

ANALYZING ACCESS:
AN ANALYSIS OF FOOD DESERT COVERAGE DURING COVID-19

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Master of Arts

by Fairrionna Magee
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The undersigned, appointed by the dean of the Graduate School, have examined the thesis entitled

ANALYZING ACCESS: AN ANALYSIS OF FOOD DESERT COVERAGE DURING
COVID-19

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DEDICATION

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ABSTRACT

This study explored the ways in which food desert coverage was reported during the COVID-19 pandemic. The purpose of the research was to analyze reporting patterns such as themes, use of race, and sourcing practices to understand the journalistic nature of food desert reporting. The analysis found emerging themes that were present in the reporting and journalistic devices that were used to develop the themes. There was a total of 85 articles analyzed from various publications around the United States. This thesis aimed to identify the ways in which food deserts in the United States are covered being that millions of Americans live in these designated areas. The results show that themes centered on financial context, agriculture, community, and vulnerability were present throughout the analysis.

Keywords: Food desert, COVID-19, food insecurity, racial health disparities, journalism

Chapter 1: Introduction

In 2017, the United States Department of Agriculture (USDA) noted there were about nineteen million people in America living in food deserts, “geographic areas where residents’ access to affordable, healthy food options (especially fresh fruits and vegetables) is restricted or nonexistent due to the absence of grocery stores within convenient traveling distance” (Ogburn, 2010). Nearly 2.3 million people (or 2.2 percent of all U.S. households) live more than one mile away from a supermarket and do not own a car (USDA, 2009).

Research finds that race and poverty were the driving factors in where food deserts were located in the United States (Deener, 2017). Eight percent of Black Americans live in what is defined as a census tract with a supermarket, compared to 31% of White Americans (Khalil et al., 2017). Poorer communities have 30% more convenience stores than higher-income communities, and these stores often stock fewer healthy choices than supermarkets (USDA, 2017). There is a historical correlation between race, food deserts, and America’s economic practices and public policy that dates to the 1930s (Beaulac et al., 2009). The Great Depression was followed by the New Deal and the creation of various government assistance programs such as SNAP and the Federal Housing Authority (Agyeman, 2021). These programs were essential to redlining which would become essential to the rise of food deserts. The New Deal made way for the development of food deserts, with the effects persisting throughout America for the following decades (Agyeman, 2021). Even in times of U.S. economic and social prosperity, access to food has disproportionately affected members of society. In times of

crisis, such as during the novel coronavirus (COVID-19) pandemic, conversations around food security, health, race, and equity throughout the country have become more vital.

As the pandemic progressed, data revealed that people of color, specifically Black American men, and women, were dying of Covid-19-related complications at higher numbers than white Americans (Center for Disease Control, 2021). Among the explanations offered for the disproportionate effects, the poor-eating habits of Black Americans had been cited as one of the reasons (Morris, 2020). Journalism was put in a very tough position. Journalists had the responsibility to accurately document what was taking place and share information, but also contend with a public that placed blame based on their reports. *The Washington Post* published a piece entitled, “Black communities have been hit hard by the coronavirus, some people think black Americans are to blame” (Goldstein, 2020). Racial resentment as it relates to food insecurity and health equity was prevalent throughout the media coverage of the coronavirus. *The American Journal of Public Health* published a study that found food insecurity in predominantly African American neighborhoods was followed by Covid-19 highlighting the direct correlation between access to healthy food choices and overall health (Dubowitz et al., 2021).

The topics that are found in health disparity coverage contribute to the problem of the lack of reporting that has been conducted on these topics. But this is just a result of the long-standing way that racially covered stories are handled in the U.S. American public media. It is argued that our understanding of race is heavily influenced by the media that we regularly consume (Alamo-Pastrama et al., 2018). This is not new, journalism at its helm has always been influential in America’s complex relationship with

race and equity. Journalism in its truest form helps us to understand race as essentially a social construct (Kilgo, 2021). But journalism, for the strides that it has made in shaping our understanding of race, has also a complicated history that persists today. Studies have found that news stories involving people can be covered with problematic or harmful use of language, sourcing, and imagery (Kilgo et al., 2019).

With a complicated topic like food deserts, and race at its helm, the way that journalists provide context and tell this story is important. There is a long and complicated history of health as it relates to race. The advent of slavery created a sort of health dichotomy in the presentation of the health of enslaved black men and women (Saguy, 2020). The presentation of this black figure was exceptionally strong, an image that was fueled by American media at the time, but the same enslaved people were not being given access to quality food items (Saguy, 2020). The public conversations, including journalistically, that have occurred historically and presently around the health of black people have been fundamental in shaping the narratives that we saw form during the Covid-19 pandemic (Morris, 2021). Looking at the way that race is used in the coverage of food deserts can be essential to the greater public understanding of these topics. The theories that would be utilized in this research will be racialized discourses theory and framing theory. Racialized discourse theory as explained by Gloria Ladson Billings, raises important questions about the control and production of knowledge, particularly about people and communities of color (Ladson-Billings, 2000).

Race is not the only research issue that is present throughout this study, there is an issue with the void of research that has been conducted on the topics of food deserts and journalism. Food deserts are a rampant issue globally, and there is not an abundance of

studies that investigate the topic, even though it is key to understanding and communicating (Siddiqi et al., 2021). Food deserts are a problem in the United States, but the way journalists tell the stories around them does not have to be. There are many factors that contribute to our understanding of food deserts that including but are not limited to race, class, wealth, infrastructure, and more. Journalists, no matter how dedicated to objectivity and truth they are not free from prejudices or being in a field that has a complicated racial past. Evaluating and analyzing the way that we shape the narrative around food deserts is important in the possible future of eradicating them. Brookings (2021) published a piece where they stated “[f]or decades, academics, advocates, and policymakers pointed to unequal geographic access to food as the problem. This geographic focus eventually gave rise to the concept of the ‘food desert’—a shorthand description for how a lack of fresh food retailers can predispose neighborhood residents to food insecurity,” but journalists play a role in this process as well. A role that may not be as pronounced but is still as important.

In the forthcoming chapters, this study explains the method approached to conduct this analysis and the results that were found during that process. Highlighting the previous research conducted on the topics to assist in understanding food deserts. This study examines the way the food deserts are covered and the role that COVID-19 played in this coverage. Also examines the use of racialized discourse theory throughout this coverage and how certain communities were covered in connection to the topics.

Chapter 2: Literature Review

There is limited research that has been done on the journalistic approach to food desert coverage. Also, being that the pandemic is a recent occurrence, studies that analyze the connection between journalism and food desert coverage in the wake of the coronavirus pandemic were even more scarce. Scholars have cited that “few studies of interventions exist in the food insecurity literature, and yet, as observed, ‘a solution-oriented research paradigm is required to identify effective interventions and policies to enhance food security’” (Gorton et al., 2011, p. 1)

There is research that suggests a direct link to the way that news stories shape our understanding and perspective ranging from people to places (Kilgo, 2021). News coverage choices spanning from language to imagery are influential even if not done in an explicit attempt at complex topics. Racial disparities have historically been presented as a complex issue for journalism and the media (Alamo-Pastrana et al., 2020). Majority white newsrooms contribute to some of this difficulty in addressing some of the issues that exist in storytelling that is centered around people of color (Wizda, 1997). Scholars have described a potential disconnect between cultural standpoints, and journalists covering topics that may affect communities of color that they are not completely familiar with (O’Kelly, 1992). This form of journalism that scholars are describing as the issues that exist in stories about people of color is what is known as “parachute reporting” (Wizda, 1997). *The Columbia Journalism Review* describes a parachute journalist as “a reporter who drops into a country for a relatively short period of time, files a story or handful of dispatches, and then leaves” and this unfamiliarity could be an explanation for

some of the issues in race reporting, but it is not the only one that has been studied (Martin, 2011).

History of Food Deserts

The history of the origins of food deserts reveal a deep-rooted connection to race and class as well. An article published in the journal of *Social Forces* traces the origins of urban food deserts to be parallel with the creation of the infrastructural exclusion concept (Deener, 2017). This concept typically occurs when there is unequal access to resources that are a result of what was referred to as sociotechnical interdependence. This notion is also supported by another study that tracked the divestment of supermarkets and grocery stores correlating with the increasing number of Black residents in urban areas (Thibodeaux, 2016). There was a combination of reasons listed in the study for the divestment that began in the mid to late twentieth century. The reasoning behind these communities' lack of access is multifaceted. But mostly all the studies included in this review noted can be traced to exclusionary practices, redlining, and systemic class discrimination and racism. The term food desert was coined in the late twentieth century in Scotland and became a part of general language following its coinage (Beaulac et al., 2009). Practices like "supermarket redlining" where major chain supermarkets are disinterested in building stores in low-income areas are connected to public perception of these areas, so looking at race highlights this connection (Morris, 2021). Hamidi research suggests that the emergence of food deserts is directly linked to urban sprawl (2020).

In addition, further support for food deserts being able to be classified as health disparities is connected to the impact that residents in these communities have limited access to healthier food options have on their health (Crowe et al, 2018). A study has

found that Black women that live in an area designated as a food desert have a higher instance of obesity (Cooksey-Stowers & et al., 2017). The findings from the study indicated that a potential interaction between factors in the local food and social environments do have a risk on an individuals' risk of obesity" which connects the dangers of living in these areas that have been designated as food deserts (Cooksey-Stowers & et al., 2017). On the contrary, there is research that supports the notion that food deserts cannot be accounted for the nutritional gap that is seen between white and Black Americans (Dube & et al, 2018). The study spearheaded by Professor Jean-Pierre Dube found that exposing low-income households to the same products and prices that are available in high-income households reduced nutritional inequality by 9% and the remaining 91% is driven by the choices (2018). Dube suggests with his study that nutritional education and shopping patterns are the biggest influences on health instead of the location that someone lives in. Alternatively, what I gathered from reading the study is there is a direct correlation between food deserts and nutritional education.

There is data that tracks the connection between urban expansion and the emergence of food deserts in the United States detailing the direct correlation between the two. A study published theorized a concept in which food deserts are the direct result of what is defined as urban sprawl (Hamidi, 2020). Food insecurity falling under the umbrella of a health disparity may also support the ways in which a BIPOC reporter or minority-owned publication may cover these topics compared to how mainstream news covers health disparities. A study published in the *Journal of Community Health* highlights the ways in which race influences this type of coverage highlighting the direct correlation between the concepts (Testa et al., 2018).

