



Media Exposure, Fire-Risk Perception and Emergency Preparedness among Traders in Selected Lagos Markets

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Abstract

Devastating fire incidents were reported in the Lagos markets in December 2025, resulting in the loss of lives, goods, and property worth billions of naira. Media exposure to the market fires and its perceived impact on risk perception and fire emergency preparedness among traders in the Arena and Balogun markets were examined in this study. Specifically, the study assessed the traders' exposure to media reports of market fires, the perceived influence of media exposure on fire safety knowledge, risk perception, and fire emergency preparedness, and the factors that hinder the adoption of fire safety preparedness measures among traders. This study employed a cross-sectional survey design, and a self-designed, structured questionnaire was used for data collection. The results indicated high exposure to media coverage of market fires (overall $M = 3.83$), with radio and social media as the main sources of information. Media exposure was seen to have exerted significant impacts on traders' knowledge of fire causes (overall $M = 3.66$), awareness of fire prevention methods, risk perception, and the adoption of non-financial fire safety preparedness, while the acquisition of structural safety equipment and the creation of specific emergency exit routes remained low. Poor market infrastructure, high equipment cost, and lack of practical training were the main limiting factors for emergency preparedness. Therefore, the study recommends that the government and market management should improve market infrastructure, subsidise fire safety equipment, and provide compulsory on-site practical fire safety training in urban markets, among others.

Keywords: fire emergency preparedness, fire safety knowledge, media exposure, market fires, risk perception, traders

Introduction

Fire outbreak in markets is a recurring problem in many countries, with severe economic and social consequences. Market fires affect both large urban and smaller local markets (Azumyarn et al., 2025). In Nigeria, fire outbreaks in markets and other commercial buildings have become a routine urban disaster, resulting in the loss of goods, property, and livelihoods, especially during the dry season, due to inadequate planning, regulation, and emergency response (Kabara et al., 2023; Okwuonu et al., 2021). Markets play an economic role in Nigeria, and the survival of the traders is greatly reliant on the functioning of the markets. However, Nigerian markets have weak institutional structures and disorganised fire-service infrastructures, which make them extremely susceptible to fire disasters. Leading causes of fire incidents include electrical faults, human negligence such as careless handling of flammable materials, illegal electrical connections, poor market planning, storage of flammable goods such as textiles, chemicals, and petroleum products in poorly ventilated shops (increasing the risk of fire disasters), and lack of basic firefighting equipment such as fire extinguishers, smoke detectors, fire alarms, and accessible emergency exit routes (Aderonmu et al., 2023; Alabi et al., 2021; Azumyarn et al., 2025; Ugwu,



2025). Thus, besides unexpected electrical issues and traders' negligence, the lack of fire-safety-conscious structural market designs and non-compliance with fire-safety regulations are responsible for the incessant market fires recorded in Nigeria.

Trade losses, slow recovery, business interruption, and, in some situations, permanent exit from business are the consequences for traders (Alabi et al., 2021; Awotunde & Aregbeshola, 2026). Market fires ruin businesses and leave thousands of traders jobless, while some succumb to shock upon their businesses being destroyed. In addition, many traders do not have insurance or other protection measures, which further increases their vulnerability and reduces chances of post-fire recovery (Awotunde & Aregbeshola, 2026; Azumyarn et al., 2025). Moreover, the local government tax revenues are compromised by repeated fires, as unemployment and poverty are exacerbated (Kabara et al., 2023; Sunday et al., 2019). This evidence from Nigeria corroborates other West African reports that market fires have a negative impact on business continuity, reduce business capital, and consequently heighten unemployment rates. Therefore, fire safety knowledge and emergency preparedness among traders are a necessity.

There have been repeated outbreaks of market fires in Lagos in recent years, including a cluster of cases in 2012–2013 and another cluster of cases in 2020–2024 (Awotunde & Aregbeshola, 2026; Kabara et al., 2023). According to Alabi et al. (2021), more than 50 markets have been affected and over 40 fires have been reported in 16 local government areas (LGAs). The recent incidents were in the Lagos markets during the 2025 yuletide season. The incidents occurred in the 22-storey Great Nigeria Insurance House, Balogun Market, Lagos Island, which caught fire on 24 December 2025, causing massive loss of goods valued at millions of naira and damage to Great Nigerian House, which houses major textile warehouses, with five people killed. The second fire, at the Arena Market, Oshodi, took place on 30 December 2025, at container shops, leaving five people injured. Again, a fire incident happened in Ikotun Market in the early morning of 1 January 2026.

Previous studies show that fire emergency preparedness among Nigerian traders is generally low. Most traders do not undertake fire emergency preparedness due to inadequate knowledge of fire safety procedures and lack of basic fire equipment such as extinguishers (Alabi et al., 2021; Kabara et al., 2023). Specifically, the majority of the traders in South-South Nigeria were not prepared for fire disaster, did not conduct fire hazard assessments, and reported a low involvement in fire drills (Okwuonu et al., 2021). Likewise, the majority of the traders in Kano were not prepared and lacked knowledge of how to use an extinguisher (Kabara et al., 2023). Similarly, previous research in Nigeria and Ghana found that traders lacked knowledge of what to do in the event of a fire, and overcrowding, inadequate fire code compliance, and equipment further hindered preparedness (Ageboba et al., 2023; Sunday & Lawan, 2023).

