

Reportage of Stories on Fire Outbreaks in Ghana: An Analysis of the *Daily Graphic* and the *Chronicle*

Bright K. Gakpe¹ Patrick Y. Mahama²

¹Department of Public Relations Management, University of Professional Studies, Accra (UPSA) P.O. Box LG 149, Accra, Ghana, ²Faculty of Communications Studies.

Email of corresponding author: Patrick.mahama@upsamail.edu.gh

Abstract

This paper seeks to establish the extent and nature of newspaper coverage of not only fire outbreaks but also fire safety issues in Ghana during the period of incessant fires.

Contents of 288 editions of the *Daily Graphic* and *The Chronicle* newspapers, published in Ghana from January to June of 2009 and 2010, were analyzed from the agenda-setting, attribution framing and normative news values perspectives.

The two newspapers published a total of 47 fire outbreak stories; 57 issues relating to fire safety; and 10 other fire-related stories. Having compared the number of published fire outbreaks with the compiled statistics of the Ghana National Fire Service during the period, it was established that only 1.44 per cent of the recorded fire outbreaks were published by the newspapers. A study hypothesis that the two newspapers were more likely to publish fire outbreak stories than fire safety-related issues was not statistically supported by the collected data. It was also assumed that there was likely to be a relationship between newspaper and news coverage on fires. This was supported by the data. News articles blamed most of the fires on the Electricity Company of Ghana for serious power fluctuations and unstable power supply.

Though the media could serve as a valuable communication vehicle to provide facts about fires, the *Daily Graphic* and *The Chronicle* were unable to take advantage of the numerous fire disasters that occurred during the period to substantially inform and educate Ghanaians on issues concerning fires.

Key words: Fire outbreaks, Fire safety, Coverage, Media, Ghana.

1. Introduction

The occurrence of fire disasters is not a new phenomenon in Ghanaian history. In 1983, the fires that engulfed Ghana had been a main point of reference in the record of the country and the severe hunger that came with those fires left an indelible mark in the minds of most people (Sam-Okyere, 2010). Twenty-seven years thereafter, the nation has found itself in almost a similar situation.

Several of the recent fire outbreaks took place at very strategic state facilities, thereby making fires an issue of public concern and debate. In 2009 and 2010, there were serious fire outbreaks which destroyed the Ministry of Foreign Affairs, Kumasi Central Market, the Ministry of Information, the loading gantry of Tema Oil Refinery, offices of the Electoral Commission, the Ridge residence of former President Rawlings, among others. Most of these fires whether domestic, industrial, institutional, commercial, vehicular, or bush, came with devastating consequences, including loss of lives and properties. On December 31, 2009 for example, two children were burnt to death in a candle-lit structure in which they slept near Champion Divine Clinic at Tantra Hill, Accra (Salia and Boadu, 2009). It was alleged that the 26-year-old mother of the children left them in a locked kiosk with a lit candle to visit her boyfriend. The candle apparently lighted up other items in the kiosk, causing fire and resulting in the tragic death of the two siblings.

Fig. 1: Fire scene at Kumasi Central Market



Fig. 2: Ridge residence of former President Jerry John Rawlings on fire



source: Enochdarfahrimpong.blogspot.com(2009) Source: myjoyonline.com(2010)

In Ghana, the National Fire Service Act, 1997 (Act 537) in accordance with article 190 of the Constitution, re-established the Ghana National Fire Service (GNFS) to be responsible for preventing and managing undesired fires and making provisions for related matters, including educating Ghanaians on fire safety (GNFS, 2011). The GNFS however, comes under frequent verbal attack from both the public and the media for their inability to act promptly and bring fires under control. The problem could partly be attributed to the nation for not being able to commit enough resources towards fighting and minimising the impact of fires. There were only 45 fire tenders nationwide, few fire resistant suits and breathing apparatus and complete non-existence of hydraulic platform in the entire country for fighting fires (Oblejumah, 2010).

The persistent increase in fire related destructions calls to mind the collaborative role the media could play in not only informing the public about fire outbreaks, but also disseminating fire safety information to the public and helping create awareness about the devastating consequences of fire outbreaks. According to Akinfeleye (2008:56), the basic philosophical foundations of the mass media systems in most parts of the world include that of “information, education, entertainment, persuasion and the like.” Akinfeleye (2008) views the mass media as powerful educational tools which must assume the responsibility to state and clarify the ideals towards which society should strive. “The mass media must be thought of as common carriers with regard to public debates and attitude formation, attitude modification, and attitude change” (Akinfeleye, 2008:60).

