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Fatal Encounters: A Content Analysis of Newspaper Depictions of the Deaths of Unarmed People of Color at the Hands of Law Enforcement or Security Personnel

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Abstract

Research has been conducted for several decades on the framing of stories in the media. This study furthers that field by analyzing the way newspaper articles report on the deaths of unarmed people of color at the hands of law enforcement and security personnel between 1999 and 2017 to determine if local and national print media frame these stories using similar terminology and concepts. Tabular and graphical analysis from the Leximancer program, as well as statistical analysis (Chi-square, $p < 0.0001$), all demonstrate that local and national newspapers do not use similar terminology and concepts when presenting these stories. Therefore, the null hypothesis is rejected.

Key words: Print media, framing, law enforcement, deaths, Leximancer

Introduction

Trayvon Martin, Philando Castile, Alton Sterling, and Freddie Gray were all unarmed people of color who lost their lives after an interaction with law enforcement or security personnel. They are also names most of the public learned due to the extensive media coverage their situations received. One might consider these occurrences to be the kind of thing about which only a local audience would care. However, as Vakili (2016) writes, national media cover local events when they believe it is either interesting or important to a national audience. Because many people in the US have formed opinions on these and similar cases based in part on the way that the media have portrayed them, the authors of this study wanted to know what that media coverage looked like. They also wondered if there were differences in the ways these stories were presented to the public based on the proximity of the newspaper to the story. The authors agree with Vakili (2016) when he says that while newspapers are no longer the primary vehicle for news delivery that they

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once were, they continue to play an important role in the distribution of information. Not only do they distribute this information, but they also put a frame around it, potentially influencing audience reaction. Formally our research question is, "Do local and national newspaper articles frame reports of deaths of unarmed people of color at the hands of law enforcement or security personnel using similar terminology and concepts?"

Literature Review

Framing is commonly understood as the ways that material can be presented to suggest how the audience should understand it (Jacobsen Koepke, 2009). Entman (2005) tells us that some aspects of a story are highlighted while others are downplayed to drive a certain interpretation of the story. Meyers (2004) reminds us that facts do not have inherent meaning. Meaning is acquired as the facts are organized into stories. This organization can be done via the media, and it shapes society and how those within the society understand events (Lee & Solomon, 1990). Further, framing has been demonstrated to influence public opinion (Iyengar & Simon, 1993).

Many people in the U.S. have traditionally trusted and believed that which is reported in newspapers (Gitlin, 2003). Even though one regularly hears the accusation of "fake news", this is usually directed at social media and online sources. For example, in Hunt's (2016) article, she addresses many aspects of "fake news", all of which are attributed to Reddit, 4chan, Twitter, online message boards, Facebook and "the social web". In fact, she clearly contrasts these outlets with such traditional newspapers as the *New York Times* and the *Washington Post*. Thus, the trust that many in the US have for mass media allows us to continue to believe they are socially responsible and report the facts objectively (Ehrlich, 2005). We regularly assume they have more insight into the matters being reported than our experiences give us (Lee & Solomon, 1990), and this leaves us open to the interpretations of those who write and present the stories.

Most people have an inherent understanding that not all the news can be reported. Thus, they further trust that the topics presented by the media are appropriately important and the facts were chosen with care. Newspapers have been known to criticize various sides of issues to maintain the impression that the reporting is fair and objective (Jacobsen Koepke, 2009). Yet the very telling of a story by a person means this is not possible (Vakili, 2016). Humans bring bias with

them, and this bias can be seen in the decisions made about which details will be included in a story and which will be excluded in an effort to keep the audience interested, suggesting how the information should be interpreted (Jacobsen Koepke, 2009). Stories are hung on a "peg" (Gitlin, 2003), or placed in a context that readers will understand. Thus, very complex information may be simplified (Gitlin, 2003), leading to additional shaping of opinions due to a lack of exposure to the full depth and breadth of an event. Pipkins (2017) reports that the media guide many audience members in their understanding of social problems by the very way that they define the problems themselves. As these messages are reinforced over time, the public begins to consider their view to be "common sense" (Gitlin, 1979). What is a concern to the present study is the "common sense" view applied to interpretations of the deaths of people of color at the hands of law enforcement and security personnel.

Van Gorp (2007) tells us that frames limit the potential explanations an audience will use to evaluate an event. Thus, it is important to understand what frames have been used to understand race and law enforcement to date. Mills (2017) reported that as far back as 1962, Malcolm X suggested that the media was used by the police to depict Black people as criminals. We also tend to see law enforcement and security personnel as warriors or "…soldiers engaged in battle with the criminal element" (Sinyangwe, 2015, p. 7). The media has generally been believed to reflect the values of white upper-class society (Alexander J. C., 2003). It makes sense that they have long supported the "law and order" narrative in which law enforcement and security personnel are held in high regard as protectors and those who keep their communities safe from crime. News reports that reinforce this "party line" are highly likely to persuade a large portion of their audience (Iyengar & Simon, 1993). These two "common sense" views intersect in cases when the officers report believing that a person was armed when that was not true, which happens more often when the person was Black.

