

ORIGINAL SCIENTIFIC PAPER

A Study on the Development Strategy for Marine Leisure Tourism: Using the Importance Performance Analysis (IPA) Method

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Abstract

Although research on marine leisure tourism is steadily increasing, there has been a gap between the South Korean government's supply-centred policies and the demands of the public as potential consumers. Thus, the purpose of this study was to investigate the marketing needs of marine leisure tourism consumers to suggest a plan for the development of it. For this purpose, a total of 412 visitors to the Busan International Boat Show were surveyed in order to understand better the marketing needs of marine leisure tourism consumers, and the results were analysed for the magnitude of satisfaction centred around the 4Ps of marketing to suggest marketing elements that should be reflected first in the policy of the government as supplier. Quadrant I in the IPA Matrix included facility convenience, programme diversity, programme safety, and programme speciality. Quadrant II included equipment purchase/rental cost, ease of accessibility, and programme use prices. Quadrant III included food and beverage cost, convenience facility fees, and programme differentiation. Quadrant IV contained include mass media promotion, providing amenities and facilities, social media promotion, linkage with tourist attractions in neighbouring areas, and promotional events, materials, and brochures. These results may provide a foundation for comprehensive development plans for marine leisure tourism.

Keywords: marine industry, marine leisure tourism, marketing mix, importance-performance analysis

Introduction

Marine tourism, among other maritime industries, greatly contributes to the economy of the nations that are bordered by the ocean, and many countries are creating added value with it. Demand for marine tourism grew steadily from 25 million consumers in 1950 to 187 million in 2013, unlike other industries that have been affected by the rapidly changing global economy over the past six decades (Organization for Economic Cooperation and Development (OECD), 2016).

The marine tourism industry grew at an annual average

rate of 7% over the four years from 2010 to 2013 (United Nations Conference on Trade and Development (UNCTAD), 2014), and half of the more than one billion international tourists in 2012 reported participating in marine tourism (United Nations World Tourism Organization (UNWTO), 2012). As of 2010, marine tourism accounted for 26% of the marine industry, following marine petroleum and natural gas (34%), and marine tourism is expected to become the largest marine industry by 2030 (26%; OECD, 2016).

The marine industry in the United States accounts for 1.8% of total industrial GDP and 2.3% of job creation, while



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marine tourism boasts 72% employment and a 36% economic contribution to the marine industry (National Oceanic and Atmospheric Administration (NOAA), 2017). The UK marine tourism industry is worth more than three billion euros and more than 3.2 million people, or 6.5% of the total population, participate in marine tourism activities. In addition, marine tourism in Australia is the largest contributor to the marine industry (\$28 billion), while marine tourism-related leisure fishing (\$2.16 billion), leisure boat manufacturing and repair (\$1.26 billion), and marina and boat infrastructure (US\$700 million) also contribute to the industry (Austrian Institute of Marine Science (AIMS), 2016).

In advanced countries, the activities of marine tourism, which have been attracting attention as a key part of the marine industry, include underwater leisure activities, such as scuba diving and snorkelling, as well as other marine leisure activities like yachting, motorboating, canoeing and kayaking in tourist programmes (Busan Development Institute (BDI), 2016). The global marine leisure market is worth \$45 billion, and the underwater leisure tourism market is estimated to be worth more than \$6 billion.

In South Korea, the marine tourism market is expanding from traditional marine tourism activities such as marine landscape appreciation, sea bathing, and enjoying seafood to more active and adventurous marine leisure activities. According to a study conducted by the Korea Maritime Institute (2018), there has been a steady increase in demand for marine fishing, cruise tourism, and marine leisure activities.

The interest and investment of the Korean government and municipalities in marine leisure tourism is continuously increasing. The Ministry of Oceans and Fisheries of Korea (2018) designated "marine leisure tourism" as a future growth engine of the country and established a new "marine leisure tourism department" to enhance the competitiveness of the industry. Furthermore, local governments are stepping up efforts to develop and promote marine leisure tourism programmes in connection with the government's midand long-term marine tourism and marine leisure tourism development policies in anticipation of the revitalization of the local economy and the effects of urban marketing.