In support of the useful role the media could play in contributing to the reduction of disasters in every society, participants at a World Conference and Roundtable held in Annenberg in Washington, USA, expressed hope that the media would focus more of its coverage on disaster prevention and reduction, instead of loss of life and damage to property (Walker 2010). Key among the issues discussed during the conference was that media throughout the world play a vital role in educating the public about disasters and facilitating discussions about disaster preparedness and response. The Conference believed that timely, accurate and sensitive communication during disasters were cost effective means of saving lives, reducing damage to property, and increasing public understanding, since such communication could educate, warn, inform and empower people to take practical steps to protect themselves from hazards. The participants recommended, among other things, that disaster mitigation organisations should develop working relationships with the media and provide the media with newsworthy events.

In the United Kingdom, the British Fire Service identified and implemented some best practices in fire prevention. The best practices were classified into eight major categories, namely, identifying and analysing high risk households, increasing staffing and training on fire prevention programmes, making home safety visits, and conducting extensive school and youth programmes. The rest were directing programmes to the high-risk elderly population, developing safer consumer products, increasing the use of fire stations for community fire safety programmes, and coordinating national and local fire safety campaigns (Schaenman, 2007). In the category of fire safety campaigns, the Service identified and used some selected local radio stations and newspapers to spread fire safety messages to ethnic populations who were the prime target audience for those media. The campaigns were intended to raise awareness of the fire problem, increase smoke alarm ownership, and change fire safety behaviours. In Scotland, a particularly clever idea was the use of real estate newspapers. The Fire Service placed pictures of partially destroyed homes among the pictures of beautiful homes that were being sold. This increased readers’ curiosity, and then delivered a message on fire safety (Schaenman (2007).

A 1999 Food and Agriculture Organisation’s (FAO) corporate documentary specified that active media coverage of unusually large fires in Indonesia, the Amazon, and Mexico, increased public awareness of these predominantly man-made environmental disasters. The smoke from the fires, which endangered public health and economies beyond national borders, also helped in focusing public attention on the fires and the need to deal with policy issues related to fires (Food and Agricultural Organisation, 2010). According to Lowrey *et al.* (2006:363),

audiences rely most heavily on television during community crises, but as perceived threat increases, dependency on newspapers increases as well. Need for deeper understanding about social consequences of a community problem drives individuals to newspapers, and the greater the dependency on newspapers, the greater the change in attitude and behaviour.

Fire outbreaks are naturally dramatic, and when they take place in someone's home, the human element that makes an event particularly newsworthy is almost undeniable (Smith, et al., (2007). The conviction that effective prevention strategies for residential fires were being underutilised and that the news media was one available communication channel to promote such strategies, motivated Smith and his colleagues to monitor four daily newspapers circulating widely in Maryland for one year. The articles which described residential fires were coded for measures of prominence, content, issue newsworthiness, reporting of causation and consequences of

the fires, in addition to inclusion of prevention messages. Smith *et al.* (2007) discovered that fires were newsworthy, with 374 relevant news articles in one-year period, 32 per cent of which appeared on the first page of a section. Most articles (88%) discussed consequences of the fires, while 58 per cent identified a causal factor. The most frequently reported causes of fires were electrical problems. Most of the stories (83%) were published as hard news reports, with 6.0 percent being feature articles. The most commonly quoted authorities were fire department officials. Only just over a third (36%) of the articles on fire included prevention information.

2.Theoretical Framework

The study was grounded in the agenda-setting assumption of McCombs and Shaw (1972) which argues that the media (mainly the news media) are not always successful at telling us what to think, but they are quite successful at telling us what to think about. Indeed the placement of full-page, color articles and top stories on fires could make it clear that Ghanaians should place fires as important issue. The theory predicts that if people are exposed to the same media, they will feel the same issues are important. In support of the agenda setting proposition for the study was Galtung and Ruge's (1965) normative theory of news value which posits that the selection and offer of prominence for an event in newspapers depend on the newsworthiness of the event. The basic tenet of the theory within the context of the study is that the selection and offer of media publicity for a fire event could be based on news values of proximity, timeliness, prominence (when the fire affects well-known personalities and places), impact and consequence (when it affects many lives and in a serious manner), or novelty (when it is strange or bizarre). Attribution framing was also deemed relevant to help understand reportage on the causal patterns since the media has the potential to attribute causes and causal responsibility of social problems, including fire disaster, in a manner that could influence what people think and how they think about the problem and the solution to the problem.