The media, therefore, is relevant not only as a source of information about fire risk, but as a determinant of how traders perceive fire risk and how they take actions based on the perception of fire risk. Given the devastating effects of market fires, and the growing need for greater awareness and preparedness to avert fire disasters, media coverage through news reports, live footage of fire incidents, interviews, commentaries, editorials, feature stories, and investigative reports highlights the causes of fire outbreaks and encourages traders to adopt safety measures.

This can have an impact on risk perception and traders' preparedness for fire disasters. However, available literature indicates that media coverage does not always have the potential to deliver actionable information for the enactment of protective behaviours (Abunyewah et al.,



2022). Previous Lagos-focused studies on market fires have concentrated mainly on fire incidence, market tragedy, response, and recovery (Alabi et al., 2021; Awotunde & Aregbeshola, 2026; Okwuonu et al., 2021), with less attention to how exposure to media coverage of the market fires shapes traders' fire-risk perception and preparedness behaviour. Related marketplace communication studies come largely from Ghana, where scholars explicitly show that traders' perceptions and protective actions are shaped by communication channels and social context (Abunyewah et al., 2022). Therefore, a study on selected Lagos markets is justified to examine how media exposure relates to traders' fire-risk perception and emergency preparedness in a city with frequent market fires and persistent preparedness deficits.

Statement of the Problem

Markets and commercial centres are important economic hubs in Nigeria, but they are always prone to fire incidents, which cause damage to goods and property (Aderonmu et al., 2023). Although previous literature and public disaster management discourses have tended to view market fires as merely physical or infrastructural issues, empirical evidence points to a deeper, systemic issue: the failure to foster actionable fire preparedness among market traders through effective risk communication strategies.

Even though many markets have been severely affected by fires in high-profile locations such as Lagos, and the media have been extensively used to communicate the risk, current risk communication channels have had limited effects on driving behavioural change. Research shows that traders possess low awareness of fire hazards and preparedness for fire emergencies (Sunday & Lawan, 2023; Kabara et al., 2023). Moreover, traders often receive generic, top-down media content that does not offer them specific, context-specific and actionable safety advice (Abunyewah et al., 2022). Accordingly, there is no significant correlation between communication efforts concerning fire hazards and traders' preparedness (Okwuonu et al., 2021), suggesting that the present information dissemination channels are either lacking in quality or inappropriate for the informal market environment.

Traders often lack early warning systems, fire extinguishers and insurance coverage, and rely on rudimentary and ineffective safety measures, such as water and detergent, when a disaster occurs (Alabi et al., 2021). In addition, market associations, shop owners and emergency responders lack coordinated emergency response procedures, and there are no regular fire drills (Okwuonu et al., 2021).

Although many studies report infrastructural deficiencies, overcrowding and economic losses following market fires in Nigeria, empirical studies measuring how disaster risk information can be transformed into sustained fire emergency preparedness are scarce. Without a context-based, evidence-based and culturally relevant communication intervention tailored to the market environment, generic risk communication messages will continue to fall short, and commercial hubs will remain vulnerable to fire disasters. Therefore, this study examines media exposure, fire-risk perception and emergency preparedness among traders in selected Lagos markets.

Objectives of the Study

The specific objectives are to:

1. Determine the level of traders' exposure to media coverage of fire outbreaks in Lagos markets.
2. Examine the perceived influence of exposure to media coverage on knowledge of fire safety among traders in Lagos markets.



3. Assess the perceived influence of exposure to media coverage on traders' perceptions of the risk of fire outbreaks in Lagos markets.
4. Determine the perceived influence of exposure to media coverage on fire emergency preparedness among traders in Lagos markets.
5. Identify barriers that limit preparedness for fire disasters among traders in Lagos markets.

Literature Review

Exposure to Media Coverage of Market Fires and Knowledge of Fire Safety among Traders

The news media are the primary sources of information for the public about disasters, including fires. People rely on the media before events (to understand fire risks and preparedness), during events (for updates on location, spread, casualties, evacuation and relief centres) and after events (for investigations, accountability, aid and recovery) (Sachdeva & McCaffrey, 2022; Rodríguez-Teijeiro & Román-Masedo, 2023). Existing literature shows that fire authorities use leaflets, radio broadcasts and information centres as dissemination methods to provide fire-risk information (Nyame-Asiamah et al., 2022). In most cases, however, education programmes on fire hazards generally target the public at large instead of focusing specifically on marketplaces (Abunyewah et al., 2022). The media also often focus on the emotional aspects of events rather than information or education about preparedness (Sachdeva & McCaffrey, 2022). This evidence comes from outside the Nigerian context and may not be applicable to Nigeria.

Previous Nigerian studies have shown gaps in fire-safety knowledge among traders. According to Iloidiuba et al. (2017), shop owners and traders have low awareness of the causes of market fires. Kabara et al. (2023) found that 95.4% of traders in Kano were not knowledgeable about the use of fire extinguishers, while 89% were not aware of fire-safety policies in the markets. Another study conducted by Ugwu (2025) revealed that 39.3% had a poor understanding of disaster preparedness. These results suggest a lack of fire-safety knowledge and preparedness for fire emergencies among traders. The findings confirm Ageboba et al.'s (2023) claim that poor knowledge of escape and evacuation signage, as well as poor awareness of the use of smoke detectors and fire extinguishers, had been reported in Ghanaian markets. Therefore, traders who lack prior knowledge of fire-safety guidelines and fail to engage in preparedness measures may be more likely to experience the consequences of fire outbreaks.

