

Influence of Perceived Value and Innovation on the Propensity to Use Sports Tourism Websites among University Students: The Moderating Effects of Age and Education

Marwan Taha Abed Rabee¹, Roxana Dev Bt Omar Dev^{2*}, Tengku Fadilah Tengku Kamalden³, Ahmad Nasrulloh⁴, Seyedali Ahrari⁵

^{1 2 3 5} Faculty of Educational Studies, Universiti Putra Malaysia, Serdang, Selangor, 43400, Malaysia
marwanrabee096@gmail.com

rdod@upm.edu.my

tengku@upm.edu.my

seyedaliahrari@upm.edu.my

⁴ Faculty of Sport Science, State University of Yogyakarta, Yogyakarta, Indonesia
ahmadnasrulloh@uny.ac.id

*Corresponding Author

<https://doi.org/10.24191/ajue.v17i4.16186>

Received: 21 April 2021

Accepted: 27 August 2021

Date Published Online: 31 October 2021

Published: 31 October 2021

Abstract: In this study, the researchers sought to understand the effects perceived value and innovation have on the propensity of university students to use sports tourism websites. This study also examined the moderating roles of age and education on this usage. University students (N = 354; 292 women and 62 men) from a public university in Malaysia were surveyed for this study. The findings revealed that perceived value and innovation significantly influence the propensity to use sports tourism websites among university students. The results also showed that both age and education significantly moderated their purposed associations. The findings of this study offer sports website managers, as well as policymakers in sports organizations, an insight that will aid in the development of effective online strategies to attract young users to engage with sports tourism websites. This study also informs managers and researchers about the importance of age and education when considering the relationship between predictors and the propensity of users to use sports tourism websites.

Keywords: Propensity to use websites, tourism, sports events, personal characteristics, perceived benefits, innovation.

1. Introduction

Sports tourism is on the rise and shows no sign of slowing down. It is believed, at the time of this research, to be the fastest-growing section of the travel industry (Ristova, 2020). Sports tourism is defined as travel that involves either observing or participating in a sporting event while remaining on the outside of visitors' regular visitation spots. There have been increasing developments within the field of sports tourism in recent times, and it has become one of the tourism industry's core "themes" (Perić et al., 2019). According to Roespinoedji et al. (2019), sports tourism is an information-intensive sector that relies on communication with visitors via many channels to sell products and establish customer relationships. Thus, the internet has become a relevant and crucial way for visitors to receive information on sporting events and travel. There are plenty of sports websites that provide users with powerful navigation tools and search functions to quickly and efficiently seek out travel-related information. Sports tourists are eager for accurate data (Cordina et al., 2019). Research conducted by Wise et al. (2019) revealed that, for a long time, tourism for sporting events has been among the top

websites accessed by internet users. Websites provide users with detailed information and promotions. On the internet, there is a lot of useful tourist information, which covers bookings for hotels, tours, experiences, airfare rates, and packages (Holloway & Humphreys, 2019). To fulfill the needs of various sports visitors, travel information is combined, incorporated, and packaged in sports tourism websites. A sport tourism website is one that offers travel reviews, trip prices, or a mix of the two for sporting events (Kersulić et al., 2020).

Numerous sports events around the world, such as the World Cup, Olympics, or even famous local tournaments like the Premier League, are promoted on sports tourism websites. Sports websites generate significant interest to bring significant benefits to the destinations that host these events. For instance, according to Malaysian newspapers, in the last Terengganu Monsoon Cup in 2015, around 81,000 sports visitors arrived at the event's venue. Thus, individuals can acquire benefits from these media (websites) which act as a platform to offer information and services. According to Gaffar et al. (2019), the population of online consumers of sports tourism websites has increased. The most sports organizations have begun using their websites as marketing tools to attract new consumers and fulfill their organizational goals. An extensive number of marketing websites for attracting sports tourists have been created (Radzliyana et al., 2015). With the emergence of online sports tourism, more researchers are willing to investigate the mechanics behind online customers' habits and their desire to embrace technology for sporting events (Fook et al., 2021; Hanna, 2012). According to Hur et al. (2011), there are many reasons for sports events seeking tourists and customers to use these websites, including ease of use, for leisure and entertainment, creativity and innovation, interpersonal contact, and fan expression. People can, for example, use sports websites to look up match results or player statistics, purchase team jerseys, and purchase match tickets. These processes can be understood by examining the sequential connection between the fans' perceptions and their intention to use the website to purchase sports products or obtain sports information.

