

Human Stampedes in Nigeria: A Psychological Review

Leah Oyeyemi Oyedele PhD

Applied Psychology Department, Kampala International University, Uganda

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.9010347>

Received: 11 January 2025; Revised: 16 January 2025; Accepted: 20 January 2025; Published: 21 February 2025

ABSTRACT

The study of human stampedes in Nigeria has become an important topic in recent years, as these events have had devastating effect on both individuals and communities. This psychological review aims to analyze the underlying causes of human stampedes in Nigeria and provide insight into how they can be prevented in the future. The crowd mentality theory which posits that individuals within a crowd may act differently than they would if they were alone, due to the influence and dynamics of the group was used to explain human stampedes in Nigeria. Through a comprehensive analysis of various case studies and research, this review identifies key factors such as overcrowding, panic, and lack of proper infrastructure contributing to these tragedies. By understanding the psychological mechanisms behind human stampedes, this review hopes to guide policymakers and event organizers in implementing effective crowd management strategies and preventing future disasters. It therefore recommends public education, crowd management training and emergency preparedness among others. The review concludes by emphasizing the urgent need to address the issue of human stampedes in Nigeria and providing valuable insights for researchers and decision-makers alike.

Keywords: Human stampedes, Nigeria, Psychological review

INTRODUCTION

Stampede is a situation in which a group of people or large animals such as horses suddenly start running in the same direction, especially because they are excited or frightened (Oxford Advanced Learner's Dictionary, 2023). A human stampede is an event that occurs in dangerously large or dense crowds of people and can result in many fatalities or other casualties of crowd-goers. It typically occurs when a large group of people are trying to get away from a perceived danger (Syed, 2022) in large gatherings such as religious events, sports matches, concerts, or political rallies with significant psychological, social, and public health implications. These events typically result from panic, overcrowding, or a sudden surge of movement, causing injuries and fatalities. Ngai et al (2009) describes a stampede as an impulsive mass movement of a crowd that often results in injuries and deaths. While the immediate physical consequences of stampede are often highlighted, the psychological impact on survivors, witnesses, and even emergency responders remain underexplored. This review seeks to delve into the psychological dimensions of human stampedes, exploring factors contributing to their occurrence and their aftermath.

Meanwhile, human stampedes have occurred globally, leading to significant health concerns for the international community. In recent years too, Nigeria has experienced several incidents of human stampedes. The tables below show notable human incidents of stampede Globally and in Nigeria from 2013 to 2024.

Year	Location	Event	Setting	Causes	Deaths
2010	Phnom Penh, Cambodia	Water Festival	Festival	Panic and misinformation about structural instability led to the crowd surge.	350
2013	the Allahabad train station, India	Kumbh Mela Religious Festiva	Religious	Overcrowding and crowd mismanagement	36

2015	Mina, Saudi Arabia	Hajj pilgrimage	Religious	Overcrowding, bottlenecks in movement, miscommunication among authorities	2,400+
2021	Houston, USA	Astro world Festival	Festival	Crowd surge	10
2022	Jammu and Kashmir, India	Vaishno Devi Temple	New Year Celebration	Heavy rush of people coming to celebrate the New Year at Hindu Shrine	12
2022	Itaewon, Seoul, South Korea	Itaewon Halloween	Celebration	Lack of formal crowd control measures and inadequate emergency response	150
2022	Giza, Egypt	Sunday morning worships	Religious	A fire at the Abu Sifin Church caused panic and a crowd crush	41
2023	Kampala, Uganda	Unnamed	New Year firework display	Crowds rushing to see a New Year's firework display got stuck in a narrow corridor in a shopping mall.	9
2024	Hathras district, Uttar Pradesh, India	Religious	Religious	Crush as attendees were leaving at the end of a religious event.	123
2024	Kinshasa, Democratic Republic of Congo	Gospel Music Concert	Concert	Overcrowding	9
2024	Jehanabad district, Bihar, India	The Baba Siddhnath Temple.	Religious	A clash between a flower vendor and Hindu worshippers.	10
2024	Nzerekore, Guinea	Nzerekore stampede	Football Match	Police tear gassed	56-150

Source: Wikipedia (2024)

