

Crowd Management Strategies Employed During A Football Match: A Case study

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Abstract. Workers at stadiums and arenas are critical components of any approach to preventing crowd violence. This study describes the crowd management strategies employed at football matches held at Jakarta's Gelora Bung Karno International Stadium. This qualitative study examines crowd management tactics used before football games to explain crowd management strategies used throughout the game and strategies used to disperse and evacuate crowds during football events. A random sample of fifteen managers, eighteen technical personnel, fourteen support workers, and two hundred and twenty-seven police officers is taken. Questionnaires and interview protocols were used to collect data. The researcher develops structured or open-ended questions based on various subject areas, including demographic data, stadium safety features, pre-event techniques, crowd management strategies during sporting events, and post-event management strategies. The findings reveal that seven crowd management measures were utilized before the event, three were used during the event, and three were used to disperse and evacuate individuals at Gelora Bung Karno. There are implications and recommendations made.

Key words: crowd; strategy; management; football

Abstract in Indonesia. Pekerja di stadion dan arena adalah komponen penting dari pendekatan apa pun untuk mencegah kekerasan massa. Penelitian ini menjelaskan tentang strategi manajemen kerumunan yang digunakan pada pertandingan sepak bola yang diadakan di Stadion Internasional Gelora Bung Karno Jakarta. Studi kualitatif ini mengkaji taktik manajemen kerumunan yang digunakan sebelum pertandingan sepak bola untuk menjelaskan strategi manajemen kerumunan yang digunakan sepanjang pertandingan dan strategi yang digunakan untuk membubarkan dan mengevakuasi kerumunan selama acara sepak bola. Sebuah sampel acak dari lima belas manajer, delapan belas tenaga teknis, empat belas pekerja pendukung, dan dua ratus dua puluh tujuh petugas polisi diambil. Kuesioner dan protokol wawancara digunakan untuk mengumpulkan data. Peneliti mengembangkan pertanyaan terstruktur atau terbuka berdasarkan berbagai bidang studi, termasuk data demografis, fitur keamanan stadion, teknik pra-acara, strategi manajemen kerumunan selama acara olahraga, dan strategi manajemen pasca-acara. Hasil temuan mengungkapkan bahwa sebelum acara dilaksanakan tujuh tindakan pengendalian massa, tiga tindakan selama acara, dan tiga digunakan untuk membubarkan dan mengevakuasi individu di Gelora Bung Karno. Ada implikasi dan rekomendasi yang dibuat

Kata Kunci: kerumunan; manajemen; strategi; sepak bola

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INTRODUCTION

Behaviour can be defined as the way individual acts or conducts himself, particularly toward others, or the way an individual acts in reaction to a particular situation or stimuli. Thus, it is stated that an individual's behaviour is contingent upon the attributes he or she possesses. Individuals' behaviour can be antisocial if it violates any social norm (Kingshott, 2014). All behaviour is learned, and attitudes change through time, and numerous early authors reduced the phenomena of perception, judgment, memory, learning, and thought to the action of attitudes. Spectator violence in stadiums is a symptom of a broader

range of problems associated with football misconduct. Occasionally, it results in death and injury during football tournaments, mainly when rival football teams are involved. As a result, public facilities such as the stadium should be equipped for the game's pre-, during-, and post-sessions.

Operationally, crowd management and crowd control are distinct. Crowd management is a collection of steps that must be implemented to enable people's movement and enjoyment (Celes et al., 2019). Crowd control refers to the acts done when a crowd behaves unexpectedly. The study