It is evident that the media could help minimise outbreaks of fire through a number of strategies. Such strategies might include the provision of compelling and startling national or local statistics that both portray the gravity of fires and influence the reader to take preventive actions. Unfortunately, there is seeming absence of empirical studies on how the print media covered fire outbreaks in Ghana. This study was, therefore, conducted to address the existing data gap and to contribute to literature that was hitherto, unavailable on the extent to which the print media in Ghana considered fires as newsworthy and had collaborated with the GNFS in disseminating fire outbreaks and safety issues to Ghanaians. Analysis of the empirical data will also provide a deeper understanding of the nature of the coverage in terms of prominence offered the fire stories, placement of the stories, size of the stories, pictorial enhancement among others. These factors are equally germane because they communicate subtly to readers on the kind of importance newspapers attach to stories on fires. The findings are expected to help inform in-house policy direction of newspaper editors and journalists on coverage of fires, serve as a primary source of information for the GNFS, the State and other fire safety advocates in their effort towards collaborating to fight the fire menace.

3.Method of Data Collection and Analysis

3.1 Design, newspaper universe and data collection

Quantitative content analysis was the approach used in collecting relevant data for this study. Various editions of the *Daily Graphic* and *The Chronicle* published from January to June of 2009 and 2010 formed the universe of the study because these were the periods during which the high-profile and incessant fires occurred. The choice of the *Daily Graphic* for the analysis was informed by the findings of a survey for Ghana Media Standards Improvement Project (GMSIP) (2009) which was conducted by the School of Communications Studies (SCS) and Media Foundation for West Africa (MFWA). Not only did the study establish the *Daily Graphic* as the most favourite or popular (44.8%) of the top ten newspapers in Ghana, but ranked it highest among all the different educational groups and was the favourite for all age groups. More than one-in-two (52.8%) respondents said they read the newspaper for information, while (14.2%) being the next largest group, though distant, said they read the newspaper for knowledge. It was therefore, reasonable to examine how the most popular newspaper was informing and equipping its readers with knowledge in relation to fires, especially when the Graphic Communication Company claimed it aimed at using its newspapers to improve lives through information and knowledge, and that it sought to do this by achieving leadership in disseminating high quality information (Graphics, 2011). The *Daily Graphic* was chosen bearing in mind that it was the flagship newspaper of the Graphic Communication Company. Publishers of *The Chronicle* on the other hand believe the newspaper had grown rapidly and attained international dimension over the years in terms of information dissemination and education to both local and international readership. The newspaper was, therefore, selected based on the assumption that its scope of information and education to its readership could be wide enough to include fire-

related issues. The print media was analysed due to its unique features. Moemeka (1991) asserts that the print media have an enduring characteristic which neither the radio nor the television has. Newspaper could be read and re-read at one's convenience, thus allowing for fuller and better understanding of what was published. Newspapers could also be stored for future use, thereby making for the preservation of materials that are considered important for future reference (Moemeka, 1991).

In total, the universe was made up of 620 editions, out of which 288 editions were selected and content analysed. The analyzed editions were selected by constructing composite week for each month within the study period. Equal numbers of editions were selected and used for the analysis because both were daily newspapers. The study, for example, sampled two Mondays (drawn at random from the four or five possible Mondays in the month of January), and two Tuesdays (drawn from the available Tuesdays in January). The process was repeated for Wednesdays through to Saturdays for the month of January and then for all other months within the study period. Lacy et al. (1995) noted that a monthly stratified sample of 12 issues was efficient sample for analysis of newspapers and magazines. Going along with the above position, 12 edition dates were selected for each month within the study period for the analysis. As part of the data gathering process, the researchers visited the headquarters of the GNFS and had a brief interaction with the Assistant Public Relations Officer of the Service, Mr. David Prince Billy Anaglatey. The interaction enabled the researchers to obtain vital and relevant statistics on fire outbreaks recorded during the periods under study. These records were used in determining how well or otherwise the newspapers had performed in covering fire outbreak stories. Data collection was undertaken using coding guide. The stories were searched for by going through all the pages of the sampled editions and manually locating all articles containing terms such as "fire," "burn," "inferno," or "flame," in the title or the lead. The units of analysis or contents coded for the study, therefore, consisted of every straight news item, feature article, opinion or editorial, and letter to the editor in which the theme of the story was fire. Every relevant story was read in its entirety while looking out for appropriate categorisation of each item. The coding schema was useful in classifying the data by simply reading and placing the categories in their designated spaces based on the codes from the alternative of categories provided. Prior to the actual coding, there was a pilot coding exercise. This was useful in checking and adjusting the categorisations on the coding sheet to make them relevant to the context in which they were to be used. Two independent coders were also trained to carry out an inter-coder reliability test. For the purpose of checking reliability, samples of the same issues, constituting about 25 per cent each of the two newspapers were offered to the independent judges. Agreement between the two coders was assessed with Holsti's formula as cited in Wimmer and Dominick (2003), which specified that reliability = $\frac{2M}{N1 + N2}$.