With continuing interest and investment in marine leisure tourism by central and local governments, academic research is also focusing on various aspects of the industry. According to the analysis of experts in the industry, marine leisure tourism research can be divided into demand-side and supply-side research. For demand-side research, Kim and Hwang-bo (2016) surveyed marine tourism activity preferences considering consumer characteristics to suggest plans for increasing marine leisure tourism, and the Busan Development Institute (2016) used the contingent valuation method (CVM) to assess the economic value of marine sports to suggest consumer-centred plans. Kim, Lee, and Jang (2017) analysed the socio-demographic characteristics of marine leisure tourism event users and conducted a study

Methods

Participants

This study selected the visitors of the Busan International Boat Show, between 26 and 29 April 2018, as a population from which to extract samples using convenience sampling out of non-probability sampling methods to ascertain the importance

to investigate the effect of event image and satisfaction of visitors on their intentions to revisit and recommend events to others.

As for supply-side research to suggest policy measures to increase marine leisure tourism, Hong (2014) has pointed out the problems of domestic marine leisure tourism policy and has suggested water-friendly cultural projects to promote marine leisure. Kim (2014) also suggested development plans of marine leisure tourism in Gangwon Province based on the conclusions drawn from the analysis of domestic and international cases and conditions, while Kwon and Mun (2015) conducted a study to determine a legal basis for legislation to encourage marine leisure tourism and to investigate current legislation that presents obstacles to increasing marine leisure tourism.

The results of these studies are significant in that they yielded marketing strategies for appealing to consumers of marine leisure tourism and provided the basic data necessary for the formulation of marine leisure tourism policy at a national level. However, despite the fact that the central government and municipalities have been pursuing multipronged policies for the establishment of infrastructure, and the popularization and advancement of marine leisure tourism for more than a decade, the marine leisure population, based on which the market size can be estimated, remains below the level of other developed countries. The policies of the government and municipalities have been focused on supply-centred activation plans. The policies also partly reflect the attitude and intention of the government to expand the related market strategically, but they cannot be exempt from the criticism that they did not adequately address demands and needs of the public as potential consumers of marine leisure services and products.

In other words, there has been a gap between the government's supply-centred policies and the demands of the public as potential consumers. At the same time, government plans to promote marine leisure tourism have failed to reflect fully the preferences and needs of potential consumers. For example, government programmes mostly focused on yachting, but analysis of the marketing needs of consumers showed the public prefers more affordable and accessible activities, like canoeing or kayaking, which are also popular in most countries with advanced marine tourism industries (BDI, 2016).

Against this backdrop, this study aims to re-examine the development strategies for revitalizing marine leisure tourism pursued by the central and local governments of South Korea and to scientifically analyse the marketing needs of marine leisure tourism consumers and effectively reflect them in the supply-centred marine leisure policies of the government. For this purpose, this study presents the strategy of developing marine leisure tourism through the Importance Performance Analysis (IPA) of factors constituting the marketing mix of marine leisure tourism for the consumers.

and satisfaction level of the factors derived from the marketing mix through the panel discussion. A total of 412 questionnaires were collected directly at the site. Of the collected questionnaires, 25 were excluded, as they had unanswered questions or incomplete responses; the remaining 387 were analysed. Table 1 shows the general characteristics of the consumers.

Table 1. Demographic Details of the Participants

Characteristic		Frequency	Percentage
Gender	Male	237	61.2
Gender	Female	150	38.8
	Under 20	19	4.9
	20 to 29	225	58.1
Age	30 to 39	63	16.3
	40 to 49	49	12.7
	50 and over	31	8
	HS graduate or less	54	14
Education	Some college	305	78.8
	College graduate	28	7,2
	Under \$12,000	185	47.8
	\$12,000 to \$23,999	54	14
Income	\$24,000 to \$35,999	58	15
	\$36,000 to \$47,999	33	8.5
	\$48,000 and over	57	14.8

Research tool

The questionnaire used in this study was drafted based on the preceding studies and preliminary investigations, and questionnaires were created through the verification of content validity by a group of marine leisure tourism experts.

The questionnaires were drafted based on the factors sug-

gested in the previous studies, such as marine leisure or marine tourism, to accommodate the purpose of this research before conducting preliminary investigations. In the preliminary study, the suitability and applicability of the contents were examined, revised, and supplemented before being used. The main components and contents of the questionnaire are listed in Table 2.