Exposure to Media Coverage of Market Fires, Risk Perception and Emergency Preparedness among Traders

Increased media attention can increase risk perception. The rapid dissemination of photographs or videos can lead to increased public attention and possible overestimation of risk (Won et al., 2025). Sensationalised and inaccurate media coverage tends to distort risk perception. Similarly, a lack of risk information and an emphasis on disaster spectacle may reduce risk perception and social learning. Media coverage, coupled with traders' first-hand experience of fire disasters, can increase risk perception and encourage traders to take more precautions, while markets with less frequent fires tend to have lower risk perception, which can lead traders to take inadequate precautions (Abunyewah et al., 2022). Thus, perception is mediated by social amplification processes and formal and informal interactions.

Research establishes that media exposure has a positive effect on individual risk perception and preparedness behaviours. As such, media platforms exert a significant influence on fire-prevention knowledge, as well as perceived severity, perceived vulnerability and, ultimately, safe



behaviours (Kurata et al., 2022). However, Abunyewah et al. (2022) noted that disaster-related information in the media often lacks instructions for action and does not inspire people to take the necessary precautions. Literature on the role of media coverage in fire emergency preparedness in Nigerian markets is scarce. Previous studies show that traders in various Nigerian markets were not adequately prepared for fire disasters (Okwuonu et al., 2021; Kabara et al., 2023; Ugwu, 2025). Okwuonu et al. (2021) found no significant relationship between fire-risk information and fire-disaster preparedness, as most markets do not conduct hazard and vulnerability assessments or drills, and markets are generally not prepared for fire disasters. However, the extent of the impact of media exposure on traders' level of preparedness was not measured in these studies.

Barriers Limiting Fire-Safety Preparedness among Traders

Across market studies, the primary factors limiting traders' fire preparedness include a lack of proper training, inadequate knowledge of fire-safety actions, infrastructure deficits, a lack of emergency communication systems and poor enforcement of fire-safety rules. The evidence points to gaps in infrastructure, training and policy. In addition, knowledge gaps, a lack of drills and inadequate organisational support may contribute to a lack of preparedness (Nyame-Asiamah et al., 2022; Mboma, 2022; Kabara et al., 2023; Iheama et al., 2025). Poor knowledge is associated with lower preparedness in several studies of traders (Ibrahim et al., 2022; Kabara et al., 2023; Novitasari & Yuantari, 2026). This aligns with the broader call for routine fire drills and training to equip individuals with the requisite skills to tackle emergencies. Physical and logistical deficits are among the most consistent barriers. The lack of fire-emergency policies and plans, as well as firefighting equipment such as water hydrants, automatic smoke detectors or alarm systems, evacuation routes and emergency exits in public markets, limits preparedness. In addition, overcrowding and blocked walkways restrict firefighters' access to markets. Market settings that lack emergency communication systems, such as emergency contact numbers, are less prepared for fire incidents.

Furthermore, cultural beliefs and attitudes towards fire risks can limit proactive behaviour, particularly where fires are uncommon, resulting in a false sense of security among traders (Abunyewah et al., 2022). Over-reliance on external responders for preparedness can result in delayed firefighting responses. Moreover, markets with overcrowded walkways and illegal makeshift stalls present obstacles to firefighters' entry into markets during emergencies. Similarly, markets without emergency communication systems, such as emergency lighting and fire alarms, lack adequate preparedness measures. In addition, inadequate knowledge and low uptake of insurance by traders undermine investments in preparedness and recovery from fire events (Alabi et al., 2021). Furthermore, non-compliance with fire-safety regulations poses a significant challenge (Ageboba et al., 2023; Iheama et al., 2025).

Theoretical Framework

This study is anchored on Protection Motivation Theory (PMT), formulated by Ronald Rogers to explain how people are motivated to adopt protective or preventive behaviours in response to perceived threats (Rogers, 1983). The theory suggests that motivation to adopt protective behaviour is shaped by two main cognitive processes: threat appraisal and coping appraisal. Threat appraisal refers to an individual's evaluation of perceived severity (a judgement of how harmful a fire outbreak could be, such as through loss of life, property and livelihoods), perceived vulnerability (the belief about how likely traders are to experience a fire disaster), and intrinsic and extrinsic rewards (the perceived benefits of not adopting protective behaviour). Thus,

in studies of traders, threat appraisal is manifested in perceived fire risk, awareness of the causes of fires, and whether past fires are frequent or severe enough to make the threat seem personal (Abunyewah et al., 2022; Novitasari & Yuantari, 2026).

