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Crowd Management Strategies and Safety Performance among Sports Tourism Event Venue Organizers in Kuala Lumpur and Selangor

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Abstract: High risk of injuries and accidents among attendees at event, especially Sports Tourism Event has become one of the major concerns to researchers and practitioners. One of the major strategies to ensure attendees safety is by practicing effective crowd management strategies. The aim of this study was to investigate the level of crowd management strategies and safety performance practices among sports tourism event venue organizers in Kuala Lumpur and Selangor, Malaysia. The sample included 40 of safety or operation manager attached to sports tourism event venue organizers. The results of the statistical analysis revealed that the correlation crowd management strategies had significant relationship with safety performance. Since the findings may not have utilitarian value to other event venues in Malaysia, future studies might consider using a national sample rather than the local sample.

Key words: Crowd Management · Safety Performance · Sports Tourism Event

INTRODUCTION

With the increased popularity of sport tourism events, it has led to larger and more diverse attendees, making safety and crowd management a necessary and integral part of the planning process for any event [1]. Crowd management at sports tourism event represents a major concern to event organizers [2]. The attendees' safety is of paramount importance and such safety must be a basic tenet of a facility or event venue philosophy to ensure continuous attendance.

Several researches showed that attending to any event was associated with increased risk of injury which leads to extreme cases that caused death [1-5]. Statistics showed that during 1992-2002, a total of 66,787 people suffered significant injuries and 232 people died at 306 open air concerts around the world [6]. Every year throughout the world in stadium, arena and other areas, crowd rusher, fires, bomb, heat exhaustion, stage collapsing, overcrowding and rioting result in thousands of injuries and deaths [7-9]. Therefore every component of the game or event from the design of the stadium or area to the game itself needs to be manage well. It is also essential to protect the attendees from unforeseeable risk of harm from other individuals or the actual facility itself [7].

In the local scene, Malaysia's tourism sector is the second largest contributor to its economy development [8]. Currently, Malaysia tourism sector is rapidly emerging as a premier destination for events with its proven track record of successfully hosting many prestigious events with the uniqueness and diverse culture and tradition that form the secret ingredient to the attract tourist [9]. However despite the great and potential that Malaysia has, several unexpected incidents of crowd rioting during a Malaysian National League football match event between Kelantan versus Selangor [10] occurred and these incidents proved that Malaysia faced similar crowd problems as other countries. Furthermore, it was also stated that rioting during concerts was a common phenomena in Malaysia [11].

Besides, a review of the sport event literature reveals a confusion of terminology, with the terms hallmark, mega, special, sports tourism, major events being used interchangeably [12-13]. Sport tourism encompasses a range of activities [14, 15]. However,

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clearly the concept of tourism and sports are related and overlap [16]. They believed that sport is an important activity in tourism and tourism is a fundamental characteristic of sport.

With regard to the need of crowd management, a study concludes that sport tourism events have grown in popularity because of their special characteristics and therefore it requires particularly good organization because the total number of attendances will also increase [17]. Due to this rapid increase, crowd management and crowd control are now important issues in this industry [18]. According to the recent study conducted by several researchers [7,19-22], they tried to define the best reason to manage crowds by proposing big gathering of people raise the odds of a dangerous occurrence happenings.

In terms of safety performance, there were many published research on safety issues focusing on the construction industry [23-25]. Studies by [26-29] examined safety issues relating to the manufacturing industry and researchers [30-31] examined safety issues in the transportation industry. Researches were also conducted on safety in tourism and sports [32-35] and on industrial and organization [36-43].

A review of the literature on the safety aspects of sports events showed that by improving safety it could help venue organizers face unwanted events and problems [2, 18, 44, 45]. Fried [44] investigates that the primary directive for any sports event venue was safety. Safety applies to employees, participants, guest and spectators. The employees' safety is covered by requirements such as the Occupational Safety and Health Administration (OSHA) regulation or provision within a collective bargaining agreement. Coaches, players and officials are often provided significant protection by uniformed officers. Guests and spectators are the groups that often require greater effort since they are the most unpredictable.