However, most of the information provided by these websites is not determined based on the needs of visitors and sports tourists, but rather on the interests of the organization or service providers (Lin & Lu, 2016). As stated by Pookaiyaudom (2019), the growth of tourism websites for such events should concentrate more on the views and values of clients rather than on the interests of the tourism organizations or sports organizations themselves. Little academic attention has been paid to understanding the propensity of young users to gravitate towards the use of sport tourism websites (Martínez-González & Álvarez-Albelo, 2021). A considerable number of sports fans and sports event tourists are young people (Demeter & Brătucu, 2014). In addition to this, demographic characteristics have been analyzed in several contexts to determine their moderating effects on purchasing behavior, especially in sports tourism (Mason & Moretti, 2015). It is widely agreed that demographics play an important role in the adoption and use of self-service technologies because they offer ways to help address customer expectations for customized goods, services, and communications (Karimi et al., 2015). Despite a large number of online marketing studies, little empirical study has been done to fully explain the moderating effects of individual tourist characteristics in the link between online adoption variables and the likelihood of using sports tourism websites. This study, therefore, aims to fill that void by examining the moderating impact of personal characteristics, in addition to the relationship between the perceived significance of innovation, on the travel website trend.

2. Literature review

2.1 Customer perceived value and the propensity of using sport tourism websites

As service encounters accumulate, marketers need to understand different global service evaluations, such as perceived value, among customers (Avourdiadou & Theodorakis, 2014). The attributes that comprise the acceptability of sports tourism websites were used to generate data on customer perceived value. The majority of customer-perceived value studies on travel and travel websites focus on the product-related attributes, implications, and desired end-states (i.e. core values, goals, and objectives) (Lexhagen, 2009). According to González-García et al. (2018), the future of the sports tourism industry can be predicted through three interrelated perspectives: participants, sports, and destinations. Furthermore, sports event tourism is considered an important factor in the world of sports-related tourism. Major developments in the sporting events tourism industry have hit the market

and made it more challenging for organizations to survive. Therefore, it requires the organization to acquire knowledge and experience in that particular industry. According to Jin et al. (2015), customer perceived value is the notion that the success of a service, such as a sports tourism website, is largely based on whether users believe it can satisfy their wants and needs. In other words, when a sports organization or agent develops its website, customers ultimately determine how to interpret and react to its marketing messages (Gonzalez et al., 2015). The following hypothesis was, therefore, tested in this study:

Hypothesis 1: Customer perceived value of sports event tourism websites has a significant positive impact on the propensity to use the websites.

2.2 Innovation and the propensity to use sports tourism websites

According to Lorgnier and Su (2014), innovation is defined as the adoption of new ideas, behaviors, systems, strategies, procedures, equipment, processes, products, or services in a company. In a competitive environment, corporations and organizations need various types of innovations (for example, innovation in products, processes, marketing, and management) to function, remain competitive, and be successful (e.g., Johari et al., 2021). Therefore, websites that embrace innovation gain a competitive advantage and have a better chance of outperforming their competitors (e.g., Lim et al., 2020). According to Shao (2021), sports website sponsors are trying to find the most appropriate online methods of attracting customers through innovative promotional strategies. It has been witnessed that innovative and attractive websites achieve the highest rates of success and that new web technology has made them more intelligent, easier to use, and interactive (Rezaeean et al., 2012). As stated by Ha et al. (2015), new media users' perceptions of innovation determine their rate of adoption. Thus, the present study suggested the subsequent hypothesis:

Hypothesis 2: Innovation has a significant positive impact on the propensity to use sports tourism websites.

2.3 Moderating effect of age and education

Sports tourism market segmentation variables are described as 'the separation of the business sports tourism market into smaller groups of delegates based on demographic features and characteristics when they are exposed to a business tourism product' (Swart & Roodt, 2015). This includes demographics of age and years of service. More study is needed to explore how market segmentation characteristics act as moderating variables on the relationship between major service components. Targeting the proper clients for a given customer retention campaign is a top priority for sports tourism websites (Swart & Roodt, 2015). There are few studies on the moderating effects sports tourists' personality traits and adoption factors have on the trend to use websites for sports tourism (Hritz & Cecil, 2019). Many researchers often use personal characteristics to explain customer responses to innovation (Álvarez-García et al., 2019).

Age plays an important role in influencing people's search habits on the internet. Previous studies have shown that, compared to older age groups, young people under the age of 30 are more likely to use the internet (Hargittai et al., 2019). Roos and Kazemi (2021) pointed out that people of this age group tend to use the internet to search for information, especially for leisure activities. Sharif and Yeoh (2018) added that Malaysian youths under the age of 20 tend to spend more time on the internet. Furthermore, the findings provided by Madden (2006) added that, due to certain factors, including cheaper prices for broadband internet access, these young Malaysians tend to have more access to an internet connection than older Malaysians. Consumers of different ages show different adaptability skills (Liu et al., 2019). In addition to this, age also affects the adoption patterns of consumers (Zaremohzzabieh et al., 2021). Compared to younger consumers, older consumers are considered more mature in decision-making. Fratu (2011) viewed age as an effective distinguishing factor in consumer behavior. He pointed out that, compared to the elderly, the young have different tastes in products or services.