Year	Location	Event	Setting	Cause	Deaths
2013	Uke, Idemili South LGA, Anambra State	Holy Ghost Adoration Ministry	Religious		25
2013	Ilorin, Kwara State	Eid-el-Fitr food distribution	Religious	Overcrowding	20
2014	Abuja, Port Harcourt, Minna and Benin City	The Nigerian Immigration Service (NIS) nationwide recruitment exercise	Recruitment	Overcrowding and struggles to enter the venues	16
2017	Katsina State	Alms Giving	Alms Giving	Crowd struggle to collect ₦500 alms at the residence of a businessman, Kamal Ma'a Gafi, in Katsina	5
2020	Nigerian refugees living in Niger Republic	Borno State Government	Food Distribution	Overcrowding	23

2022	Ikotun, Lagos State	Comfort Life Mission International Church	Crusade	Overcrowding	2
2022	Port Harcourt, Nigeria	Charity Event	Food Distribution	Overcrowding and people broke through a fence, causing a panic.	31
2023	Yaba, Lagos	Nigeria Custom Service	Cheap sale of rice	Overcrowding and struggle to buy seized bags of rice.	6
2023	Ilorin, Kwara State	Sallah	Free rice distribution	Overcrowding	20
2024	Bauchi, Bauchi State	The Annual Zakat Exercise	Religious	Overcrowding	4
2024	Gawon Nama, Sokoto, Sokoto State	Senator Aliyu Wamakko's 'generosity'	Palliative Distribution	Overcrowding	9
2024	Keffi, Nasarawa State University	University's Convocation	Academics	Overcrowding	2
2024	Keffi, Nasarawa State University	State Government Palliative Distribution	Politics	Rice looting given for distribution by the government.	7
2024	Ibadan, Nigeria	Christmas Funfair	Food Distribution	Overcrowding	35
2024	Abuja, Nigeria	Charity Distribution	Food Distribution	Overcrowding	10
2024	Okija, Anambra, Nigeria	Palliative Distribution	Palliative Distribution	Overcrowding	29

Source: Legit.ng (2024)

These tables highlight how overcrowding, panic, and mismanagement are common causes of stampedes, both globally and in Nigeria. Many of these incidents occur during religious events, food distributions, and large gatherings where crowd control measures are inadequate. Again, from the above tables, it is evident that human stampede is a global occurrence, and the factors responsible for it are varied. In Nigeria, the common cause of stampedes is overcrowding, which is evident across the various incidents reported. Understanding these causes can help in formulating better preventive measures and ensuring the safety of individuals during large-scale events.

Evidence from literature established that human stampedes are often triggered by a combination of environmental, situational, and psychological factors. Overcrowding is a primary contributor, with the density of individuals exceeding a critical threshold leading to high-pressure situations (Helbing et al., 2000). Panic, fuelled by the fear of danger or death, amplifies the likelihood of chaotic movement and trampling (Drury et al., 2009). Social psychological theories suggest that crowd behavior during emergencies often involves a breakdown of social norms, heightened emotional contagion, and impaired decision-making (Le Bon, 1896; Reicher, 2001). Poor crowd management because of inadequate planning, lack of trained personnel, and absence of effective crowd control measures are recurring issues (Still, 2014). The psychological aftermath of stampedes can be profound. Survivors often report experiencing acute stress, post-traumatic stress disorder (PTSD), anxiety, and depression (Benedek et al., 2007). Witnesses and rescue workers may also endure vicarious trauma, further complicating the recovery process (Fullerton et al., 2003). The collective trauma from such incidents can lead to enduring fear and avoidance behaviours, impacting societal trust and future participation in mass gatherings (Pennebaker & Harber, 1993).

Additionally, cultural contexts significantly influence how human stampedes are perceived and managed. In some societies, fatalism may dominate, with stampedes viewed as inevitable or divinely ordained, potentially delaying the adoption of preventive measures (Simpson, 2013). Conversely, societies with robust disaster management frameworks often emphasize crowd control strategies and psychological support systems post-incident (Zhou et al., 2020). Despite the recurring nature of human stampedes, the psychological dimensions of these events remain under-researched. Existing studies tend to focus on structural and logistical aspects, such as crowd density and exit routes, with limited attention to the behavioral and emotional dynamics of crowds during emergencies (Still, 2014). This gap underscores the need for a multidisciplinary approach that integrates psychological insights into the design and management of safe public gatherings. Understanding the psychological aspects of human stampedes is crucial for preventing such tragedies and supporting those affected. By exploring individual and collective behaviours during emergencies, this review aims to contribute to a holistic understanding of human stampedes and inform evidence-based interventions.