Food deserts are defined by the United States Department of Agriculture (USDA) (2015) as “a low-income tract where a substantial number or substantial share of residents does not have easy access to a supermarket or large grocery store” and it is estimated that over 19 million people in the U.S. live in one of the designated areas. Scholars have researched that food deserts are directly related to race and class because many of these locations typically have higher concentrations of people of color and lower income-areas (Deener, 2017). Food deserts are classified as health disparities because these areas are indicators of socioeconomic injustice and public health and safety concerns that are in that area. Residents who do not have access to healthy food options are more prone to illness and poor health. Research shows that these residents may have instances of diabetes, obesity, or cardiovascular disease (Testa et al, 2018). The following paragraphs will discuss the scholarship on topics related to food desert coverage and COVID-19.

Food Insecurity in the United States

Food insecurity is defined as, “the state of being without reliable access to a sufficient quantity of affordable, nutritious food” defined by the non-profit organization Feeding America (USDA). Researchers have found that food insecurity impacts many factors of daily life from academic performance to overall health (Gundersun et al, 2015). A study published in the *Health Affairs* journal found, “[t]he majority of research examining food insecurity in general and its effects on health outcomes has concentrated on children” (Gundersun et al., 2015 p. 1832). This research looks at the linkages and how it associated with risks such as birth defects, anemia, lower nutrient intakes, cognitive problems, and aggression and anxiety. Also, living in a food desert increases

the risk of being hospitalized and impacts the state of being outside of physical health. It is also associated with higher risks of being hospitalized and poorer general health and with having asthma, behavioral problems, depression, suicide ideation, and worse oral health. (Gailey et al., 2019). This is concise with other studies that were conducted that also highlighted that the group of people to deal with the impacts of food insecurity were vulnerable populations (Alaimo, 2005). So, the findings in the *Health Affairs* journal that found children were more vulnerable to suffering from insecurity correlates with other studies which highlight among other groups (2015), children are more vulnerable to food insecurity issues. The literature is highlighting that vulnerable populations are more susceptible to food risks connected to food deserts. This connection constantly reappears in studies that looked at the topic with most studies agreeing that children are the most vulnerable and in need of assistance in relation to the topic.

COVID-19 and Food in the U.S.

COVID-19 was proclaimed a pandemic by the *World Health Organization* on March 11th, 2020 chiefly because of the speed and size of the transmission of the illness. Before that, it began as a huge issue in China being first and foremost found in the city of Wuhan, Hubei on February 26th, 2020. The etiologic specialist of COVID-19 was detached and distinguished as a novel coronavirus, at first assigned as 2019-nCoV (Dos Santos, 2020). The origin of COVID-19 is unknown.

A study that was conducted in 2021 found that food insecurity was an issue among racial groups specifically Black people during COVID-19. (Dubowitz et al., 2021). The study found that COVID-19 amplified these issues and the Black people specifically those in lower wage-earning careers struggled with food

insecurity during that time frame that was research (Dubowitz et al., 2021). This is the leading study on the topic and new research is still emerging and being collected as the pandemic is ongoing. Other research highlights the ways in which COVID-19 just exacerbated racial health disparities overall. For example, a study published in the *Journal of the American Medical Association* urged that legislation address the issue of racial health disparities and COVID-19 because the issue was so vast (2021).

Racialized Discourse Theory & Race Portrayal in the Media

Racialized discourse theory is also a theory that I will be focusing on for this analysis. Including this theory will allow for a deeper analysis of how race is used in the coverage of food deserts. One of the direct issues that scholars theorize has arisen from racial media gatekeeping is the media portrayal of black men as criminals. The highly criminalized nature of reporting of Black males is not a new phenomenon and has been found to have existed for decades. A study by Entman and Rojecki (2000) argued that news reporting that focused on Black men as criminals has had societal consequences by intensifying animosity between Black and White Americans and widening the empathy gap. This idea supports Howard, Flenbaugh, and Terry's (2012) study that negative social imagery of Black men is a historical aspect of American culture and serves as a contributing factor to the continuing disenfranchisement of Black people in this country. These problematic patterns exist beyond criminality. An example of these patterns can be connected to health, and how media has historically contributed to the fatphobia of black bodies (Saguy, 2020). The way that the media discusses health as it related to racial groups influences the way these groups are perceived. Being that food insecurity is

connected to health disparities, an understanding of how these topics are covered in the media is important.

Health Disparity Coverage

Analysis of news coverage of medical health disparities has revealed patterns as well. A study found that “ Consistent with previous research on media coverage of health and health care disparities, we found that behavioral explanations were mostly presented in newspaper coverage of racial/ethnic health disparities, for both causes and solutions” (Kim et al., 2010, p. 84). These ideas are what contribute to a wider public discourse and understanding of national understanding of health disparities. The same study found that “However, societal-level explanations made up a sizable proportion of both causal and solution attributions, second only to behavioral-level explanations. (p. 88)” The research is noting that there is a continuous cycle of how we communicate ideas and how we understand these ideas. Another group of researchers looking at the media and health disparities found, “Despite the release of major organizational reports and the publication of many studies confirming the prevalence of MHD (Medical health disparities), few newspaper articles have been published explaining MHD to the public (Kim & et al, 2010, p. 227)”

This supports the work done by Amzel and Ghosh which found that Black people were the focus of health disparity coverage in print media (60.4%) and that the news coverage that was focused on the topic wasn't explanative (2007). The topic was presented but wasn't thoroughly explained in all the complexity and why the gap continues to exist in America. This was an analysis that was conducted on a national level but there are issues that scholars have found are even more pertinent on a local level.

It is theorized that local journalism also suffers from similar issues that are present in national reporting. This doesn't necessarily mean that a publication geared towards people of color covers health disparities or health stories more accurately. An analysis of cancer news stories by minority-owned publications compared to other publications found patterns of inaccuracy in the way that cancer stories are presented. There is not much research that analyzes the exact frames that are typically used in food desert coverage but because food deserts are under the umbrella of health disparities, this positions them in the larger discourse of health disparity coverage.

Framing

Framing theory is situated in that the media focuses attention on certain events and then places them within a field of meaning. Framing is important in the coverage of food deserts because food deserts have been described as a public health crisis, and the general public's understanding of food deserts can shape how they are addressed. There are conceptual issues that exist in framing theory that lies at looking at the focusing of sociological aspects of media design, but media reception is just as important as the intent. The theory suggests that "the media highlights certain events and then places them within a particular context to encourage or discourage certain interpretations" (Lecheler & Vreese, 2018). *Framing theory's* roots originate in psychological and sociological research and its origin in mass communication research in Erving Goffman's 1974 book, "Frame Analysis" which first made its connection to messaging. Although, this study is looking at thematic trends specifically and the larger context of thematic framing, having a general understanding of framing is key to understanding both concepts and how to choose which one is a better approach.

This study is looking to analyze themes and a deeper look at how frequently these themes emerge. Due to this, the analysis looks at the frequency of thematic and episodic framing of these stories. As it pertains to thematic framing, “thematic framing refers to the portrayal and presentation of issues through information about their systemic causes, trends, and consequences” (Zhang et al, 2015). Episodic framing, in contrast, is a way of storytelling that takes “the form of a case study or event-oriented report and depicts public issues in terms of concrete instances” (Iyengar 1991 p. 14). Thematic framing often ties back into the larger context of the issue whereas episodic framing looks at a specific profile, person, or situation. These are two frames that are used in this analysis.

There is limited research that analyzes the way in which health stories are framed. Most of the research that is done on the topic focuses on the way in which the research is presented and if it is factual. A recent study that was conducted found that the most common frames that occurred were loss and gain and competitive (Guenther, 2021). In addition, the study found that thematic and generic framing was featured equally in health communication.

Thematic Analysis

The focus of this research is to look for reoccurring themes, but in support of this, analyzing how often themes are the focus of the articles is why the researcher is looking for thematic vs. episodic framing. The way in which stories are presented and the influence that this presentation has on the wider understanding of these concepts is integral in understanding how stories regarding health disparities are consumed by the public. Braun and Clarke (2006) explained that thematic analysis is a fundamental approach as a translator which allows for researchers who used different methods to

communicate. The presentation is one that emerges with reemerging themes. The basis of thematic analysis “is a method of identifying, analyzing, and reporting patterns (themes) within data” (Jayadevappa et al., 2019, p. 4). It is described as a descriptive method that reduces the data in a flexible way that dovetails with other data analysis methods” (Castleberry et al., 2018). Authors have noted that thematic analysis is not just a homogenous approach but one that rather acts as an umbrella term that encompasses multiple forms of approaches (Forbes, 2021).

Themes are an important aspect of coverage of food deserts because food deserts have been described as a public health crisis, and the general public’s understanding of food deserts can shape how they are addressed and what patterns emerge in this reporting (citation). There are conceptual issues that exist in thematic analysis that lies in looking at the focusing execution of the actual analysis.

In the actual analysis process, the researcher is the one that is essentially the instrument for analysis, they are the ones that make judgments as it regards to the processes of coding, theming, decontextualizing, and recontextualizing the data (Starks & Trinidad, 2007). There are benefits to using the thematic analysis approach. Research explains that thematic analysis is also useful for summarizing key features that are found as part of a large data set, as it forces the researcher to take a well-structured approach (Forbes, 2021).

Current Study

This review has highlighted that there is a lot of powerful scholarship within the lens of health disparities and journalism. This study differs because of its specificity of food desert coverage during the pandemic, which is two plaguing issues and threats to

national health. Ultimately, it is important to understand how stories are being communicated and make changes if the stories are not being communicated properly. This review also highlighted the amount of literature that is missing on the topic of food deserts as a separate entity outside of the other examples of food insecurity and the way that it is covered. Therefore, this study seeks to address the following questions:

RQ 1: What journalistic patterns and themes emerged in food desert coverage during the duration of the coronavirus pandemic?”

RQ 2: How are race and health disparities presented in news coverage about food deserts?