Cowart, Saunders and Blackstone (2016) performed a content analysis of the Twitter feeds of nine major media outlets for a month following the shooting of Michael Brown, hypothesizing that more images would fall under the "law and order" classification than any of the other categories they had identified (violence, civil liberties, talking heads, or grieving/coming together). They were unable to support that hypothesis, finding that the "violence" category accounted for more of

the images while "law and order" was a close second in the ranking. Interestingly, they also found that most images separated police and protesters rather than depicting them both in the same image, suggesting a narrative of opposing forces and reinforcing our earlier discussion of the depiction of law enforcement personnel ready for conflict, as soldiers or warriors in battle.

Several researchers have investigated differences in national media coverage and local media coverage of events that can be said to have a racial component. Dill and Wu (2009) examined front-page newspaper content for the two weeks following Hurricane Katrina searching for the assignment of blame for suffering and damage. The local papers printed more content about death and injury, with rescue/relief/evacuation matters coming in second. National newspapers primarily printed content dealing with the distress suffered by the displaced residents, crime in the city, and the failure of the government.

Klahm, Papp and Rubino (2016) conducted research similar to the present study, performing a content analysis of newspaper articles covering police shootings between January 2014 and April 2015. Rather than explicit references to race, they found that the stories were more likely to mention officer misconduct, less likely to mention criminal history, and less likely to mention the possession of a weapon when the suspect was Black than when the suspect was White.

Holody, Park and Zhang (2013) conducted a study of the framing of race in coverage of the Virginia Tech shootings. They found that the national newspapers included in the study were more likely than the local newspapers to mention the shooter's race and to do so in a more prominent way. Similarly, Vakili (2016) performed a content analysis of *The New York Times* (national) and *The Baltimore Sun* (local) and found that although both national and local coverage of the Freddie Gray situation framed race through negative stereotypes, national articles were more likely to use race as a frame than local articles were. The national articles suggested that his race was the reason for his death while local articles attributed his death to his injuries and, on occasion, his own behavior.

To date, research has looked either at a shortened time frame or individual events to compare media coverage of these cases. This study expands both the time frame and number of cases to

present a more comprehensive picture of this field. Additionally, this study analyzes the data and reports on the findings using multiple methods to add robustness to the results.

Method

Research Design

The storehouse of human knowledge and experience is vast, complex, messy, and growing exponentially. To cope with the information explosion, scholars in many knowledge domains rely on sophisticated information technologies to search for and retrieve records and publications pertinent to their research interests. But what is a scholar to do when a search identifies hundreds of documents, any of which might be vital or irrelevant to his/her work? More and more, scholars are turning to automated textual (i.e., content) analysis technologies to achieve what they do not have time to do themselves (Thomas, 2014). This study used Leximancer, an automated textual analysis technology, to identify and characterize relationships between concepts (e.g., police, shooting, gun) in hundreds of U.S. newspaper articles, a body of work large and complex enough to challenge the most systematic, reliable, and unbiased reader.

There are several reasons why a scholar would want an automated system for content analysis of documents (Smith & Humphreys, 2006). Researchers are subject to influences that they are unable to report which may lead to subjectivity in data analysis and the interpretation of findings (Nisbett & Wilson, 1977). Limiting researcher subjectivity often involves extensive investments of time and money to address interrater reliability and other sources of bias. One goal of automated content analysis is to reduce this cost and to allow more rapid and frequent analysis and reanalysis of text. A related goal is to facilitate the analysis of massive document sets and to do so unfettered by a priori assumptions or theoretical frameworks used by the researcher, consciously or unconsciously, as a scaffold for the identification of concepts and themes in the data (Zimitat, 2006). Since textual analysis technologies operate directly on words (as well as other symbols), a rationale for inducing relationships between words is needed. Beeferman, Berger, & Lafferty (1997) observed that words tend to correlate with other words over a certain range within the text stream. Indeed, a word may be defined by its context in usage (Leydesdorff & Hellsten, 2006). For instance, few North Americans would have trouble completing the sentence, "A breakfast food of lightly fried batter disks served with butter and syrup is called a … (*pancake*)."

This study asked the research question, "Do local and national newspaper articles frame reports of deaths of unarmed people of color at the hands of law enforcement or security personnel using similar terminology and concepts?" In addressing this question, a research design was developed that went beyond counting concept occurrences as isolated events to characterizing the strength of co-occurrence relationships between concepts and their respective media sources. Data analysis was conducted using three approaches (tabular, graphical, and statistical), each of which provides a different perspective of the relationships between the discovered concepts in the local and national print media.

In tabular format, co-occurring concepts are presented as word lists in table columns (see Table 1). Each column lists the most frequently occurring concepts appearing in articles from the indicated sources. In an informal manner, the lists may be compared and concepts common to both media sources marked. The scope of this analysis is limited to an intuitive awareness of the extent to which the lists resemble one another.