M in the formula represents the number of coding decisions on which the two coders agreed, while N1 and N2 represent the total number of coding decisions by the first and second coder respectively. The first check resulted in an inter-rater reliability coefficient of 0.80, while the second check resulted in a coefficient of 0.92. These produced margins of error of 0.20 and 0.08 in the first and second instances respectively. Before the second round of the coding, the coders discussed points of disagreement and arrived at a consensus, resulting in the 0.92 reliability coefficient for the second check; an indication of a good inter-rater agreement. The collection of data for the entire study lasted for four weeks. Upon completion of the coding, the data was entered into the Statistical Package for Social Sciences (SPSS) software and quantitatively analysed for trends, patterns, relationships, similarities, and differences. This was carried out through formation of various frequency distribution tables, bar charts, and pie charts.

4. Findings

4.1 Extent of Coverage of Fire Stories

A total of 47 fire outbreaks were reported by the two newspapers for the first half of 2009 and 2010. This constituted 41.2 per cent of all the stories reported. Also, a total of 57 stories relating to fire safety and prevention was published by the newspapers. This formed exactly half of all the stories reported. Some other stories which were related to fires but could neither be classified as fire outbreak reports nor issues relating to fire safety constituted less than one out of ten (8.8%) of the reported stories. Examples were stories with headlines which read: "Consider plight of fire victims– Nana Addo tells government" (Alhassan, 2009:13), "Pioneer waste company clears debris from Kumasi central market" (Asare, 2009:29), and "Support Bolga Poly fire victims" (Mumuni, 2009:9). In all, there were 114 stories on fire of which 82 were from the *Daily Graphic* and 32 were from *The Chronicle*. Compared to *The Chronicle*, the *Daily Graphic* published more stories on fire outbreaks, fire safety related issues and even stories labeled as 'other.' Some issues raised in relation to fire

safety were on the need to use qualified electrical engineers in carrying out electrical installations and wirings, installing fire extinguishers at homes and work places and training residents and workers on how to operate them, and also letting workers know the fire plan of their workplaces. Others were on the need for Ghana Standards Board to prevent the influx of sub-standard electrical cables and products, and inspection of sites and fire certificates before issuing permits for building of fuel and gas stations. Turning off electrical equipment during power outages, formation of fire volunteer squads, and the need to contact the Ghana National Fire Service through 192 and 193 telephone emergency lines for rapid response in the event of fire were also specified.

Table 1: Newspaper reports on fire outbreaks versus Fire Service records

2009				2010			
Month	% of outbreaks reported by newspapers out of Fire Service records	% of unreported fire outbreaks	Total monthly records of Fire Service	Month	% of outbreaks reported by newspapers out of Fire Service records	% of unreported fire outbreaks	Total monthly records of Fire Service
January	5 (1%)	495 (99%)	500 (100%)	Jan.	5 (1.6%)	315 (98.4%)	320 (100%)
February	3 (1%)	290 (99%)	293 (100%)	Feb.	9 (2.6%)	341 (97.4%)	350 (100%)
March	5 (1.8%)	271 (98.2%)	276 (100%)	Mar	3 (1%)	308 (99%)	311 (100%)
April	2 (0.8%)	243 (99.2%)	245 (100%)	Apr.	3 (1.4%)	219 (98.6%)	222 (100%)
May	5 (2.6%)	184 (97.4%)	189 (100%)	May	3 (1.5%)	194 (98.5%)	197 (100%)
June	1 (0.5%)	191 (99.5%)	192 (100%)	Jun.	3 (1.8%)	160 (98.2%)	163 (100%)
Total	21 (1.2%)	1,674 (98.8%)	1,695 (100%)	Total	26 (1.7%)	1,537 (98.3%)	1,563 (100%)