On the other hand, coping appraisal refers to an individual's evaluation of their ability to respond effectively to a threat. It includes response efficacy (the belief that a recommended action, such as installing a fire extinguisher or smoke detector, will reduce risk), self-efficacy (confidence in one's ability to carry out that protective action) and response costs (perceived barriers associated with taking action, such as cost, time and resources) (Maddux & Rogers, 1983). Thus, coping appraisal relates to beliefs that preparedness actions work, that traders can carry them out, and that the costs are manageable. Response efficacy relates to beliefs that fire extinguishers, drills, reporting procedures, evacuation routes and guidelines will minimise fire damage, while self-efficacy relates to traders' confidence in their ability to use the equipment, follow procedures and respond quickly to a fire outbreak. Response costs refer to the money, time, disruption and discomfort involved, which may slow down preparedness actions. Put succinctly, PMT posits that individuals are more likely to adopt protective measures when they perceive high severity and vulnerability, have confidence in the effectiveness of protective responses, and feel capable of carrying them out.

The media can shape both threat and coping appraisals before behaviour is determined, as illustrated in Figure 1. Media exposure can influence preparedness behaviour, but the media are not consistently effective in improving preparedness when audiences do not internalise actionable information about the efficacy of protective measures (Qian et al., 2024; Hesti et al., 2025).

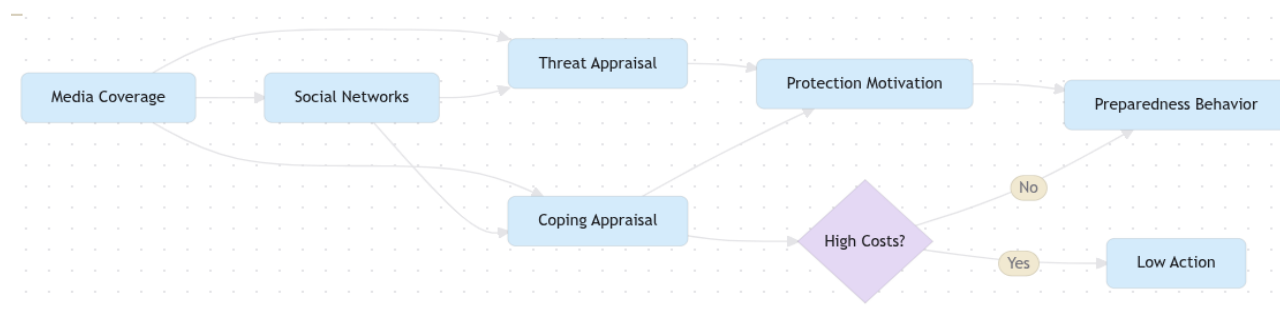


Figure 1. Media shaping threat and coping appraisals in traders

In the marketplace, traders' social networks serve to verify risk information and can reinforce both appraisals. During a disaster, threat appraisal and willingness to listen to warnings tend to increase. However, when fire experiences are rare, threat appraisal decreases, creating a false sense of safety (Botzen et al., 2024; Abunyewah et al., 2022). Coping appraisal is a better predictor of preparedness than threat appraisal alone (Hu et al., 2021; Botzen et al., 2024). Therefore, media coverage that demonstrates successful fire-safety practices, such as the use of fire extinguishers, emergency plans and safety training, can increase traders' response efficacy and self-efficacy, thereby reinforcing their belief in the value and achievability of preparedness. Moreover, barriers such as the cost of fire-safety equipment, limited training opportunities and poor infrastructure can reduce motivation to adopt preparedness behaviours.

Methodology

This study employed quantitative research design, using the survey method to gather data from traders in Arena and Balogun markets in Lagos. The markets (Arena and Balogun) were purposively selected based on the recent fire incidents that occurred in December 2025, their geographic variations (Mainland and Island respectively) and commercial importance. Arena market is an organized and fenced shopping complex enclosed within the military cantonment in Oshodi, Lagos, with hundreds of structured stalls, whereas Balogun market is an open market with no fixed boundary nor gates, and extends into many major streets such as Broad Street, Martins Street, Nnamdi Azikiwe Street in Lagos Island. Since the population of traders in the two selected markets is unknown, the sample size was scientifically determined using the Cochran's formula for unknown population proportions. The Cochran's formula for an unknown population, ($n = (z^2 * p * (1-p)) / e^2$) was used to determine the sample size.

Where $Z = Z\text{-Score} = 1.96$

$e = \text{margin of error} = 0.05$

$P = 0.50$

The calculation $1.96^2 * 0.50 * (1-0.50) / 0.05^2$ yielded approximately 384. All the copies of the questionnaire distributed were returned. However, 12 copies were excluded from the analysis due to incomplete responses as some respondents withdrew from the study. Therefore, 372 complete and valid responses were used for analysis. A pilot test of the instrument was conducted, using 25 (consisting 6.5% of the study population) traders in the Tejuosho market, to ensure the consistency of the instrument in measuring the study variables. The Cronbach's alpha reliability coefficients for all the study variables (as presented in Table 1) are within the acceptable threshold for internal consistency.