Table 1

Concepts Associated with Different Sources

Source 1	Source 2
concept1	concept21
concept2	concept22
concept3	concept3
concept4	concept23
concept5	concept24
concept6	concept1
…	…

In graphical format, co-occurring concepts are represented in network spanning trees, or concept maps (see Figure 1). In these maps, concepts, individual files, and file folders appear as circular nodes. Concepts positioned closely to one another co-occur frequently. Concepts more widely separated co-occur less frequently. Segments joining nodes identify the most likely co-occurrences associated with those concepts. The same principles apply to the positioning of the file source folders, FOLDR1_localword and FOLDER1_natlword. The scope of this analysis, while still intuitive in interpretation, employs both Bayesian and machine-learning algorithms to depict associations between concepts and sources. In this study, graphical representations like Figure 1

were used to identify concepts close to the source folders and, therefore, characteristic of the articles in those sources and those which were "in the middle" and, therefore, less indicative or diagnostic, so to speak.

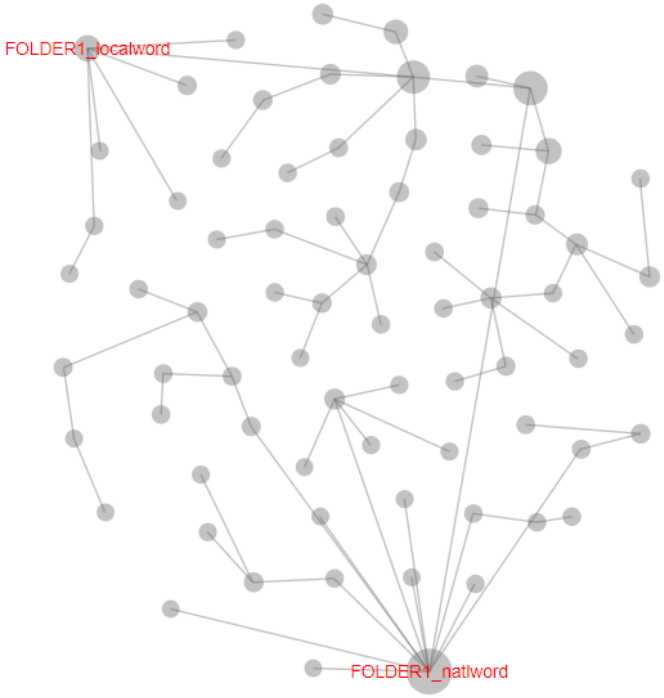

Figure 1 Network Spanning Tree / Concept Map

The Chi-square test of association compared the relative frequencies of occurrence of several concept clusters. According to Lowry (2018),

> …when observed items are sorted according to two or more separate dimensions of classification concurrently, they are said to be cross-categorized. The most efficient way to represent cross-categorized frequency data is with what is known as a contingency table. When chi-square procedures are applied to a contingency table of this sort, it is typically with the aim of determining whether the two categorical variables are associated; hence the name of this version, the chi-square test of association.

In this study, the Chi-square test of association was used to determine the probability that both the local and national data were drawn from the same population of articles.

Sample

The authors compiled a list of people of color who lost their lives during the period 1999–2017 following interactions with law enforcement or security personnel. This was a difficult task because there is no comprehensive list of such victims in the US. The authors relied on information found in a variety of sources. These included the online databases Fatal Encounters and Operation Ghetto Storm, the Hip Hop and Politics website, The Root website, victims listed by McCarthy (2015a) and Alexander (2016), and personal knowledge gained through traditional media reports and social media discussions. Lists of the victims, local and national newspapers, and articles referenced in this study may be found at https://mathedcom.wordpress.com/shootings/ in the Appendices. Appendix A identifies the victims.

Given the list of victims, the authors selected newspapers recognized as local media. Selected national newspapers were each associated with major metropolitan areas. To achieve a national sample, the authors partitioned the US into eight distinct geographic areas and selected the most recognizable newspapers from each. Consequently, the northwestern and southwestern coastal US, the northeastern and southeastern coastal US, two north-central US regions, and two south-central US regions are represented. The list of newspapers accessed may be found in Appendix B on the website referenced above.

Articles were then selected for analysis. While we are aware of the function of repetition in the success of making meaning and shaping opinions, we believe that the initial presentation of a story sets the stage for how it will be interpreted. Thus, we chose to focus solely on the first reporting of each case in each newspaper. Each victim's name was entered into the search engine of the website for each of the eight national newspapers and the local newspaper associated with the case. The article with the earliest date of publication was chosen for inclusion in this study. A coding system was developed to identify the victim and the newspaper, and each article was saved as an Adobe Portable Document Format (.pdf) file using the appropriate code. With a list of 97 victims, we felt that selecting a smaller sample would not necessarily provide representative results and decided to include all the pertinent cases for analysis. Thus, there was a potential population size of 834 articles. However, not all newspapers reported on all cases as listed. Therefore, the number

of articles reviewed was 350, with 85 local articles and 265 national articles. The list of articles included in the data analysis can be found in Appendix C on the website referenced previously.

To compare the content of national articles with local articles, each corresponding file was saved to a comprehensive group folder. In other words, all 85 individual local files were saved to a single "local" folder and all 265 individual national files were saved to a single "national" folder, as the researchers saw no need to identify individual articles for this project. These folders were then uploaded to Leximancer for analysis. To further strengthen the qualitative content analysis, the quantitative Chi-square test of association was also performed on the data.

