VOICES FROM THE FIELD:

A Q METHODOLOGY STUDY ABOUT RURAL

HOSPITAL PRIORITIES

By

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Title of Study: VOICES FROM THE FIELD: A Q STUDY ABOUT RURAL HOSPITAL PRIORITIES

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Abstract: In the face of rampant and widespread rural hospital closures in Oklahoma (Woodring et al., 2021), voices of rural residents are being left out of decision-making conversations (DeKeseredy et al., 2013). This comes at a high cost for rural people, both financial and in the lives and wellbeing of those seeking care in these areas (Miller et al., 2020). Researchers used a conceptual framework based on Phillips and Pittman's (2014) rural development text, focusing on the thoughts about economy, social impact, politics, and technical assets.

Seeking to understand priorities of rural Oklahomans regarding rural healthcare, researchers employed Q Methodology, a form of factor analysis designed to describe subjective perspectives in a small group of participants (Brown, 1980). Twenty rural Oklahomans participated by sorting a 43-statement Q set of opinions on the rural healthcare phenomenon according to their thoughts on the condition of instruction, "What matters to you about having a hospital in your community?"

Based on the interpretation of Q sort data, interviews, and field notes, this study describes two priority mindsets, the Business Priority perspective and the Relationship Priority perspective. The Business Priority perspective has a thrive mentality, observation through economic impact, and is full of determination when facing hurdles. The Relationship Priority perspective has a survive mentality, sees their world through an idyllic view, and values unity above other factors.

Though these perspectives have different initial priorities regarding healthcare, they have a common, foundational priority of preserving life and making decisions that will further that end. Based on these two perspectives, legislators, local stakeholders, and rural hospital operators should accept and involve engaged rural residents in the conversations about rural healthcare to best serve the people living in critical Oklahoma communities.

TABLE OF CONTENTS

Chapter Page

LIST OF TABLES

Table Page

LIST OF FIGURES

CHAPTER I

INTRODUCTION TO THE STUDY

The United States Census Bureau first reported the country had a majority urban population in the 1920s, and as of 1990 the majority lived in urban metropolitan areas of more than 1 million residents (Deavers, 1992). With fewer people living in rural areas, their problems are increasingly forgotten or intentionally ignored (Ulrich-Schad & Duncan, 2018). One of the problems rural people in the United States face is a perfect storm of healthcare inequality that is increasing in intensity every day (Thomas et al., 2014). The culture, economic disparity, and geographic challenges that are inherent in rural life create problems for people seeking emergency and wellness care across the country (Thomas et al., 2014).

Rural hospitals are closing at an increasing rate in Oklahoma and across the country, especially in the last decade (Kaufman et al., 2016). Due to lack of revenue, local leaders are increasingly forced to choose between subsidizing a failing hospital or risk losing the economic value it creates for the community (McDermott, et al., 1991).

Without nearby access to healthcare, rural people are more likely to face severe consequences of illness and injury (Ison & Russell, 2000). Increased time in an

ambulance or personal transport before receiving care at a permanent facility increases the likelihood of insufficient care and potential loss of life (Miller et al., 2020).

Closure of a rural hospital creates increased strain on local emergency services that causes slower reaction times and longer transportation times (Miller et al., 2020). A longer-term impact of a rural hospital closure is the degradation of healthcare quality and value in neighboring systems due to decreased competition in the local market (Frakt, 2019).

Macaulay et al. (2021), found rural community members with varying degrees of medical background were capable of understanding and contributing to discussions about healthcare options. When determining what to prioritize when creating an improvement plan for their healthcare system, rural communities did not have homogenous views and expressed the importance of a multifaceted approach to healthcare reform (Macaulay et al., 2021).

Purpose of the Study

The purpose of this study was to explore perspectives of rural people regarding their priorities related to rural hospitals and healthcare. With this aim, more information will be available to both rural and urban people about perspectives that exist in rural areas. This could help inform discussions of resource allocation and policy decision making at local, regional, and state levels.