says that sporting tourist events have risen in popularity in crowd management due to their unique characteristics. In terms of safety performance, numerous literature reviews on the safety elements of sporting events demonstrated that by enhancing safety, venue organizers might avoid unwelcome events and difficulties (Ammon & Fried, 1998; Fried, 2005; Seidler, 2006). Risk management is also required to mitigate the consequences of unforeseen issues or accidents during the games. In sports, violence refers to any statement or action made by a player, coach, referee, parent, spectator, or any participant in a sporting event that causes injury to those involved. Numerous types of violence in sports can be classified according to the perpetrators: violence between athletes, violence against officials, violence between coaches and athletes, violence against parents, and fan violence (Rahmat et al., 2011). These breaches may incite fans to engage in any form of hooliganism. Therefore, each stadium must implement a complete crowd management system to prevent this type of hooliganism. Hooliganism is a widely acknowledged term that refers to individuals' and groups' destructive behaviour that violates societal norms and laws and causes property damage. Hooliganism developed further due to free leisure, promoting sporting events, political views, and street criminality (Adebisi et al., 2007). Today, fan groups in sports, including football, basketball, handball, rugby, and hockey, acknowledge such behaviour.

Indonesia, too, has a problem with hooliganism. Since the inception of the Indonesian Football League in 1993-1994, at least 54 football-related deaths have occurred. It is too expensive if watching football can result in someone's death. A few years ago, after a brawl during Persija's previous home match left four police officers injured, including one who was put in a coma for several days, police moved the match to a neutral stadium more than 500 kilometres away and banned all Persib supporters from attending. Following the success of the Asian Games, Indonesia should develop effective crowd management measures to host various international events. Sports venue security continues to be a critical component of venue and event preparation, frequently relying on the best practices approach influenced by risk management principles. That is an insufficiently focused strategy (Menaker et al., 2016; Menaker & Chaney, 2014). The emphasis on reducing responsibility and risk associated with physical

and intellectual property is frequently reactive. Additionally, research on sports security has demonstrated that the current approach can repress spectators' and citizens' civil liberties in some instances, thereby strengthening the police state approach to safety and security and undermining the fan experience and sense of community that sporting events are intended to generate. Previous studies about crowd management strategies (A. Park et al., 2021; Zhao et al., 2020) discuss managing crowds in a festival. However, limited studies discuss Crowd Management Strategies used in a Football match, particularly in Indonesia. Therefore, this study aims to unravel the crowd management strategies employed at football matches held at Jakarta's Gelora Bung Karno International Stadium. Its purpose was threefold: (1) to explore the crowd management strategies prior to the event, (2) to ascertain crowd management strategies during the event, and (3) to estimate how to disperse and evacuate individuals at Gelora Bung Karno. Does it address the following issue: (1) What crowd management strategies are used in the pre-event football events? (2) What crowd management strategies are used in the main event of football events? (3) What are the strategies used in dispersing and evacuating people in the event of emergencies during football events?

METHODS

A cross-sectional survey research design was used because the study entailed data collection from different target population groups to respond to questions on strategies to manage crowds during football events (Creswell & Creswell, 2018). Different target population groups are sampled and compared to the same study variables. The variable of the study is crowd management. The independent variables of the study are; a) safety strategies such as CCTV surveillance cameras, emergency exits, lighting, access roads, and posted warnings; b) pre-event strategies such as the sale of tickets, sitting arrangements, safety awareness campaigns, emergency arrangements and securing of adequate security personnel, separation/demarcation of sitting arrangements, provision of first aid and emergency arrangements; c) strategies used during the event such as contraband screening, assembling and queuing of fans, strategic deployment of security personnel, removal of disruptive fans and regulation of numbers of spectators; d) post-event management strategies

such as, communicating about emergencies, opening of exit gates, coordination of dispersal process to exit routes. The variables are studied without manipulation or introducing any control group. Stratified random sampling, under the probability sampling technique, was used. Fisher's formula is used to determine the sample size of the fans as 384. The instruments for data collection are questionnaires and interview guidelines. The researcher constructs structured or closed-ended questions based on different areas of study, such as demographic data, stadium safety features, prevent strategies, crowd management during sports events, and post-event management strategies. The questions are accompanied by a list of alternatives from which respondents selected the answer that best described their situation. The researcher uses research assistants to collect data. The questionnaires are administered to football fans. Other respondents are given questionnaires at their offices or designated operation stations. Football fans are requested to complete their questionnaires, and interviews are done during the halftime break. Other respondents are given two days; a follow-up will be done to collect the questionnaires. For each closed-ended question, the respondents must tick the answers that best represented their views from the choices provided.