Education (academic background) is another factor that may have a significant impact on the internet or online behavior of consumers. In many cases, highly educated people, who have computer skills and technical knowledge, can use the internet easily. In recent years, all parts of the world,

including Malaysia, have taken note of the relationship between education and the internet. According to research by Abd Hamid et al. (2020), the majority of internet users in Malaysia are professionals with a high level of English. Research results in two different countries show that there are differences in the online behaviors of internet users of different education levels. For instance, Teo (2001) showed that there is no significant difference in the educational level and online activities of Singaporean university students. However, Naseri et al. (2021) showed a significant difference in the online activities, such as browsing, messaging, shopping, and downloading, of those of varying education levels. Van Droogenbroeck and Van Hove (2017) found that well-educated online users primarily use the internet to find the latest news and information on specific products and/or services, future travel plans, or anything related to their work. Therefore, one's profession also has a great influence on one's online behavior (Fratu, 2011). Thus, the search for moderating effects should avoid inferring that the results pertain to the whole of the population of interest, when, in fact, they only apply to a part of the sample (Clark et al., 2021). As such, we proposed the following hypotheses:

Hypothesis 3: Age moderates the relationship between innovation and the propensity to use websites.

Hypothesis 4: Age moderates the relationship between the customer perceived value of sports event tourism websites and the propensity to use the websites.

Hypothesis 5: Education moderates the relationship between innovation and the propensity to use websites.

Hypothesis 6: Education moderates the relationship between the customer-perceived value of sports event tourism websites and the propensity to use the websites.

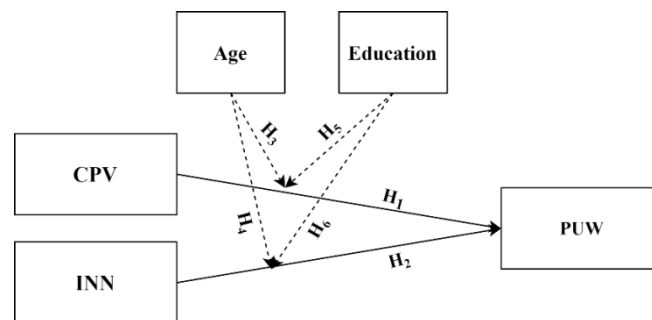


Fig. 1 Conceptual framework

3. Methods

3.1 Participants and procedures

The focus of this study is on sports tourists' use of relevant websites to participate in sporting events. For this study, the sample size comprised of Malaysian university students who frequently participate in different sporting events held in Universiti Putra Malaysia (UPM). According to Sekaran and Bougie (2016), the sample size should be several times greater than the number of study variables (preferably ten times or more). Out of 460 randomly distributed questionnaires, 410 students completed the survey forms. Due to missing data, the final sample was 354 (M Age = 22.12, SD = 1.73), for a 76.95% response rate. This is consistent with the recommendations of previous literature (Hair et al., 2010). The university students were from several faculties, who had been enrolled in the university for at least one semester before the survey's distribution date.

The researchers translated all survey items into Malay and then back-translated them to verify their accuracy. All of the items were provided in Malay in the survey booklet itself. Before the actual data collection process was undertaken, a pilot test was conducted with 50 students from the Department of Sport Sciences from the Faculty of Educational Studies to ensure the reliability of the scales. Data were collected by a group of enumerators who administered the questionnaires. The self-administered

questionnaire was used as a research tool to obtain data from UPM students who participated in the event. The demographic attributes of the students are provided in Table 1. Almost half of the respondents (50.8%) were bachelor's degree students, with the majority (59.9%) being younger than 30 years old and predominantly female (82.6%). The rationale for this unequal number of gender in the number of respondents is that higher education in Malaysia has 61 percent female students (Department of Statistic Malaysia, 2019). The results also showed that most students (82.5%) had GPAs higher than 3.0.

Table 1. Demographic profile of respondents (n = 354)

Demographic information	f	%	Mean	SD
Age			22.12	1.73
21-30	212	59.9%		
30<	142	40.1%		
Gender				
Male	62	17.5		
Female	292	82.6		
Education Groups				
Master & PhD	156	44.1		
Bachelor	180	50.8		
Higher Diploma	18	5.1		
GPA				
< 3	61	17.4		
> 3	293	82.5		

3.2 Measures

Perceived benefits of using the website. This section was designed with a referral to the attributes of the sports tourism websites. The revisited technology acceptance model for marketing technology was used (White et al., 2012). All 21 items (with four components of accessibility, flexibility, interactivity, and reliability) were scored according to the response format of the 5-point Likert scale, with values ranging from 1 (completely disagree) to 5 (completely agree). An example of the type of questions asked to obtain these responses is, "I use the websites because it allows me to spend more time to search for information". The obtained Cronbach's alpha value for the measurement was 0.95.

Opportunity to use sporting event travel websites. This five-item scale used the sports website acceptance model (Hur et al., 2011) to measure the opportunities present to use sporting events travel websites. The response format of the 5-point Likert scale ranged from 1 (totally disagree) to 5 (totally agree). An example of the questions asked in this segment is, "The website allows me to gain access to previously inaccessible information". The Cronbach's alpha score for the measurement was 0.89.