Table 2. Questionnaire Configuration

Factor	ltem	Number of Items	
Product	Programme safety		
	Programme diversity	4	
	Programme speciality	4	
	Programme differentiation		
Price	Programme use prices		
	Food and beverage cost	4	
	Convenience facility fees	4	
	Equipment purchase/rental cost		
	Facility convenience		
	Ease of accessibility		
Place	Linkage with tourist attractions in neighbouring areas	4	
	Providing amenities & facilities		
Promotion	Social media promotion		
	Promotional materials & brochures	4	
	Mass media promotion	4	
	Promotional events		

The questionnaire consisted of six general questions, eight questions about consumption behaviour, and 16 IPA assessment questions pertaining to the marine leisure tourism marketing mix. The questionnaire items were measured with a nominal scale and a five-point Likert Scale.

Validity test

A factor analysis was conducted to guarantee the validi-

ty and the marketing factors of marine leisure tourism were applied to the Importance Performance Analysis (IPA). As shown in Table 3, the questionnaire about the importance of marketing factors consisted of four factors: promotion, price, product, and place. The factors accounted for about 64% of the total variance, and the reliability coefficients of the questionnaire were all over .7 (α =.759-.856), thus proving reliability.

Sport Mont 18 (2020) 1 41

Table 3. Factor Analysis of the Importance of Marketing Factors Questions

	ltem	Factor 1	Factor 2	Factor 3	Factor 4
Promotion	MMP	.817	<u> </u>		
	PE	.812			
	PMB	.802			
	SMP	.748			
Price	CFF		.837		
	FBC		.830		
	EPRC		.703		
	PUP		.693		
Product	PSP			796	
	PDIV			.781	
	PDIF			.699	
	PSA			.631	
Place	EA				.800
	FC				.774
	PAF				.620
	LTN				.557
	Eigenvalue	2.910	2.528	2.423	2.335
	% of Variance	18.185	15.797	15.141	14.595
	Cumulative %	18.185	33.982	49.124	63.718
	Cronbach's α	.761	.803	.759	.856

Legend: MMP - Mass media promotion; PE - Promotional events; PMB - Promotional materials & brochures; CFF - Convenience facility fees; FBC - Food & beverage cost; EPRC - Equipment purchase/rental cost; PUP - Programme use prices; PSP - Programme specialty; PDIV - Programme diversity; PDIF - Programme differentiation; PSA - Programme safety; EA - Ease of accessibility; FC - Facility convenience; PAF - Providing amenities & facilities; LTN - Linkage with tourist attractions in neighbouring areas

As shown in Table 4, the questionnaire about the satisfaction of marketing factors consisted of four factors: promotion, price, product, and place. The factors accounted for about 70%

of the total variance, and the reliability coefficients of the questionnaire were all over .7 (α =.825-.876), thus demonstrating internal consistency.

Table 4. Factor Analysis of the Satisfaction of Marketing Factors Questions

14140		Factor 2	Factor 3	Factor 4
MMP	.818			
PE	.794			
PMB	.774			
SMP	.715			
CFF		.826		
FBC		.784		
EPRC		.779		
PUP		.678		
PSP			.781	
PDIV			.775	
PDIF			.774	
PSA			.631	
EA				.732
FC				.725
PAF				.686
LTN				.622
	PE PMB SMP CFF FBC EPRC PUP PSP PDIV PDIF PSA EA FC PAF	PE794 PMB774 SMP715 CFF FBC EPRC PUP PSP PDIV PDIF PSA EA FC PAF	PE .794 PMB .774 SMP .715 CFF .826 FBC .784 EPRC .779 PUP .678 PSP PDIV PDIF PSA EA FC PAF	PE .794 PMB .774 SMP .715 CFF .826 FBC .784 EPRC .779 PUP .678 PSP .781 PDIV .775 PDIF .774 PSA .631 EA FC PAF

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Item	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue	3.012	2.911	2.727	2.582
% of Variance	18.826	18.197	17.031	16.140
Cumulative %	18.826	37.023	54.053	70.193
Cronbach's α	.842	.867	.825	.876

Data processing

The collected data were subjected to a frequency analysis and IPA after excluding unsuitable data through coding and data cleaning. First, a frequency analysis was conducted to examine the demographic characteristics of the subjects. Second, an Exploratory Factor Analysis was conducted to verify the validity of marine leisure tourism products, prices, places, and promotional factors. The reliability of the data was then verified through Cronbach's α coefficients, which measure internal consistency between the items. Third, an IPA was

conducted for 4Ps based on marine leisure tourism consumers using SPSS 23.0.

