

A STUDY ON THE SPORTS EVENT IMAGE AND ELECTRONIC WORD-OF-MOUTH ON BEHAVIORAL INTENTIONS

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Summary

The purpose of this study is to explore the relationship between sports event audiences' sports event image, electronic word-of-mouth and behavioral intentions. In this study, a total of 531 questionnaires were sent to sports event audiences using the snowball sampling method, after eliminating invalid questionnaires, 519 valid samples were obtained, with an effective recovery rate of 97.74%. Through the structural equation modeling, it is found that the electronic word-of-mouth of sports event audiences has a significant positive impact on the sports event image, and has a significant positive impact on the behavioral intentions, and the sports event image has a significant positive impact on the behavioral intentions, and the sports event image has an intermediate effect in the influence of electronic WOM on the behavioral intentions. In view of the above results, it is suggested that the organizers of sports events can strengthen the communication and marketing of sports events on the internet, so as to promote the behavior of sports event audiences to watch sports events.

Keywords: Tokyo Olympics; Sport Mega-Event; Importance of the Sport Event; External Opinion Sharing; Structural Equation Modeling.

INTRODUCTION

In 2020, the global population has been profoundly affected by Covid-19, leading to severe disruptions and challenges across various industries worldwide. The most eye-catching one was undoubtedly the Tokyo Olympics in Japan, which was originally scheduled to be held in July. However, as the pandemic has not subsided in 2021, the Tokyo Olympics must adapt to pandemic preventive measures. The Olympic Committee thus decided that the venues in the capital region, including the opening and closing ceremonies, would be held closed-door, but the number of audiences was still limited 50% of the venue capacity or 10,000 people. This led to the Tokyo Olympics to recording no audiences for the first time in the history of the Olympics (Li, 2021).

Since the severe pandemic situation, this competition could only be watched through television and online channels, to satisfy the audiences who cannot come to the scene to cheer for the players, However, when EBC News broadcasted the Olympic games, it broke the ratings for the highest viewership for an

Olympic broadcast (EBC News, 2021).

As shown by the high ratings, people face changes in the environment and the diversification of online media channels, and electronic word-of-mouth (eMOM) is increasingly valued. People begin to refer to eMOM and share information on the internet. Through the exchange of opinions, the online media becomes more diverse, it also allows participating users to gain different levels of feelings and experiences. Smith et al. (2005) pointed out that word-of-mouth is more influential than traditional communication through other sources such as recommendations or advertisements. In recent years, the development of network technology has gradually matured, making traditional word-of-mouth gradually turn into eMOM (Davis & Khazanchi, 2008; Xia & Bechwati, 2008). The modern people's dependence on the internet has amplified the impact of eMOM on behavioral intentions.

The form of live stream of sports events is developing rapidly globally (Needleman, 2015). The convenience of live stream allows

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audiences of sports events to no longer pursue the experience of watching sports events in person. Online platforms can also support players anytime and anywhere. Zeytoonli (2020) pointed out that people will use online information and mass media to shape their imaginations about activities, thereby affecting individual attitudes and intentions (Sen & Lerman, 2007; Xia & Bechwati, 2008). Because people can only watch sports events through online live stream and discuss information about Olympic Games through online platforms, the popularity of the Tokyo Olympics has also affected other Internet users' willingness and behavior to watch the Olympics. From this, it can be found that Electronic Word-of-Mouth has a significant impact on shaping the event image of sports event audiences and influencing behavioral intentions.

In summary, the correlation and adhesion between sports events image, eMOM, and behavioral intentions are extremely high. In this regard, this study wants to explore whether the sharing and discussion of events image through eMOM can make individuals have a positive attitude toward the event. This is the motivation for this study. Finally, it's hoped to provide reference for game organizers or enterprises to make research suggestions based on the research results.

RESEARCH METHODS

Research Subjects

Subject were mainly focus on audiences of the Olympic games in Taiwan. Snowball sampling conducts questionnaire surveys from the beginning of January to the end of February in 2022. The questionnaire data of psychological capital, sport anxiety, and sport performance were analyzed. Before the questionnaires were released, and the questionnaires were released after the subjects consented informed consents. 531 questionnaires were issued; 519 valid questionnaires were returned and the effective response rate is 97.74%. The characteristics of the sample are as follows: in the gender part, the majority are men; in the age part, the majority are 46 to 55 years old; in the education part, the majority are college (junior

college); in the annual income part, the majority are more than 750,000; in the occupation part, the majority are military, public and educational.