Innovations. 12 items were used in this study because these items were previously tested by many researchers (Ranaweera et al., 2005). These items were divided into four subsections: product innovation, process innovation, marketing innovation, and management innovation. The 5-point Likert scale used for this segment ranged from 1 (completely disagree) to 5 (completely agree). An example of the questions asked in this section is, "I think the new products and services are often the best on this website". The obtained Cronbach's alpha score for innovation measurement was 0.91.

3.3 Analytic strategy

This study used the Social Science Statistical Package (SPSS), version 26.0, to analyze all collected data. To analyze the data, the study used descriptive and inferential statistics. Preliminary data assays were conducted to confirm that normality, linearity, and multicollinearity assumptions were not breached. For describing the three constructs, means and standard deviations were employed. To meet

the objectives of the research, the researchers used linear correlation coefficients to determine the relationship between the independent constructs and the propensity to use sporting event travel websites. Due to this study using inference analysis, multiple linear regression analyses were performed. The study also examined consumer moderating effects by utilizing multi-group analysis. Finally, hypothesis testing was performed to determine the validity of the proposed hypotheses.

4. Results

4.1 Descriptive analysis

The first hypothesis of this study aimed to determine the relationship between the perceived value of customers (independent variable) and the propensity to use travel websites for sporting events (correlation). The results are shown in Table 2 and depict a significant positive relationship between customer perceived value and their propensity to use sport tourism websites ($r = 0.567$, $N = 354$, $p < 0.05$). This result clearly shows a moderate to significant relationship between innovation and endogenous variables ($r = 0.342$, $N = 354$, $p < 0.05$).

Table 2. Means and standard deviations, correlations among study variables.

Variables	M	SD	1	2	3
1. CPV	0.548	1.25	1		
2. INN	0.535	0.97	0.342**	1	
3. PUW	0.563	1.08	0.567 **	0.757**	1

Note. CPV= Customer perceived value, INN= Innovation, PUW= Propensity to use websites;
** Correlation is significant at the 0.01 level.

4.2 Multiple linear regression

Multiple linear regression analysis was performed to assess the predictability of using sports tourism websites among university students via the study's independent variables. The predictors significantly predicted a propensity to use sports tourism websites among students in Malaysia. The most positive, statistically significant predictor was innovation, with $\beta = .379$, $p < .001$. Customer perceived values of $\beta = .248$, $p < .001$ indicate a significant predictor of students' propensity to use sports tourism websites. In short, these results provide statistical evidence for accepting H_1 and H_2 . The results show that both predictor variables explain up to 34% of the variance in the propensity to use websites, while the remaining 66% may be attributed to other factors which are not within the scope of this study.

Table 3. Results of hypotheses testing

Paths	β	t	P	Decision
CPV→ PUW	0.248	3.768	0.000	H_1 : Accepted
INN→ PUW	0.379	5.743	0.000	H_2 : Accepted

Note. INN= Innovation, PUW= Propensity to use the website, CPV = Customer perceived value.

4.3 Moderation analysis

Multiple group analysis uses a split-group technique, in which the initial sample is divided into two subgroups depending on each moderator's cut-off values. For participants' age, the sample was divided into younger and older groups; whereas, for education, we broke the sample into undergraduates and postgraduates groups. For each hypothesized moderating impact, two models were estimated: (a) a constrained model, in which the path influenced by the moderating variable was fixed to 1; and (b) a free model, in which all paths of the structural model were permitted to be estimated freely. A significant

(χ^2) difference between the two models implies that the moderator variables have a significant effect on the hypothesized relationships. The outcomes of this analysis are presented in Table 4.

Our results indicate that the effects of innovation on the desire to utilize sports tourism websites are significantly moderated by age ($\Delta\chi_{(1)}^2 = 4.13; p < .05$). The results show that the influence of innovation as an inducement to use sports tourism websites is more effective among younger students ($\beta = -.40, t = 3.62, p < .05$). The results also indicate that the association between perceived value and the propensity to use sports tourism websites is significantly moderated by age ($\Delta\chi_{(1)}^2 = 0.12; p < .05$). Thus, the impact of the perceived value of younger respondents on their propensity to use such websites is greater than older students ($\beta = .56, t = 4.49, p < .05$).

The findings reveal that effects of innovation on the desire to utilize sports tourism websites are significantly moderated by education ($\Delta\chi_{(1)}^2 = 7.26; p < .05$). Our results indicate that the effects of innovation on the desire to utilize sports tourism websites are significantly moderated by education ($\Delta\chi_{(1)}^2 = 4.41; p < .05$), while postgraduate students were more likely to use innovative sports tourism websites compared to undergraduate students ($\beta = -.46, t = 1.84, p < .05$). While, the influence of education on the perceived value of sports tourism websites is more significant among undergraduates ($\beta = .48, t = 2.04, p < .05$). Thus, this study's results support H₃ to H₆.

Table 4. Results of individual moderating effects.