The figures in Table 1 show that the newspapers were able to report only 1.2 per cent of the 1,695 fire outbreaks recorded by the GNFS in 2009, leaving out 98.8 per cent. The figures for 2010 were not much different as the newspapers were able to report only 1.7 per cent of the 1,563 fire outbreaks recorded by the GNFS. In sum, the two newspapers published only about 1.44 per cent of the 3,258 fire outbreaks recorded by the GNFS. Reporting on disasters could as well serve as suitable opportunities for preventive communication. As a result, analysis was carried out to determine whether stories that specifically reported fire outbreaks also used the opportunity to include some precautionary messages. The study established that less than three out of ten (28%) of the 47 fire outbreak reports included some form of fire prevention information.

5. Nature of coverage

Almost half (48.9%) of the 47 reported fire outbreaks were residential. This, however, was far below the 1,339 residential fires recorded by the GNFS. Eleven (23.4%) commercial fires formed the second highest after residential fires, though the figure fell below the 324 commercial fires documented by the Fire Department. Bush

fires and vehicular fires had the least coverage of two stories each. However, the records from the GNFS indicated 464 and 396 for bush and vehicular fires respectively. Close to nine out of ten (88.6%) of the 44 stories on fire in 2009 were reported as straight news stories. In 2010, straight news style again was the highest, with more than four out of five (84.3%) of the 70 stories published. In 2009, not a single feature article was published on fire by any of the newspapers. In the year 2010, however, less than one out of ten (4.3%) of the stories were published as feature articles. Slightly more than half (50.9%) of the published stories were accompanied by photographs of the event or persons involved. More than seven out of ten (71.9%) of the 114 stories were placed in inside pages other than the centre spread. Of the 114 stories, 10.5 per cent each was placed at the back page and the centre spread. Front-page lead stories formed just 4.4 per cent, while front-page non-lead stories were 2.6 per cent. In relation to newshole or amount of space devoted to the stories, it was discovered that 3.0 per cent each of the 114 fire stories occupied a full page and more than a page. While 14 per cent occupied quarter of a page, the highest number of stories (39%) was placed in less than quarter of a page. Besides immediate eyewitnesses, fire officials are good sources and authorities to speak to when reporting on fire outbreaks. Of the 47 fire outbreaks reported by the newspapers, only 31.9 per cent cited fire officials as sources. Issues relating to lack of fire-fighting logistics for the GNFS were expressed in 20.2 per cent of the stories. Only 7.0 per cent of the stories made reference to congestion and lack of accessible routes for fire engines to reach the affected sites on time. The majority of stories (65.8%) however, did not mention any form of challenge as having confronted the GNFS in fighting the fires. Most news articles (27.7%) attributed responsibility for the cause of the fire outbreaks to the Electricity Company of Ghana and the generally unsafe electrical systems in the country. The Electricity Company of Ghana was specifically blamed for its numerous intermittent power outages of which some were believed to have resulted in fires. The intermittent power outages were believed to have underpinned the fire outbreaks in places of poor wiring, and in the use of unsafe electronics and small appliances. A few stories (4.3%) from *The Chronicle*, however, attributed the fires to political opponents. Those articles had semantic phrases or devices which read: “don’t rule out saboteurs of government in this calamity...too many fires beset this new administration” (Nonor 2010:1). One other example read “some party faithful started pointing accusing fingers at critics of the former President as those behind his woes” (Takyi-Boadu and Bebli 2010:15).

Two hypotheses were tested using Pearson chi-square statistical coefficient in which 0.05 (five out of 100 times) was set as the probability level since that appears to be the practice in mass media research. “A level of significance of 0.05 indicates that the researcher has 5 per cent chance of making a wrong decision about rejecting the null hypothesis or accepting the research hypothesis” (Wimmer and Dominick, 2003:269). Analyses of outcome of the tested hypotheses are presented below:

Table 2: Aspect of fire reported by Newspaper

Newspapers	Aspect of fire reported			Total
	Fire outbreak	Fire safety related issue	Other	
<i>Daily Graphic</i>	32	44	6	82
	39.0	53.7	7.3	100.0
<i>The Chronicle</i>	15	13	4	32
	46.9	40.6	12.5	100.0
Total	47	57	10	114
	41.2	50.0	8.8	100.0