Research Tools

For the purpose of this study, it compiled relevant literature and compiled questionnaire items, which included four parts: "Sports Event Image", "Electronic Word-of-Mouth", "Behavioral Intentions" and "basic information". A 5-point Likert scale was used in this research, the subjects choose from a range of possible responses to a specific question or a statement; for a scale where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, and 5 = strongly agree.

1. Event Image

The event image scale adopts the design method of uses Kim and Petrick (2005) and Schofield and Thompson (2007) as the theme of the event image that tourists feel when they go to watch sports events. The questionnaire was designed and compiled as the basis for this topic (Example: Watching the Olympic events can help me understand the culture of different countries). Its aspects include three aspects: game awareness, game importance, and game information.

2. Electronic Word-of-Mouth

The Electronic Word-of-Mouth scale is based on Goldsmith and Horowitz (2006) and modified to items suitable for this study (Example: I think the Olympic word-of-mouth information provided by comments on the Internet is an important source of information for me to watch the events). The aspects include website information comments and external opinion sharing.

3. Behavioral intention

The event image scale adopts Byon et al. (2013) behavioral intention development scale for game tourists, and then modified it into items suitable for this study (example: During the Olympics, I will try to watch more game), its facet is a single facet.

Confirmatory Factor Analysis, CFA

Before conducting model path analysis, confirmatory factor analysis is first used to test the reliability and validity of each aspect. The

measurement method includes the evaluation of the measurement model and discriminant validity. After testing the factor loading of each variable, it is confirmed whether the item falls among the originally set variables. According to Hair et al. (2021), it is recommended that the

factor loading should be greater than 0.5, so this study uses 0.5 as the deletion, shown as Table 1. The items sports events image, eMOM and behavioral intentions all meet the standard of 0.5 or above, and there is no need to delete the items.

Table1. Estimated Parameters of Measurement Model

variables	Aspect/item	Original Sample	SE	T Statistics	Cronbach's Alpha	CR	AVE
Event Image	game awareness	.902	.015	61.472	.857	.913	.777
	game importance	.852	.017	52.222			
	game information	.890	.011	76.806			
Electronic Word-of-Mouth	Website information review	.951	.005	175.959	.894	.949	.904
	External opinion sharing	.950	.005	204.476			
Behavioral Intention	Behavioral Intention 1	.848	.021	39.956	.936	.952	.797
	Behavioral Intention 2	.879	.015	57.237			
	Behavioral Intention 3	.920	.011	81.132			
	Behavioral Intention 4	.917	.012	75.849			
	Behavioral Intention 5	.900	.014	66.161			

Table 2. Discriminant validity of each variable

	1	2	3
1. Event Image	0.951		
2. Electronic Word-of-Mouth	0.544	0.893	
3. Behavioral intention	0.616	0.688	0.882

Table 2 shows the correlation coefficient between each variable and the value after the square root of average variance extracted (AVE) of each variable. According to Hair et al. (2021), it is recommended that the correlation coefficient between each variable should be less than the AVE extraction of each variable. Shown as Table 2, the AVE of each variable after taking the square root are greater than the correlation coefficients with other variable, which means that each scale has discriminant validity.

Note: The bold value on the diagonal is the square root of the AVE value of each latent variable.

Data processing

This study uses SPSS 18.0 and SmartPLS 4.0 statistical software for analyses. First, SPSS is used to analyze the descriptive statistics of this study sample to understand the basic

background information of sports event audiences. Subsequently, Structural Equation Modeling (SEM) to conduct confirmatory factor analysis. Mainly because of its advantages in testing complex theoretical models with small sample sizes and non-normally distributed data (Ali et al., 2018). Its ease of computing complex high-order models also makes it the preferred analysis tool for many researchers (Rasoolimanesh & Ali, 2018).