Age as a moderator				
Main effect	Younger age group ^a (n ₁ = 212)	Older age group ^b (n ₂ = 142)	$\Delta\chi^2(\Delta df = 1)$	Decision
INN → PUW	$\beta = 0.40$ $t = 3.62$	$\beta = 0.37$ $t = 3.47$	4.13 ($p < .05$)	H ₃ : Accepted
CPV → PUW	$\beta = 0.56$ $t = 4.49$	$\beta = 0.30$ $t = 2.43$	0.12 ($p < .05$)	H ₄ : Accepted
Education as a moderator				
Main effect	Undergraduates ¹ (n ₁ = 198)	Postgraduates ² (n ₂ = 156)	$\Delta\chi^2(\Delta df = 1)$	Decision
INN → PUW	$\beta = 0.27$ $t = 3.08$	$\beta = 0.46$ $t = 1.84$	4.41 ($p < .05$)	H ₅ : Accepted
CPV → PUW	$\beta = 0.48$ $t = 2.04$	$\beta = .22$ $t = 2.97$	7.26 ($p < .05$)	H ₆ : Accepted

Note. INN= Innovation, PUW= Propensity to use websites, CPV = Customer perceived value. a: 21-30 years old students, b: above 30 years old students, 1: Higher Diploma and Bachelor, 2: Master/Ph.D.

5. Discussion

To contribute to the growth of sports activities and their associated tourism in Malaysia, the findings of this study provide readers with a deeper understanding of current issues related to online tourism website use, especially in terms of consumer perceived value, innovation, and the propensity to use tourism websites for sports events among higher education students. While the sports tourists who participated in this research were those who attended all sporting activities, it ultimately managed to include information on the personal characteristics of sports tourists with regards to the moderating effects of their perceived importance of websites and their propensity to use websites for sports events.

The findings of this study showed that, while there is an average relationship between the study's variables, there is a substantial relationship between innovation and the propensity to use sports event tourism websites. This shows that the more attractive and creative websites are in promoting sports tourism, the more likely it is visitors will embrace them. The propensity to use travel websites for sporting activities will, therefore, increase among consumers in the future. Consistent with the findings of Gaffar et al. (2019), the perceived value of online users directly influences their propensity

to use websites for their services. Thus, the present findings confirm that active online, user-valued websites are evaluated based on the quality of the information they present. These results are consistent with existing literature, such as Castaneda et al. (2007), which claims that the perceived value of consumers on a sports tourism website is motivated by the advantages the online service offers to all stakeholders in sports tourism. Customer perceived value is based on the websites' parameters. These parameters can be the website's usability, the versatility of the information obtained, the interactivity of the exchange of information, or the security of the information obtained (Martínez-Sala et al., 2020).

The findings of this study show that the relationship between consumer perceived value and the propensity to use sports event tourism websites is affected and moderated by age of respondents. This conclusion is consistent with Fratu (2011), which observed that young people under the age of 31 are more likely to use the internet than other age groups. This indicates that young people are more likely to access these websites for tourism purposes. The present findings are consistent with the studies of several scholars who have researched consumer purchasing behavior (Fujak et al., 2018); consumer behavior in decision-making (Yim & Byon, 2020); consumer purchasing participation; and the importance of personal characteristics, such as age, when evaluating online behavior (Hsieh et al., 2004). Education serves as a moderating factor. The results of this study reveal that the mixture of value perceived by customers and higher education leads to a better association towards using tourist websites for sporting events.

The results of the regression analysis show that the perceived benefits of innovation and the propensity to use the sports tourism websites are linked. This is consistent with Liu et. al. (2020) suggestion that the perceived value of innovations affects the adoption behavior of online users. The classic study of Moore and Benbasat (1991) pinpointed the characteristics of innovation for new technologies as being compatibility, image, result demonstrability, visibility, and trialability, which are beyond scope of this study. To illustrate the customer's reaction to innovation, demographic identifiers, such as age and education level, were used. The moderation results are consistent with diffusion and adoption literature that states that not all individuals with similar characteristics will adopt an innovative medium (Yung & Khoo-Lattimore, 2019). Thus, personal attributes, such as age and education, play an important role in the implementation of innovative artistic and technology-oriented approaches.

The findings of this study help us understand, to some degree, ways to promote sports tourism using online tools, especially among university students. Aforementioned, sports tourism is a growing business that is expected to incur huge revenue for sports organizations and even universities. Universities and colleges in many parts of the world already benefit from high monetary gain from sporting activities. While previous literature has outlined the meaning of the perceived value of consumers and the propensity to use tourist websites for sporting activities, no study has yet analyzed the components of that perceived value, which are accessibility, flexibility interactivity, and reliability. Furthermore, the current research has proven—for the first time, to this study's researchers' knowledge—the moderating effects of age and education on the relationship between customer perceived value and the propensity to use tourism websites for sports events. This research may be extended to include other attributes or factors that could apply to the creation of websites for sports tourism; or it may be extended to other segments of tourism, such as the perceived value of websites for education tourism, the perceived value of websites for fitness tourism, and the perceived value of eco-tourism, to compare them to the propensity to use websites for sporting activities. Determining the association between customer perceived value and the propensity to use sports event tourism websites among the participants of sporting events, who participated in this study, has provided valuable contributions. In creating a detailed website, the results of this study offer useful knowledge for sports tourism organizations. In addition, it offers certain suggestions for companies to consider their consumers' characteristics. Thorough knowledge of these variables would certainly allow organizations to be more precise in designing their websites based on their user's needs; hence enhancing communication campaigns for organizations.