Conceptual Framework

The conceptual framework for this study stemmed from the sources of greatest influence in a developing community described in Phillips and Pittman (2014). There are seven categories named by the authors, but the present study utilized the four areas that are most prevalent rural life: political, social, economic, and technical. These areas are often where conflict can arise due to disagreement of importance or management styles. These four categories are common aspects of various frameworks based on types of capital, which have differing inclusion due to the situational necessity of the research problem (Farmer et al., 2012). Political influence is the ability of local, state, and federal government to control the resources available for use. Social influence can be a form of unofficial political influence as it involves the human connection that can impact decision-making in a community as well as the human resources available. Economic influence is related to the finances of a phenomenon, both personal and on a corporate level. Technical influence has to do with the expertise and physical resources available in a community, which in the case of rural health includes the presence or absence of up-to-date hospital facilities. Each of these areas is relevant to the purpose of this study because people can best prioritize those tangible influences with which they are most familiar, and some of the most prominent factors in health care operations are policy, people, money, and expertise.

Statement of the Problem

There is an immediate, critical need for understanding the needs of rural residents regarding their healthcare (Harrington et al., 2020). Research conducted to date regarding

healthcare is focused on the statistical realities rather than real-life experiences (Frakt, 2019). Policymakers, administrators and other stakeholders need to welcome the prioritized issues of rural people in order to better understand the local environment within rural hospital closures increasing nationwide. The problem this study addresses is the lack of rural voices sharing their own opinions in the larger conversation about rural healthcare.

Research Questions

There are two research questions for this study:

1. What are prominent priorities of rural people regarding hospital access?
2. How does the conceptual framework derived from Phillips and Pittman (2014) assist in understanding the priorities?

Assumptions

The following assumptions were made for this study:

1. Rural people utilize hospital and healthcare services.
2. Rural people will honestly share their opinions about their healthcare to the best of their ability.

Limitations

The findings of this study cannot be generalized to a sample or population of people. Rather in Q methodology the generalizability is reflected by the sampling procedure to obtain the Q set of statements from the concourse of all possible opinions

about the topic of study. The thoughts and opinions reflected in individual Q sorts and interviews are those held by the participants in this study.

Terminology

Array Position: The number indicating the column in which each statement exists in the composite array, ranging from -5 to +5 (Brown, 1980)

Concourse: A collection of items, usually self-referential statements, that represent all possible thoughts about a phenomenon (Stephenson, 1952)

Condition of instruction: The question or statement by which participants are instructed to complete a Q sort (Brown, 1980)

Factor array: A composite Q sort created by correlating the placement of statements of all sorts that define a single factor. Acts as a representative sort which defines the perspective.

Factor loading: Factor loadings express the fit of a singular sort with the factor array for each factor. These loadings are defined as correlation coefficients (McKeown & Thomas, 2013)

Operancy: Concepts can be expressed through observable actions (Brown, 1980)

P set: The participants who complete a Q sort

Q methodology: A methodology of factor analysis that reverses traditional R factor analysis to correlate people instead of test items (Stephenson, 1935)

Q set: The selected items from the concourse to represent the variety of opinions about a topic.

Q sort: The process and result of ordering Q set statements on a formboard according to a condition of instruction

Subjectivity: Variation in belief or opinion that is not accidental or random (Brown, 1980)

CHAPTER II

REVIEW OF LITERATURE

The purpose of this study was to explore perspectives of rural people regarding their priorities related to rural hospitals and healthcare. This chapter will describe the current environment of rural healthcare

Rurality

People have been grappling to find a concise, absolute definition for what makes something "rural" since the existence of "urban" began (Meserole, 1938). To be considered rural an area must exist in a geographic distance from urban areas, but also contain a unique set of traits that have grown from this separation over time (Mishra et al., 2021). Rural communities face a unique set of problems, which can usually be understood through physically distanced place, lack of diverse employment, sparse population with aging demographics and low public participation (Ford, 2016).

Rural culture tends to be simplified by those outside it as stunted, unintelligent, and impoverished (DeKeseredy et al., 2013). This mindset is largely due to continued media portrayals of a stagnant and homogenous group, despite the myriad differences in culture and personality in every region of rural communities (DeKeseredy et al., 2017).

Rural people often have deep-set ties to place and more deeply value family and community than those who do not identify as rural (Ulrich-Schad & Duncan, 2018). However, a monolithic view of any group of people can be damaging when those beliefs create any sort of hurdle, internally or externally, toward progress and improved quality of life. Rural areas tend to have endemic cultural traditions, which, passed down through generations, can stagnate the development of the community (Ison & Russell, 2000).