THEORETICAL FRAMEWORK

This review hangs on the crowd mentality theory to explain human stampedes in Nigeria. The theory is also referred to as herd or mob mentality, it is a psychological construct that significantly impacts human behaviour. It occurs when individuals adopt the beliefs, behaviours, or attitudes of the majority in a group, often at the expense of their own judgement or individuality. According to Zhang et al (2019), this behaviour can be observed in various aspects of daily life, from fashion trends to investment decisions and even political affiliations. The crowd mentality theory suggests that individuals in a crowd can behave differently than they would on their own due to the influence of the group. This theory is often used to explain human stampedes, as it highlights how collective behavior can lead to dangerous situations. Here are some key points of this theory:

Diffusion of Responsibility: In a crowd, individuals may feel less personally responsible for their actions because they believe others will take charge or help in an emergency (NABS, 2023). This diffusion of responsibility can lead to inaction or impulsive behavior, contributing to stampedes. This is precisely the case in some of the human stampedes in Nigeria, where individuals neglect their self-care responsibilities. People neglect their safety in the pursuit of food and other essentials, with some even going as far as throwing their children over fences to access the distributed materials.

Anonymity: When individuals feel anonymous in a crowd, they are less likely to feel accountable for their actions. This can lead to a reduction in self-awareness and an increase in impulsive or deviant behavior. (Festinger, Pepitone, and Newcomb, 1956) proposed that anonymity reduces self-awareness and self-regulation, leading to anti-normative behavior. There is always decrease in personal responsibility and people tend to be aggressive and violent. Other factors such as group size, environmental factors, altered states of consciousness and social influence can also lead to loss of self-awareness in a crowd, where individuals feel less personally responsible for their actions (Ifioque, 2024). People may engage in behaviours they wouldn't normally consider, such as pushing, running and trampling, which can escalate into a stampede.

Herd Behaviour: Herd behaviour refers to the tendency of individuals to follow the actions of the majority without independent thought. In a crowded situation, if a few people start to panic and move quickly, others may follow suit, leading to a stampede (NABS, 2023). In such situations, when there is a reward for positive behavior, individuals readily appear to claim it. However, when they anticipate punishment, they immerse themselves within the group to diffuse responsibility.

Panic and Fear: The perception of danger, whether real or imagined, can trigger a fight-or-flight response in individuals. This heightened emotional state can lead to irrational actions as people try to escape the perceived threat.

THE PECULIARITIES OF NIGERIA STAMPEDES

Nigeria has experienced numerous tragic stampedes over the years, often during large gatherings such as food distributions, religious events, and recruitment exercises. Between 2013 and 2024, at least 213 Nigerians have tragically lost their lives due to human stampedes. These incidents highlight several peculiarities unique to the

Nigerian context:

Socio-Economic Challenges and Resource Scarcity: Stampedes in Nigeria are frequently linked to socio-economic hardships and widespread poverty. Events involving the distribution of food, relief materials, or financial aid often attract large crowds, leading to overcrowding and chaotic behaviour reflecting the severe economic challenges faced by Nigerians. For example, the Ibadan stampede of 2024, which claimed 35 lives during Christmas children funfair, was driven by economic desperation among attendees. The same thing replicated itself in Abuja and Porth Harcourt. These incidents reflect the struggles of a significant portion of the population in accessing basic necessities.