RESULTS AND DISCUSSION

Structural Equation Modeling

After confirmatory factor analysis, each variable and each items in this study has good reliability and validity, so the SEM can be estimated, based on the causal relationship estimation results of each model's latent variables in this research model. As shown in Table 3, eMOM has a direct positive impact on

sports events image, with a coefficient of .617 ($t= 21.597$; $SE=.029$); sports events image has a direct positive impact on behavioral intentions, with a coefficient of .596 ($t= 12.187$; $SE=.047$); eMOM has a direct positive impact on behavioral intentions, with a coefficient of .193 ($t= 3.918$; $SE=.049$); sports events image has an intermediate effect on the impact of eMOM on behavioral intentions, the coefficient value is

.351 ($t= 10.747$; $SE=.033$). In order to confirm the degree of influence of this indirect effect, Iacobucci and Duhachek (2003) proposed Variance Accounted for (VAF) to confirm the degree of influence of the indirect effect relative to the total effect. The calculated VAF value is 64.52% (greater than 20% and less than 80%). This result confirms the existence of some intermediaries (Hair et al., 2021).

Table 3. Direct and indirect effects between variables

	Event Image	Behavioral Intention		total effect	VAF
	directed	directed	in-directed		
Electronic Word-of-Mouth	.617 *	.193 *	.351 *	0.617	56.89%
	($t= 21.597$; $SE=. 029$)	($t= 3.918$; $SE=. 049$)	($t= 10.747$; $SE=. 033$)		
Event Image		.569 *		0.569	
		($t= 12.187$; $SE=. 047$)			

Memon and Rahman (2013) pointed out that the purpose of model adaptation is to measure whether the structure is sufficient to explain the data obtained from actual exploration. Smart PLS statistical software measures model adaptation index with GOF (Goodness of Fit), and the value is judged as GOF small = .10, GOF medium = .25, GOF large = .36 (Akter et al., 2011). The software cannot produce this value and must be calculated by the researcher.

The formula is $=\sqrt{(AVE_{eve} * R^2_{ave})}$, if there is good fit, it means that the model has high substantive value and the estimated value is more representative. It can be seen from Table 4 that the fitness value of this model is .602, which is a high fitness, indicating that it is appropriate to use this model to measure the impact of sports events image and eMOM on behavioral intentions of sports event audiences.

Table 4. Overall model fit

Variables	AVE	Composite Reliability	R ²	Cronbach's Alpha	Community	GOF
Event Image	0.777	0.913	0.379	0.857	.857	0.602
Electronic Word-of-Mouth	0.904	0.949		0.894	.894	
Behavioral intention	0.797	0.952	0.497	0.936	.937	

Summarizing the above research results, it can be found that eMOM has a significant positive impact on sports events image, which is consistent with Lita (2020) and Vegara-Ferri (2020) and Papadimitriou et al. (2018); eMOM has a significant positive impact on behavioral intentions, which is consistent with Moran and Muzellec (2017) and Zhang et al. (2011) The research results are similar; sports events image

has a significant positive impact on behavioral intentions, which is similar to the research results of Lita (2020) and Milovanović et al. (2021); sports events image has an intermediate effect on the impact of eMOM on behavioral intentions. The research results of Andriani et al. (2019) and Luong et al. (2017) are consistent. It is speculated that the reason is that the Internet usage rate is quite common in today's society.

People no longer communicate face-to-face orally about Olympic information, but have switched to the Internet. The platform shares its own views on the Olympics or obtains information about the Olympics from the Internet and promotes and redistributes it, thereby shaping people's understanding of the Olympic games' imager and strengthening people's willingness to participate in Olympic activities.

CONCLUSION

The influence of sports events image, eMOM and behavioral intentions among audiences of sports events has a significant positive impact on sports events image and behavioral intentions; sports events image has a significant positive impact on behavioral intentions; the impact of sports events image on eMOM on behavioral intentions has an intermediate effect.

Suggestions

The results of this study found that audiences of sports events have extremely high awareness of sports events image, eMOM, and behavioral intentions. It can be inferred that Taiwanese sports event audiences are very enthusiastic about participating in mega-events such as the Olympics. Therefore, it is recommended that the game organizer can set up fan pages according to the fans of different sports during planning and operation, and integrate them with other domestic and foreign sports games to maintain user relationships and maintain user relationships. Continue the audience's attitude and behavioral intentions to continue watching. The results of this study show that eMOM can affect sports events image and behavioral intentions. Nowadays, with the popularization of the Internet, people care about and communicate through social media, and eMOM has a decisive reference value and behavioral basis in life. It is recommended that the organizing team of sports mega-events should conduct more distribution and promotion on the Internet platform when marketing and promoting the events, thereby increasing the evaluation and volume, and stimulating people's willingness to watch the sports events.

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