

Article

Introduction

“Crowd management is the organized and substantiated planning and the direction given to the orderly progress of events where large groups of people gather together” as stated by Heras Mobile Fencing and Security (2021). Furthermore it involves planning the manner in which the crowd gets together and directing the people throughout a safe event. However, sometimes not everything goes as planned and incidents happen because of improper crowd monitoring and management.

Problem and Thesis Statement

Improper crowd management can cause deaths. In order to lessen the situations of incidents, crowd managers should start implementing technology, training of personnel and doing crowd analyses.

Incidents caused by improper crowd management

The audience is usually the most important part of an event as they are the reason why event managers organize festivals or why some DJs and artists are well-known. That is why crowd management is crucial and it requires a lot of time and work to plan out carefully a proper safe event for the visitors. Unfortunately, sometimes incidents and tragic situations happen because of improper crowd Rebecca O’neill (2019) is Roskilde Festival in Denmark in the year 2000. It ended tragically because of the huge amount of people that showed up. What happened was that nine people suffocated to death after being pushed and packed in very tight. Another similar situation is Mawazine festival in Morocco in 2009 where eleven people died because “a stampede trampled them”. They were trapped beneath a security fence which fell over during the festival itself. There were also not enough exits for the crowd afterwards which was a miscommunication between the event organizers and the police. Last but not least, there is the Love Parade festival in Duisburg, Germany in 2010, which ended up with a total of twenty-one people not surviving the chaos. According to The Travel, the entrance was a really narrow and long tunnel and when the festival’s capacity reached its maximum, a massive stampede was formed. Therefore, it caused panic in the tunnel and everyone went into the wrong direction, pushing the people forward which resulted in panic attacks, hard breathing and suffocating. This all means that the event managers did not forecast the visitors correctly and did not make the festival safe for them.

Recommendations (how to prevent issues from happening)

There are multiple ways of preventing crowd management problems. Luckily, with time and with the many incidents happening at festivals, the crowd managers are starting to pay more attention on the safety of the people. Many different inventions are created such as the MOJO fence which allows the police to step on it and take a closer look of the crowd, and prevents people from suffocating if being pushed forwards. But there are some bigger aspects that must be considered and implemented beforehand which would make a great difference in the way a festival is managed and most definitely would prevent incidents from happening.

Technology

The importance of understanding human behavior in crowd management is crucial but sometimes people are not able to forecast or make decision quickly in a certain pressured situation. Just as Nanda Wijermans and Maarten van Steen (2016) say both strengths of human and technology should be used as human expertise is unbeatable and technology can rapidly process and digest large amounts of information. For example, crowd observation and monitoring everything on cameras during the event itself would enable the assessment of the situation and it can help to detect a potential problem from happening. Therefore, it all leads to affective action from the crowd managers and gives them time to think of a solution. In their article, Nanda W., Maarten van S., Claudine C. and Claudio M. suggest a crowd management support in the form of a decision-making framework called “INCROWD”. It is just an example how event managers could use technology to make quick decisions when in a situation of overcrowding, stampede or any kind of violent action. This framework mines, predicts the situation and makes decisions to manage the behavior in a crowd in real-time. This way it is a big help for the crowd managers to manage huge amounts of visitors during a festival or can simply act as a support decision-maker if things in the crowd get too serious.

Training of personnel and crowd analyses

When organizing a festival it is really important to try to forecast the amount of visitors, their density in the venue that is used and as said before, to understand their behavior. Keith Still, Marina Papalexi, Yiyi Fan and David Bamford (2020) explain that the dynamics of crowd behavior and movement depend on various crowd-related factors such as average speed, volume and density of the crowd. Therefore, logically, high crowd density would result in overcrowding which is the usual cause of safety issues and would turn the event into a disaster. It is also very common that the crowd gets confused and the crowd motion transitions into a stop-and-go pattern and causes crowd turbulence and stampedes. This often happens when there is no communication between the organizers and the visitors. That is why Keith Still suggests an adequate training of the personnel in crowd management principles and techniques. This way they will be aware of potential problems and will be informed regarding the appropriate ways to deal with an incident or chaos during the festival. Moreover, Keith also mentions that crowd risk analysis is an important element in order to properly monitor and manage a crowd. Also, crowd

modeling and pre-play of the event might be effective for creating a forecast and training the staff.

Reference

<https://www.rollingstone.com/culture/culture-lists/5-festivals-that-ended-in-disaster-119679/1990-glastonbury-festival-pilton-england-119725/>

<https://www.thetravel.com/biggest-worst-music-festival-disasters/>

https://www.researchgate.net/publication/297611276_A_landscape_of_crowd-management_support_An_integrative_approach

<https://www.emerald.com/insight/content/doi/10.1108/JPMD-10-2019-0090/full/html>

<https://www.heras-mobile.com/crowdmanagement/wat-is-crowd-management>

What are the results of the research?

What do the authors want to communicate?

Do the authors agree or disagree?

Recommendations

Article 1:

Use of technology for decision making

Article 2:

How to prevent problems from happening

Article 3:

Training before, crowd analysis

Explains dynamics of crowd behavior

Article 4:

Use of technology for decision making

Article 5:

Glocalization techniques

Article 6:

Contact with law enforcement

Article 7:

OMFs (outdoor music festivals) are associated with an increased risk to health and safety.

Article 8:

The following study has identified a number of factors that are highly likely to have an influence on crowd behavior and safety at OMFs

Article 9:

Causes of crowd incidents

Problem

Improper crowd management can cause deaths.

statement:**Thesis statement:**

In order to lessen the causes of incidents, crowd managers should start implementing technology, training of personnel and doing crowd analyses.