Results

Figure 1 is the IPA matrix of all the items selected from the marketing mix of marine leisure tourism. It is a matrix of the average values of importance and satisfaction for each factor for all items. The centre of the matrix is the same as in the Likert 5-point scale, with an average of importance (3.90) and an average of satisfaction (3.30).

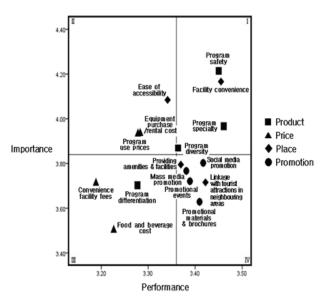


Figure 1. IPA Matrix of Marine leisure tourism marketing mix based on tourism consumers

The attributes of quadrant I, "keep up good work", have both high importance and satisfaction, which means that continuous maintenance and management are necessary to stay relatively superior. These factors include facility convenience, programme diversity, programme safety, and programme speciality.

The attributes of quadrant II, "concentrate here", are considered underperforming and, as such, represent the product's major weaknesses and threats to its competitiveness. These attributes have the highest priority in terms of efforts to enhance the level of satisfaction. These factors include equipment purchase/rental cost, ease of accessibility, and programme use prices.

The attributes of quadrant III, "low priority", are considered low both in importance and satisfaction and include food and beverage cost, convenience facility fees, and programme differentiation. These attributes do not require further efforts, and it is considered unimportant to devote additional resources to them.

Quadrant IV, "possible overkill", contains attributes of low importance to customers, which are performing strongly, indicating a possible waste of limited resources. These factors include mass media promotion, providing amenities and facilities, social media promotion, linkage with tourist attractions in neighbouring areas, and promotional events, materials, and brochures.

Discussion

Based on the results of the analysis of importance-satisfaction (IPA) of the customer-based marine leisure tourism marketing mix, the marketing strategies to develop marine leisure tourism are suggested as follows.

Product strategy

This research is in agreement with the study of Roh and Kim (2014) in placing "programme differentiation" in quadrant III. It was revealed that differentiation of tourism products is important to attract tourists to the destination and it is necessary to accommodate the different needs of consumers by market segment because they show different preferences according to gender and age (Yeo & Kim, 2014; Choi, 2010; Jeon, 2012).

Jeon (2012) argues that younger consumers are more likely to be interested in the equipment and learning skills of marine leisure tourism and should be provided with differentiated programmes to obtain new knowledge regularly. Therefore, consumers in their twenties and thirties should be given programmes by level, based on learning how to use equipment, while more static and non-active tourist programmes like un-

Sport Mont 18 (2020) 1 43

derwater landscape appreciation need to be provided for those in their forties to sixties.

According to the analysis of consumption patterns of the marine leisure tourism consumers surveyed for this research, most consumers have had experiences with power-type marine leisure activities, such as motorboat and rubber boat riding, followed by towed sport-type activities, such as banana boat riding and water-skiing. However, for most of them, the experience was no more than a one-time experiential activity, and measures should be prepared to encourage consumers to participate in these types of activities more frequently and regularly. For example, a package tour product could be developed and provided for those in their twenties and thirties, as that demographic is more likely to enjoy these activities. According to the National Survey on Marine and Fisheries, middle-aged people (in their forties to sixties) prefer enjoying scenery (Korea Maritime Institute, 2018). To reach this group of consumers, the marine leisure tourism industry should consider developing marine landscape appreciation programmes using power-type marine leisure vehicles.

Price strategy

According to the trend analysis of the Korea Maritime Institute (2018), one of the major obstacles to promoting domestic marine tourism is its high price. In previous studies by Choi, Han, and Lee (2013), Kang and Kim (2012), and Jeon (2012), as well as in this research, the price of marine leisure tourism ranks at a high level of importance but reveals a low level of satisfaction. It is expected that a decrease in price will encourage consumers to keep participating and specific measures, such as membership programs, mileage rewards programs, and birthday or anniversary discounts, were suggested to ease the price burden on consumers.