Table 1: Cronbach Alpha reliability coefficients for the survey instrument

Variable	Number of Items (K)	Cronbach's Alpha (α)	Internal Consistency / Reliability Benchmark
Exposure to Media Coverage of Market Fires	5	0.78	Acceptable
Perceived Influence on Knowledge	6	0.82	Good
Perceived Influence on Risk Perception	5	0.80	Good
Perceived Influence on Emergency Preparedness Actions	5	0.76	Acceptable
Factors Militating Against Adoption	5	0.74	Acceptable
Overall Instrument / Scale	26	0.86	High / Excellent

A total of 260 copies of the study questionnaire was allocated to Balogun Market, which is significantly larger, busier and more extensive and recorded more fatalities, while 130 copies were allocated to Arena Market in Oshodi. Arena Market consists of A–Z compartments (26 shop lines), and a systematic sampling technique was employed to select every fifth shop across the 26 lines in the market. However, the selection of shops in Balogun Market was based on the researchers' discretion, as the market does not have clearly defined shop lines or district boundaries. Where a selected shop had more than one trader, the traders were asked to nominate one respondent. The next open shop was selected as a replacement where a selected shop was closed or unoccupied or where traders declined to participate. The instrument was administered

through the interviewer-administered method because the study was conducted in a busy market where traders were occupied with their businesses. However, this method was time-consuming, as the researcher and research assistants had to move from shop to shop to collect data. The study was conducted in accordance with ethical principles. The objectives of the study, information regarding voluntary participation and anonymity, and respondents' right to withdraw were read out to them, after which oral consent was obtained from all respondents.

Results

Table 1. *Distribution of Respondents' Demographic Characteristics (N = 372)*

Category	Variables	f	%
Gender	Male	141	37.9
	Female	231	62.1
Age	Below 18	5	1.3
	18-20	28	7.5
	21-30	134	36.0
	31-40	121	32.5
	41-50	63	16.9
	50 and above	21	5.8
Educational level	No formal education	18	4.8
	Primary/basic education	52	14.0
	Secondary school	212	57.0
	Tertiary education	90	24.0
Marital status	Married	258	69.4
	Single	114	30.6

Data from Table 1 indicates a clear female dominance among traders in the studied Lagos markets, reflecting the socio-economic reality of commerce in Southwestern Nigeria, where retail trade and market structures are traditionally spearheaded by women. The age distribution indicates a highly active and economically vibrant population likely to consume mass media through diverse modern streams including digital media, social media, and terrestrial radio or television. Again, the dominance of married individuals implies that a large majority of the traders have families and may be more motivated to adopt emergency preparedness to safeguard their livelihoods. Lastly, the educational profile of the traders shows that the majority of Lagos market traders are literate.

Table 2. *Traders' Exposure to Media Coverage of Market Fires (N = 372)*

Item/Response	f	%
<i>Preferred media channel for receiving reports on fire outbreaks</i>		
Television	54	14.5
Radio	148	39.8
Newspaper/magazine	11	3.0
Social media	123	33.1
Interpersonal communication	36	9.6
<i>I actively pay attention to media reports about fire outbreaks.</i>		
Strongly disagree	12	3.2
Disagree	24	6.5
Uncertain	19	5.1



Agree	176	47.3
Strongly agree	141	37.9
<i>I receive repeated information about fire outbreaks from different media sources.</i>		
Strongly disagree	8	2.2
Disagree	31	8.3
Uncertain	22	5.9
Agree	194	52.1
Strongly agree	117	31.5
<i>I regularly listen to or watch programmes that discuss fire incidents.</i>		
Strongly disagree	38	10.2
Disagree	112	30.1
Uncertain	43	11.6
Agree	124	33.3
Strongly agree	55	14.8
<i>I rarely encounter information about fire outbreaks in the media.</i>		
Strongly disagree	109	29.3
Disagree	182	48.9
Uncertain	25	6.7
Agree	41	11.0
Strongly agree	15	4.1
<i>I often discuss media reports about fire outbreaks with other traders.</i>		
Strongly disagree	15	4.0
Disagree	38	10.2
Uncertain	17	4.6
Agree	163	43.8
Strongly agree	139	37.4
Overall mean		3.83

Note: $N = 372$. f = frequency. Percentages may not total 100 because of rounding.

Table 2 indicates that Radio and Social Media are the major channels through which traders receive media coverage on market fires. This suggests that traders listen to radio and use social media while running their shops. The data indicate a high level of exposure as the traders actively listen to fire reports from the market, are fed repeated information from various platforms, and often engage in interpersonal discussion about market fires with other traders. The data suggest that points out that information about the market fires is widely accessible to Lagos traders, and media coverage often triggers interaction among traders within the markets.

Table 3. *Perceived Influence of Exposure to Media Coverage of Market Fires on Traders' Knowledge of Fire Safety (N = 372)*

Item	Response	f	%	Mean	SD	Remark
I am aware of basic fire-safety equipment due to information from the media.	Strongly disagree	11	3.0	3.97	0.97	Agreed
	Disagree	32	8.6			
	Uncertain	19	5.1			
	Agree	204	54.8			
	Strongly agree	106	28.5			