Rural Places

The borders of rural distance are not clearly defined. The distance that makes a place rural, or that makes a hospital isolated, is dependent on the resources of residents and the complexity and urgency of needs (Buzza et al., 2011). The United States Department of Agriculture Economic Research Service defines rural as a multidimensional concept with many definitions depending on measured variables such as population density and geographical isolation (Cromartie, 2019). In many ways, it is simpler to define metropolitan areas – densely populated centers of 50,000 or more people and the surrounding, economically dependent counties – and consider anything outside this definition as rural (Cromartie, 2019). These definitions also change with time, as the standards for a viable, thriving community are different today than at any point in the past (Cromartie & Bucholtz, 2008).

Rural People

Rurality is a performance enacted by those who consider themselves as rural people (Woods, 2010). This act of performing rurality does not mean being rural is ingenuine, but that there are distinct characteristics that can be acted upon to distinguish

oneself from outside groups. Rural research has begun shifting from the concrete measures of economic and political impact to the subjective attributes of the social construction surrounding rural culture (Woods, 2010).

In rural communities, there is often a small group of active, dedicated individuals who participate in all aspects of community life while the rest of the population remains largely uninvolved (Ford, 2016). This concentration creates vacuums of thought and power that can create blockages to creative solutions, especially when average residents who are using healthcare services are not involving themselves in decisions (Ford, 2016).

Rural America has an older, sicker, and poorer population than that of urban or metropolitan areas (NICHM, 2020). Elderly people in rural areas face an additional set of challenges because the additional care necessitated by age is not readily available in most rural communities (Coburn, 2002). Older adults in rural areas have generally poorer health than those in other areas, partially as a result of the lack of maintenance care over time (Nichols et al., 2020). Despite this disparity, older rural residents are less likely to be involved in long-term studies because of challenges in distance and communication (Nichols et al., 2020).

Rural Development

Rural community development is subject to the highs and lows of available resources of all kinds (Phillips & Pittman, 2014). Most of these resources can be categorized into one of seven types of community capital: natural, technical, economic, human, social, political, and spiritual. In this study, four were chosen that had the most concrete impact on rural people in their perceptions of healthcare. Macaulay et al. (2021)

identified local economic activity, protecting and caring for the community, redistribution of resources, and investing in people as areas rural people emphasized when planning to improve healthcare systems. These four areas correspond to four of the seven influential categories, economic, social, political, and technical, respectively.

The economic status of a rural community is the first and greatest determinant of the available opportunity in the area, especially regarding access and quality of healthcare (Frakt, 2019). The economic viability of a community is closely linked to the quality of local government and the attitudes of residents toward innovative action (Rivza & Kruzmetra, 2017). A unique set of social interactions are inextricable from rural culture in the United States, and these relationships affect the community's willingness to participate in their own individual wellbeing and support that of other residents (Rivza & Kruzmetra, 2017). Rural health systems must abide by policy determined at every level, often including broad legislation that is more fit to urban or metropolitan community health (Inglehart, 2018). Finally, the personal expertise and physical assets a community possesses, which constitutes its technical, also known as built, resources, represents the time and financial investments that convert to assets (Kline et al., 2018). Rural community sustainability is particularly strongly influenced by economic and social resources (Farmer et al., 2012).

In rural development powered by outside entities, residents prefer new and personalized methods of regeneration be applied, rather than adapted practices from urban settings (Zografos, 2007). Businesses that reinvest in the area rather than seeking ultimate profit are more positively received by community members, which can be applied to healthcare businesses (Zografos, 2007).

Brain Drain

A major factor in the future viability of rural communities is the possibility of brain drain, the process of young, talented people from small towns leaving for education and work opportunities in more urban areas (Phillips & Pittman, 2014). Brain drain is exacerbated in areas where automation or progress has created redundancies in the local labor force (Ulrich-Schad & Duncan, 2018).