Religious and Cultural Gatherings: Religion plays a central role in Nigerian society, and large religious gatherings are a common occurrence. Unfortunately, some of these events have been marred by stampedes. The Annual Zakat Exercise in Bauchi, Bauchi State in 2024 where 4 people lost their lives is a typical example of large crowd gatherings in Nigeria. Also, the 2013 Uke Adoration Ground tragedy in Anambra State, where 25 people died underscores the risks associated with poorly managed religious gatherings (Okoli & Nnam, 2016). The emotional fervour and high attendance rates at such events can amplify crowd dynamics, leading to panic and loss of control. In any mass gathering in Nigeria, disorderliness among the masses is often at its peak, characterized by pushing and rushing in endless struggle. Some Nigerians find it difficult to queue for anything, which is unfortunate for the citizens. Additionally, both government and individuals organizing programmes often lack adequate planning, leading to long queues for everything from as in the cases of registration for National ID cards, Voter's cards, Mobile SIM cards, fuel, to the new redesigned naira notes. These experiences have been far from palatable for the masses.

Recruitment Drives: Recruitment exercises by government agencies, such as the Nigeria Immigration Service have also led to deadly stampedes. Thousands of job seekers gather at recruitment centres leading to overcrowding and panic. This situation arises due to the high level of unemployment in the country. Universities are producing thousands of graduates each year without adequate job provision. Furthermore, university graduates are not practically oriented, as everyone seeks white-collar jobs that are hard to get by ordinary job seekers. Even those who are fully employed are seeking government jobs, particularly federal government positions, due to disparities in salary payments and job security. Whenever there is a job advertisement from the federal government, the application process is always overcrowded. Hence, the call for serious reform to bridge the gaps between government jobs at different levels (local, state, and federal). Additionally, private sector jobs should be brought to par with federal government jobs.

Overhyping Programs through Media Announcements: Media outlets like radio, TV, and social media often employ sensationalism to captivate audiences and enhance their image. This approach involves exaggerating or emphasizing certain aspects of stories to evoke strong emotional responses, thereby attracting more viewers or listeners. The increased attention can lead to higher advertising revenues, as advertisers are willing to pay premiums for larger audiences. Additionally, creating a sense of urgency or importance around programs can make audiences feel compelled to engage, further boosting viewership. Organizations or individuals featured in these programs may also benefit from the heightened exposure, using media hype to bolster their image or advance their causes. In such a situation, there could be misinformation because sometimes the excitement doesn't match reality. Psychologically, it can create anxiety or urgency, leading to issues like stampedes in crowded places.

Poor Infrastructure and Crowd Management: Inadequate infrastructure and poor crowd control measures significantly contribute to stampedes in Nigeria. Many events lack proper planning and safety measures, increasing the risk of accidents. Also, many of the venues for large gatherings lack proper entry and exit points, signage, or emergency response mechanisms. A notable example is the 2014 Synagogue Church of All Nations stampede in Lagos, where 116 people died, partly due to structural issues and ineffective crowd management (Akinbola, 2015). This incidence is very avoidable if there was proper planning on ground.

Political Rallies and Public Events: Political events in Nigeria are also prone to stampedes due to high public engagement and insufficient planning. During election campaigns, overcrowded rallies often lead to chaotic situations. For instance, a stampede at a presidential campaign rally in Port Harcourt in 2019 resulted in the

deaths of at least 14 people (BBC News, 2019).

Emergency Response and Public Awareness: Emergency response to stampedes in Nigeria is often delayed or inadequate due to limited resources and lack of preparedness. Public awareness about safety during mass gatherings is also low, contributing to the risks. The absence of comprehensive crowd safety guidelines further exacerbates the situation (Ajayi et al., 2021).

Cultural Fatalism and Risk Perception: In many Nigerian communities, there is a cultural tendency to view disasters as acts of fate or divine will. This fatalistic attitude may hinder proactive measures to prevent stampedes or encourage accountability among event organizers (Omotosho, 2019). These peculiarities underscore the need for improved economic policies, better crowd management, and more efficient distribution systems to prevent such tragedies in the future.

PSYCHOLOGICAL MECHANISMS BEHIND HUMAN STAMPEDES IN NIGERIA

Human stampedes in Nigeria are shaped by a complex of psychological mechanisms, particularly during emergencies or high-pressure situations influenced by socio-economic, cultural, and environmental factors. These mechanisms involve individual and collective behaviours influenced by fear, social dynamics, panic, crowd dynamics, emotional contagion, individual survival instincts and cognitive limitations often exacerbated by the specific contexts of Nigerian society.