Chapter 3: Methods

This research relies on a qualitative textual thematic analysis focusing on food desert coverage during the coronavirus pandemic. A textual analysis is the best method for this research because it allows for the understanding of the language and literary tools employed in the articles which would allow for a larger contextual understanding of this reporting (Wolf, 1988). Also, because the literature on this topic is extremely limited and has not been conducted in a vast amount, a textual analysis provided the opportunity to provide a general analytical consensus on the themes present in food desert coverage (Lester, 2020). In addition, the sensitive narrative of the topics as it relates to access, health, and race, and analysis provides the opportunity to really evaluate the way the topics have been approached. A qualitative analysis provides more information than a quantitative analysis because that type of analysis is only focused on the frequencies of the reporting (Wolf, 1998). The focus on thematic trends in the articles allowed for various types of articles to be examined without looking through a predominant type of journalism. In the literature review, as written, having a general understanding of framing helped the researcher decide that it was not the best approach to this analysis because of the article variety in the sample.

Sampling

This first phase of this study was to decide the time frame that the articles would be focused upon. This study includes articles from March 1st, 2020- March 1st, 2021. These specific dates were chosen because this research is tracking the onset of the pandemic, which was officially declared on March 11th, 2020 according to the *Center for Disease Control*, and resulted in the rise in food desert coverage. There was a rise in

journalistic coverage of topics like food deserts, food insecurity, and nationwide adequate access to nutritional food during this period according to *Factiva*. This rise in coverage could be possibly connected to issues of access that arose in the pandemic such as national lockdown and lack of transportation (Janda et al, 2021).

After choosing a specific date range, the process of gathering articles took place, utilizing the search engine, Factiva. Factiva was founded in 1999 and has an archive of over 32,000 articles from major newspapers, magazines, trade publications, newswires, reports, and other sources (Dow Jones, 2022). The terms “Food desert” and “Covid” during the selected date range was selected as the search criteria. A sample of 237 articles were generated. From this initial sample, press releases, scholarly articles, and non-U.S. publications were excluded. Only journalistic articles were used in the textual analysis. Further exclusion included articles that were not published by a United States-based publication or a global publication that does not have at least or more 10 American-based writers or journalists. This information was typically found on the publications staffing pages on their respective websites that list who works for the publication or frequently freelances or contributes. This decision was made because the researcher wanted the articles to come from U.S. based publications familiar with the United States. This research aimed to get an understanding of the national journalistic approach rather than a global one. Being that there is limited literature on the subject, a national understanding could be important in later studies. Food insecurity is a global issue and there is various national legislation that influences the way in which the topic is addressed. Focusing on a specific nation allowed for that legislation to be taken in and analyzed.

After exclusions, (n = 152), a total of 85 articles remained. The articles included in the analysis were of a journalistic nature but may not have come from a ‘traditional journalism’ approach. Articles that were written by locals, appeared in trade publications such as business journals, and were written from an editorial perspective were included in the analysis. This research decision was made because from preliminary readings, it was evident that the localized business coverage and editorial writing included significant analysis results that contributed to the larger thematic understanding of the way this topic is covered. This also provided the context that there is a more non-traditional approach evident in approaching the topics and the researcher wanted that to be included in the analysis. Exclusion of these type of alternative publications maybe would have limited the larger thematic findings that was present in the research. Press releases, mid-sized briefs, and academic material were ruled out in the analysis because they did not contribute to the larger journalistic understanding of the topics.

Analysis

After gathering the final sample (n = 85), a preliminary analysis was conducted in which a coding scheme was created. The unit of analysis was each article. The preliminary analysis looked for overarching themes and early evidence of patterns in the articles. This analysis was followed up by multiple reads and a thorough open coding process. A textual analysis is the best methodology for this research because it allows for the understanding of the language and journalistic tools employed in this coverage which would allow for a larger contextual understanding of this reporting. After reading the article in its entirety, notes were written down highlighting what was found in the article. Next, a more thorough reading took place, where themes were noted and an analysis of

the approach of the article was evaluated. For example, an excerpt of this article that was published in the Tampa Bay Times on August 1st, 2020 is provided with the notes of the coding process that took place. The article was titled, “Plentiful partnership; Two St. Petersburg congregations unite to grow fresh produce for any neighbors in need” and is coded below:

One had the acreage that the other didn’t, and so it was that a Snell Isle church in one of the city’s most affluent neighborhoods teamed up with another settled on a modest street. **(Localized introduction)**

Their joint mission was to plant and harvest fruit and vegetables to share in an area that most consider a food desert and to sell enough to sustain the project. **(Communal organizing)** In the almost 12 months since they launched their urban farm, St. Thomas’ Episcopal Church on Snell Isle and St. Augustine’s Episcopal Church in the Highland Oaks neighborhood have sold their harvest at a successful farmer’s market and given it away to individuals and an organization that helps the poor. **(Mention of food deserts in conjunction with urban agriculture and local business)**

St. Augustine’s, a historically Black, multicultural congregation, was founded in 1927. Its congregation is small, with an average Sunday attendance of about 40 to 45 worshipers. **(Black is mentioned as a descriptor of the church)**

St. Thomas, which has a larger, mostly white congregation, was founded in 1952. The preschool it started in the 1960s grew into the Canterbury School of Florida, whose lower school continues to meet on its campus. **(White is used a descriptor of the church)**

The idea for the garden — now established on 1.5 acres behind St. Augustine’s sanctuary at 2920 26th Ave. S — was the Rev. Martha Goodwill’s, a deacon at St. Thomas’. **(Agricultural mention of communal gardening) (Communal sourcing- religious leader)**

“I have always had a passion for gardening, and I was always keenly aware of the food desert,” she said, referring to the U.S. Department of Agriculture’s definition for a low-income area where access to fresh, affordable, nutritious food is limited. **(explanation of food deserts, sources mentions the term)**

She wanted to combine her passion for gardening, Goodwill said, with “the driving force of trying to help correct some of the social problems around food.” **(Sourcing is quoted focusing on aiding the community)**

“You have the land, and I have the desire to do this,” is what the Rev. Josie Rose, St. Augustine’s priest-in-charge, recalled Goodwill saying. **(Local sources-religious)**

It was through Goodwill’s leadership that a grant was secured for the project, Rose said. The two congregations, which already held joint Bible studies and participated in other programs together, agreed to team up on an urban farm. “It’s just proved to be a good partnership,” said Goodwill, who works full time as an accountant for the Diocese of Southwest Florida. The project got start-up money from the Episcopal Church’s United Thank Offering ministry, which gave it a \$63,600 grant. The Episcopal Diocese of Southwest Florida, based in Parrish, contributed \$3,000. **(Monetary theme emerging focused on specific financial information related to grants)**

The funds helped clear and level the overgrown St. Augustine’s property, buy a new pump for a deep water well that was already in place, and add irrigation and solar power. **(Monetary mention as it relates to agriculture)**

As included in the Tampa Bay Times example above, the articles were analyzed looking for themes and the approaches that were used to convey the topics. This process seen above was uniform and conducted on the entirety of the articles. In addition to the coding examples that were provided in the above sample, each article was noted for its publisher and publishing date. The information was analyzed after the conduction of the thematic analysis to see the ways in which time and publisher influenced the reporting themes that were found to have emerged.

Throughout the analysis process, data was collected and analyzed and written in a categorical form. A table was used to collect and highlight the themes included in each article and the ways that each theme was communicated. This table was created from data that was recorded from each article in the analysis process. The categorical table included qualitative data primarily and quantitative data that supported the qualitative findings. There was a list created that noted each article and its preliminary results and the final coding results, this was the data that was ultimately transferred into the table.

To ensure that this process was valid, the researcher took a rigorous approach, analyzing each article multiple times.

The researcher approached the analysis process initially with an open-coding approach. Open-coding is typically the first step in qualitative analysis. The researcher took the textual data (the articles) and broke down the data into discrete parts and created codes to help categorize them (Corbin et al., 2015). This is where the researcher read through the data several times and created labels that described what was taking place in the reading. Next, the researcher axial coded the data, drawing connections between the codes that were found in the open coding process (Qureshi et al, 2020). From there, the researcher gathered what was collected in the axial coding process to develop the themes that were present.

Racialized Discourse Theory & Thematic Analysis

In addition, the theory being utilized in this research is racialized discourse theory. This theory specifically looks at the impact and the understanding of language and literary tools as it pertains to race, so the use of textual analysis was essential in understanding the theoretical framework as well. The *racialized discourses theory* supports the idea of understating the “control and production of knowledge, particularly about people and communities of color” (Ladson-Billings, 2000). A textual analysis provides the opportunity to analyze the ways in which race is discussed ultimately contributing to the larger conversations surrounding food deserts and race.

The analysis is looking to find reporting patterns or techniques used to effectively communicate stories regarding food deserts and Covid-19. The coding process looked for themes and techniques that implore language surrounding race, class, infrastructure, or

systemic racism within the context of the search terms. Themes of race and class are being analyzed due to food deserts being described as a health disparity, and the connection to race and class are deeply connected to social constructions of race and class. Analyzing the diction and journalistic techniques that are used in these two concepts will reveal the ways in which journalism is positioning the concepts of race in these stories, which contributes to understanding the further context of health disparity coverage. Additionally, the analysis looked for the language surrounding infrastructure and systemic racism because a review of literature on food deserts detailed those practices like “supermarket redlining” and how these concepts are connected to both the terms. The analysis is also open to themes that emerge in the reporting and it is not limited to these, for example, if there is reoccurring specific language that is appearing in the news stories, then there would be further analysis of these terms. The analysis was flexible and used the preliminary reading to identify what topics would need to be analyzed.

The analysis noted the ways in which information about race was communicated, the frequency of race of being mentioned, the different racial groups being mentioned and how each racial group was mentioned.

The results from the analysis are looked at comprehensively and presented in a form connected to prevalence and quality. Prevalence is only focused upon in the study because it acted as a guide to the reemerging themes that needed to be analyzed further. The results examine the ways in which the reoccurring themes are communicated and how often these themes occur. The research question was answered because it is looking directly for overarching themes and reporting patterns on how the topic of food deserts is

communicated so the results of the analysis being looked at in this manner will provide a possible answer to the research question.

Chapter 4: Results

This section of the study is composed of the findings that were found through conducting a textual analysis. There was a preliminary analysis conducted that was followed by a more rigorous process looking for overarching themes and a racialized discourse theoretical framework. The section is broken up into four parts- definition of themes, thematic findings, racialized discourse theory findings, and patterns and publications. There was a total of 85 articles analyzed. There are tables and illustrations that display quantitative data accompanying the actual in-depth qualitative analysis that act as additional support for the found patterns. The articles were composed of various lengths from various publications and regions of the United States detailed further throughout this section.