Brain drain is especially prominent in the healthcare field because students who incur student debt are more likely to take positions at large hospitals with more financial resources than in their hometown or another rural area (Vazzana & Rudi-Polloshka, 2019). Some areas are combatting this trend with programs like student loan forgiveness or partnering with larger hospital systems to rotate qualified employees into rural healthcare systems (Serour, 2009). Brain drain cannot be allowed to continue without recourse in rural America because health care professionals in a town are a significant factor in the sustainabilty of that community (Farmer, et al., 2012).

Policy

Positive development in rural areas is not a one-size-fits-all solution (Ison & Russell, 2000). Rural healthcare policy is complex, but there is a higher possibility of reaching agreement if differences of opinion are acknowledged and openly considered (Baker et al., 2021). Small, isolated hospitals generally need more support to maintain similar standards of employee qualification as more urban healthcare settings (Smith et al., 2019). However, the elementary path of solving inequality by distributing wealth,

access, and power more equally to rural areas is unrealistic and unhelpful (Mishra et al., 2021).

With the instatement of the Affordable Care Act, millions of previously uninsured Americans received practical medical insurance, affording many the ability to access healthcare (Sharp et al., 2015). However, the day-to-day reality of limited access did not change for those newly-insured Americans living in rural areas. Rural healthcare policy is often created on a federal or state level, and legislation usually best serves metropolitan areas (Iglehart, 2018).

In 2016, Medicare only reimbursed telehealth appointments for patients in designated rural clinics to interact with specialists in urban areas (Mehrotra, 2016). Over the proceeding five years, coverage for telemedicine has increased greatly for services across the board, culminating during the COVID-19 pandemic (Medicare, 2021). Despite the effort over time to integrate telemedicine into rural primary care, it accounts for only a small portion of appointments in rural America, though the percentage rose sharply during the pandemic (Koonin et al, 2021). Broadband internet access is often slow and unreliable in rural areas, which deters individuals from electing to access healthcare online (Drake et al., 2019). However, rural people are also hesitant to utilize telemedicine because of the stigma surrounding the practice and uncertainty of reliable, complete care (Struminger & Arora, 2019).

Healthcare

Healthcare is an essential part of a high quality of life, regardless of the strain on resources (Harrington et al., 2020). Haraldstad et al. (2019) found that though the

majority of health-related quality of life studies are conducted in the United States, they are mostly restricted in scope and demographic range, with the research being focused in populace areas. Rural and urban people face many of the same challenges and need much of the same type of care, regardless of access (Patten et al., 2020). However, in the U.S. there is "poorer mortality, clinical care, and social and economic outcomes for rural versus non-rural counties" (Anderson et al., 2015). Rural people may resist attending well-care appointments and hesitate to seek out curative treatments because of myriad barriers, including lack of transportation, social isolation, and lack of choice in access (Goins et al., 2005). Individuals in rural communities have a greater reliance on informal caregiving due to some combination of cultural preference and lack of available services (Siconolfi et al., 2019).

Rural healthcare is facing a watershed period of change after dealing with repercussions from the COVID-19 pandemic (Mueller et al., 2021). Rural health providers faced the same unexpected shocks of the pandemic with fewer resources and lacking emergency plans (Patel et al., 2021). Many rural hospitals were forced to spend large portions of their budgets to prepare for surges in COVID-19 infections, which will create long-term deficits for those operating on a tight annual schedule (Greenwood-Ericksen et al., 2021). Local government representatives and rural hospital administrators are choosing how to maintain their facilities by connecting with academic hospitals, creating a regionalized network of healthcare facilities, expanding telemedicine, and innovating in workforce and service delivery (Greenwood-Ericksen, 2020). The ethical requirement to continue providing services remains constant regardless of the level of

ability, and historically, healthcare practitioners are willing to extend resources to meet current needs where they are able (Patel et al., 2021).

Rural Medical Professionals

Rural physicians and other healthcare providers are perceived as inadequate and unprofessional (Goins et al., 2005). Most rural health practitioners lived in a similar community prior to their turning 18 years old and chose to work in a rural area because of their connection from childhood or young adulthood (Swan & Hobbs, 2021). Rural health providers are more likely to need advanced skill and experience in accidental trauma and life support than those practicing in urban communities (Toerber-Clark et al., 2021).