Data Analysis

Using Bayesian statistical methods, Leximancer automatically extracts a dictionary of terms from source documents, discovers concepts, and constructs a thesaurus of terms associated with each concept using Boolean algorithms. Concepts identified in this manner are unbiased, robust statistical artifacts and are depicted graphically in Leximancer as concept spanning trees. In these trees, concepts appear as circular nodes, frequent co-occurrences appear as segments, and concept nodes positioned near to one another co-occur more frequently than more widely separated concepts. Document files and/or folders are positioned in the trees using similar principles to facilitate identification and interpretation of relationships between concepts and documents.

Leximancer treats words as collections of symbols and analyzes the occurrence and co-occurrence of words across the entire set of documents submitted for analysis. As a metaphor of this process, imagine Leximancer concatenating a set of documents and treating their content as a single string, while maintaining the original structure of each document in case it is needed for further analysis. Leximancer begins by eliminating parts of speech (e.g., a, an, it, the, those, is, was, were, etc.) that, while necessary for sentence structure and meaning, are unrelated to the co-occurrence of other words. It counts the number of occurrences of each word and builds a thesaurus from the "concept seeds", or the words that occur most often. It then looks for words that co-occur, either in the same sentence or adjacent sentences. When a threshold of frequency is found, the program creates a concept. Metaphorically, concepts in Leximancer are collections of words that generally travel together throughout the text. Presented with a list of discovered concepts, the researcher may add

(e.g., acronyms), delete (e.g., Figure, Table, pp., etc.), or merge concepts (e.g., teacher/teachers, instructor/instructors), thereby introducing a certain level of informed bias.

Thomas (2014) cites several studies in which Leximancer provided the analysis of textual data. These studies looked at the progress of design science research in academic conference proceedings papers, the evolution of international business paper content and the current state of research on data quality. Thomas has conducted his own research using Leximancer. In one study, he analyzed papers from the annual meetings of the Society for Information Technology in Education to determine the emergence of themes and concepts (Thomas, 2014). In another, he analyzed journal articles and proceedings papers on the use of technology in math and science distance learning courses to determine if those fields are using the same language, so to speak (Thomas, 2018). Thomas, Handy and Stols (2017) also used Leximancer to analyze scholarly articles, reports, and publications dealing with mathematics education in South Africa to determine the various voices and communities of thought discussing it. It is this type of work that provides a methodological foundation for the present study.

Findings

Tabular Findings

Leximancer reports identify discovered concepts using both tabular and graphical representations. Table 2 presents a complete list of the 63 discovered word-like (as opposed to name-like) concepts in an ordered (by count) list. In this table,

- *concepts* are collections of words that travel together in the text;
- *count* denotes the total number of content blocks containing the given concept; and
- *relevance* denotes the percentage frequency of text segments which are coded with that concept, relative to the frequency of the most frequent concept in the list.

The relatively frequent use of the concepts *police, officers, shooting, shot*, and *man* suggests that newspaper reports emphasize actors and actions more than complex concepts like *community* and *justice*.

Table 2

Ranked Concepts: All Newspapers

Word-Like	Count	Relevance	Word-Like	Count	Relevance
Police	3028	33%	Attorney	268	03%
Officers	2850	31%	community	262	03%
Shooting	1453	16%	department	257	03%
Shot	1174	13%	Law	255	03%
Man	860	09%	Down	238	03%
Fired	698	08%	Incident	236	03%
Charges	667	07%	Officials	231	03%
investigation	665	07%	News	231	03%
Killed	662	07%	Men	224	02%
Gun	659	07%	Murder	219	02%
Death	658	07%	Statement	215	02%
Black	653	07%	Outside	212	02%
Family	581	06%	Happened	212	02%
Video	573	06%	Scene	211	02%
Time	474	05%	Civil	206	02%
Report	472	05%	Night	193	02%
Case	467	05%	Including	186	02%
Car	447	05%	Home	186	02%
People	419	05%	Members	184	02%
Fatal	367	04%	Woman	174	02%
Told	364	04%	Son	174	02%
Released	357	04%	Several	171	02%
Force	355	04%	Public	164	02%
Called	348	04%	Heard	158	02%
Unarmed	342	04%	Decision	149	02%
City	338	04%	Mother	148	02%
Died	298	03%	Justice	142	02%
Involved	273	03%	Head	140	02%
Tried	273	03%	Saying	136	02%
White	272	03%	Life	134	01%
Jury	270	03%	Body	133	01%
Day	268	03%			

Tables 3 and 4 offer insights into the differential uses of concepts in *local* and *national* reports. In Table 3, the 20 most likely concepts to occur in *national* and *local* text blocks are presented. Note that only 8 (noted in red) of the 20 concepts appear in both media formats.

Table 3

Twenty Concepts likely to occur in National and Local Reports: 8 duplicates (Red)

National	Local
black	Fatal
justice	Scene
video	Involved
white	Unarmed
civil	investigation
unarmed	Murder
jury	Video

city	Black
life	Day
decision	White
community	Outside
department	Man
law	Charges
including	Released
gun	Death
force	Night
told	Police
men	City
day	Officials
death	Community

Table 4 lists the 20 concepts most likely to co-occur with the concept *police.* Note that there are no duplicates between media formats. This strongly suggests that reports framed by national and local print media employ different concepts to describe the deaths of unarmed people of color by police.