Panic and Fear as Triggers: Panic is a primary psychological driver of stampedes, often triggered by real or perceived threats such as fire, explosions, or structural instability. In high-stress situations, such as perceived threats or sudden emergencies, individuals experience heightened fear, leading to a fight-or-flight response and also to erratic and self-preserving behaviours (Helbing et al, 2000). In Nigeria, events like the Uke Adoration Ground stampede of 2013 reveal how panic spreads quickly in large gatherings, with attendees acting impulsively to escape perceived danger (Okoli & Nnam, 2016). Fear can spread rapidly through a crowd, amplifying the likelihood of chaotic movement as individuals prioritize escape over rational decision-making (Drury et al., 2009). The limited availability of safe exits and overcrowding amplify this response. Again, fear narrows attention, causing people to focus solely on escape routes and ignore alternative options (Fahy et al., 2012).

Emotional Contagion in Crowds: The rapid spread of emotions within a group, plays a critical role in human stampedes. In Nigerian settings, where communal gatherings often involve heightened emotional intensity, fear or excitement can easily propagate through the crowd. This is facilitated by nonverbal cues such as facial expressions, body language, and vocalizations (Barsade, 2002). This phenomenon is particularly evident during religious or political events, where collective emotional states dominate individual decision-making (Ajayi et al., 2021). In a situation like this people unconsciously imitate the emotions and actions of others thereby intensify shared emotions within the group.

Herd Mentality and Deindividuation: Herd mentality, where individuals mimic the actions of others without independent reasoning, is common during stampedes especially when they are uncertain or lack information. This phenomenon occurs because people perceive the actions of others as a source of social proof (Le Bon, 1896; Reicher, 2001). In high-density situations, this can lead to synchronized movement, resulting in bottlenecks and dangerous crowd surges. Social contagion with emotions such as fear or urgency spread rapidly through the crowd. Deindividuation in the other hand is a psychological state where individuals feel less accountable for their actions within a crowd, further exacerbates this behavior. In Nigeria, cultural emphasis on communal identity may amplify herd behavior during emergencies, leading to irrational and dangerous actions (Omotosho, 2019). There is loss of individuality where individuals prioritize group dynamics over personal agency.

Perceived Scarcity and Competition: Perceived scarcity of resources, such as food, money, or access to safety, triggers competitive behaviour during mass gatherings. The 2022 Port Harcourt charity event stampede is a stark example, where individuals rushed to secure scarce food supplies, resulting in chaos and fatalities (Adebayo, 2022). The socio-economic context of Nigeria, marked by high poverty levels, heightens this competitive mindset.

Survival Instincts and Self-Preservation: In life-threatening situations, individuals prioritize self-preservation over collective well-being. These instinct drives behaviours such as pushing, shoving, and trampling others to secure personal safety. Such survival-oriented behaviours were evident in the Synagogue Church of All Nations tragedy in Lagos, where fear of structural collapse prompted frantic escapes (Akinbola, 2015).

Role of Misinformation and Rumours: Misinformation and rumours can quickly escalate panic in crowded settings. In many Nigerian stampedes, inaccurate information about imminent danger or restricted access has triggered sudden surges of movement, as seen during religious gatherings or political rallies (Okoli & Nnam, 2016).

Decision-Making Under Stress: Crowds in stampedes often face cognitive overload due to the high-stress environment. This leads to impaired decision-making, where individuals rely on heuristics or mental shortcuts. For instance, people may follow the crowd toward perceived exits without assessing whether those routes are viable (Still, 2014). Cognitive overload causes stress, and this reduces the brain's capacity to process complex information and thereby leads to follow the majority syndrome.

Loss of Social Norms: Stampedes are characterized by a breakdown of social norms and cooperative behavior. In emergency situations, the instinct for self-preservation often overrides the usual rules of social conduct, such as helping others or maintaining order (Quarantelli, 1988). However, some research challenges this narrative, suggesting that crowd members often display altruism and solidarity (Drury et al., 2009). In this situation, priority shift which turn out to be survival instincts override social considerations, reduced self-awareness and accountability lead to impulsive actions.