$\chi^2 = 1.831$

df = 2

p = 0.400

The first assumption was that:

H₁: The two newspapers were more likely to publish fire outbreak stories than fire safety issues. Smith *et al.* (2007) for instance established that fire outbreak disasters were generally deemed more newsworthy or out of the ordinary and this reflected in their high reportage, compared to fire safety issues. According to him, fire outbreaks are obviously dramatic, and when they occur in someone's home, the human factor that makes an event predominantly newsworthy is almost undeniable. Even studies, including Kool and Ameratunga (2003) confirmed that newspapers reported a lot on fire disasters but often failed to provide information to readers on how to prevent such disasters. Brooks *et al.* (1992) similarly maintain that stories about fire outbreaks and disasters in general have been a principal ingredient of newspapers for many years. The accompanying null hypothesis that was tested read:

H₀: It was not likely the two newspapers will publish more fire outbreak stories than issues relating to fire safety. The data in Table 2 partially suggest the existence of a relationship since *The Chronicle* reported 46.9 per cent of fire outbreaks and 40.6 per cent of issues relating to fire safety, while *The Daily Graphic* reported 39.0 per cent of fire outbreaks and 53.7 per cent of fire safety issues. However, after the data was subjected to a statistical test, a chi-square value of 1.831 degrees of freedom of two, and a probability of 0.400 were produced. This means an acceptance of the null hypothesis since the level of significance was more than the generally accepted level of 0.05 for samples of 500 or less.

The second conjecture speculated that:

H₂: There was likely to be a relationship between newspaper and news coverage on fires. Brooks *et al.* (1992) believe that decisions regarding the fire stories to report in newspapers, if at all, and those to develop into major editorials may depend on the size of the newspaper. The accompanying null hypothesis says:

H₀: There was no relationship between newspaper and news coverage on fires.

Table 3: News coverage on fires by Newspaper

Newspapers	News coverage on fires		Total
	No fire story	Fire story	
<i>Daily Graphic</i>	62 43.1	82 56.9	144 100.0
<i>The Chronicle</i>	122 77.8	32 22.2	144 100.0
Total	174 60.4	114 39.6	288 100.0

$X^2 = 36.298$ $df = 1$ $P = 0.000$

The data in Table 3 above seem to suggest existence of a relationship between newspapers and news coverage on fires, as the *Daily Graphic* carried more fire-related stories than the *Chronicle*. For example, while fire-related stories published by the *Daily Graphic* were 56.9 per cent, *The Chronicle* published only 22.2 per cent. Again, while 43.1 per cent of the sampled editions of the *Daily Graphic* did not contain any fire-related story, 77.8 per cent of the selected editions from *The Chronicle* had no fire-related issue. The Pearson chi-square statistical test produced a chi-square value of 36.298, degree of freedom of one, and an accompanying probability of 0.000. The level of significance is less than the 0.05 set for the study, which means a rejection of the null hypothesis. The research hypothesis that there was likely to be a relationship between newspaper and news coverage on fires was, therefore, supported by the data gathered.

6. Discussion

6.1 Extent of news coverage on fires

The *Daily Graphic* published 50 more stories than *The Chronicle* as expected. Brooks *et al.* (1992) believe that decision making concerning the fire stories to report in newspapers, whether to report them at all, and those to develop into major articles may depend on the size of the city and its newspaper. The *Daily Graphic's* decision to publish more stories on fire as compared to *The Chronicle* could be attributed to factors including the large-size nature of the newspaper, high number of pages, large number of reporters the newspaper has throughout the country, and perhaps the newspaper's interest in reporting on environmental and social problems, including fires. The *Daily Graphic's* decision to publish more stories, therefore, does not relate to the fact that it is state-owned,

but a question of size. The overall performance of the two newspapers in terms of the number of fire outbreaks (47) published seems inadequate, considering the huge deficit as shown by the records of the GNFS and the harmful effect of fires on life and property. The newspapers seemed to have under-represented small scale fires and focused basically on a few major ones. This observation runs counter to a study by Smith *et al.* (2007) which indicated that fires were considered as newsworthy, with 374 relevant news articles in one year. Same is the discovery of Kool and Ameratunga (2003) who used fire service records and national minimum dataset to identify 14 fatal fire-related events with 19 deaths in Auckland, New Zealand. These researchers discovered that all the 14 fatal fire-related events were reported in the *New Zealand Herald* newspaper. The aspect of Kool and Ameratunga's (2003) study which, however, agrees with the current research was that the daily newspaper reports often represented missed opportunities to disseminate public health messages that raised awareness on sources of risk and means of preventing fire-related deaths. Another contradictory finding comes from Rainey and Ruyan (1992) who compared newspaper clippings in North Carolina with medical examination records of 45 residential fire deaths and found that newspapers covered 96 percent of the fire fatalities and contained a lot more information than what existed in the medical examination records on several factors, including cause of fire. The deaths recorded might have contributed to the high reportage on those fire incidents.