Many of these communities are dependent on the connected nature of rural life, and the lack of anonymity in healthcare settings leads to decreased secondary stress in the providers (Swan & Hobbs, 2021). Despite working additional hours, nurses in rural hospitals leave more tasks perceived as required left undone because of time and resource constraints (Smith et al., 2020). Nurses are forced to prioritize tasks they deem most relevant to patient safety, leaving other duties such as record keeping potentially undone, which contributes to a lower quality of life assessment by patients (Smith et al., 2020).

Hospital Closures

Across the United States, hundreds of rural hospitals have closed over the past decade and many more are on the brink of closing if financing and policy trends continue (CDC, 2021). Specifically, Oklahoma has lost seven hospitals over the past 10 years and 52 rural hospitals are struggling to remain viable operations (Woodring et al., 2021). Across the United States, there have been more than 170 total or partial rural hospital

closures in the same time period (Woodring et al., 2021). Rural hospital closures also reduce the available employment in communities where agriculture and manufacturing jobs are continuing to decline (Deavers, 1992). Researchers work to find accurate ways of predicting which hospitals are facing the worst financial situations, but error rates in such data are high because the reactions of community members when facing the closure of their local health system can be unpredictable (Holmes et al., 2017).

When rural hospitals are paired with larger affiliates instead of being closed outright, results for the rural community can be lower than expected (O'Hanlon et al., 2019). Though small hospitals may receive a temporary financial boost, this partnership can create a stronger flow of patients to the larger partner hospital rather than keeping resources in the community (O'Hanlon et al., 2019). However, with careful organization and agreement, some partnerships between rural hospitals and larger health systems can be beneficial for both in the long term (Elrod & Fortenberry, 2017).

Long-term care, including disability assistance and assisted living for older adults, is also becoming more infrequent outside of population centers, forcing residents to leave rural communities when increased care is required (Coburn, 2002).

Emergency Medical Services

Due to hospital closures and other factors listed above, paramedics and other emergency medical workers are increasingly considered the front line of primary healthcare in rural areas (O'Meara, 2012). Emergency responders are, however, often left out of conversations regarding health policy though they provide a substantial portion of the routine and palliative care in rural areas (Long, 2019).

Shorter treatment times are associated with better recovery and lower mortality rates, especially when patients are being referred to a specialist facility, which is more likely to be necessary in rural settings (Wang et al., 2011). A consistent transfer network serving a rural region within reasonable transport times helps alleviate these waiting periods, and can strengthen rural healthcare centers through reliable service (Greenwood-Ericksen et al., 2020).

COVID-19

Concerns about the impact and danger of COVID-19 were markedly lower in rural areas in the United States than urban areas (CDC, 2021) despite the effects being severe across employment, mental health, and quality of life (Mueller et al., 2021). There is a greater stigma in rural communities against standard preventative care, and medical professionals at rural hospitals were faced with treating patients without the necessary equipment or space (CDC, 2021).

Rural communities were most strongly affected after the first wave of COVID-19 infections, when initial prevention procedures had been implemented to varying degrees of success (Gavulic & Buntin, 2021). This delayed impact affected the national mood concerning COVID-19, reflected in the lower levels of overall concern seen in rural communities (Mueller et al., 2021).

CHAPTER III

METHODOLOGY

The purpose of this study was to explore perspectives of rural people regarding their priorities related to rural hospitals and healthcare. This chapter describes Q methodology, provides reasoning for its application in this study, details the solicitation of participants, explains the procedures for the development of the instrument, and explains data collection and analysis according to Q methodology strategies.

Q Methodology

Q methodology includes the foundational theory and philosophy surrounding the Q research strategies that employ Q technique statement sorting combined with supporting data analyses to study the subjectivity of a topic in a systematic, rigorous way (Brown, 1993). Q methodology was introduced by William Stephenson in 1935 as a self-referent way of learning about the intricacies in differing opinions (Brown, 1980). This technique, the subsequent statistical methods, and the methodological principles stemmed from Stephenson's background in psychology and physics, leading to the adaption of factor analysis to view individual expressions of belief to relate in a physical quantum space (Marangoni, 2018). The purpose of a Q methodology study is to discover

perspectives or viewpoints and explore existing opinions, not to categorize people based on a hypothesis (Stephenson, 1952). The persons performing a Q sort are never right or wrong in the way they are sorting, because they are expressing a meaningful order of their own set of values on a subject rather than responding to an arbitrary scale (Brown, 1980). Q methodology is used around the world and in every field of social sciences research, because it emphasizes the importance of understanding the subjective opinions of those who interact with a phenomenon (Watts & Stenner, 2012).