Media coverage has helped me understand how to use fire-safety equipment (e.g., fire extinguishers).	Strongly disagree	41	11.0	2.99	1.23	Disagreed
	Disagree	118	31.7			
	Uncertain	58	15.6			
	Agree	113	30.4			
	Strongly agree	42	11.3			
Media campaigns have increased my understanding of the causes of fire outbreaks.	Strongly disagree	5	1.3	4.27	0.80	Agreed
	Disagree	14	3.8			
	Uncertain	11	3.0			
	Agree	187	50.3			
	Strongly agree	155	41.6			
I have learned whom to contact in cases of fire emergencies through media reports or programmes.	Strongly disagree	18	4.8	3.65	1.14	Agreed
	Disagree	59	15.9			
	Uncertain	46	12.4			
	Agree	162	43.5			
	Strongly agree	87	23.4			
Media coverage provides enough practical knowledge to help traders manage fire outbreaks.	Strongly disagree	34	9.1	2.97	1.17	Disagreed
	Disagree	126	33.9			
	Uncertain	61	16.4			
	Agree	119	32.0			
	Strongly agree	32	8.6			
Media coverage has improved my knowledge of fire-prevention methods.	Strongly disagree	8	2.2	4.08	0.91	Agreed
	Disagree	23	6.2			
	Uncertain	21	5.6			
	Agree	198	53.2			
	Strongly agree	122	32.8			



Grand/overall mean

3.66 1.04 Agreed

Note. N = 372. f = frequency; SD = standard deviation. Decision rule: Mean $\geq$ 3.00 indicates good knowledge.

Data in Table 3 show that the traders strongly perceived that the media has a positive impact on knowledge of the causes of fires (Mean = 4.27), fire prevention methods (Mean = 4.08), basic fire equipment (Mean = 3.97), and who to contact during fire emergency (Mean = 3.65). However, the media was perceived to be ineffective in delivering practical skills or actionable training, as traders believe that it did not offer them much practical information to manage fire incidents (Mean = 2.97) or failed to demonstrate how to use equipment like fire extinguishers (Mean = 2.99). Therefore, the media is perceived to be effective in disseminating knowledge, but has limited impact in promoting practical firefighting skills.

Table 4. Influence of Exposure to Media Coverage of Market Fires on Traders' Perception of Fire Risk (N = 372)

Item	Response	f	%	Mean	SD	Remark
Media coverage has increased my awareness of the possibility of fire outbreaks in the markets.	Strongly disagree	24	6.5	3.62	1.23	Agreed
	Disagree	68	18.3			
	Uncertain	31	8.3			
	Agree	152	40.9			
	Strongly agree	97	26.1			
I pay more attention to fire risks after being exposed to media coverage of market fire incidents.	Strongly disagree	35	9.4	3.39	1.30	Agreed
	Disagree	82	22.0			
	Uncertain	40	10.8			
	Agree	134	36.0			
	Strongly agree	81	21.8			
I have assessed fire risks in my shop based on frequent media reports on market fires.	Strongly disagree	49	13.2	3.02	1.31	Agreed
	Disagree	114	30.6			
	Uncertain	43	11.6			
	Agree	112	30.1			
	Strongly agree	54	14.5			
Media coverage influences how seriously I perceive the danger of fire outbreaks.	Strongly disagree	18	4.8	3.83	1.14	Agreed



	Disagree	47	12.6			
	Uncertain	29	7.8			
	Agree	163	43.8			
	Strongly agree	115	30.9			
I believe that media coverage sometimes exaggerates the risk of fire outbreaks in the market.	Strongly disagree	31	8.3	3.44	1.26	Agreed
	Disagree	74	19.9			
	Uncertain	48	12.9			
	Agree	138	37.1			
	Strongly agree	81	21.8			
Grand/overall mean				3.46	1.25	Agreed

Note: $N = 372$. f = frequency; SD = standard deviation. Decision rule: A mean of 3.00 or above indicates high risk perception.

As shown in Table 4, the traders agreed with all statements regarding media influence on risk perception. The majority of traders think the media play significant roles in shaping their perception of vulnerability to fire disaster, seriousness of fire disaster, threat assessment, and attention to fire risks. The overall grand mean of 3.46 indicates that media coverage of market fires has a positive and high influence on increasing traders' risk perception, even though a majority also agree that the media especially online blogs and social media contents tend to be sensationalized. This can make the messages become less educational and make the target audience lose their interest in learning about the warnings, and therefore not consider them an urgent call for emergency preparedness.

Table 5. *Perceived Influence of Exposure to Media Coverage of Market Fires on the Adoption of Fire Emergency Preparedness Measures Among Traders ($N = 372$)*

Item	Response	f	%	Mean	SD	Remark
Media reports of fire incidents have influenced me to turn off all electrical appliances and switch off the sockets at the close of business every day.	Strongly disagree	38	10.2	3.14	1.28	Agreed
	Disagree	114	30.6			
	Uncertain	34	9.1			
	Agree	131	35.2			
	Strongly agree	55	14.8			
Media reports of fire incidents have influenced me to equip my shop with fire extinguishers.	Strongly disagree	59	15.9	2.80	1.33	Disagreed



	Disagree	148	39.8			
	Uncertain	21	5.6			
	Agree	96	25.8			
	Strongly agree	48	12.9			
Media reports of fire incidents have influenced me to create emergency exits in my shop.	Strongly disagree	118	31.7	2.14	1.13	Disagreed
	Disagree	164	44.1			
	Uncertain	29	7.8			
	Agree	43	11.6			
	Strongly agree	18	4.8			
Media coverage of fire outbreaks motivates me to take fire prevention seriously.	Strongly disagree	11	3.0	3.99	1.01	Agreed
	Disagree	34	9.1			
	Uncertain	24	6.5			
	Agree	181	48.7			
	Strongly agree	122	32.8			
Media reports of fire incidents have influenced me to equip my shop with smoke detectors.	Strongly disagree	134	36.0	2.35	1.42	Disagreed
	Disagree	116	31.2			
	Uncertain	31	8.3			
	Agree	39	10.5			
	Strongly agree	52	14.0			
Grand/overall mean				2.88	1.23	Disagreed

Note: $N = 372$. f = frequency; SD = standard deviation. Decision rule: A mean of 3.00 or above indicates preparedness.