RESULTS AND DISCUSSION

The survey of interviewing and distributing, percentages of their responses about the crowd management strategies in the pre-event can be seen in the following figure 1.

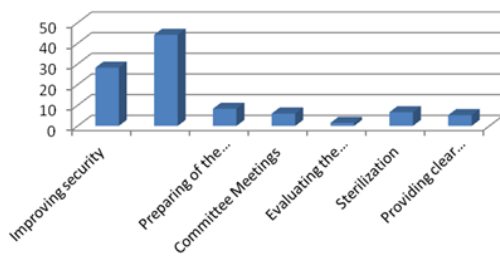


Figure 1. The crowd management strategies in the pre-event

All officers and fans are concerned with the issue of the entry systems of the crowd and the security. 44 % of respondents believe arranging the entry gates will be the best strategy for pre-event. If the entry gate systems work appropriately, they believe the pre-event crowd management strategies will be successfully

conducted. Another strategy that is needed is improving the security systems. 28% of respondents stated that security systems are crucial to successful crowd management strategies.

Moreover, the officers and the fans have expressed concern about the effectiveness of the advance sale of the ticket as part of the entry system. For example, it can be seen in the following figures 2.

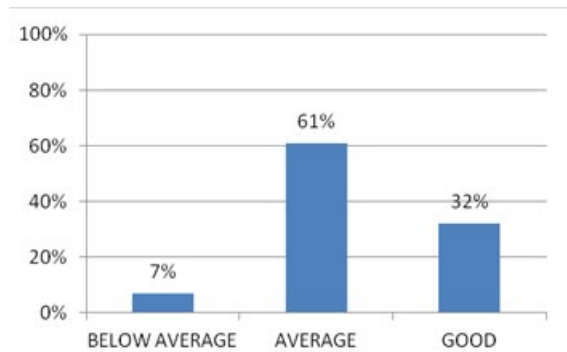


Figure 2. The assessment of advanced sales of ticket

Based on the figure 2., both officers and fans see that the effectiveness of the advance sale of tickets is average. It needs much improvement. Therefore, it becomes one concern of the entry gate arrangement. To ensure that the crowd management in the pre-event works well, there must be an improvement in the advance sale of the ticket system and the entry gate arrangement. Both officers and fans also are concerned about the facility maintenance and the access road to the gate.

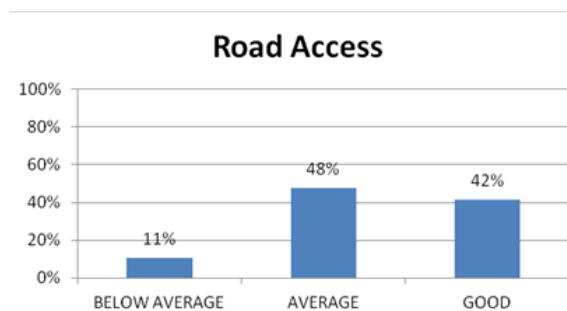


Figure 3. The assessment of road access

In Figure 3. there are 48 % of the officer, and the opinion of the fans about road access is on the average level. The road should have instructional signs and adequate lighting systems. Moreover, safety awareness campaigns also need to be optimized. Also, 42% of respondents state that the

road access is good.

Another issue concerning the findings above is the security issue. The result of the interview and the questionnaires are presented figure 4.

