out to the right prospects and raise brand awareness. As stated and supported by Buted et.al (2014) social media is a terrific usage to advertise your expertise, products and services. Social media use made it easier and more affordable. It is now being utilized to promote the tourism business through network sites where people generally communicate and meet new ventures.

CONCLUSIONS

In the light of the findings of this research the following conclusions were drawn:

Facebook is the most effective platform for looking for and promoting tourist destinations on social media. Twice a week is how often the respondents post and see the promotion of tourist destinations, and between 12:01 p.m. and 6:00 p.m. is the time when respondents usually see and post the promotion of tourist destinations on social media. The image-based, audio-based and textbased content sometimes attracts the interest of the respondents. While, video-based always attract their interest when looking for a tourist destination. Owned is the most seen and used nature of post according to the findings of the study. Natural paid promotion is the most seen than paid promotion. In addition, the actual tourist is the one who endorses the tourist destinations and Facebook is the most effective platform for looking for and promoting tourist destinations on social media in boost according to the findings of the study.

The usage of different social media platforms for promotional purposes helps tourists in selecting a travel destination. In order to find anything that attracts people, tourists rely on social media. Due to this, the number of people who visit a tourist destination will rise if it is promoted through social media. Social media promotion helps a tourist destination become widely known and recognized. Among the respondents strongly agree that social media gives a competitive advantage over competitors who still use traditional techniques, social media promotion helps to develop relationships with potential customers and social media promotion helps to reach the right prospects and raise brand awareness. Social media promotion has a significant relationship with the tourist destinations in the municipality of San Rafael, Bulacan.

RECOMMENDATIONS

Based on the conclusions drawn, the researcher recommends that:

Tourism business owners may utilize Facebook as their platform for promoting their tourist destinations, and future researchers may also conduct a study on how Facebook significantly affects the tourist destinations in the municipality of San Rafael in Bulacan. Tourism business owners may consider posting their promotions in their tourist destinations twice a week and posting them between 12:01 p.m. and 6:00 p.m., and future researchers may also conduct a study on how effective it is to post promotions twice a week and the time between 12:01 p.m. and 6:00 p.m. When posting a promotion on social media, owners of tourism-related businesses may consider using video-based content because it always attracts tourists who were looking for a destination on social

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

media. The owned nature of posts is the aspect that is utilized and observed the most; business owners may always use it to boost the promotion of their tourism destination. A tourism business owner may value the actual tourist. since natural promotion helps to promote tourist destinations. Additionally, they can utilize Facebook as their platform to boost the tourist destination.

Tourist business owners may consider engaging more in social media promotion since tourists rely on social media platforms to select tourist destinations, make tourist destinations known, and increase the number of people visiting the tourist destinations. Tourism business owners may consider social media as a promoting tool. It will help them to increase their sales, since it can provide a competitive advantage over competitors, develop a relationship with potential customers and help to reach the right prospects and raise brand awareness.

Tourism business owners may utilize social media promotion, specifically Facebook, as their platform to positively affect their tourist destinations, and future researchers may also conduct a study on how Facebook significantly affects the tourist destinations in their chosen place or even the municipality of San Rafael in Bulacan.

REFERENCES

Books

- 1) Angelkova, Tanja and Ristova, Cvetanka and Dzordzevic Milosevic, Suzana (2017). Online booking: benefits and advantages. First International Scientific Conference, ISCTBL, Faculty of Tourism and Business Logistics - Gevgelija, Macedonia. pp.170-177.
- 2) Cvijanović, D.,(2018). Social Media as a Tool for the Promotion of a Tourist Destination. *Tourism in Function of Development of the Republic of Serbia*, 170-186.
- 3) Fuchs, C. (2013). Social Media: A Critical Introduction. *Information, Society, Technology, Communication & Digital Media*, 448.
- 4) Pearse, D. G. (2020). *Tourist Destinations: Structure and Synthesis*. Nueva Zelanda: Scientific Tourism Network.

Journals

- 1) Asuncion, D. A., & Cepeda, J. (2019, October). Surfacing Social Media as a Platform in Marketing Selected Tourism. *LPU-Laguna Journal of International Tourism and Hospitality Management*, 125-135.
- 2) Azpeitia, J. (2021). Social Media Marketing and its Effects on TikTok Users. *VAASAN AMMATTIKORKEAKOULU UNIVERSITY OF APPLIED SCIENCES*, 1-44.
- 3) Buted, D., Nancy, G., & Conti, J. (2014). Effects of Social Media in the Tourism Industry of Batangas Province. *Asia Pacific Journal of Multidisciplinary Research*, 1-9.
- 4) Gohil, N. (2015, April). Role and Impact of Social Media in Tourism: A Case Study on the Initiatives of Madhya Pradesh State Tourism. *International Journal of Research in Economics and Social Sciences*, 8-15.
- 5) Kemi, A. O. (2016). Impact of Social Network on Society: A Case Study of. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)*, pp 117.
- 6) Liu, X., Mehraliyev, F., Liu, C., & Schuckert, M. (2019). The roles of social media in tourists' choices of travel components. *Tourist Studies*, 20(1), 27-48. doi:10.1177/1468797619873107
- 7) Sharma, P., Kumar, R., & Rani, A. (2017). Social Media in Tourism- A Double-Edged Sword . *International Journal of Trend in Scientific Research and Development (IJTSRD)*, Page: 1273 .
- 8) Shuayb, A., & Gebreel, O. (2022). Contribution of Social Media Platforms in Tourism Promotion. *International Journal of Social Science, Education, Communication and Economics*, 189-198.