MATERIALS AND METHODS

Subject and Instrument: Participants in this study consisted of safety or operation managers attached to 40 major sports tourism event venues located in the state of Selangor and Kuala Lumpur, Malaysia. A self-administered questionnaire was distributed to the respondents with the help of the General Manager. A total of 35 usable questionnaires were returned and analyzed, representing a response rate of 87.5%.

The instrument was divided into four major sections. The first section (A) was designed using nominal scales. It focused on respondents' demographic profiles. Items relating to age, educational background, current position and working experience are asked in this section. Section (B) consisted of items assessing event venue profile such as venue capacity, ownership status, types of event conducted and frequencies of event held.

Section (C) consisted of items assessing respondents' acceptance level of crowd management strategies. Respondents are asked to report their views on a five type Likert scale ranging from 1 with ' strongly disagree' to 5 ' strongly agree'. Section (D) consisted of items related to safety performance. These two sections were expected to provide greater insights into the exercise of crowd management strategies and safety performance among sports tourism event venues.

Data Collection Process: Questionnaires were mailed to the respected respondents with a pack of information including cover letter which included details about the purpose, aim and relevant contact information about the researcher in case they had questions about the study. After two weeks, the researchers compiled back the entire answered questionnaire. In addition, the reliability test (Cronbach's Alpha) was carried out on Section C and D separately and result showed that the items and instrument used was reliable with the value at 0.91 at Section C and 0.96 for Section D.

RESULTS AND DISCUSSION

Using the frequency test, the overall dimensions of the respondents' profiles were analyzed. Results are reported in Table 1. The majority of age range was between 31 to 40 years old. 94.2 percent (n=21) of the respondents were Malay. It was interesting to note that the majority (65 percent) of the respondent were Bachelor Degree holders compared to 20 percent (n=7) who had Diploma as their highest education level. Among the 35 respondent who answered the questionnaire, 19 of them had selected Safety or Security Officer as their current position. 65% of the respondents as the majority worked within two to five years.

Crowd Management Strategies Pactices: The descriptive statistics looking at the mean score was used to examine the crowd management strategies practices among sports

Table 1: The Respondents

Variables	N	%
Age		
Less than 30	2	5.7
31 to 40	21	60.0
41 to 50	10	28.0
51 to 60	2	5.7
Ethnic Group		
Malay	33	94.2
Chinese	1	2.8
India	1	2.8
Others	0	0.0
Level of Education		
SPM	3	8.5
Professional certificate	1	2.8
Diploma	7	20.0
Bachelor Degree	23	65.0
Others	1	2.8
Current Position		
Safety /security manager	5	2.8
Operation manager	19	14.2
Safety/ security officer	3	54.2
Operation officer	1	8.5
Others	7	20.0
Working Experience		
Less than 1 year	2	5.7
2 to 5 years	23	65.0
6 to 10 years	10	28.0
More than 10 years	0	0.0

tourism event venue organizers. Result are presented in Table 2. As shown by Table 2, the mean rating given by the respondents on the level of crowd management strategies practiced by their venue. In term of crowd forces, the majority of them agreed that venue has sufficient safety personnel to supervise crowds on the venue at any time given (M=4.22, item 1). They also believed that the venue use warning signs and give clear direction of where things are located in the information part (M=4.00, item 1 and 2). Similar views were given to the space part whereby they perceived that the concession stands are big enough to handle the crowds (M=4.17, item 1). In addition, they also agreed that waiting time to exit premise is acceptable (M=4.00, item 1) for the items in time.

The result was in line with the statement that the analysis clearly indicated forces or enforcement of the crowd was important in ensuring the emergency management for the crowd [19] and in term of time the expression of calculating admission time of crowd is given as part of the emergency process of crowd management [19]. Researcher [20] also agrees that pedestrian evacuation processes and prevents escape points from congestion.