Definition of Themes

As proposed in RQ1, a purpose of this research was to look for overarching themes that appeared in this coverage. After completing a preliminary analysis, a more thorough evaluation provided thematic patterns that reoccurred through the various published articles. The decision to focus on the general overarching themes compared to specific frames was due to the limited literature that existed on the topic. This research wanted to provide an introductory thematic framework that could be used in later studies on the topic and one that was not limited. This work looked to be as extensive as possible, and the use of a thematic approach allowed for flexibility and a more concise understanding of the articles. Also, due to the varying nature of the publications that the search results provided, emerging themes were a more straightforward result that encompassed all the publications. Framing was only included in analyzing the

frequencies of thematic frames opposed to episodic frames. This research decision was made to see if the articles are explaining in full context information regarding food deserts or just focusing on singular events or individuals. As noted, “thematic framing refers to the portrayal and presentation of issues through information about their systemic causes, trends, and consequences” (Zhang et al, 2015, p. 38).

After conducting the analysis, there were four themes found: *monetary theme*, *location and communal specific theme*, *agricultural and farming themes*, and a *vulnerability theme*. Monetary themed reporting was focused on business topics, COVID-19 financial implications, and industry-focused storytelling. Location and communal specific themes encompassed localized coverage, urbanized vs rural approaches, political focused, and philanthropic efforts. Agricultural and farming themes included reporting that was focused on the environment and farming. Vulnerability themes were focused on vulnerable populations such as communities of color, poverty-stricken areas, those with illnesses, or more susceptible to food deserts. An overarching theme related to access could be seen throughout the articles.

There were several events that happened during the period chronicled in analysis that shaped the nature of the reporting contributing to certain themes. These dates were chronicled by the *Center for Disease Control*:

- March 11th, 2020 - The World Health Organization declares the coronavirus outbreak a pandemic citing it as a public health emergency of major concern
- March 13th, 2020 – President Trump declares COVID-19 a national emergency
- March 27th, 2020 - The CARES Act is signed into law including the Paycheck Protection Program and an increase in unemployment benefits

- April 2020 - Early data reveals that people of color were dying and dealing with COVID-19 complications at higher rates than white Americans
- April 2020 – Early data reveals the age and underlying health conditions make people more vulnerable to COVID-19 related complications
- May 25th, 2020 - George Floyd is killed by a Minneapolis Police Officer who knelt on Floyd’s neck for over nine minutes after being accused of using a counterfeit \$20 bill
- May 26th, 2020 - Protests erupt throughout the nation following George Floyd’s death
- February 21, 2021 - The United States reaches 500,000 COVID-19 related deaths
- February 27th, 2021 – FDA approves emergency use of the authorization of the COVID-19 vaccine

Thematic Findings

Monetary Themes. The monetary themes found in the analysis covered various aspects related to food deserts. There was a substantial number of articles that were published from a financial angle and were written focusing on a business perspective and monetary emphasis. Business stories were the most frequent type of topic-specific stories that were found in the analysis outside of race. The articles focused on aspects like store/market opening or closures, use of aid or loans, partnerships, and the revitalization of areas in communities. The business stories posted on the topic were COVID-19 intensive and included the financial struggles and how it was shaping the grocer and the food industry. These articles included that many of these industries were struggling pre-COVID, and the pandemic intensified or revealed the issues. These articles shared

statistics and specific money amounts that went along with the story. Business publications like business journals, business insiders, and *Contify News* all published stories on these topics. There were seventeen stories in the analysis that were published in local business journals. The theme of finances was central to the reporting involving food deserts and was found throughout.

Sourcing in these types of stories ranged from business owners to local business leaders in their respective communities. Even stories that weren't published in business publications still had a business perspective or included some form of financial information. Articles with a primarily environmental angle or health angle made references to financial information in some capacity. This was done by including numerical information or including the ways the community would be impacted financially supporting the written reporting. Research suggests that the representation of numbers does play a vital role in understanding the important aspects of economic reality (Espindosa and Alarcon, 2016).

During the summer months of 2020, there was a reoccurring mention of aid or federal assistance programs that emerged during the COVID-19 pandemic. Examples of these programs were the Paycheck Protection Program (PPP), unemployment assistance, and the American Rescue Plan. The articles were detailing the struggles that businesses in the grocery industry were having in obtaining assistance from these programs, and residents' issues with the programs as well. A study found the net United States GDP losses from COVID-19 were expected to be between \$3.2 trillion to \$4.8 trillion over a two-year period (Walmsley et al., 2021). There were stories that focused on income as it relates to the economic well-being of local communities. The study also estimated for job

decline to be between 14.7% to 23.8% in the same given period (Walmsley et al., 2021). Many of the articles were particularly focused on the connection between poverty and food insecurity, constantly using terms, such as “low-income” in conjunction with the reporting on food deserts. In October 2020, there were stories published that focused on more openings than closures. The trends that existed within the business coverage of food deserts and COVID-19 coincided with the public conversations and emphasis on financial implications during 2020 and 2021. There was a pattern of articles published that investigated the intersection of COVID-19 and food deserts. The articles highlighted that the pandemic was making an existing problem worse and the struggle of the residents in the communities and access to food. Business stories were also focused on race and the way that Black businesses were struggling with the impacts of COVID-19. These business stories were particularly focused on the ways in which COVID-19 was impacting businesses not necessarily food deserts. An example of this theme can be seen in this *Christian Science Monitor* article, titled, “More American families struggling to afford food. Can food banks cope?”

The economic fallout brought on by COVID-19 put millions of families in Ms. White’s shoes. According to the US Department of Agriculture, 35 million Americans were food insecure before the pandemic, a number that may rise to 50 million by the end of the year, says Zuani Villarreal of Feeding America, a nonprofit that supplies food banks. On the front lines are food banks and food pantries. Adjusting to the pandemic has demanded long hours and new models to meet their communities’ changing needs, and to make sure families like Ms. White’s don’t go hungry.

Table 1. Frequencies of Business Reporting by Topic

Types of monetary themed reporting

Type	# Of occurrences
Business openings	11
Business closures	5
Federal aid focused	4
COVID-19 focused	4
Partnerships	3
Agricultural Income	2

There was a total of 26 monetary themed articles found in the analysis. Some of the articles are counted as overlapping if they mention multiple types of monetary themes.

Figure 1. Regional Map



Communal Themes. Location was also a central theme that emerged throughout the analysis. A large amount of the articles contained information that was location-specific using communal angles or one specific location. The differences that emerged in the localized coverage and the national coverage were limited, although the localized coverage was slightly more detail-oriented pertaining to what could have possibly contributed to that specific location becoming a food desert. For example, the reporter would list multiple local grocer closures that local communities maybe were not able to recover from or meaningful to that area. Also, many of the localized articles were detailing local volunteer or philanthropic stories in connection to food insecurity.

A total of 56 articles were localized or location-specific coverage, meaning that the article covered one location specifically a city or state. Twenty-two articles were nationally focused. Many of the localized coverage came from publications with circulations of under 350,000. The region that was most frequently covered was the Midwest with a total of 24 articles. The southeast region and the Mid-Atlantic both had a total of fourteen articles. The southwest published seven articles focused on the topics while the west coast had five. The New England region had three articles that mentioned a state or city in that region. This information is displayed in Table 2 based on the region description in Fig. 1.

Coverage of urban areas appeared more frequently in this analysis compared to rural locations. There were no differences in coverage of the two with both having similar themes that reoccurred throughout the analysis. Often, when the term “rural” was used within an article, it was mentioned in conjunction with “urban” whereas when the term

“urban” was found, it stood alone. The differences between the urban and rural reporting found that urban areas had an emphasis on farming or volunteer opportunities.

National stories had a particular focus that reoccurred: politics. Politics were mentioned in connection to food deserts and COVID-19 through policy and what actions were taking place to address the two topics. Politics and politicians were typically mentioned in conjunction with COVID-19 programs such as the Paycheck Protection Program. These articles that included politicians were not businesses focused but were more nationally focused as they related to the status of the country. The publications typically covered explained how public policy could possibly affect food deserts on different levels. Local publications didn’t focus on politics as much and rather focused on straightforward news accounts rather than political connections. Data from the Pew Research Center revealed that local publications focused on more straight news accounts whereas national publications reporting was more interpretive (1998). The inclusion of politicians and politics was not overwhelming but occurred in multiple instances.

Table 2. Frequencies of Reporting by Region

Location	# of articles published including the region
Midwest	24
Southeast	14
Mid-Atlantic	14
Southwest	7
West Coast	5
North East	3

There was a pattern of community-centered stories particularly highlighting the ways in which communities were volunteering or organizations donating to address the issue of food insecurity. Volunteer and philanthropic efforts were published throughout the entire period analyzed. These types of articles mentioned locals or organizations who were involved in the process. The articles may have been written focusing on a single organization or could focus more on the volunteer product itself. There were also examples of technological focus in these types of stories as well, highlighting apps that were created to show residents of food deserts ways in which they could access food. The stories detailed where people in the community wanted to help and the ways in which they volunteered. These articles were typically upbeat and written with a positive tone.

Here is an example:

On the sidewalk outside First Mount Calvary Baptist Church on Saturdays, volunteers stack cardboard boxes filled with produce, from apples to squash, across a strip of folding tables. People arrive in cars or by foot to pick up food to take home. No one is turned away. Before the pandemic, the church served hot meals from its soup kitchen once a week and distributed produce boxes once a month. Now, this Sandtown church hands out food six days a week -- including lunches three times a week, hot meals once a week plus produce boxes on two days. "The pandemic has created what everyone is calling a perfect storm, because now you have children who are out of school who would normally only eat when they're in school," said the church's pastor, the Rev. Derrick DeWitt, who is also the president of Clergy United for the Transformation of Sandtown (CUTS). "You also have the lack of transportation or people afraid to use public transportation, and if they could afford to go grocery shopping, getting there is a problem." The church and its members have long been dedicated to providing food to the community, and before the pandemic, they relied completely on their own donations and grant money to do so, said Roxane Prettyman, the church's outreach coordinator who does much of the cooking and distribution of food.

The article is titled, "Volunteers working harder as COVID heightens need for food" and covers Baltimore, MD. There were examples of local figures in the organization that is

doing the work, and how it is impacting the community. This was the typical frame of the articles.