Theses/Dissertations

- 1) KÜTÜK, A. (2016). Social Media Marketing in Tourism Industry and Role of the Social Media on Consumer Preferences: A survey on the Effects of Social Media Sites on the Buying Decision Making Process

Internet Articles

- 1) Aftab, S., & Khan, M. (2019, June 30). View of role of social media in promoting tourism in Pakistan: Journal of Social Sciences and Humanities. Retrieved December 19, 2022, from <https://jssh.uok.com/oj/index.php/jssh/article/view/131/120>
- 2) Bakshi, P. (2021, April 28). Descriptive statistics. Retrieved December 19, 2022, from <https://medium.com/nerd-for-tech/descriptive-statistics-81c9dce06da0>

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

- 3) Boyd. (2014). The Social Construction of Media: Introduction of Social Media. Retrieved November 20, 2022, from <https://scalar.usc.edu/works/cultures-of-socialmedia/introduction-of-social-media>
- 4) Census of Population (2020). "Region III (Central Luzon)". Total Population by Province, City, Municipality and Barangay. PSA. Retrieved 8 July 2021.
- 5) Cheung, M., Ting, H., Cheah, J., & Sharipudin, M. (2020, September 14). Examining the role of social media-based destination brand community in evoking tourists' emotions and intention to co-create and visit. Retrieved December 19, 2022, from <https://www.emerald.com/insight/content/doi/10.1108/JPBM-09-20192554/full/html>
- 6) Dean, B. (2021, October 10). *backlinko*. Retrieved from backlinko.com: <https://backlinko.com/social-media-users?fbclid=IwAR3veajtP6aS7BfbzOTOYw19iCG9ZcSiI3GFgUVsnv74kUWU1Izbk1NsQs>
- 7) Dudovskiy, J. (2012). The Social Construction of Media: Introduction of Social Media. Retrieved December 19, 2022, from <https://scalar.usc.edu/works/cultures-ofsocial-media/introduction-of-social-media>
- 8) D.says:, J., Deansays:, B., Karlottasays:, T., McEvoyays:, S., & Andreasays:. (2021, October) How many people use Social Media in 2022? (65+ statistics). Retrieved December 19, 2022, from <https://backlinko.com/social-mediausers?fbclid=IwAR3veajtP6aS7BfbzOTOYw19iCG9ZcSiI3GFgUVsnv74kUWU1Izbk1NsQs>
- 9) Gaffar, V., Tjahjono, B., Abdullah, T., & Sukmayadi, V. (2021, February 01). Like, tag and share: Bolstering social media marketing to improve intention to visit a naturebased tourism destination. Retrieved December 19, 2022, from <https://www.emerald.com/insight/content/doi/10.1108/TR-05-20200215/full/html>
- 10) Ghorbanzadeh, D., Zakieva, R., & Kuznetsova, M. (2022, March 8). *emerald insight*. Retrieved from emerald.com: <https://www.emerald.com/insight/content/doi/10.1108/K-092021-0931/full/html?skipTracking=true>
- 11) Ghosh, P., & Mukherjee, S. (2022, April 19). Understanding tourist behaviour towards destination selection based on social media information: An evaluation using unsupervised clustering algorithms. Retrieved December 19, 2022, from <https://www.emerald.com/insight/content/doi/10.1108/JHTI-11-20210317/full/html>
- 12) Han, J., & Chen, H. (2021, June 8). Millennial Social Media Users' intention to travel: The moderating role of social media influencer following behavior. Retrieved December 19, 2022, from <https://www.emerald.com/insight/content/doi/10.1108/IHR-11-20200069/full/html>
- 13) Islam, T. (2021, January 01). Applications of social media in the Tourism Industry: A Review. Retrieved December 19, 2022, from https://www.researchgate.net/profile/MdTariqul-Islam-13/publication/348846355_Applications_of_Social_Media_in_the_Tourism_Industry_A_Review/links/6013cafd45851517ef227bef/Applications-of-Social-Media-in-the-Tourism-Industry-A-Review.pdf?origin=publication_detail
- 14) IvyPanda. (2022, June 19). Descriptive Correlational Design in Research. Retrieved from <https://ivypanda.com/essays/descriptive-statistics-and-correlational-design/>
- 15) Kanwar, P., & Taprial, V. (2012, October 29). *The Effects of Social Media Marketing on Brand Awareness through Facebook: An Individual-Based Perspective of Mobile Services Sector in Egypt*. Retrieved from Scientific Research an Academic Publisher: https://scirp.org/reference/referencespapers.aspx?referenceid=2383821&fbclid=IwAR13HF1XJguSebbNp_SNPgSp_6PZp9xW2YuogVMhSFNfKCUQDLOj8Km vmxo
- 16) Melati, N., Fathorrahman, F., & Pradiani, T. (2022, June). The influence of Instagram, Tiktok Travel Influencers and city branding on the decision to choose a tourist destination (case study on @Backpackertampan in Bali). Retrieved December 19, 2022, from <https://www.neliti.com/publications/420616/the-influence-ofinstagram-tiktok-travel-influencers-and-city-branding-on-the-de>
- 17) Nur'affah, O., & Prihantoro, E. (2021, December). The influence of social media on millennial generation about travel decision-making2021. Retrieved December 19, 2022, from https://journals.usm.ac.id/index.php/themessenger/article/view/2328/2404?fbclid=IwAR2JKtrwbmbnbnZWWhn-WpmOSyc3h_7anGetsWmGd2ThHY4AS3S0uYKZOckuY
- 18) Patagano, P., Padillos, C., Cuyos, R., Borlio, J., & Buladaco, M. (2020, June). The effectiveness of social media pages of tourist spots in Davao de ... Retrieved December 19, 2022, from https://www.researchgate.net/profile/Mark-Van-Buladaco/publication/342572498_The_Effectiveness_of_Social_Media_Pages_of30299bf18816f5ec8e/The-Effectiveness-of-Social-Media-Pages-of-Tourist-Spotsin-Davao-De-Oro-towards-Customer-Satisfaction.pdf
- 19) Pedrosa, C., Celis, E., Iglesias-Sánchez, P., & Maldonado, C. (2022, May 17). Importance of Social Media in the Image Formation of Tourist Destinations from theStakeholders' Perspective. Retrieved October 19, 2022, from <https://l.facebook.com/l.php?u=https%3A%2F%2Fwww.mdpi.com%2F20711050%2F12%2F10%2F4092%2Fpdf%3Fversi>