Crowd Density and Physical Constraints: Psychological mechanisms are amplified in high-density environments where physical constraints limit movement. As crowd density increases, individuals experience heightened stress and discomfort, which can escalate to panic. The concept of "crowd turbulence" highlights how small movements in dense crowds can propagate as waves, increasing the risk of crush injuries (Helbing et al., 2000). Physical proximity with close contact heightens anxiety and reduces personal space. It can also lead to perceive helplessness which is inability to move freely contribute to panic.

Desperation and Panic: In situations where people are already desperate, such as during food distribution events, exaggerated media reports can exacerbate feelings of urgency and panic. This can lead to rushed and unsafe behaviours, contributing to the likelihood of stampedes. Also, the mental health impact for those directly affected by stampedes, such as survivors and families of victims, the constant media attention can exacerbate trauma and hinder the healing process. The focus on sensational aspects rather than systemic issues can make it harder for individuals to find closure and support.

CONCLUSION

This study has undertaken a psychological review of human stampedes within the Nigerian context. The study has established that, social-economic, cultural and political factors have significant impact on human stampedes. The study also shows that psychological mechanism such as panic and fear as triggers, emotional contagion in crowds, loss of social norms, crowd density and physical constraints, decision-making under stress, survival instincts and self-preservation, are largely responsible for stampedes in Nigeria.

Moreover, the psychological mechanisms behind human stampedes in Nigeria are deeply intertwined with the country's socio-cultural and economic realities. Addressing these underlying factors requires a multidisciplinary approach that combines psychology, public health, and engineering to create safer environments for mass gatherings.

RECOMMENDATIONS

Understanding these psychological mechanisms is critical for preventing stampedes in Nigeria. Effective interventions should include:

- **Public Education:** It is crucial to promote awareness about crowd safety measures, responsible behaviour during mass events and the dangers of panic-induced behaviour.
- Self-care practices during emergencies are personal responsibilities which individuals must give attention to for their own safety.
- **Emotional Regulation:** It is very important to incorporate calming mechanisms and clear communication during mass events to prevent panic escalation.
- **Crowd Management Training:** Event organizers should be equipped with the knowledge to manage emotional contagion and herd behaviour effectively as well as responding calmly during emergencies.
- **Emergency Preparedness:** Developing protocols to address misinformation and ensure orderly evacuations.
- **Improved Infrastructure:** Ensuring adequate facilities for large gatherings, with sufficient exits, clear signage, and crowd control barriers.
- **Policy Development:** Policy makers should establish and enforce safety regulations for public events.
- Future research should focus on empirical study to further understand the dynamics of stampedes within Nigeria context.

REFERENCES

1. Adebayo, B. (2022). Nigeria church stampede kills 31 people during food drive. CNN News.
2. Ajayi, M. P., Oni, O. A., & Eze, U. J. (2021). Disaster management in Nigeria: Challenges and prospects. *Journal of Disaster Risk Studies*, 13(1), a850.
3. Akinbola, A. (2015). The Synagogue tragedy and lessons for building safety in Nigeria. *Nigerian Journal of Building Safety*, 4(2), 18-25.
4. Andrew, Wasike (2024). Stampedes in Nigeria highlight deepening crises. Stampedes in Nigeria highlight deepening crises – DW – 12/24/2024
5. Barsade, S. G. (2002). The ripple effect: Emotional contagion in groups. *Administrative Science Quarterly*, 47(4), 644-675.
6. BBC News (2024). "Ibadan crush: 35 children killed at Nigeria funfair". BBC. Retrieved 19 December 2024.
7. BBC News. (2019). Nigeria election: Stampede at rally kills 14. Retrieved from www.bbc.com.
8. Benedek, D. M., Fullerton, C., & Ursano, R. J. (2007). First responders: Mental health consequences of natural and human-made disasters for public health and public safety workers. *Annual Review of Public Health*, 28(1), 55-68.
9. Drury, J., Cocking, C., & Reicher, S. (2009). Everyone for themselves? A comparative study of crowd solidarity among emergency survivors. *British Journal of Social Psychology*, 48(3), 487-506.
10. Drury, J., Cocking, C., & Reicher, S. (2009). The nature of collective resilience: Survivor reactions to emergency mass evacuation. *International Journal of Mass Emergencies and Disasters*, 27(1), 66-95.
11. Fahy, R. F., Proulx, G., & Clarke, M. J. (2012). Movement of people: The evacuation timing concept revisited. *Fire and Materials*, 36(5-6), 339-350.
12. Festinger, L., Pepitone, A., & Newcomb, T. (1956). "Deindividuation and Group Size." *Journal of Abnormal and Social Psychology*, 52(3), 367-376.
13. Full List: Stampedes In Nigeria from 2014 To 2024
14. Fullerton, C. S., Ursano, R. J., & Wang, L. (2003). Acute stress disorder, posttraumatic stress disorder, and depression in disaster or rescue workers. *American Journal of Psychiatry*, 160(4), 1370-1376.
15. Helbing, D., Farkas, I., & Vicsek, T. (2000). "Simulating Pedestrian Crowds in Normal and Evacuation Situations." *Social Forces*, 78(3), 843-863.
16. Helbing, D., Farkas, I., & Vicsek, T. (2000). Simulating dynamical features of escape panic. *Nature*, 407(6803), 487-490.