Table 4

Twenty concepts most likely to co-occur with the concept police

National	Local
black	Scene
justice	Woman
video	Murder
white	Night
civil	Home
unarmed	Several
jury	Heard
city	Incident
life	Head
decision	Officials
community	Members
department	investigation
law	Involved
including	Called
gun	Time
force	Mother
told	Tried
men	Car
day	Died
death	Shooting

Graphical Findings

The concept map seen in Figure 2 collapses the 350 files used in the study into *national* and *local* file folders to avoid burying the 63 discovered concepts in a presentation of the article titles. Each folder icon represents the aggregated content of its sample documents. The most striking feature

of Figure 2 is the diametrical positioning of the *national* and *local* file folders. In this representation, the proximity of a given concept (e.g., scene) relative to a given folder (e.g., local) indicates frequent occurrence of the concept in the documents of the *local* folder. Conversely, the separation of a given concept (e.g., scene) and a given folder (e.g., national) indicates infrequent occurrence of the concept *scene* in the documents of the *national* folder. An inescapable impression is that local and national reports differ systematically with respect to the concepts they use to frame their stories.

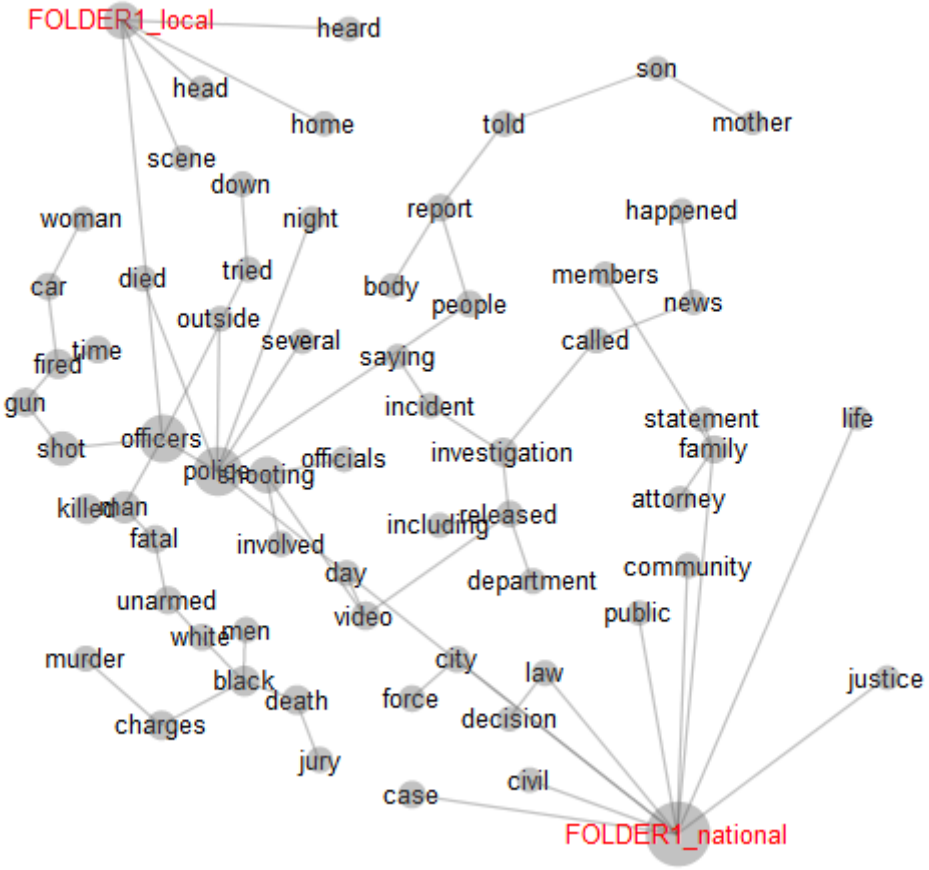

Figure 2. Concept Map

In Figure 3, the concept map is spanned by a set of colored circles denoting sets of co-occurring concepts called *themes*. Each theme is named according to its most prominent concept: *police, report, family, case, son*. Unlike concepts, which are robust statistical artifacts, themes are convenient organizational representations generated by Leximancer with some input from the researcher. Like "a view from 10,000 feet", themes provide a setting for intuitive generalization.