There was a pattern of reporting that looked to explain the source of what drives food deserts or insecurity. A study conducted found that COVID-19 did cause a shift in the way that journalists were reporting forcing them to be intent on properly serving their local communities (Finnerman et al., 2021). Local volunteering programs would be an example of an initiative that serves communities. One of the reoccurring explanations that were mentioned was the ways in which transportation impacts those in food deserts. These articles never completely focused on transportation solely but did include information on the lack of transportation. Many of these types of articles with a mention of transportation were concentrated in northern and midwestern urbanized areas. There was not a focus on transportation as much in articles that were focused on southern or western regions of the United States.

Agricultural and Farming Themes. Food insecurity is a national issue and is intrinsically connected to agriculture. There was a constant theme of agricultural connections evident in the analysis. Agricultural and farming connections to food deserts were often included in articles on the topics. The articles detailed agricultural topics often from a local lens. The reporting focused on the intersection of food insecurity and agriculture, stories highlighting local black farmers, urban farming, or troubles that farmers were having during the pandemic. Agricultural articles were published consistently throughout this period with the reporting style staying typically the same: connecting the ways in which agriculture was connected to the pandemic. These articles

were typically narrative and character-driven profiling someone impacted and telling their story through the lens of agriculture.

The articles with an agricultural or farming theme were interconnected with other topics such as local markets or environmental issues. These articles would detail how local farmers were getting together to combat issues around food deserts. In other cases, there were stories that focused on the difficulty of farming in areas that are in a food desert. There were also examples of how agricultural issues were being exacerbated by the issue of climate change ultimately impacting food insecurity.

Table 3. Mentions of Race and Racial Groups

Racial Group	Number of times mentioned	Percentage of total articles
Race (In any capacity)	36	42%
Black	22	26%
Native American	7	.8%
Hispanic	3	.4%
Asian	1	.1%

The theme of vulnerability was apparent but because that theme overlapped with race, both are addressed below.

The Use of Race

Racialized Discourse Theory. Race has a historical presence in journalism that it must confront to progress. Researchers noted, “this will require journalists to look

squarely at how professional journalism fails to explain historical forms of racial exclusion and, in its inability to confront its own enduring whiteness, helps to reproduce, even in its liberal critique of white nationalism, unremitting forms of white privilege” (Alamo-Pastrana & et al., 2018, p. 88). The researcher chose to address the topic of food desert coverage through racialized discourse theory to understand the way that journalism coverage of marginalized communities and food insecurity contributes to larger societal conversations. All of the racially-focused articles fell under the theme of vulnerability because this type of reporting evaluated the ways in which these groups were more susceptible to living in these areas.

The discourses that are used are important because they add to our wider understanding of certain topics. Researchers explain discourse allows us to “draw upon and (re)produce particular knowledge paradigms and in doing so influence what counts as knowledge” (Hill-Collins, 2000). Racialized discourses theory specifies to identify the ways in which the topic of race is discussed and how that influences the collective understanding of general knowledge. The ways in which race was used in these articles exemplified the ways in which race is connected to the larger understanding of food deserts and the way that the topics intersect. There is a discourse of race through an overarching vulnerability theme highlighting the ways in which certain racial groups are more vulnerable as it relates to food deserts.

There were different forms of vulnerability that were present in the articles. These examples of vulnerability included living conditions, health complications, and financial struggles. Race was typically written about in its connection to one of those vulnerabilities if not multiple. Racist practices and racism have contributed to BIPOC

groups being impacted by food deserts at disparaging rates. Scholars have found that practices such as mass incarceration, job discrimination, and segregation all contribute to food insecurity (Odoms-Young, 2018). The research that supports that people of color are more susceptible to food deserts due to racism would explain why coverage of these areas focuses on marginalized communities. There were some examples of journalists explicitly detailing racism as the cause of the issue and others that didn't. These examples were published at a similar rate with articles explicitly detailing racism published slightly less.

Ultimately, the coverage of race in the articles shows who was directly impacted by food deserts. This coverage contributes to conversations around who needs help the most and who live in these communities. Including race and the legacy of racism in the articles contributes to the larger interpretation of the issue. The articles are supporting the larger societal understanding of racism being one of the underlying causes of food deserts.

Race. There were 36 articles that included context about race in its connection to the topics as seen in Table 3. These approaches included investigating how people of color were more likely to live in areas designated as food deserts, black farming, and health disparities that disproportionately impacted BIPOC (Black, Indigenous, or People of Color). In some articles, race was a central focus, and in others, it was mentioned once. The most frequent race mentioned was Black people or African Americans, being mentioned a total of 22 times. Black people were then followed by Native American or Indigenous identifying people a total of seven times. Hispanic people were mentioned three times specifically. Asian people were mentioned once. This information can be

found in Table 3. There were also instances of multiple races being included in the same article.

There were certain trends that were found pertaining to race in the analysis. Following the death of George Floyd on May 25th in Minneapolis, MN, there was an increased number of stories focusing on Black people. Articles published began to emphasize Black Americans' access to healthy food amid the pandemic. Following the protests, there were four articles published that looked at food deserts being caused by the riots, which led to convenience stores being destroyed by rioters/looters. The Star Tribune of Minneapolis published the largest quantity of these articles. When the Navajo Nation declared a state of emergency amid the COVID-19 pandemic, there was an increased amount of coverage frequently including quotes by the nation's leader and the exact number of grocers in that region. When data released highlighted that people of color were disproportionately dying due to COVID-19 complications, there was an increase in articles published that included race typically from an accessibility or health disparities angle. Many of the articles that focused on the Navajo Nation following the news that was released from the community used similar quotes that came directly from the nation's leader. The pattern that was consistent throughout the articles was highlighting that these groups were the most vulnerable and susceptible communities to have to deal with the impacts of food deserts.

Racial Health Disparities. Health-focused publications didn't publish stories on the topic as frequently as business publications but there were some examples of some health patterns that emerged. The number of health-focused stories fluctuated during the duration of the pandemic, with more stories being published during then the onset of the

pandemic and less towards the beginning of 2021. The nature of the health reporting often highlighted the linkage between diseases such as hypertension, obesity, and cardiovascular disease and food access through food deserts. The articles often cited the ways these communities suffered from higher occurrences of instances not necessarily highlighting the food deserts as the driving force behind these instances of disease but just speaking of the ways in which the two were connected. Another health centered-topic was the focus of hunger as it was related to access, citing the ways in which those who live in communities that are food deserts may go hungry or have trouble accessing food causing hunger-related sickness. The health focus in many of these stories was related to the ways in which COVID-19 was impacting people separately from food deserts.

Overall, there wasn't an extremely strong emphasis on the connections to food deserts and health in the articles, health was not the overall focus although it was mentioned.

Here is an example:

While the struggle for "food justice" is decades-old, the coronavirus pandemic has exposed how racial inequalities still make it harder for many Black Americans to eat well, affecting their health and ultimately cutting some lives short. Preliminary data from several states has shown that COVID-19 is killing African Americans at a higher rate. Human rights campaigners say that likely reflects both poorer underlying health with Black Americans more likely to have heart disease, diabetes and high blood pressure as well as reduced access to healthcare. "The bad food, the lack of food, the health disparities, the life expectancy, the incarceration rates, the violence, all of those pieces are all connected to the economic system and who has power," said Erika Allen, co-founder and chief executive at the Chicago-based Urban Growers Collective.

The article is titled, "Black urban farmers in the U.S. sow seeds to end 'food apartheid'".

In this example, the tone is sympathetic like much of the articles that covered topics were. The example shows what types of patterns can be seen, such as introducing the issue, the larger health impacts, and how COVID-19 is connected to them.

Overall, the health coverage included in the analysis was not primarily focused on the connections to race but did connect the two in a few instances. There were articles where race and health were being mentioned in connection to each other, for example when there was an explanation of diseases such as hypertension or cardiovascular. Throughout conducting the entire analysis, it was not an extremely large percentage of the type of coverage that was prioritized. Medical health disparities were not explicitly explained in the coverage except for a few examples. Less than 10 articles included race and health disparities in tandem with one another.

Vulnerability Theme. Racial groups were the most prominent group that was covered as being vulnerable in the articles. Outside of racial groups being included in the articles, there were frequent mentioning of vulnerable communities that live in proximity to food deserts and/or are impacted by COVID-19. These communities included the elderly, children, low-income, and disabled individuals who were susceptible to the impacts of both topics. The tone of the articles that mentioned vulnerable communities was like those that mentioned race and could be covered in-depth or mentioned once in an article. There were examples of these communities being covered without racial context and there was evidence of these groups being mentioned alongside racial groups. The articles executed vulnerability-theming using personal narratives, historical context, and sources' quotes typically. Many of the vulnerable-theme centered stories focused on personal narratives and were character-driven.

Thematic vs. Episodic Framing

This analysis also looked to identify the frequency of thematic framing compared to episodic framing. The analysis found that the two appeared evenly in the text with

thematic framing being a little more common and accounting for 52% of the articles. The articles that focused on thematic framing often included the larger issues that were present in food deserts and insecurity compared to episodic framing. Episodic framing articles typically just focused on a specific issue or an event like a grocery store opening. The examples of thematic framing were typically longer and were more detailed in their approach. Episodic framing was more covered in an incidental approach just highlighting the ways in which an event was occurring or where it was occurring.

In addition, the type of themes overlapped with the appearances of each frame, with monetary theming being more connected to episodic framing. Agricultural and Vulnerability themes appeared more frequently alongside thematic frames. There were instances of all the themes appearing in the two frames.

Reporting Publications and Patterns

Table 4. Frequencies of Reporting by Publication Type

Publications	# of articles published on topics
National	16
Local Publications (Large)	22
Local Publications (Small)	17
Trade Publications (Business Journals, etc.)	25
Alternative Publications (College Press, etc.)	5
Total (# of Articles Published)	85

The table above combined information to calculate this data, a full list of articles and their associated publications can be found in the appendix A.

A functioning purpose of the research was to analyze the ways in which information about food deserts is reported. In 37 of the articles, sources explained or were the major contribution of mentioning a food desert. The food desert was frequently mentioned in the context of the sources, sometimes being the only sole mention of the term. The sources ranged from local activists, grocers, residents, and politicians. There was an extreme emphasis on sources advocating for inquiry into their respective and providing information on the concept. In some instances, the author of the article would explain what a food desert was but overall, the explanation of a food desert was limited in the analysis.