Rich (2000) believes one of the basic facts reporters need to gather when covering a disaster is safety precautions. Reporters need to "check with fire departments and find out about the relevant precautions that people need to observe. You could refer to dangerous conditions in the main story or in a separate story" (Rich, 2000:468). In the current study, only 28 percent of stories that specifically reported an outbreak of fire included some form of precautions. This supports a research by Smith *et al.* (2007) who found that only 36 per cent of residential fires covered by the print media for a period of one year in Maryland, included prevention messages. With reference to the current study, the assertion by Kool and Ameratunga (2003) and Smith *et al.* (2007) that newspapers were woefully deficient in providing information on fire disaster prevention, still holds.

6.2. Nature and content of the fire stories

6.2.1 Concept of source enterprise

Brooks *et al.* (1992) maintain that stories that rely on single sources are usually inadequate and that, besides individual eyewitnesses, reporters need to make every effort to talk to fire officers at the scene of fires, if they are available. In the current research, more than six in ten (68.1%) of the fire outbreak reports were published without citing fire officers as sources in any part of the story. Perhaps fire officers were not source enterprising enough in supplying journalists with steady, appropriately formatted and timely information— a necessity in today's deadline-driven world of journalism. This finding is, however, contrary to the position held by Brooks *et al.* (1992) which emphasized the need for reporters not only to establish good relationship with fire officers but take advantage of the expertise of the officers who are the investigators of fire incidents to enable the reporters secure much of the information needed. Again, the finding contradicts the discovery by Smith *et al.* (2007) in which the most commonly quoted arbiters were fire department officials, with 95 percent of the articles including a quote from a fire official. Brooks *et al.* (1992), however, identified two main challenges reporters often encounter in getting comments from fire officials. The writers noted that during fire incidents, the officer in-charge might be busy directing fire-fighters and might not be able to talk to reporters. The second challenge was that often, barriers are erected to prevent the public from coming too close to the burning structure. This does not allow reporters to come close to the fire-fighters to enable them obtain the quotes needed to improve their stories. Addressing this problem might involve delaying the stories to enable reporters talk to fire officials when the fires subdue, but this could have negative implication for deadlines. Alternatively, reporters could take telephone numbers of fire officials and talk to them later; although, this seems rather helpful in follow-up stories.

6.2.2 Challenges of the National Fire Service

Brooks *et al.* (1992) see newspaper coverage of fires and other disasters as opportunity for the media to perform its watchdog role in holding government and its agencies liable on behalf of the public. According to them, newspapers would need to report whether fire personnel were slow, poorly trained, or not efficient in their service delivery. The writers believe reporters should do a careful observation of public officials as they perform their duties so as to ask relevant questions on behalf of the reading public. There seems to be a departure from

that position as more than six in ten (65.8%) of the stories were unable to incorporate any concerns or challenges faced by fire officials in fighting the fires.

6.2.3 Types of fires reported and forms of news in which stories were presented

The high interest of the newspapers in reporting on residential fires may find some explanation in the observation of Mallonee *et al.* (1996) that most severe and fatal burn injuries result from residential fires thereby making such fires newsworthy. The residential fires were possibly considered more relevant and useful to the public due to their direct impact (emotional and physical fatalities) on lives of readers.

Straight or hard news report was the predominant form in which the newspapers published the stories. This is consistent with the discovery by Smith *et al.* (2007) in which the majority (83%) of newspaper articles on residential fires was in the form of hard news reporting, with longer feature stories forming only 6.0 per cent. The insignificant feature articles on fires create a situation where readers kept consuming largely event driven reports without getting detailed analysis on fire and fire safety issues. In explaining why reporters prefer to use straight news style, Brooks *et al.* (1992:222) observe that fires are simple to cover and report because

the subject matter lends itself to the classic inverted pyramid writing style... It is the most space-efficient story form known since it allows editors to cut stories from the bottom without destroying the story. Besides, newspapers, including *USA Today* are primarily using the inverted pyramid style because readers averagely spend only 15 to 20 minutes a day with a newspaper. Since they may stop reading at anytime, reporters need to provide the important news first so that whoever reads as little as a paragraph could know the important elements the story contains.