The data in Table 5 show that respondents indicated varying perceptions of influence for each measure of preparedness. Traders generally indicated that they were motivated to take fire prevention seriously due to media coverage (Mean = 3.99) and carry out daily routine measures like turning off appliances and switching off the sockets (Mean = 3.14). However, media coverage has a low influence for structural preparedness measures and costly preparedness measures such as fire extinguishers (2.80), smoke detectors (2.35), and creation of emergency exits (2.14). The grand mean of 2.88 indicates that media coverage alone has a limited/insufficient impact on driving full emergency preparedness adoption among traders.

Table 6. *Distribution of Factors Militating Against the Adoption of Fire Emergency Preparedness Measures Among Traders (N = 372)*

Item	Response	f	%	Mean	SD	Remark
The cost of fire-safety equipment, such as fire extinguishers, prevents me from adopting fire-preparedness measures.	Strongly disagree	15	4.0	3.97	1.03	Agreed
	Disagree	30	8.1			
	Uncertain	25	6.1			
	Agree	185	49.7			
	Strongly agree	117	31.5			
I have not received enough training on how to prevent or respond to fire outbreaks.	Strongly disagree	10	2.7	4.10	0.93	Agreed
	Disagree	22	5.9			
	Uncertain	18	4.8			
	Agree	192	51.6			
	Strongly agree	130	34.9			
I lack adequate knowledge about fire-emergency preparedness measures.	Strongly disagree	20	5.4	3.73	1.16	Agreed*
	Disagree	52	14.0			
	Uncertain	35	9.4			
	Agree	165	44.4			
	Strongly agree	100	26.9			
Poor infrastructure, such as a lack of water supply and narrow pathways, makes fire preparedness difficult in the market.	Strongly disagree	8	2.2	4.28	0.87	Agreed
	Disagree	14	3.8			
	Uncertain	12	3.2			
	Agree	170	45.7			
	Strongly agree	168	45.2			
I believe that fire outbreaks are unlikely to occur in my business area.	Strongly disagree	85	22.8	2.52	1.26	Disagreed
	Disagree	142	38.2			
	Uncertain	45	12.1			
	Agree	68	18.3			
	Strongly agree	32	8.6			
Grand/overall mean				3.72	1.05	Agreed

Note: N = 372. f = frequency; SD = standard deviation. Decision rule: A mean score of 3.00 or above signifies a major barrier.

Data in Table 6 show that traders affirmed that structural and resource constraints are important factors limiting the traders from adopting fire emergency preparedness measures. Poor infrastructure (Mean = 4.28) and lack of training (Mean = 4.10) were the highest militating factors followed closely by cost (3.97) and lack of knowledge (3.73). Conversely, the traders' disagreement to the statement that fires are unlikely to occur (Mean = 2.52), implying that practical, financial, and infrastructural obstacles are the primary hindrances, not complacency.

Discussion of Findings



This study examined exposure to media reports and their perceived influence on knowledge, risk perception and fire emergency preparedness among traders in selected markets in Lagos, Nigeria. The results show that radio and social media are the major channels through which traders access information about market fires. This finding implies that radio remains an accessible and reliable medium for traders because it can be used while they are simultaneously engaged in their business activities, whereas social media provides rapid, visual and real-time updates among traders in urban markets. Traders also reported paying close attention to media reports of market fires and indicated that media exposure triggers interpersonal communication, which may further enhance message recall among market traders.

The results further showed that traders perceived media coverage as effective in enhancing their knowledge of the causes of fire outbreaks, basic fire-safety equipment and emergency contact details. This finding contradicts an earlier report that traders have low awareness of the causes of market fires (Ilodiuba et al., 2017). However, media coverage was perceived as insufficient in providing practical guidance on how to manage fires and operate fire extinguishers. This indicates that traders perceive that the media cannot replace hands-on behavioural training. It suffices to say that the media focus on dramatic visual accounts of fire incidents rather than on step-by-step instruction on fire safety, confirming Sachdeva and McCaffrey's (2022) report that the media tend to focus on the emotional toll of events at the expense of factual or educational content about preparedness.

Moreover, the findings of this study established that exposure to media reports significantly increases traders' perceived risk and sense of vulnerability to fire hazards. Portrayals of burning markets and destroyed livelihoods heighten traders' threat appraisal and create a strong sense of psychological urgency. The findings confirm previous reports that media exposure shapes perceived severity, perceived vulnerability and preparedness behaviours (Kurata et al., 2022). However, a significant majority of traders agreed that media outlets sometimes exaggerate the risks of market fires. While sensational reporting may heighten the sense of urgency, it can also induce media fatigue or scepticism regarding actual threat levels. Therefore, perceived sensationalisation could distort risk perception and social learning.