The types of publications varied in this process and had different instances of reporting on the topics. Table 4 lists the patterns of publications and the amount each mentioned publication published an article on the topic. Although the *Associated Press* was a driving publisher on the topic, many of the stories that ran in this publication were from smaller localized publishers throughout the country like the Santa Fe New Mexican. The other largest contributors to the topic were business journals or business publications.

The ways in which different publications covered the topic were evident. For example, the *Atlanta Journal-Constitution* and the *Minneapolis Star Tribune* were more communal-based and included race frequently in their coverage. Larger publications like *The Guardian* also included race in their coverage but did have more instances of national coverage. A pattern that was seen in all types of publications was a volunteer or philanthropic coverage as it related to the topics. Also, mostly all publications made references to some form or aspect of financial information. A study conducted did find

that COVID-19 did cause a shift in the way that journalists were reporting forcing them to be intent on properly serving their local communities (Finnerman et al., 2021).

All the themes are tied back into the larger theme of access. Access was at the center of most of the articles whether that include creating financial opportunities for access, agricultural access, or the lack of health disparities connected to access. Some of the articles used to access with a sympathetic tone and others didn't.

RQ1's intent was to look for patterns that existed in the analysis. These patterns looked different across the coding process.

Solutions. One of the main patterns was the presentation of the problem and the ways that the problem was being addressed. It was rare, even though it did occur, that publications just laid out the information about the food desert without addressing what was being done to combat it. Much of the reporting was incident-based. Incident-based reporting meaning that the journalist is following or reporting on something that had occurred.

Reoccurring Language. There were examples of language that were constantly mentioned throughout the analysis.

- **Equity:** The term didn't appear often, but the idea was available through journalistic techniques and synonyms that led back to the topic. Terms like access, justice, value, and fair were all used in connection to explain equity and how it relates to the food deserts.
- **Pandemic:** There were examples of language that was pandemic specific, such as "social distancing", "lockdown", or the word 'pandemic' itself. The pandemic was not treated as an afterthought in this coverage but was

rather front and center in the reporting process. The pandemic was ultimately a character.

- Assistance: There was much language that focused on the origins of assistance. Terms such as ‘help’, ‘volunteer’, or ‘aid’ were used in the language around the assistance. Assistance was a primary focus and the use of terms that relayed to assistance were consistent throughout the reporting.
- Employment: There was language that attempted to identify employment to food deserts and COVID-19. The actual term ‘employment’ was used often but there also was an instance of words ‘jobs’ or ‘employment assistance programs that focused on opportunity access.
- Newness: There was multiple language that was centered around the introduction or the concept of newness. The language that supported this concept was terms like ‘new’, ‘opening’, ‘starting’, or ‘beginning.

Duration of the Pandemic. The duration of the pandemic revealed patterns as well because the analysis showed that different periods of the pandemic covered more topics than others. Articles that were published earlier and in mid-2020 were more health-focused than articles that were published later in the pandemic. Although monetary coverage was consistent, throughout the middle to later period of the pandemic, it dominated the themes appearing in the coverage. Race followed trends that were evident through national sentiments that were occurring during the pandemic, like conversations about racial issues, COVID-19 spikes, and financial issues throughout the pandemic. Coverage specifically on Black Americans was published during the larger context of

Also, towards the summer months of 2020, there began a long period of coverage that was focused on volunteer efforts or the way that community support was assisting in the process of food deserts.

Chapter 5: Conclusion

Discussion

Overall, this study set out to analyze the ways in which food deserts are reported upon and introduce a thematic framework on the topic. The results from the study showed that there were certain patterns that were revealed. RQ 1 posed the question, “What journalistic patterns and themes emerged in food desert coverage during the duration of the coronavirus pandemic?” Due to the limited research on the topic, it was not known which frame would appear more frequently but that monetary themes were consistent. This could be in part due to the financial issues already present in food deserts were more present during the coronavirus pandemic. There was evidence of health focused stories but even those stories did not dive into the topic as much as could be done. Research shows that food insecurity is a health issue (Alaimo, 2005). Coincidentally food insecurity is a consequence of food deserts, so health not being one of the main themes is complex (Gundersun et al, 2015). The theme of monetary-focused articles may be a consequence of reporting that followed certain incidents that were related to business. This connects the literature that showed historically food access was deeply connected to the business (Crowe et al., 2018). Practices like “supermarket redlining” which were detailed in the review of literature seem to still be a factor in the way that topics are covered because the reporting was deeply connected to business and where food access was going to be located (Ogburn, 2010).

The second research question is, how are race and health disparities presented in news coverage about food deserts? Race was a central factor that was found throughout the analysis. Race was constantly mentioned along with food deserts and COVID-19. Race was mentioned in different capacities and at various lengths throughout the text.

Health disparities were also present in the coverage but was not extremely dominant. The sections in the discussion that focus on the literature review and racialized discourse theory dive into the answers to the second research question more thoroughly.

Literature Review. Some of the results found supported the literature review while other results did not support the scholarship that was read prior to this study. The elements of race being present in the article follows the patterns seen in other topics related to health disparities (Nagler et al., 2016). Also, there is research that supports the results that were found as it pertained to episodic and thematic framing (Forbes, 2021). A prior study found there is no significant frame that appears between the two and this was consistent with this study's findings (Guenther, 2021). So, ultimately the findings supported the literature related to thematic framing and the presence of race.

There was also a lot present in the findings that did not appear in the literature. The biggest inconsistent finding as it related to the prior literature was the frequency of finances being covered and the ways in which a lot of the coverage is focused on the topic of food deserts. The monetary theming and financially focused based information that was centered in the analysis were surprising based on the ideas that were presented in the literature review. There was not a large amount of reading that was available that presented finances as it relates to food desert coverage or food insecurity. Most of the literature that existed on the topic was focused on ideas that were health-based but that may be due to the limited amount of research on the topic. Also, it is possible that COVID-19 influenced this reporting because of the impact that the pandemic had on the American economy. The literature focused on the information accuracy and efficacy of medical information rather than the role of monetary connections (Hoffman-Goetz et al.

2005). The research found that most of the information that was focused on health disparities was information that was focused on health and that was not what appeared in the results (Nagler, 2016). There was information regarding health, but it was not the most frequent theme.

Racialized Discourse Theory. Race being as present as it was and the inclusion of racism as a factor impacting food deserts is instrumental in providing context to the issue. The inclusion of race influences conversation on who needs help and wherein communities help is beneficial. Racialized discourse theory is rooted in understanding how information about race being presented is influencing larger societal understanding (Aviles de Bradley, 2014). The coverage revealed that race and racism are factors impacting food deserts. This is going to ultimately allow conversations of the topic to include information on race and racism. If the topic of food deserts was covered without racial context and was done in a more abstract way, this could have positioned conversations about food deserts to not include race.

The coverage of race varied and included context on finances, discrimination, and health disparities. There was not a singular type of context that emerged more frequently than the others as it related to race in the coverage. Racial health disparities appeared slightly more but did not emerge as the predominant racial context included in the articles as assumed due to the literature. The theme of vulnerability correlated with preliminary readings that took place before the analysis. Understanding racialized discourse theory, the inclusion of race in the articles was very important in shaping the larger contextually racially-based understanding of the issue. The coverage being as widespread as it was and

covering multiple contexts is helpful because it is influencing the conversations to be more thorough.

There could have been more coverage that focused on social determinants of health and how food deserts impact different racial communities. There was a lot of coverage that focused on Black Americans and secondly, Native Americans but Hispanic Americans were not as prominent. According to data, it is estimated that 29% of Latinos live in areas designated as food deserts (McIlveen, 2017). McKinsey & Company estimates that 20% of Black Americans live in food deserts (2021). Almost 26% of Native Americans live in food deserts and many Native American reservations are classified as food deserts (2017). Based on the statistical information that was made available, Hispanic people would have been the most prominent group appearing in the research followed by Native Americans. As it relates to racialized discourse theory, it is important to not only look at if race is being included but what racial groups are being covered and how? There must be inclusion of all racial groups that are impacted by food deserts in the coverage to make sure that it is accurate and not just emphasizing a singular group. The findings present the issue as if it impacts predominantly one group, but statistics reveal that this is not in fact true.

Time Frame. The findings revealed that events that took place in the pandemic impacted the coverage. George Floyd's death and the Navajo Nation's leader announcing the issues that Native Americans were facing showed a rise in coverage. Also, during the COVID-19 pandemic, when there was a rise in coverage that focused on specific volunteer events like community fridges in the Northeast or food banks in the south, there

was a rise in the coverage of these topics. Ultimately, what was taking place was instrumental in how the topic was approached.

Limitations

There were a few limitations that were presented in the analysis. Primarily, the use of Factiva, even though it is a database with a vast number of articles, the search engine may not encompass every article that was published on the topic. So, my sampling study does not include the coverage of this topics in their entirety. Also, *Factiva* is business information and research tool owned by Dow Jones & Company, so that could possibly have influenced the research results. Due to this, the researcher conducted a web search of articles that were not in the time frame and found that business aspects were included in those examples as well. Financial information was present in web articles that were looked at outside of *Factiva* as well, so even though that was the limitation, additional research revealed that this was a consistency,

Also, the time frame in which the search was conducted in providing robust analysis on food desert coverage may have been limited. Due to the analysis looking at months of the pandemic, this may play a key role in the way the way that the topic was covered and differences in food desert coverage may have taken place prior to the coronavirus pandemic. COVID-19 was extremely influential in the way that food deserts were covered. Although, the search time frame begins 11 days before the World Health Organization officially declared a pandemic, there was already an influence pertaining to COVID-19 before the WHO's declaration.

The Future

Research. There is an opportunity to do a lot more research on this topic, as mentioned, there is a limit on the amount of information that is available. Additional research can be done by analyzing the history of the way that food deserts have been covered in the United States. Being that the term is around 30 years old, a historical analysis of its origin in journalistic coverage can provide a framework for understanding how it is currently covered. Also, research that is conducted throughout different generations on food deserts can provide possible information as could be covered in the future or what needs to be addressed.

Outside of just primarily focusing on food desert research and coverage, there's an opportunity to look at and analyze the ways that food insecurity is covered. The literature review showed that most of the research that was done on the topic although it was limited was conducted from an advertising or marketing perspective as it related to media. There were very few examples of journalistic analyses pertaining to food deserts. The analyses that were available were also global or focus on a different region of the world, there was not, an extensive number of United States-based research.