Consumers in their twenties and thirties are sensitive to the price of tourist products, and it is important to offer a variety of discount programmes to attract those young consumers. In fact, many studies have confirmed that most participants of marine leisure tourism activities are in their twenties and thirties and that this demographic considers KRW 10,000 to 50,000 (USD 10 to 50) per use the appropriate cost for marine leisure tourism activities. However, most marine leisure tourism programmes are beyond a price that consumers can afford, while discount programmes through promotional events are insufficient. It is necessary to establish and implement a wide range of price strategies to accommodate various consumer groups and to lure price-sensitive young consumers to marine leisure tourism programs.

According to the consumption pattern analysis of this research, consumers of marine leisure tourism tend to use these services with friends or family members rather than alone and gather information about programmes from friends or acquaintances in addition to the Internet; therefore, it is a good strategy to attract consumers by offering various discount programmes such as friends and family discounts and couple discounts.

Location strategy

The criteria for selecting marinas, one of the key infrastructure facilities of marine leisure tourism, include accessibility to a large market and accessibility and convenience via various modes of transportation (Ministry of Oceans and Fisheries of Korea, 2010). In this research, accessibility is positioned in quadrant II, which indicates that it is considered

more important than other factors but is underperforming.

As for accessibility, this research is not in agreement with the study of Choi et al. (2013), who placed it in quadrant I, where importance and satisfaction are both high. However, Moon (2010), Kang and Kim (2012), and Jeon (2012) showed that the location of marine leisure tourist destinations significantly influences consumer participation.

Given that consumers mostly use a car or bus to participate in marine leisure tourism activities, in order to appeal to a majority of customers, most of whom are in their twenties and do not have a high income, offering a programme combining a city tour and a car rental/car sharing application, such as SoCar, would be a good strategy.

Promotional strategy

Promotion showed a relatively higher level of satisfaction, but it was still not sufficiently high compared to what was shown by the preceding studies in terms of mass media promotion, promotional events, and promotion items. It is, therefore, important to establish and pursue continuous and effective promotional strategies to encourage marine leisure tourism.

As a primary promotional strategy, TV programmes might seem a viable strategy. However, most marine leisure tourism agencies have limited access to mass media, including TV. Considering that most marine leisure tourism providers are small and have limited financial resources to spend on promotion and marketing, the government should intervene and provide financial support to build a business platform for small marine leisure tourism companies to cooperate in co-marketing. At the same time, word-of-mouth marketing through social media such as Instagram and Facebook is considered effective to target marine leisure tourism consumers in their twenties and thirties.

This research has examined the importance and satisfaction of the marketing factors of marine leisure tourism using the IPA method. First, the objective of this research was to make an integrated analysis of the demand-side and supply-side factors for the development of marine leisure tourism and to suggest marine leisure tourism development strategies on a macroscopic level. However, the analysis of the demand side marketing mix was based on the survey conducted in Busan Metropolitan City and may be too limited to generalize the results as the global attitude of consumers to the marine leisure tourism marketing mix. To increase the external validity of data, a survey needs to be conducted on a national level and for a sufficiently long period to analyse the importance and satisfaction consumers perceive regarding the marine leisure tourism factors in the survey.

Additionally, marine leisure tourism is a promising sector of the marine industry that most coastal nations are strategically developing. However, different nations have different priorities depending on the maritime environment, the conditions of front- and rear-facing industries related to marine leisure tourism, and government policies. Therefore, it is necessary to continue research in which development factors are derived in ways that reflect differences in the macroscopic and microscopic socio-economic environments and can be scientifically verified, which would provide a firm basis for the establishment of the practical and customizable marine leisure tourism development strategies.

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Conflict of Interest

The authors declare that there are no conflicts of interest.