The perceived influence of the media was moderate to high regarding non-financial daily habits, such as turning off electrical appliances at the close of business, and general motivation to adopt fire-safety measures, indicating high response efficacy. However, the perceived influence was low regarding capital investments in fire extinguishers, the installation of smoke detectors and the acquisition of technical skills for creating emergency exit routes, highlighting a gap in preparedness. This behavioural inaction suggests that traders seldom invest in fire safety because of low self-efficacy in carrying out safety actions and high response costs. The finding confirms previous evidence of poor fire-disaster preparedness among traders in various Nigerian markets (Okwuonu et al., 2021; Kabara et al., 2023; Ugwu, 2025) and Ghanaian markets (Ageboba et al., 2023). Traders' coping capacity appears insufficient to overcome the perceived response costs, which include financial, physical and knowledge-related barriers. Consequently, the protection motivation process may break down at the implementation stage.

This study challenges the assumption that traders deny their vulnerability to fire, as many explicitly affirmed that fires could occur in their markets. This finding is consistent with Onyejekwe et al.'s (2023) report of a high perception of fire risks in major markets in south-eastern Nigeria. However, traders perceived poor market infrastructure and a lack of formal training as the



biggest barriers limiting their preparedness for fire disasters, followed closely by the high cost of safety equipment and a lack of practical knowledge of firefighting. The high level of agreement regarding poor market infrastructure reinforces Chenube and Sule's (2026) report of highly congested layouts, narrow pathways and a lack of localised water hydrants in Lagos markets, which make it difficult to prepare for and manage emergencies. Similarly, the finding regarding a lack of practical training corroborates Daramola and Arije's (2025) claim about the absence of fire drills and safety training provided by emergency services in Lagos. Fire-safety equipment, such as extinguishers, smoke detectors and fire blankets, is often expensive, especially for small-scale traders. Even when such equipment is purchased, regular maintenance and the replacement of expired safety devices can be costly. Thus, failure to adopt emergency preparedness measures is not necessarily driven by ignorance or a belief that traders are safe; rather, it appears to be shaped by severe economic constraints, a lack of practical institutional training and highly restrictive, congested market infrastructure. Therefore, the study establishes that high threat appraisal and perceived response efficacy coexist with high response costs, which continue to hinder preparedness. It is therefore important for stakeholders to address the components of coping appraisal by reducing response costs through equipment subsidies and infrastructure upgrades, while increasing self-efficacy through hands-on training and practical safety drills.

Conclusion and Recommendations

Based on the findings of this study, the following conclusions were drawn. First, there is a high level of exposure to media reports of market fires among traders in Lagos, predominantly through radio and social media. Media reports also trigger interactions among traders in the same market, enhancing information dissemination within and across markets. Secondly, exposure to media reports of market fires is perceived to enhance traders' knowledge of the causes of market fires, basic fire-safety equipment and emergency contact details. However, it does not adequately impart practical firefighting skills, leaving traders ill-equipped to operate safety equipment, such as fire extinguishers, during emergencies. Thirdly, exposure to media reports increases traders' perception of fire risks and awareness of potential hazards, although a significant number perceive that the media tend to sensationalise or exaggerate fire reports, which may undermine long-term trust in media risk information. Fourthly, there is a disconnect between perceived media-driven knowledge and emergency preparedness. While media reports are perceived to motivate routine, non-financial safety habits, their perceived influence on the acquisition of structural safety equipment is low. Finally, the major barriers preventing traders from adopting fire-preparedness measures include inadequate market infrastructure, a lack of practical firefighting skills and the high cost of fire-safety equipment. Therefore, the study recommends the following:

1. Media organisations should partner with fire-safety experts to develop localised, action-oriented instructional content, including step-by-step pictorial guides on social media and simple audio-based demonstrations of how to operate fire extinguishers, conduct safe evacuations and store flammable materials.
2. Since traders actively discuss media reports of fires among themselves, traders' associations could leverage interpersonal communication channels for peer advocacy and the enforcement of fire-safety rules. They could establish a *Fire Safety Task Force* to conduct routine awareness programmes and preventive checks in the markets.
3. Government agencies, such as the State Emergency Management Agency (SEMA), State Fire and Rescue Services, local government councils and market leaders, should



collaborate to subsidise the cost of fire extinguishers and smoke detectors or offer flexible instalment payment plans to traders.

4. The State Emergency Management Agency and State Fire and Rescue Services should conduct on-site practical fire-safety and emergency-response training in markets to prepare traders for fire emergencies.
5. To address the significant infrastructural challenges, the state ministries responsible for physical planning and urban development, in partnership with local government authorities, should develop and enforce policies addressing illegal extensions along market walkways, the provision of clearly marked emergency exit routes and the mandatory installation of water hydrants in the designs of major markets.

Limitations of the Study

The study adopted a cross-sectional design, whereas risk perception and behavioural changes occur as continuous processes. Therefore, a longitudinal study would be necessary to monitor media framing and track long-term changes in behaviour.

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AI Use Disclosure:

Grammarly was used to proofread the manuscript.