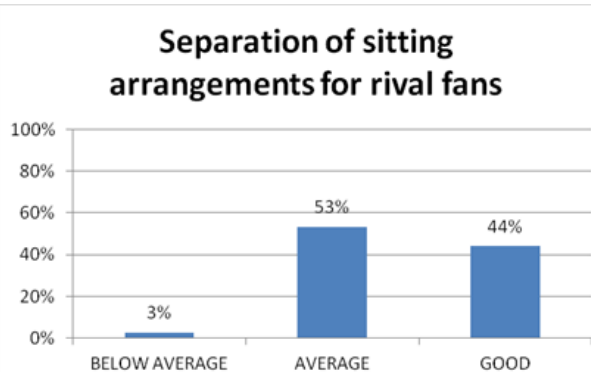


Figure 4. The assessment of sitting arrangement separation

Both officers and fans see that the sitting arrangement's effectiveness for rival fans is average. 53 % of the respondents state that the sitting arrangement separation systems are on the average level. They still see the opportunity to clash with supporters of this system. On the other hand, 44% of responders believe that Gelora Bung Karno Stadium has a sound sitting arrangement separation system. It needs a great and solid separator. They believe that rival fans should enter the gate from different gates to avoid a clash between rival fans. Besides, some aspects of the security systems assessed by the officer and the fans about the security issues are related in figure 5.

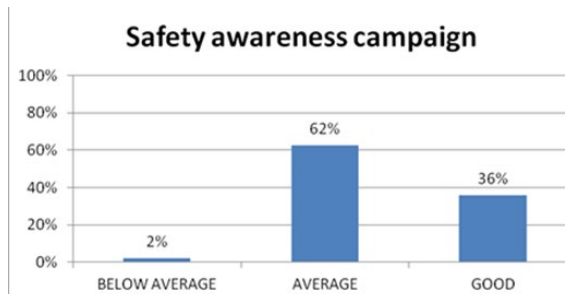


Figure 5. The assessment of sitting arrangement separation

The questionnaires show that the safety awareness campaign is on the average level. 62 % of respondents state that the safety awareness campaign is average. They still see that not all fans pay attention to the safety awareness campaign within the stadium. On the other hand, 36% of responders believe that Gelora Bung Karno Stadium has a sound system for the safety awareness campaign. The safety awareness

campaign must be informed frequently during the pre-event to improve security. The safety awareness campaign can be used to decrease the risk of violence in a football event.

The crowd management strategies during the sports event

Some crowd management strategies should be done during the sports event. Interviewing the respondents and distributing the survey, the percentages of their responses about the crowd management strategies during the sports event can be seen in figure 6.

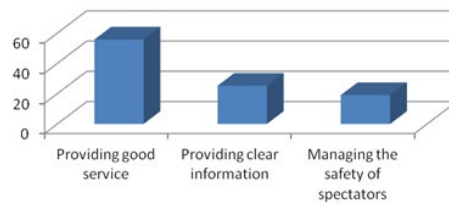


Figure 6. The crowd management strategies during the sports event

From the figure 6., most officers and fans are concerned with the good services. 55 % of respondents believe providing good services is the best strategy during the event. If the officers could provide good services such as regular facilities maintenance, lighting systems, a clean stadium, and many CCTV Surveillance cameras, they believe that the crowd management strategies during the sports event will be run well. The other points that may be considered good strategies are providing clear information and managing the safety of the spectators. The result shows that 25 % of the respondents believe that clear information is necessary, and the other 20 % state that is managing the spectators' safety is also essential.

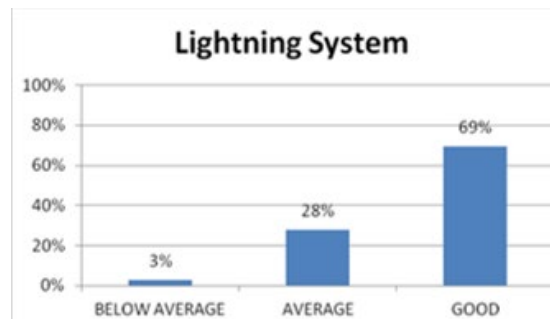


Figure 7. The assessment of the lighting system

According to the survey result, the lighting system of Gelora Bung Karno Stadium is the best example of good service within a football event in

figure 7.

From the figure 7., most officers and fans positively respond to the quality of the lighting system. 69 % of respondents believe that Gelora Bung Karno Stadium has a sound lighting system. Therefore, the officers and the fans could benefit from a sound lighting system. Another strategy that is needed is providing clear information and managing the safety of spectators.