U.S. news media provides a very powerful opportunity to influence and shape the understanding of certain topics. So, if the research is conducted it will provide an opportunity to possibly address the issue. There is an opportunity to look at framing themes and journalistic patterns that exist on this topic outside of the examples that were analyzed in this study. For example, an analysis that looked at broadcast journalism, the coverage that followed other national emergencies, or journalistic frames all are present here. There are opportunities to do comparative studies, such as looking at alternative

publications such as the Black press coverage of food deserts compared to mainstream news. Studies can also compare how food deserts are covered compared to food oases. In conclusion, there is an opportunity to do a lot with future research on food desert coverage.

Profession. The findings show that food deserts were covered as more of a business story rather than one that focused on social determinants of health. Even though, there were a few examples of articles that focused on the social determinants, it was not dominant in the coverage. Going forward, journalists can encompass the multiple factors that contribute to food deserts instead of solely focusing on the financial implications.

The ways in which the stories were covered may also be impacting the frames that dominated the study. According to prior research, business stories are generally covered in episodic framing, because the genre is looked at as being too abstract or too complex for a general audience to understand (Adoni and Cohen, 1978). Studies also revealed that episodic framing accounted for one-third of poverty stories (S.-H. Kim et al. 2012). There is also research that suggests that journalism covers poverty as more of an individual issue rather than a societal one (Rose and Baumgartner, 2013). This differs from studies that find that health discourse in the media is typically more thematic (Higgins et al. 2006). A 2008 study found that thematic frames cause fewer emotions in the audience but tend to be more persuasive, even if the episodic frame caused a stronger emotional response in the audience (Gross). Ultimately, this is showing that the coverage must be balanced to trigger emotional responses and actions from the readers. Including more information regarding social determinants of health, health complications, or even other factors that contribute to food desert-like history can be impactful in the topic's coverage.

Also, as seen earlier, Black people accounted for most of the coverage of food deserts during COVID-19. Statistics revealed that other racial groups are equally if not more vulnerable to living in areas designated as food deserts. This is not reflected in the findings. It is important for journalists to make sure their reporting is inclusive of all these communities and groups and not focused on a singular group. Hispanic Americans were not covered as much as they could have been being that almost 30% of Latinos live in food deserts.

Ultimately, information regarding health, historical context, and specific racial groups were the main factors that were missing in the coverage. Going forward, as a profession, the context surrounding those topics should be included more in articles. There were 85 articles that were included in this study, and non-traditional media such as trade publications and editorials were included. There needs to be more coverage of food deserts in general.

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Appendix A

List of Articles Included in the Analysis (by chronological order)

COPING WITH COVID: (March 2020). FoodShare South Carolina . *Columbia Regional Business*.

Changes brought by COVID-19 may reveal some basic blessings. (March 2020). *Boston Globe*.

Social Distancing Is a Privilege. (2020 April). *The New York Times*.

Everytable levels food insecurity playing field at Santa Monica College. (April 2020). *Food Management*

How these execs are (still) selling Nashville. (2020 April). *Nashville Business Journal*

St. Paul urban farm goes fallow // Shutdown has Frogtown leaders concerned beyond 2020. (2020 April 2020). *Minneapolis Star Tribune*

Polluted US areas are among worst-hit by coronavirus – putting people of color even more at risk. (2020 April). *The Guardian*

Renewed push starts for a grocery store near Hopkins Hospital. (2020 April). *Baltimore Business Journal*

Idled Cincinnati arts groups perform acts of kindness to help those struggling. (2020 April). *Cincinnati Business Courier*

Rural grocers deal with supply issues due to COVID-19. (2020 April). *Mankato Free Press*

Partners with a Purpose: 'It's about feeding people'. (2020 May). *Boston Business Journal*

Redeveloped Union Station will be site of Wichita's newest farmers market. (2020 May). *Wichita Business Journal*

Navajo nation reels under weight of coronavirus – and history of broken promises. (2020 May). *The Guardian*

Company Notebook. (2020 May). *Business West*

'In each other's shadows': Behind Irish outpouring of relief for Navajo. (2020 May). *The Christian Science Monitor*

Coronavirus has gotten so bad in the US, Doctors Without Borders sent a team here. (2020 May). Boy Genuis Report

UNFI CEO: Recession, new consumer habits could last 24 months. (2020 May). Supermarket News

Navajo Nation surpasses New York state for the highest Covid-19 infection rate in the US. (2020 May) CNN

US coronavirus death toll passes 90,000 but influential model lowers its prediction. (2020 May). CNN

All states will be partially reopened by Memorial Day weekend despite at least 17 recording upward case trends. (2020 May). CNN

I want meaningful justice reform. I also worry about the health effects of these protests

Rioting's aftermath leaves food desert. (2020 June). The Minneapolis Star-Tribune

U.S. News -- Capital Account: Twin Crises Blunt Black Economic Gains. (2020 June). The Wall Street Journal

Community aid distilled // Du Nord, other small firms trying to help fellow business owners suffering after riots. (2020 June). The Minneapolis Star Tribune

A Minneapolis school asked people to donate food for students after looting closed stores. 'Miles of cars' lined up. (2020 June). The Washington Post

In their words part 2: Buffalonians look forward following racial injustice and community discord. (2020 June) Buffalo Business

Monitor: Coast-to-coast upheaval means brands should listen first. (2020 June). Politico

LISC attacks health by improving where and how people live. (2020 June). Indianapolis Business Journal

The ministry of erosion. (2020 June). The Christian Century

Navajo nation reinstates lockdown as Covid-19 cases surge near reservation. (2020 June). The Guardian

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Covid-19 has emptied out Baltimore's downtown. What happens next?. (2020 September) Baltimore Business Journal

Country Singer Tyler Childers Makes a Powerful Appeal to Rural Fans to Understand Black Protesters' Anger; In a video statement to explain. (2020 September) Variety

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Group of Black women farmers target agricultural disparities. (2020 September). The Post Courier

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Oregon sends Covid-19 vaccine distribution plan to feds, with phased approach. (2020 October).

Feeding downtown Valpo: Roots rebrands after adding groceries. (2020 October). Times of Northwest Indiana

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Lifetime Partners with Charities to Give Women the 'Gift of a Lifetime'; (Exclusive). (2020 November). The Hollywood Reporter

More and more Bostonians struggle to feed themselves as a resurgent pandemic approaches. (2020 November). The Boston Globe

Teens' quarantine diaries. (2020 November). Philadelphia Inquirer

How a bus ride tells the story of a crisis that existed long before the virus hit. (2020 December). The Washington Post

Policy experts push greater support for New Mexico farmers

Stopping the pandemic isn't about blame but responsibility. (2020 December). Sante Few New Mexican

More American families struggling to afford food. Can food banks cope? (2020 December). The Christian Science Monitor

Restaurateur wants food truck to inspire East St. Louis. (2020 December). Belleville News-Democrat

Volunteers working harder as COVID heightens need for food. (2020 December). Baltimore, Associated Press

Dayton-area city booms with new businesses in pandemic. (2020 December). Dayton Business Journal

Kansas gets creative in using federal COVID-19 aid. (2020 December). Kansas Public Radio

Millions go hungry as America reels from pandemic's effects. (2020 December). The Guardian

ONLY IN THE AJC URBAN FARMING: Atlanta's largest urban farm becomes a landowner: Truly Living Well provides fresh produce to local food. (2020 December). Atlanta Journal Constitution

New Fifth Ward grocer Telomarket seeks to feed, employ local population. (2021 January). Houston Business Journal

Frankfort's food desert: what's been lost and what may come. (2021 January). AP, The State Journal

A HAND UP FREE FARMERS MARKET ENSURES THOSE IN NEED AGAIN HAVE ACCESS TO FRESH VEGGIES - AND HOPE. (2021 January). Pittsburgh Post-Gazette

Nuns founded Chicago's oldest hospital. Today Black Catholics are fighting to keep it open. (2021 February). *America Jesuit Review Magazine*

Three Amazon Fresh grocery stores apparently in the works for the Twin Cities. (2021 February). *Milwaukee Business Journal*

Appendix B

Theme Occurrence List				
Article Titles	Monetary	Farming	Communal	Vulnerable
COPING WITH COVID:.	X			X
Changes brought by COVID-19 may reveal some basic blessings	X		X	X
Social Distancing Is a Privilege	X			
Everytable levels food insecurity playing field at Santa Monica College			X	X
How these execs are (still) selling Nashville	X			
St. Paul urban farm goes fallow				
Polluted US areas are among worst-hit by coronavirus – putting people of color even more at risk	X		X	X
Renewed push starts for a grocery store near Hopkins Hospital.	X		X	
Idled Cincinnati arts groups perform acts of kindness to help those struggling	X		X	
Rural grocers deal with supply issues due to COVID-19	X	X		X
Partners with a Purpose: 'It's about feeding people'.	X			
Redeveloped Union Station will be site of Wichita's newest farmers market.	X	X		
Navajo nation reels under weight of coronavirus – and history of broken promises.	X	X	X	X
Company Notebook	X			
'In each other's shadows':	X		X	X
Coronavirus has gotten so bad in the US, Doctors Without Borders sent a team here	X			X
UNFI CEO: Recession, new consumer habits could last 24 months	X			

Navajo Nation surpasses New York state for the highest Covid-19 infection rate in the US	X	X	X
US coronavirus death toll passes 90,000 but influential model lowers its prediction	X		X
All states will be partially reopened by Memorial Day weekend despite at least 17 recording upward case trends.	X		
I want meaningful justice reform. I also worry about the health effects of these protests	X		X
Rioting's aftermath leaves food desert.	X	X	X
Community aid distilled	X		X
A Minneapolis school asked people to donate food for students after looting closed stores.	X	X	X
In their words part 2: Buffalonians look forward following racial injustice and community discord	X	X	X
Monitor: Coast-to-coast upheaval means brands should listen first	X		
LISC attacks health by improving where and how people live		X	X
The ministry of erosion		X	X
Navajo nation reinstates lockdown as Covid-19 cases surge near reservation.(X	X	X
FOOD SHELVES WORKING TOGETHER TO FILL THE GAPS /		X	X
Black leaders outraged Tulsa is hosting Trump's rally		X	X
Cub's Mpls. stores to be rebuilt; UNFI will spin 2 chains into 1 unit	X	X	X
Timothy Fisher Steps Down as Dean of University of Connecticut		X	