17. Ifioque. (2024). "Deindividuation: The Loss of Self in the Crowd." Retrieved from Ifioque.
18. Le Bon, G. (1896). *The Crowd: A Study of the Popular Mind*. London: T. Fisher Unwin.
19. Legit (2024). Abuja, Anambra, Ibadan Tragedies: How Stampedes Kill 213 Nigerians Updated Monday, December 23, 2024 at 12:56 PM Read more: <https://www.legit.ng/nigeria/1632102-abuja-anambra-ibadan-tragedies-how-stampedes-kill-213-nigerians-11-years/?form=MG0AV3>
20. Legit.ng (2024). "Ten people including children die in a stampede in Nigeria at a Christmas food distribution event". Associated Press. 22 December 2024. Retrieved 22 December 2024.
21. National Academy of Behavioral Science (NABS, 2023). "Understanding the Psychology of Stampede: Insights from the National Academy of Behavioral Science." Retrieved from NABS.
22. Ngai, Ka Ming & Burkle, Frederick & Hsu, Anthony & Hsu, Edbert. (2009). Human Stampedes: A Systematic Review of Historical and Peer-Reviewed Sources. *Disaster medicine and public health preparedness*. 3. 191-5. 10.1097/DMP.0b013e3181c5b494.
23. Okoli, A. C., & Nnam, M. U. (2016). Religious fatalism and disaster preparedness in Nigeria: The case of the Uke Adoration stampede. *International Journal of Religious Studies*, 9(2), 45-62.
24. Omotosho, O. F. (2019). Cultural beliefs and disaster risk reduction: A Nigerian perspective. *Journal of African Cultural Studies*, 31(3), 273-288.
25. Oxford Advanced Learner's Dictionary (2023). 10th edition Oxford University Press.
26. Pennebaker, J. W., & Harber, K. D. (1993). A social stage model of collective coping: The Loma Prieta earthquake and the Persian Gulf War. *Journal of Social Issues*, 49(4), 125-145.
27. Reicher, S. (2001). The psychology of crowd dynamics. *Blackwell Handbook of Social Psychology: Group Processes*, 182-208.
28. Simpson, E. (2013). The sociology of crowd disasters: Past, present, and future. *Safety Science*, 50(1), 208-215.
29. Still, G. K. (2014). Crowd dynamics. *Annual Review of Fluid Mechanics*, 46(1), 1-25.
30. Syed, Armani (31 October 2022). "Why Crowd Crushes Like South Korea's Halloween Surge Are So Deadly". *Time*. Retrieved 17 May 2023.
31. Wikipedia (2024) last edited on 24 December 2024, at 01:10 (UTC).
32. Yamin, M., Rahman, S., & Albugami, M. (2016). Crowd analysis for disaster preparedness during Hajj. *Safety Science*, 86(1), 50-56.
33. Zhang W, Yang D, Jin J, Diao L, Ma Q, (2019). The neural basis of herding decisions in enterprise clustering: an event-related potential study. *Front Neurosci*. 2019; 13:1175. doi:10.3389/fnins.01175
34. Zhou, H., Wu, C., & Rau, P. L. P. (2020). Crowd management: Influencing factors and preventive measures. *Safety Science*, 127(1), 104701.