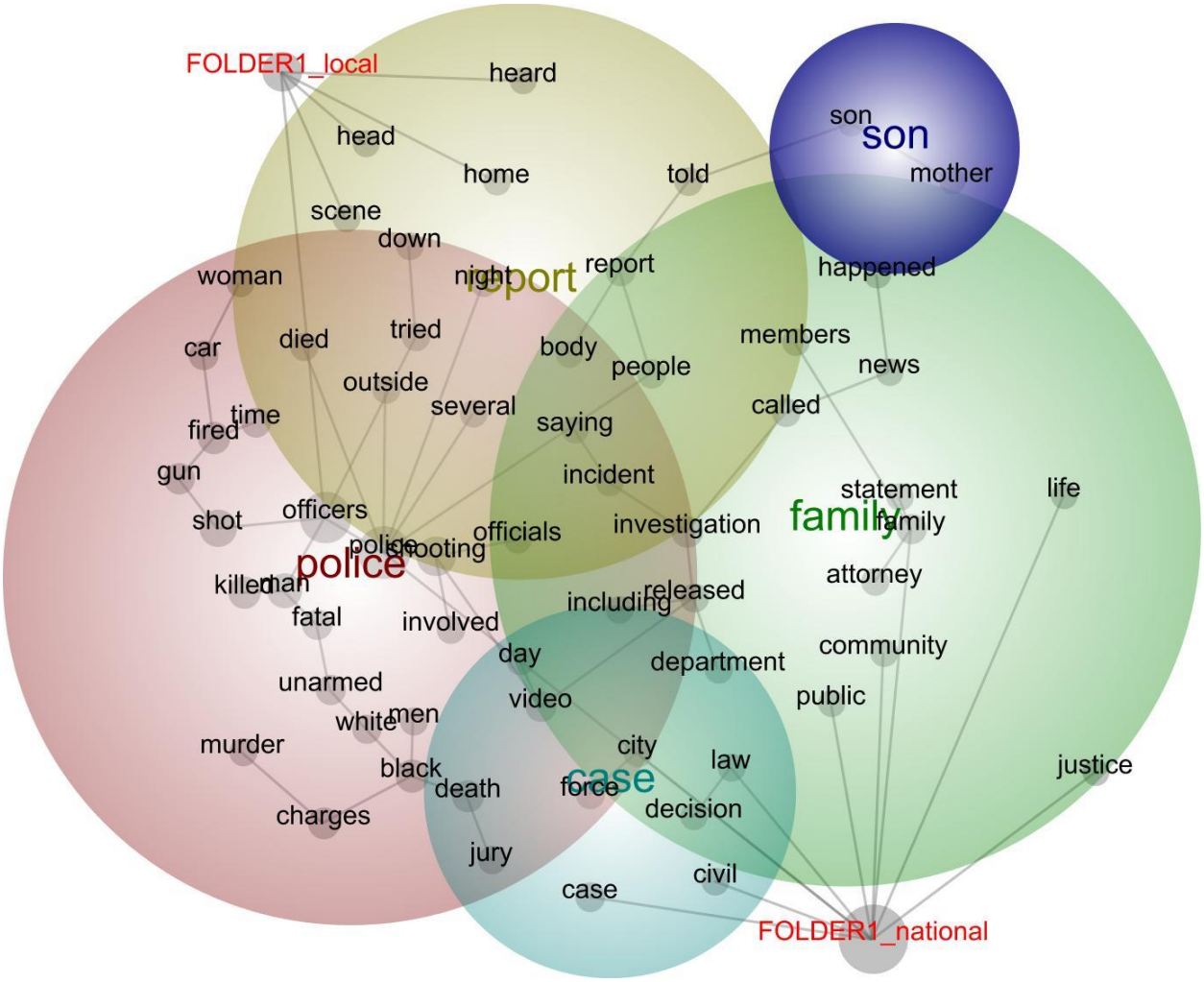

Figure 3. Concept Map with Themes

Statistical Findings

To achieve a higher-level perspective, frequency data related to the occurrence of the concepts *police, black, white, shooting, shot, fired, gun, death, killed, fatal, murder, justice, officials, jury*, and *attorney* were aggregated into five clusters as seen in Table 5: police, race, shooting, death, and justice.

Table 5

Frequencies of Occurrence of Key Concept Clusters

	Police	Race	Shooting	Death	Justice
	Police	Black	Shooting	Death	Justice
		White	Shot	Killed	Officials
			Fired	Fatal	Jury
			Gun	Murder	Attorney
National	3768	827	3007	1427	720
Local	1019	233	355	527	147

The null and alternative hypotheses used in the chi-square test of association were

- H_0: Local and national print media employ similar terminology and concepts to describe and characterize incidents involving the deaths of unarmed people of color and subsequent legal proceedings; and
- H_A: Local and national print media employ different terminology and concepts to describe and characterize incidents involving the deaths of unarmed people of color and subsequent legal proceedings.

The data presented in Table 5 was entered into the online interface of Vassarstats (Lowry, 2018) and the analysis reported as seen in Table 6.

Table 6

Vassarstats Chi-square Test of Association 1

	Police	Race	Shooting	Death	Justice	Totals
National	3768	827	3007	1427	720	9749
Local	1019	233	355	527	147	2281
Totals	4787	1060	3362	1954	867	12030

Specifying $\alpha = 0.01$, $df = 4$, and $X^2_{critical} = 13.28$, a test statistic of $X^2_{obtained} = 261.44$ was returned using the Vassarstats online statistical analysis suite (http://vassarstats.net/newcs.html). An associated *p-value* < 0.0001 was obtained. Accordingly, the null hypothesis was rejected in favor of the alternative hypothesis: Local and national print media employ different terminology and

concepts to describe and characterize incidents involving the deaths of unarmed people of color and subsequent legal proceedings.