Brooks *et al.* (1992), however, believe most editors expect their reporters to follow up on major stories of fires, but reporters often fail to produce such retrospective articles probably due to the pressure to select newer and timely events. Rich (2000) also maintains that every major fire disaster requires follow-up stories for a number of days and that the second-day story could focus on explaining the cause if that was unclear on day-one. Should the cause still remain unclear, reporters could lead with what officials are investigating or describe clean-up attempts at the scene or even focus on rescue efforts, human interest elements, cost of rebuilding or any other related issue.

6.2.4 Pictorial enhancement and causal attribution

Photographs make enormous impact on readers, attract readers to accompanying stories about fires or disasters, and help communicate the drama of such events (Brooks *et al.* (1992). Indeed, not only do photographs enhance stories but put readers at the scene of events and often contribute to the believability of stories. A little beyond half (50.9%) of the fire stories were accompanied by photographs of the event or persons involved. This finding is slightly inconsistent with Kool and Ameratunga (2003) who found that two-thirds of *New Zealand Herald* newspaper reports of child deaths from fire-related incidents provided photographs of the events or victims. The finding, however, was a positive departure from what was found by Voight, *et al.* (1998) who investigated how newspapers reported injury events, including fires. In their study, only few (11%) of the articles included photographs. In the current research, the photographs which accompanied the stories were basically images of raging fires, debris from fires and victims of the fire disasters. Where a story focused exclusively on fire safety issue, however, the accompanying photograph was either the story maker or participants at the event where the fire safety education took place.

According to Heath (2005), framing of an issue sometimes involves both its cause and its solution. In relation to causal factors, Brooks *et al.* (1992:223) insist on the need to gather facts on “why or how it happened or who was at fault, as determined by officials in charge of the investigation” when reporters are covering any fire. In the current research, though the causes of most of the fires were unknown at the time of filing news reports, close to a third (27.7%) of the stories attributed causal responsibility to the Electricity Company of Ghana for the frequent and serious power fluctuations which were often believed to have resulted in fires. This discovery is again consistent with the study by Smith *et al.* (2007) in which the most frequently reported causes of fires were electrical problems. Indeed, Brooks *et al.* (1992) maintain that in most fire disasters, investigation may not start until the fire is extinguished and in many cases, the cause of the fire may be unknown for several hours, days or weeks and in some cases, it may never be known. A negligible number of stories from *The Chronicle* — a private newspaper, however, attempted to attribute the fires to political opponents, speculative though. The research hypothesis which speculated that the two newspapers were more likely to publish fire outbreak stories than issues relating to fire safety was not supported statistically, leading to the acceptance of the null hypothesis.

One other assumption that there was likely to be a relationship between newspaper and news coverage on fires was supported statistically, leading to the rejection of the null hypothesis.

7. Conclusion

Although Smith *et al.* (2007) believe fire outbreaks are newsworthy and this reflects in high coverage they are offered, the current study strongly established a situation where even in the period of incessant fire crisis, the *Daily Graphic* and *The Chronicle*, published stories on just a negligible number of the fires that engulfed the nation. Since reporting on fire outbreak disasters, which naturally are dramatic and newsworthy, was not on top of the agenda of the two newspapers, preventive communication also had just about similar coverage, though better than the number of fire outbreaks published. The stories primarily attributed causal responsibility of the fires to the Electricity Company of Ghana for its recurrent power fluctuations. Principally, most of the stories were denied prominence in terms of placement and size. It was evident that reporters depended less on getting the perspective of fire officials who were supposed to be experts in the domain of fire. Again, the over reliance on straight news reports denied readers the opportunity to get analytical views on the fire situation. In conclusion, even though the media could serve as valuable communication vehicles to provide facts about fires, the *Daily Graphic* and *The Chronicle* were unable to take advantage of the numerous fire disasters that occurred during the period under study to substantially inform and educate Ghanaians on issues concerning fires. To this end, we propose that fire safety advocates develop working relationship with the media and work towards ensuring that the public is constantly informed about fire disasters and that, attention-grabbing prevention messages feature prominently in the media to promote public education.

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