Clear information becomes essential within a football event. Posting information signs on safety, such as exit routes and separation/demarcation of sitting arrangements for known rival fans, will help the officers manage the crowd efficiently. Furthermore, 25% of respondents stated that providing clear information is also essential to the success of crowd management strategies. In addition, posting information signs on safety and advertising penalties for violent behaviour is helpful.

Posting of information signs on safety such as exit routes

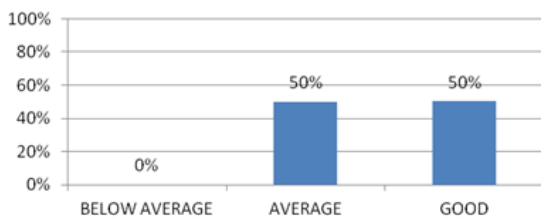


Figure 8. The assessment of the effectiveness of the information sign

From the figure 8., the number of officers and fans who respond positively to the effectiveness of the information sign is excellent and average. Therefore, 50 % of respondents believe that Gelora Bung Karno Stadium has excellent and practical information signs, and the other 50% say that the effectiveness of the information signs is on average. Moreover, removing disruptive fans and screening fans to detect any alcohol, drugs, and weapon are needed to manage the safety of the spectators.

The figure 9. shows that the number of officers and fans who respond positively to the effectiveness of the fan screening is excellent and average. 63 % of respondents believe that Gelora Bung Karno Stadium has excellent and effective fan screening to detect any alcohol, drugs, and weapon, and the other 34% say that the fan screening to detect any alcohol, drugs, and weapon is on average level. The minimum number of rival clashes may cause it to happen in the stadium

recently.

Contraband screening of fans to detect any alcohol, drugs and weapons

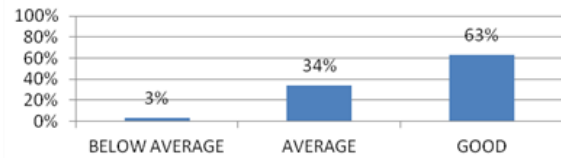


Figure 9. The effectiveness of fans screening at Gelora Bung Karno Stadium

The crowd management strategies in dispersing and evacuating people in the event of emergencies during football events

Some crowd management strategies should be done in dispersing and evacuating people in the event of emergencies during football events. Interviewing and distributing the survey. The percentages of their responses about the crowd management strategies that should be done in dispersing and evacuating people in the event of an emergencies event can be seen in the following figure 10.

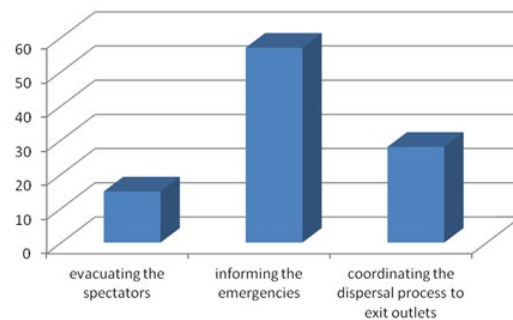


Figure 10. The crowd management strategies in dispersing and evacuating people in the event of emergencies during football events

From the figure 10., more than 60 % of the officers and the fans are concerned with the importance of emergency information. The other 25% are concerned with the dispersal process to exit outlets, and the other 15% are concerned with the evacuation of the spectators. Therefore, 60 % of respondents believe that informing the emergency is a promising strategy during the event. Furthermore, based on the interview result, 62 % of the respondent state that the effectiveness of emergency information is at the average level, while the other 38% state that Gelora Bung Karno stadium has a sound system for informing the

emergencies.