Social Media as a Tool for Promoting Tourist Destinations in the Municipality of San Rafael, Bulacan, Philippines

on%3D1590547750%26fbclid%3DIwAR1TAPvJvvO9DT_v8zPufAjTkrnVympU-Mc1ip2cSpH7Xz1lxEQCaIn2Phg&h=AT3BpI_g_Ju8uB4va4IqH1UaTG__jvzI_V fvb_ozFKYrWt6-dg83-8zVhkpPOdkapeM7vU0f1LYIps1RJT_N8LUe05cXtFkUY6k05agS3m8GWJ3GOVQ5VMpGy_w54oMruMorcbQ

- 20) Pietro, L., Virgilio, F., & Pantano, E. (2012, March 16). Social Network for the choice of tourist destination: Attitude and behavioural intention. Retrieved December 19, 2022, from <https://www.emerald.com/insight/content/doi/10.1108/17579881211206543/full/html>
 - 21) Syafitri, T., & Suriyanto, M. (2022, April). Social Media as a Strategy to Attract Tourists in Setigi. Retrieved October, 2022, from <http://journal.umg.ac.id/index.php/innovation/article/view/3724/2356>
 - 22) Turney, S. (2022, December 05). Pearson correlation coefficient (R): Guide & examples. Retrieved December 19, 2022, from <https://www.scribbr.com/statistics/pearsoncorrelationcoefficient/#:~:text=Published%20on%20May%2013%2C%202022,the%20relationship%20between%20two%20variables>
 - 23) Tjoe, K. (2022, February 28). *rezdy*. Retrieved from rezdy.com: https://rezdy.com/blog/the-vitalrole-of-social-media-in-tourismZOabMyLUtwOMol+https%3A%2F%2Fwww.researchgate.net%2Fpublication%2F323428915_Social_Media_in_Tourism-_A_Double-Edged_Sword%3Ff
 - 24) Vanhove, N. (2018, April 23). What is tourism? Retrieved December 19, 2022, from http://www.turismeproactiu.com/en/what-istourism/?fbclid=IwAR3S75a4jUNcJHgLXOEL4nX4nE_EZc4sasknjti4n4gVE5J-LqKngu3hj9Y
- Vedantu. (2022, November 29). Social Media Essay. Retrieved December 19, 2022, from <https://www.vedantu.com/english/essay-on-social-media>



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0)

(<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.