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References

- Australian Institute of Marine Science (2016). Marine and coastal industries. Retrieved 06/25, 2019, from www.aims.gov.au/marine-industries
- Busan Development Institute (2016). Analysing marine sports demands and recommending user based activation policies. Retrieved 06/25, 2019, from www. bdi.re.kr/03station/03_01.asp?cate1=f4&dept=D3101&year=&cate=&SType=ReR_Title&SString=&idx=1407&page=2#
- Choi, K. (2010). Market segmentation of marine tourists using spectrum of marine recreation opportunity and value paradigm. *Journal of Tourism & Leisure Research*, 22(3), 429–449.
- Choi, S.B., Han, T.Y., & Lee, K.S. (2013). The importance-performance analysis of selection attribute assessment for Gangwon province east sea beach visitor. Korean Journal of Sports Science, 22(6), 227–237.
- Hong, J. (2014). Cultivating marine leisure industry by spreading hydrophilic culture. Korea Tourism Policy, (58), 33–38.
- Jeon, H.M. (2012). A study on the strategies of a marketing mix to attract real customers in marine leisure sport. *Journal of Sport and Leisure Studies*, 48(1), 347–360.
- Kang, M.G. & Kim, W.S. (2012). The effects of using marine leisure sports in participant of marine leisure sports on motive for participating. Korean Society of Sport and Leisure Studies, 49(1), 401–412.
- Kim, C.R., Lee, J., & Jang, S. (2017). The effect of marine sport event visitors' satisfactions and city image on revisit and recommendation: Focusing on 2015 Busan cup women's international match race. Korean Journal of Sport Studies, 56(1), 53–65.
- Kim, G. & Hwang-bo, J. (2016). Revitalization of marine tourism focused on user characteristics Busan/Ulsan/Gyeongnam. The Korea Academic Society of Tourism and Leisure, 28(12), 135–149.
- Kim, T. (2014). A restudy of marine leisure tourism industry activation strategies: Around Gwangwondo. *Journal of the Korean Entertainment Industry Association*, 8(3), 359–366.

- Korea Maritime Institute. (2018). Weekly report: KMI trend analysis. *Korea Maritime Institute*, 1–43.
- Kwon, I. & Mun, S. (2015). A study on the improvement of legal system for the revitalization of marine leisure tourism. *Journal of Sport and Leisure Studies*, 59(1), 363–376.
- Ministry of Oceans and Fisheries of Korea. (2010). Ministry of Oceans and Fisheries of Korea 2010
- work plan. Retrieved 06/25, 2019, from www. mof.go.kr/article/view.do?menuKey=390&boardKey=26&articleKey=4705
- Ministry of Oceans and Fisheries of Korea. (2018). Ministry of Oceans and Fisheries of Korea 2018 work plan. Retrieved 06/25, 2019, from www. mof. go.kr/2018/file/2018_mof_workpalns_3.pdf
- Moon, T.Y. (2010). Influence in environmental factors of experiencing marine leisure sports upon participants' emotional response, satisfaction, and re-participation intention. *Journal of Sport and Leisure Studies*, 40(2), 799–810
- National Oceanic and Atmospheric Administration (2017). NOAA report on the U.S. ocean and great
- lakes economy. Retrieved 06/25, 2019, from www. coast.noaa.gov/digitalcoast/training/econreport.html
- Organization for Economic Cooperation and Development (2016). The Ocean Economy in 2030.
- Retrieved 06/25, 2019, from www. geoblueplanet.org/wp-content/up-loads/2016/05/OECD-ocean-economy.pdf
- Roh, C. & Kim, K. (2014). Development on economical evaluation model for activation of investment
- of marine tourism industry: Application on the Gampo tourist complex. Journal of Tourism &
- Leisure Research, 26(2), 459-474.
- United Nations Conference on Trade and Development (2014). The ocean economy: Opportunities and challenges for small island developing states. Retrieved 06/25, 2019, from www. unctad.org/en/PublicationsLibrary/ditcted2014d5_en.pdf
- United Nations World Tourism Organization (2012). Robust demand for international tourism despite
- $uncertain\ economy.\ Retrieved\ 06/25,\ 2019,\ from\ www.\ mkt.unwto.org/sites/all/files/pdf/unwto_barom12_06_nov_excerpt.pdf$
- Yeo, H. & Kim, J. (2014). A study on preference of types on marine leisure and tourism activity. *Journal of Tourism & Leisure Research*, 26(6), 27–42.

Sport Mont 18 (2020) 1 45