Furthermore, relevant organizations engaged in sports tourism in Malaysia may be interested in researching the experience of their customers in an additional way. Certainly, the features of sports visitors vary from most user portals. The results of this study show that, in website contact and e-marketing, the personal characteristics of sports tourists play a significant role. Sports tourism

companies should wisely assess the real desires of their customers with consideration to managerial ramifications. As time moves on, the needs and expectations of online users for website information and marketing will vary; digital technology changes, and relies on the personal skills of an individual in implementing new technology. Therefore, the researcher hopes that the knowledge gathered through this research's findings will be realistic and beneficial for Malaysian sports tourism organizations to include distinctive sports tourism websites to sell their goods and/or services to satisfy their customers' varied needs. In addition to this, the analysis results may also include an empirical mechanism for website sponsors to assess the usefulness of a specific website that involves personal characteristics, for example, data on consumer preferences and the ease with which they use the website. In this respect, companies should be able to build outstanding websites that meet the corporate goal of supplying customers with comprehensive knowledge. The results of this study found that the personal characteristics of sports tourists, including age and education, have a clear, positive association between the perceived value of consumers and their willingness to use sports tourism websites. From the point of view of motivational variables, it is recommended that sports tourism organizations in Malaysia concentrate on and make considerable effort to provide information.

6. Conclusion

This study concludes that, once individuals value a particular website and consider its innovative features, they tend to use it frequently. The research results indicate that this relationship is moderated by age and education. It is hoped that the results concerning consumer propensity to use tourism websites will add to the body of information on leisure, travel, and tourism. The outcome of this study suggests that an improvement in creativity and customer perceived value would potentially lead to an increase in their propensity to use tourism websites for access to sporting events. The findings collected in this study will enable promoters of sporting competitions to build a more robust platform for sports activities in the future.

7. Limitations and Direction for Future Research

Many factors have limited this study's results. The research centered on some factors affecting the propensity to use tourism websites for sporting activities. One drawback of the present analysis is the generalization of the research's results. Selected groups of students participated in the research instrument in this analysis that corresponds to the questionnaires filled. Such handpicked respondents might not represent the entire sample population. In addition to this, the results of the study cannot be generalized to other individuals or sports tourists. While this analysis, through undergoing validity and reliability tests, has created a fair testing instrument and measurement scales, there could be risks to the internal validity of the study as a result of how respondents answered the questionnaires. As with every self-administered questionnaire, the research was open to the opinions and interpretations of the participating individuals, thus creating a risk of perfunctory answers. Furthermore, this condition is worsened because some respondents may have supplied misleading information just to impress the researchers. Thus, to address this constraint, prospective future research will practice a new methodology in their studies such as longitudinal study. It is assumed that more insight into the analysis may be provided through another quantitative or qualitative approach. This research has shown the importance of travel and tourism websites to innovate to build upon the [virtual] relationship between the perceived value of customers and their propensity of sports tourism websites among sports tourists in Malaysia. The results of the study have also simplified the significant role of moderating effects in improving or worsening the current relationship between perceived value and the propensity to use tourism websites for sports events. Sports tourism organizations, as alluded to in the study results, must also prepare to monitor the website's growth vigilantly by taking into account the moderating effects of other customers' characteristics, motivational factors, and virtual experiences.