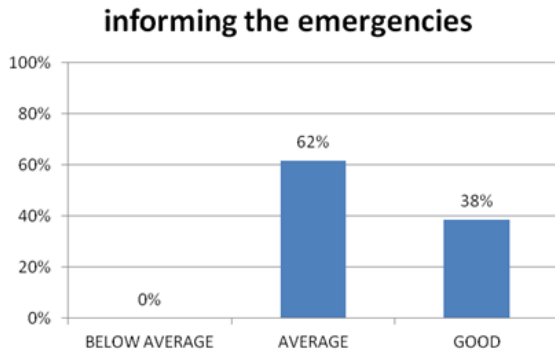


Figure 11. The effectiveness of emergencies information at Gelora Bung Karno Stadium

The findings in figure 11. show that some crowd management strategies are done in the different parts of the event. If the entry gate systems work correctly in the pre-event, they believe that the crowd management strategies within the pre-event will be successfully conducted. All stadiums should be fitted with adequate and effective CCTV surveillance cameras positioned to cover all entry and exit points, approaches to the stadium, spectator accommodation inside the stadium, stairways, and players' entrances onto the field of play (Blatter, 2010).

The advance sale of tickets helps control access to the stadium for those with valid tickets. Tickets for seats with severely restricted views should not be sold. The entry card from the ticket should identify the location of the accommodation for which it has been issued. Colour coding of tickets corresponding to different ground sections should be considered. Tickets should be issued only for usable seats with information on the ticket corresponding precisely with the correct number and row (Blatter, 2010).

Fifty-five % of respondents believe that providing good services is the best strategy during the event. If the officers could provide good services such as regular facilities maintenance, lighting systems, a clean stadium, and many CCTV Surveillance cameras, they believe that the crowd management strategies during the sports event will be run well. Safety and emergency lighting should provide sufficient illumination levels to allow people to see hazards and obstacles and ensure effective CCTV surveillance camera operations. Lighting in all parts of a sports ground accessible to spectators should allow them to enter, leave and move about the ground safely,

especially about entry and exit routes. When the daylight in any section of ground access to the public is insufficient, or if the ground is used in non-daylight hours, adequate artificial lighting should be provided (Blatter, 2010). Lighting provides an apparent means of deterrence as well as detection. If it is carefully used, lighting will help security staff and improve the capacities of CCTV systems.

Clean and tidy seated areas are safe for the spectators, but they also promote good behaviour and a more favourable attitude towards the facilities provided; hence, each seat should be clean before spectators are admitted.

Crowds come in various shapes and sizes; their behaviour ranges from passive to hostile and is mainly determined by their group aim (Kingshott, 2014). Unfortunately, one could argue those police officers charged with maintaining public frequently behave in a way that provokes crowd aggression. Their riot uniform of body armor, shield, and helmets may instil in the public an expectation of forceful crowd control and restricted protest movement (J. Park, 2003). Despite the sensitivity of law enforcement crowd management, the history of law enforcement and the people cooperating to protect the peace and prevent or suppress public disorder continues.

This study can assist in predicting the sites where hot spots may occur by considering the activity nodes in the vicinity of venues and the temporal rhythm with which fans visit them before, during, and after sporting events. Crowd management strategies may promote situational prevention in a sports event. A fundamental concern is the safety of spectators at major sporting events. However, these events must be balanced against the lively style and spirit. This paper articulated the desire to incorporate a new theoretical direction into sports management's approach to safety and security. It established a framework for integrating stakeholder input with the environmental criminological theory that underpins the community-centred security approach, resulting in a more balanced approach to sports safety and security interventions while preserving a positive spectator experience. However, it is necessary to acknowledge that the approach has limits. At its heart, situational prevention is a problem-solving process that identifies activities to resolve a specified problem. It entails examining the problem in the context of its environment, calculating the measures necessary to ensure the environment's safety and security, and extrapolating from this analysis

which measure, or suite of interventions, may be most effective at averting the problem.

CONCLUSION

The importance of essential and relevant mainstream empirical research in sports and event management, emphasizing sports venue safety and security, has never been greater. Based on the findings, seven crowd management strategies were used in the pre-events at Gelora Bung Karno, arranging entry gates, improving security, committee meeting, evaluating the readiness of the facilities, sterilization, and providing clear information. Moreover, There are three crowd management strategies used during the events at Gelora Bung Karno, among them providing good service, providing clear information, and managing the safety of spectators. There are three crowd management strategies for dispersing and evacuating people in the event of emergencies during football events, among them evacuating the spectators, informing the emergencies, and coordinating the dispersal process to exit outlets.

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