Table 2: Crowd Management Strategies of Sport Tourism Event Venue Organizers

No	Items	M	S.D
Forces			
1.	Premise have sufficient safety personnel to supervise crowds on the premises at any time given	4.22	.518
2.	Premise assigned duties only to an individual who has met those standards and certification (e.g.: first aid,OSH,CPR, ERP)	4.17	.522
3.	The safety personnel are experienced and knowledgeable	4.13	.548
4.	Premise safety personnel perform their duties according to personnel manual	4.09	.515
5.	The safety personnel are responsive to crowds needs	4.09	.596
6.	The safety personnel are presentable and easily identified.	4.00	.491
Information			
1.	Premise uses warning signs	4.00	.522
2.	Signs at premise give clear direction of where things are located	4.00	.522
3.	Premise provides instruction to crowds on proper use of the facility	3.96	.562
4.	Signs located at entrance identifying items that are prohibited and allowed into the premise	3.91	.596
5.	Signs at premise help crowds know where they're going	3.87	.626
6.	Premise provides safety instruction to crowds	3.41	.515
Space			
1.	The concession stands are big enough to handle the crowds	4.17	.576
2.	Premise allows enough space to handle the crowds	4.13	.548
3.	The restroom are large enough to handle the crowds	4.09	.596
4.	The walkways are wide enough to handle the crowds	4.09	.515
5.	The seat arrangement provides plenty of spaces	4.04	.562
6.	Premise provides confortable seats	3.91	.596
Time			
1.	Waiting time to exit premise is acceptable	4.00	.603
2.	Waiting time to purchase ticket is reasonable	3.96	.562
3.	Waiting time to enter premise is acceptable	3.96	.638
4.	Spectators allowed to exit and re-enter the stadium	3.91	.596
5.	Spectators allowed on the field after games time	3.91	.596
6.	Bags and purses searched when crowds enter the premise	3.74	.752

Note: 1 = Strongly Disagree, 2=Disagree, 3 =Neither, 4=Agree, 5= Strongly Agree

Table 3: Correlation of Crowd Management and Safety Performance

	Correlation Coefficient	SF	Forces	Info	Space	Time
SF	Sig. (2-tailed)	1.000	.492(*)	.678(*)	.568(*)	.407 (*)
		.	.017	.000	.005	.054
	N	35	35	35	35	35

* Correlation is significant at the 0.05 level (2-tailed).

Correlation of Crowd Management Strategies and Safety Performance: From Table 3, the result showed that there was a significant relationship between the safety performance and crowd management (forces, information, space and time). The value of .492 indicated a weak association between the safety performance and forces. The value of .678 indicated a moderate association between safety performance and information. The value of .568 indicated a moderate association between safety performance and space. Lastly the value of .407 indicated a weak association between safety performance and time.

The study sought to identify the level of crowd management strategies and safety performance among sports tourism event venue organizers. The results of the statistical analysis revealed that the correlation crowd management strategies (namely crowd forces, information, space and time) had significant relationship with safety performance. A positive correlation coefficient meant that as the particular independent variable increased, the dependent variable also increased. The negative correlation implied that as the particular independent variable increased, the dependent variable decreased. Overall, the correlation was significant at the 0.05 level (p=0.05).

CONCLUSION

The most important practical implication of this study for practitioners is that the findings of this study may provide some information for the event organizers to better understand the important crowd management strategies needed to enhance the safety in the area of sports tourism event. The event organizers can avoid overcrowding at their premise by maintaining the safety of the crowds [20]. Next, the findings of this study may provide some information for the sport tourism event managers to better understand what other sports tourism venues thought about managing and controlling crowds. The managers who would like to learn more about safety and crowd management or improve their safety may get insights from these findings. This study showed that the crowd management strategies can be used to increase the safety performance of the Sports Tourism Event Organizers. The organizers need to realize that they are responsible to ensure the safety of their attendees or visitors. In this research, the possible crowd management practices can serve as basic tools for safety to sports tourism event organizers.

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