8. References

- Abd Hamid, J., Mohd Shukr, S., & Ferdous Azam, S. M. (2020). Role of Attitudes and Demographics on the Attitude towards Social Media: Evidence from Malaysian Universities. *Systematic Reviews in Pharmacy*, 11(1), 1042–1052.
- Álvarez-García, J., González-Vázquez, E., Río-Rama, D., de la Cruz, M., & Durán-Sánchez, A. (2019). Quality in Customer Service and Its Relationship with Satisfaction: An Innovation and Competitiveness Tool in Sport and Health Centers. *International Journal of Environmental Research and Public Health*, 16(20), 3942.
- Avourdiadou, S., & Theodorakis, N. D. (2014). The development of loyalty among novice and experienced customers of sport and fitness centres. *Sport Management Review*, 17(4), 419–431.
- Castaneda, J. A., Munoz-Leiva, F., & Luque, T. (2007). Web Acceptance Model (WAM): Moderating effects of user experience. *Information & Management*, 44(4), 384–396.
- Clark, T., Foster, L., Sloan, L., & Bryman, A. (2021). *Social Research Methods* (6th ed.). Oxford University Press.
- Cordina, R., Gannon, M. J., & Croall, R. (2019). Over and over: Local fans and spectator sport tourist engagement. *The Service Industries Journal*, 39(7–8), 590–608.
- Demeter, T., & Brătucu, G. (2014). Typologies of Youth Tourism. *Bulletin of the Transilvania*, 7(1), 115–122.
- Department of Statistic Malaysia. (2019). *Quick Facts 2019* (Malaysian Educational Statistics). Department of Statistic Malaysia.
- Fook, C. Y., Narasuman, S., Aziz, N. A., Mustafa, S. M. S., & Han, C. T. (2021). Smart Phone Use among University Students. *Asian Journal of University Education*, 17(1), 282–291.
- Fratu, D. (2011). Factors of influence and changes in the tourism consumer behaviour. *Bulletin of the Transilvania*, 4(53), 119–126.
- Fujak, H., Frawley, S., McDonald, H., & Bush, S. (2018). Are sport consumers unique? Consumer behavior within crowded sport markets. *Journal of Sport Management*, 32(4), 362–375.
- Gaffar, V., Ridwanudin, O., Trinugraha, B., & Riswanto, A. (2019). The Influence of Website Navigational Design on Improving Tourism Performance: Empirical Studies on Sport Tourism Providers in Indonesia. *Research in World Economy*, 10(3), 408–418.
- Gonzalez, M. E., Quesada, G., Davis, J., & Mora-Monge, C. (2015). Application of Quality Management Tools in the Evaluation of Websites: The Case of Sports Organizations. *Quality Management Journal*, 22(1), 30–46.
- González-García, R. J., Añó-Sanz, V., Parra-Camacho, D., & Calabuig-Moreno, F. (2018). Perception of residents about the impact of sports tourism on the community: Analysis and scale-validation. *Journal of Physical Education and Sport*, 18(1), 149–156.
- Ha, J.-P., Kang, S. J., & Ha, J. (2015). A conceptual framework for the adoption of smartphones in a sports context. *International Journal of Sports Marketing and Sponsorship*, 16(3), 2–19.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis*. Prentice Hall.
- Hanna, P. (2012). Using internet technologies (such as Skype) as a research medium: A research note. *Qualitative Research*, 12(2), 239–242.
- Hargittai, E., Piper, A. M., & Morris, M. R. (2019). From internet access to internet skills: Digital inequality among older adults. *Universal Access in the Information Society*, 18(4), 881–890.
- Holloway, J. C., & Humphreys, C. (2019). *The business of tourism* (11th ed.). Sage.
- Hritz, N., & Cecil, A. (2019). Small business owner's perception of the value and impacts of sport tourism on a destination. *Journal of Convention & Event Tourism*, 20(3), 224–240.
- Hsieh, M.-H., Pan, S.-L., & Setiono, R. (2004). Product-, corporate-, and country-image dimensions and purchase behavior: A multicountry analysis. *Journal of the Academy of Marketing Science*, 32(3), 251–270.
- Hur, Y., Ko, Y. J., & Valacich, J. (2011). A structural model of the relationships between sport website quality, e-satisfaction, and e-loyalty. *Journal of Sport Management*, 25(5), 458–473.
- Jin, N., Lee, S., & Lee, H. (2015). The Effect of Experience Quality on Perceived Value, Satisfaction, Image and Behavioral Intention of Water Park Patrons: New versus Repeat Visitors. *Tourism Research*, 17(1), 82–95.