School of Law			
Symbolism alone won't solve District's disparities	X	X	X
A NEW START Clearing Market St. site hailed as step to retail rebirth.		X	X
MIXED-AGE NEIGHBORHOODS MAY PROMOTE HEALTH		X	X
NEW FUNDING FOR RETAILERS WHO HELPED SUSTAIN FOOD ACCESS	X		X
Bluff City Greens brings groceries to South Memphis	X		X
Feeding a need	X	X	X
A one-two punch for retail landlords;	X		
North Carolina co-op grocery stuck in limbo awaiting funds	X	X	X
Community fridges help fight hunger in New York	X	X	X
Community Hunger Refrigerators in New York.	X	X	X
Philadelphia Based Black-led Private Equity Fund TPP Capital Seeks One Billion for Black Health.	X	X	X
INSIGHT-Black urban farmers in the U.S. sow seeds to end 'food apartheid'		X	X
This app connects low-income families with free fruit and vegetables		X	X
Plentiful partnership; Two St. Petersburg congregations unite to grow fresh produce for any neighbors in need.	X	X	X
'People have already lost so much		X	X
AJC HELPING OTHERS: PAWKids helps support Grove Park's underserved	X	X	X

Philadelphia development firm looks to raise \$1B to revitalize Black neighborhoods Food justice efforts fight hunger, create food desert oasis.	X		X	
I'm an ER doctor and father who believes school is as essential as healthcare	X			X
Group fights COVID food insecurities with community fridges	X	X	X	X
Dole Packaged Foods Takes Action to Address Global Food Accessibility Challenge	X		X	X
'Coming here is a necessity demand for food aid soars in US amid job losses	X		X	X
Covid-19 has emptied out Baltimore's downtown. What happens next	X		X	X
Country Singer Tyler Childers Makes a Powerful Appeal to Rural Fans to Understand Black Protesters' Anger				X
Tyler Childers to Fans: 'Stop Being So Taken Aback by Black Lives Matter'				X
Group of Black women farmers target agricultural disparities		X	X	X
Birmingham venture raises capital for indoor farm project	X	X		
Zero waste is not a waste of time	X	X		
Grocers stockpile goods	X			X
Cleveland Produce Distributor Fights Food Waste,	X	X		
Oregon sends Covid-19 vaccine distribution plan to feds, with phased approach				X
Feeding downtown Valpo			X	X

HEROES OF THE PANDEMIC	X	X	X	X
Lifetime Partners With Charities to Give Women the 'Gift of a Lifetime'	X			X
More and more Bostonians struggle to feed themselves	X		X	X
Teens' quarantine diaries	X	X	X	X
How a bus ride tells the story of a crisis that existed long before the virus hit	X		X	X
Policy experts push greater support for New Mexico farmers	X	X	X	X
Stopping the pandemic isn't about blame but responsibility				X
More American families struggling to afford food. Can food banks cope?	X			X
Restauranteur wants food truck to inspire East St. Louis	X		X	
Volunteers working harder as COVID heightens need for food	X			X
Dayton-area city booms with new businesses in pandemic	X		X	
Kansas gets creative in using federal COVID-19 aid	X		X	
Millions go hungry as America reels from pandemic's effects				X
ONLY IN THE AJC URBAN FARMING: Atlanta's largest urban farm becomes a landowner: Truly Living Well provides fresh produce to local food		X	X	X
New Fifth Ward grocer Telomarket seeks to feed, employ local population			X	X

Frankfort's food desert: what's been lost and what may come	X		X	X
A HAND UP FREE FARMERS MARKET ENSURES THOSE IN NEED AGAIN HAVE ACCESS TO FRESH VEGGIES - AND HOPE		X	X	X
Nuns founded Chicago's oldest hospital. Today Black Catholics are fighting to keep it open.	X			X
Three Amazon Fresh grocery stores apparently in the works for the Twin Cities.	X		X	

Appendix C

Codebook

Open codes for RQ 1

Open-Codes	Definition	Examples
<i>Financial implications</i>	These were articles that emphasized the correlation between food deserts and COVID-19. the articles analyzed so far emphasize local issues that relate to food insecurity, economic issues, and food deserts	“The urgency around hunger has grown, along with the numbers of hungry Minnesotans, so there’s an immediacy to my partnering asks and calls for guidance. When George Floyd was murdered, communities already experiencing Covid-related hard times found themselves living in a food desert.”
<i>Localized Coverage</i>	Local publications and local business journals. When covered by local publications, the area’s history and economic issues that are currently impacting the area.	“Southeastern Grocers began its expansion in February with the opening of a new Winn-Dixie store in the grocer’s hometown of Jacksonville in response to local city and community pleas to combat an impending food desert in the Brentwood community.”
<i>Business Reporting</i>	Articles looking at the financial impacts of food deserts and Covid-19. Words like “income”, “business”, and “economy” were frequently used. Many of the articles are detailing the opening of a new business that will be bringing fresh food to the area. Covid-19 is mentioned many times in these articles as exacerbating many of the pre-existing issues related to food insecurity in that area. Analyzing the headlines of the articles analyzed, nearly 80% of them had to do with opening of a local business, grocer, or farming.	"Entrepreneurs are looking for new locations and our city has a lot of storefront availability," she said. "Especially with Downtown Middletown Inc., the group has worked to help businesses grow locally."

<i>Sourcing</i>	Sources are typically local and consist of those who are close to the topic and are involved with what is being covered. Interestingly the sources are the ones who are frequently mentioning the term “food desert”, and quoting is a common way for the topic to be included in the articles	"Downtown Middletown is a food desert, so this is something that I always thought was needed," she said
<i>Regional</i>	Location may have an impact on the way the topics are covered, and this could be area of the United States or rural/urban.	“Food insecurity has surged since the onset of the pandemic – since the start of the outbreak alone, Food Bank For New York City has distributed more than 77 million meals to New Yorkers in need, a 70% increase over last year,” the statement said. “
<i>Farming</i>	Agriculture is commonly referenced but in a different way, such as urban farming or troubles that local farmers are possibly having.	“The tour was hosted by PA Veteran Farming Project, which connects military veterans to programs and resources, including those available through the state.”
<i>Time</i>	Articles that seemed to be published earlier in the pandemic emphasize more so the connection between Covid-19 and food deserts. Later, coverage doesn’t have the same emphasis, but developing this.	“Those hardest hit financially during the pandemic also live in neighborhoods where people do much of their shopping at convenience stores because of a lack of access to groceries.”

Open-codes for RQ 2

Open-codes	<u>Definition</u>	<u>Examples</u>
<i>Racial Vulnerabilities</i>	Text that focuses on the connection between groups that are ore vulnerable to deal with health disparities or live in areas designated as food deserts	Mr. Coleman serves as a deacon at Saint James Catholic Church in Chicago's predominantly Black Bronzeville neighborhood, about a half-mile from Mercy Hospital.

Axial Codes based off open codes

Code	Definition	Sub-theme	Example
<i>Monetary-Theming</i>	Information that pertains to the financial connections of food deserts	Financial	“In the middle of a pandemic, mostly low-income Washingtonians are riding the bus. It is a lifeline through poorer areas of the nation's capital where food and services can be hard to reach. And it tells the story of a crisis that existed long before the coronavirus hit.”
	This includes the openings/closures, or issues that business were faced with	Business	“The store includes produce, a bakery and a butcher. The butcher will be a major focal point for the store, Ayala said. It will also serve meals all day. The store’s 50 staff members are mostly members of the Fifth Ward community, a factor that’s important to Ayala.”
	This is coverage that focused on programs that aimed to give aid away or assist in financial programs, this also included philanthropic giveaways	Aid	“Kansas Grown, which has operated for 30 years and is considered the largest market in Kansas, also hosts the farmers markets at the Sedgwick County Extension Office at 21st and Ridge Road in west Wichita and at Madison Avenue Central Park in Derby.”
	Financial decisions that related to the COVID-19 pandemic or issues	Crisis	The health system reported more than \$8 billion in cash on hand earlier this year before the pandemic hit.

Vulnerability-Theming

Information that related who is more susceptible to food deserts	Susception	“Every day the president of the Navajo nation provides a coronavirus update, and every day there’s more bad news. The Native American tribe now has the highest per-capita Covid-19 infection rate after only New York and New Jersey, and the spread is not slowing.”
These were examples that include racial groups or other groups that were vulnerable to food deserts	Group-Identification	“Elderly residents and people with disabilities or preexisting conditions are more likely to rely on SNAP, but one-third of recipients are from working families. SNAP recipients in Massachusetts also are more likely to be Black, Hispanic, or people of color — groups disproportionately affected by COVID-19.”
Text that focuses on health disparities and the impact of farming	Health	“It’s not just the quantity of homes, it’s also about quality. About 30% of people do not have electricity, and so cook and heat their homes by burning coal or wood which irritates the lungs – potentially exacerbating the risk of severe Covid-19.” “
<i>Agricultural-Theming</i> Text that focused on aspects of farming and agriculture	Access	“This has been the philosophy: the concentration of farms and the farming system into a very narrow and small number of people, and they are being squeezed. So in between the producers and the consumers, you have the processing companies, the big grain companies, who are controlling the distribution of our food in this country and creating a system that is just broken,” he said.
Urban farming or rural farming groups	Access	“I have three goals: The first goal is to work collectively as Black women to show that we can work together. No. 2, that farming will create health for you
<i>Communal-Theming</i> Localized coverage that focused on local areas	Location	“Food insecurity is far from a new issue in Baltimore, but the spread of COVID-19 -- with schools shut and jobs lost -- has intensified the problem. The Maryland Food Bank, a non-profit hunger-relief organization, saw its distribution

		rate increase by 96% over last year's rate between March and October”
National coverage that covered the national as a whole	Location	Tens of millions of Americans have long faced hunger, but the pandemic, which has left more than 323,000 dead in America and devastated the economy, has worsened lack of access to sufficient food.
Volunteer efforts that attempted to combat food deserts	Assistance	“For six years, Carolyn Anewich has been in charge of Soul Kitchen, a mission of the Govans Presbyterian Church that feeds people a hot gourmet meal once a week. Anewich not only runs the mission but is the head chef and publicist as well. She and her team of volunteers make it happen each week without pay.”