Table 7

Vassarstats Chi-square Test of Association 2

	Police	Race	Shooting	Death	Justice
National	-2.9%	-3.7%	+10.4%	-9.9%	+2.5%
Local	+12.3%	+15.9%	-44.3%	+42.2%	-10.6%

Table 7 identifies the degree to which observed cell frequencies differ from the values needed to support the null hypothesis. For instance, the observed frequency of concepts in the local print media shooting cluster is 44.3% too small relative to the national print media shooting cluster under the null hypothesis. Further examination suggests that the local newspapers say less about the shooting itself and more about the death of the victim than the national newspapers.

Limitations

There are several limitations that potentially impact the findings of this study. First, the lack of reliable data regarding the number of people in the United States who are shot by law enforcement personnel each year is notable (Sinyangwe, 2015; McCarthy, 2015a; McCarthy, 2015b; Barry & Jones, 2014; Lowery, 2014). This not only applies to victims who were unarmed, but also to all people who were victims of these shootings. Although attempts have been made to collect data on "arrest-related deaths" (McCarthy, 2015b, p. 2), they have not been successful to date. The average person in the United States is more likely to learn about these events from either the traditional media or social media than he or she is to hear it from law enforcement (McCarthy, 2015a). While such reporting may be done, there are a variety of city, county, and/or state requirements that do not lead to a comprehensive national picture of this issue.

Without a reliable count of officer-involved shootings, it is difficult to compile a list of the deaths involving unarmed victims and, further, the racial identity of those victims. This also leaves out the deaths of people who were not shot by law enforcement personnel but nevertheless died while in their care. Further, it does not address deaths attributed to security personnel who are not

technically members of the law enforcement community. For purposes of this study, the authors attempted to create a list of victims that was as accurate as possible. In addition to the steps outlined in the discussion of methodology, the authors reached out to the National Association for the Advancement of Colored People (NAACP), the Black Lives Matter movement, the Marshall Project, and the Southern Poverty Law Center as potential sources for a reliable list of victims. None of those organizations was able to assist with such a list. Without the certainty of a complete accounting of victims, it is possible that some newspaper coverage that could have altered the outcome of the data analysis was missed. However, the potential for missing data should not deter scholars from a study of this type that can provide a description of what can be seen in the known data.

A second limitation is the number of victims who did not receive coverage in either a local or a national newspaper. Eight of the ninety-seven victims received no coverage at all in the newspapers chosen for the study. The other stories did not necessarily receive equal coverage in all the newspapers under review, either in quantity or quality. Both of these could have led to biased outcomes in the data analysis. While the lack of coverage of some of these cases could potentially open a dialog on the lack of concern for the death of an unarmed person of color, the authors do not feel that such a gap in information negates the descriptive findings of this study.

Finally, a number of the newspaper stories were attributed to The Associated Press or other wire services rather than original works written by staff reporters. While this has the possibility to skew the results, it should also be noted that the choice of which, if any, articles to include regarding each victim is made by the individual newspapers. Thus, the choice of how to present the information to the audience remains a local one.

Conclusions

As the reader can see from both the graphical and statistical analysis of this data, the authors have demonstrated that there is a marked difference between local coverage of these deaths and national coverage of the same stories. This further suggests that there may be a difference in audience understanding of these events due, at least in part, to the difference in coverage. If one agrees that

public opinion has an effect on the actions of others, such as law enforcement and security personnel, then one must understand how those opinions are formed.

There is much to be learned about race relations in the United States, as well as public sentiment regarding law enforcement and security personnel, by analyzing newspaper articles. The authors are planning additional research on newspaper coverage of the deaths of unarmed people of color that will address the sex of the victim, the coverage that exists before and after an incident happens locally, a comparison of local coverage when the law enforcement member responsible is indicted versus not indicted, and a comparison of coverage by geographical region in the US. The authors would like to invite others to join them on this journey. Unfortunately, it appears that there is no end in sight to the names of victims to be included in future research. At least eight unarmed people of color have been killed by law enforcement personnel in the first six months of 2018. The names Danny Ray Thomas, Decynthia Clements, Stephon Clark, Saheed Vassell, Diante Yarber, Claudia Gomez Gonzalez, Antwon Rose, Jr., and Anthony Marcel Green have already been added to the list from which these researchers work.

References

Alexander, B. (2016). Introduction: "Hands up! Don't shoot!": Policing race in America. Cultural Studies - Critical Methodologies, 16(3), 239-244.

Alexander, J.C. (2003). The sociology of news. New York: W.W. Norton & Company.

Barry, R., & Jones, C. (2014, December 3). Hundreds of police killings are uncounted in federal stats. Retrieved from Wall Street Journal: https://www.wsj.com/articles/hundreds-of-police-killings-are-uncounted-in-federal-stats

Beeferman, D., Berger, A., & Lafferty, J. (1997). A model of lexical attraction and repulsion. In Proceedings of the eighth conference on European chapter of the Association for Computational Linguistics, pp. 373-380.