- Johari, A., Wahat, N. W. A., & Zaremohzzabieh, Z. (2021). Innovative Work Behavior among Teachers in Malaysia: The Effects of Teamwork, Principal Support, and Humor. *Asian Journal of University Education*, 17(2), 72–84.
- Karimi, S., Papamichail, K. N., & Holland, C. P. (2015). The effect of prior knowledge and decision-making style on the online purchase decision-making process: A typology of consumer shopping behaviour. *Decision Support Systems*, 77, 137–147.
- Kersulić, A., Perić, M., & Wise, N. (2020). Assessing and Considering the Wider Impacts of Sport-Tourism Events: A Research Agenda Review of Sustainability and Strategic Planning Elements. *Sustainability*, 12(11), 1–18.
- Lexhagen, M. (2009). Customer perceived value of travel and tourism web sites. *International Journal of Information Systems in the Service Sector (IJISSS)*, 1(1), 35–53.
- Lim, B. C.-Y., Liu, L. W.-L., & Choo, C.-H. (2020). Investigating the effects of interactive e-book towards academic achievement. *Asian Journal of University Education*, 16(3), 78–88. <https://doi.org/10.24191/ajue.v16i3.10272>
- Lin, H.-W., & Lu, H.-F. (2016). Valuing residents' perceptions of sport tourism development in Taiwan's North Coast and Guanyinshan National Scenic Area. *Asia Pacific Journal of Tourism Research*, 21(4), 398–424.
- Liu, P. J., Dallas, S. K., & Fitzsimons, G. J. (2019). A framework for understanding consumer choices for others. *Journal of Consumer Research*, 46(3), 407–434.
- Liu, Q., Geertshuis, S., & Grainger, R. (2020). Understanding academics' adoption of learning technologies: A systematic review. *Computers & Education*, 151, 1–68.
- Lorgnier, N., & Su, C.-J. (2014). Considering coopetition strategies in sport tourism networks: A look at the nonprofit nautical sports clubs on the northern coast of France. *European Sport Management Quarterly*, 14(1), 87–109.
- Madden, M. (2006). *Internet penetration and impact*. Pew Internet and American Life Project.
- Martínez-González, J. A., & Álvarez-Albelo, C. D. (2021). Influence of Site Personalization and First Impression on Young Consumers' Loyalty to Tourism Websites. *Sustainability*, 13(3), 1–17.
- Martínez-Sala, A.-M., Monserrat-Gauchi, J., & Alemany-Martínez, D. (2020). User Usable Experience: A three-dimensional approach on usability in tourism websites and a model for its evaluation. *Tourism Management Perspectives*, 33, 1–13.
- Mason, M. C., & Moretti, A. (2015). Antecedents and moderators of golf tourists' behavioral intentions: An empirical study in a Mediterranean destination. *EuroMed Journal of Business*, 10(3), 338–359.
- Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2(3), 192–222.
- Naseri, R. N. N., Mohd Esa, M., Ahmad, N. A. N. Z. A., Abd Azis, R., & Nordin, M. N. B. (2021). An Overview Of Online Purchase Intention Of Halal Cosmetic Product: A Perspective From Malaysia. *Turkish Journal of Computer and Mathematics Education*, 12(10), 7674–7681.
- Perić, M., Vitezić, V., & Badurina, J. \DJurkin. (2019). Business models for active outdoor sport event tourism experiences. *Tourism Management Perspectives*, 32, 100561.
- Pookaiyaudom, G. (2019). The Development of the Thai Long-boat Race as a Sports Tourism and Cultural Product. *Tourism Planning & Development*, 16(1), 61–74.
- Radzliyana, R., Khor, P. H., Azlan, A. A., & Lim, K. C. (2015). The moderating effects of individual tourists' characteristics: An application of the extended Sport Website Acceptance Model (SWAM) to tourism perspectives. *Proceedings of HTC 2015*, 327.
- Ranaweera, C., McDougall, G., & Bansal, H. (2005). A model of online customer behavior during the initial transaction: Moderating effects of customer characteristics. *Marketing Theory*, 5(1), 51–74.
- Rezaeean, A., Bairamzadeh, S., & Bolhari, A. (2012). The importance of Website Innovation on Students' Satisfaction of University Websites. *World Applied Sciences Journal*, 18(8), 1023–1029.
- Ristova, C. (2020). Sports event tourism-an evolving business opportunity for the hotel industry. *Activities in Physical Education and Sport*, 10(1–2), 6–9.

- Roespinoedji, D., Afghan Prawira, E. P., Solihin, I., Saudi, M. H. M., & Alaeddin, O. (2019). Determinants of supply chain performance: Moderating role of firm size in tourism hotel industry in Indonesia. *International Journal of Supply Chain Management*, 8(1), 219–230.
- Roos, J. M., & Kazemi, A. (2021). Personality traits and Internet usage across generation cohorts: Insights from a nationally representative study. *Current Psychology*, 40(3), 1287–1297.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Shao, G. (2021). Sports Information Communication Model Based on Network Technology. *International Conference on Data and Information in Online*, 391–399.
- Sharif, S. P., & Yeoh, K. K. (2018). Excessive social networking sites use and online compulsive buying in young adults: The mediating role of money attitude. *Young Consumers*, 19(3), 310–327.
- Swart, M. P., & Roodt, G. (2015). Market segmentation variables as moderators in the prediction of business tourist retention. *Service Business*, 9(3), 491–513.
- Teo, T. S. H. (2001). Demographic and motivational variables associated with Internet usage activities. *Internet Research: Electronic Networking Applications and Policy*, 11(2), 125–137.
- Van Droogenbroeck, E., & Van Hove, L. (2017). Adoption of online grocery shopping: Personal or household characteristics? *Journal of Internet Commerce*, 16(3), 255–286.
- White, C., McMurray, A. J., & Rudito, P. (2012). Using mature concepts to generate new ideas: Technology acceptance revisited. *International Journal of Technology Marketing*, 7(4), 361–378.
- Wise, N., Perić, M., & Đurkin, J. (2019). Benchmarking service delivery for sports tourism and events: Lessons for Gorski Kotar, Croatia from Pokljuka, Slovenia. *European Journal of Tourism Research*, 22, 107–128.
- Yim, B. H., & Byon, K. K. (2020). Critical factors in the sport consumption decision making process of millennial fans: A revised model of goal-directed behavior. *International Journal of Sports Marketing and Sponsorship*, 21(3), 427–447.
- Yung, R., & Khoo-Lattimore, C. (2019). New realities: A systematic literature review on virtual reality and augmented reality in tourism research. *Current Issues in Tourism*, 22(17), 2056–2081.
- Zaremohzzabieh, Z., Ismail, N., Ahrari, S., & Samah, A. A. (2021). The effects of consumer attitude on green purchase intention: A meta-analytic path analysis. *Journal of Business Research*, 132, 732–743. <https://doi.org/10.1016/j.jbusres.2020.10.053>