Cowart, H., Saunders, L., & Blackstone, G. (2016). Picture a protest: Analyzing media images tweeted from Ferguson. Social Media + Society (Oct-Dec), 1-9.

Dill, R., & Wu, H. (2009). Coverage of Katrina in local, regional, national newspapers. Newspaper Research Journal, 30(1), 6-20.

Ehrlich, M. (2005). Shattered glass, movies, and the free press myth. Journal of Communication Inquiry, 29(2), 103-118.

Entman, R. (2005). Media and democracy without party competition. In J. Curran, & M. Gurevitch (Eds.), Mass media and society (4th ed., pp. 251-270). London: Oxford University Press.

Gitlin, T. (1979). Prime time ideology: The hegemonic process in television. Social Problems, 26(3), 251-266.

Gitlin, T. (2003). The whole world is watching: Mass media in the making and unmaking of the New Left. Berkeley: University of California Press.

Holody, K., Park, S., & Zhang, X. (2013). Racialization of the Virginia Tech shootings. Journalism Studies, 14(4), 568-586. doi:10.1080/1461670X.2012.726499

Hunt, E. (2016, December 17). What is fake news? How to spot it and what you can do to stop it. Retrieved May 4, 2018 from The Guardian: https://www.theguardian.com/media/2016/dec/18/what-is-fake-news-pizzagate

Iyengar, S., & Simon, A. (1993). News coverage of the Gulf crisis and public opinion. Communication Research, 20(3), 365-383.

Jacobsen Koepke, D. (2009). Do you know what it means? A frame analysis of the New Orleans Times-Picayune's articles for the year following Hurricane Katrina. (Doctoral dissertation). Retrieved from https://search.proquest.com. doi:3371265

Klahm IV, C., Papp, J., & Rubino, L. (2016). Police shootings in black and white: Exploring newspaper coverages of officer-involved shootings. Sociology of Crime, Law and Deviance, 21, 197-217.

Lee, M., & Solomon, N. (1990). Unreliable sources: A guide to detecting bias in news media. New York: Carol Publishing Group.

Leydesdorff, L. & Hellsten, L. (2006). Measuring the meaning of words in contexts: an automated analysis of controversies about 'monarch butterflies', 'frankenfoods', and 'stem cells'. Scientometrics, 67(2): 231-258.

Lowery, W. (2014, September 8). How many police shootings a year? No one knows. Retrieved from Washington Post: https://www.washingtonpost.com/news/post-nation/wp/2014/09/08/how-many-police-shootings-a-year-no-one-knows

Lowry, R. (2018). VassarStats: Website for statistical computation. Retrieved fromwww.vassarstats.net.

McCarthy, T. (2015a, March 21). The counted: Inside the search for the real number of police killings in the US. Retrieved from The Guardian: https://www.theguardian.com/us-news/2015/mar/21/police-killings-us-government-statistics

McCarthy, T. (2015b, March 18). The uncounted: Why the US can't keep track of people killed by police. Retrieved from The Guardian: https://www.theguardian.com/us-news/2015/mar/18/police-killings-government-data-count

Meyers, M. (2004). Crack mothers in the news: A narrative of paternalistic racism. Journal of Communication Inquiry, 28(3), 194-216.

Mills, C. (2017). Framing Ferguson: Fox News and the construction of US racism. Race & Class, 58(4), 39-56.

Nisbett, R.E. & Wilson, T.D. (1977). Telling more than we can know: verbal reports on mental processes, Psychological Review, 84(3): 231-259.

Pipkins, M. (2017). "I feared for my life": Law enforcement's appeal to murderous empathy. Race and Justice. doi:10.1177/2153368717697103

Sinyangwe, S. (2015, May 26). Why do US police keep killing unarmed black men? Retrieved from BBC: http://www.bbc.com/news/world-us-canada-32740523

Smith, A. & Humphreys, M. (2006). Evaluation of unsupervised semantic mapping of natural language with Leximancer concept mapping, Behavior Research Methods, 38(2): 262-279.

Thomas, D. (2014). Searching for significance in unstructured data: Text mining with Leximancer. European Education Research Journal, 13(2), 235-256.

Thomas, D. (2018). Technology in mathematics and science distance education: Automated textual analysis of articles and proceedings papers using Leximancer. The Eurasia Proceedings of Educational & Social Sciences, 9, 28-35.

Thomas, D., Handy, H., & Stols, G. (2017). Mathematics education in South Africa: Many perspectives, many voices. In M. Shelley, & M. Pehlivan (Eds.), Education Research Highlights in Mathematics, Science and Technology 2017 (pp. 32-41). Ames, IA: ISRES Publishing.

Vakili, A. (2016). Framing of race by local and national newspapers in the Baltimore unrest: An analysis of The New York Times and The Baltimore Sun's coverage of Freddie Gray's race. (Master's thesis). Retrieved from https://search.proquest.com. doi:10119550

VanGorp, B. (2007). The constructionist approach to framing: Bringing culture back in. Journal of Communication, 57(1), 60-78.

Zimitat, C. (2006). A lexical analysis of 1995, 2000 and 2005 Ascilite conference papers. Proceedings of the 23rd Annual Ascilite Conference, pp. 947-951.