Rationale for Q

Q methodology is useful in the present study of rural residents because it is a method which allows for the exploration of different perspectives that exist together in a single small community (Duenckmann, 2010). Previte et al. (2007) made a case for more use of Q methodology in rural research, because it elucidates characteristics of an opinion that might not be expressed through other means of study. Q methodology is additionally helpful in lessening the influence of a researcher on results, which is important in rural research because the traditions and stereotypes can be so longstanding and strongly held (Previte et al., 2007).

In a review of research, Q methodology was considered a novel method in healthcare journals, used infrequently, and not in most phenomenological areas (Churruca et al., 2021). Similarly, Leggette and Redwine (2016) found a lack of Q methodology usage in studying topics of agricultural communication, which includes quality of life of rural people. The crossroads of these two areas of study lie directly at rural healthcare systems, further demonstrating need for studies using Q methodology.

Participants

In Q methodology, the participants are called a P set (McKeown & Thomas, 2013). The P set for this study included soliciting individuals currently living in rural Oklahoma. The United States Department of Agriculture's Economic Research Service has several definitions of rural, based on variables such as population density, economic impact, and geographic isolation (Cromartie, 2019). The participants for this study were recruited from areas following the rural, nonmetro definitions from the US Census Bureau and the Office of Management and Budget (Cromartie, 2019). Communities represented in this P set have a population of fewer than 5,000 and are not economically dependent on a metropolitan area.

Participants were recruited specifically to find a diversity of opinion among rural inhabitants. I intentionally sought out participants with different backgrounds, living in a rural area for a short time or for their entire lives. Some of the recruited members of the P set had worked in a variety of healthcare situations while others had never been employed in a health profession. There was an intentional effort to obtain diversity of age and gender. The procedures for human participant research were approved by the Oklahoma State University Institutional Review Board on November 5, 2020 (Appendix A).

Participants were recruited with flyers shared in rural communities through personal contacts and the snowball method was employed to reach other contacts. Snowball method implies that following completion of a Q sort, participants were offered flyers to share with other potential participants. Participants were encouraged to share the

flyers and information with rural people who might have a different personal experience with the rural healthcare system than their own.

Instrument Development

Q methodology relies on the communicability of a phenomenon (Stephenson, 1935). Communicability means every thought and opinion about a particular subject can be expressed and examined as behavior, not something mysterious that can never be studied or understood (McKeown & Thomas, 2013). The entire collection of these opinions is called the concourse (Stephenson, 1953). Following this concept, all thoughts and opinions about rural hospital priorities can be collected and subsequently sampled to result in the instrument used for sorting. For this study, I used a hybrid approach of gathering statements intended to represent all possible communicable ideas from both naturalistic sources and literature about the subject of rural health (McKeown & Thomas, 2013). This concourse included more than 130 statements from peer-reviewed studies, popular journalism, personal conversation, and lived experience in rural areas. These statements were self-referential or were specifically worded to represent an individual's possible thoughts and feelings, not outward statements of fact about a situation (McKeown & Thomas, 2013). Two necessary elements of the final Q set are coverage of the topic and balance, which are accomplished by purposive sampling techniques, specifically, using the principles of homogeneity and heterogeneity (Brown, 1980). This sampling technique first puts statements together because they are alike in some way followed by finding the statements within each category that are different from one another to represent the range of opinions in that category.

Naturalistic statements are those that come from subjective opinions obtained in interview or informal musings. One statement, "I'm tired of people looking down on rural systems," was derived from conversations that occurred during unrelated work in a rural community. Adapted statements are those derived from literature or opinions about facts about the phenomenon (Brown, 1980). "Not every county needs a hospital," was adapted from concepts in the Oklahoma State University data on rural hospital closures (Woodring et al., 2021). These statements were taken directly from articles and other sources but were adapted from the inspiration to create a sentiment that could have self-referential meaning to an individual. Another adaptation of statements was to use colloquial language so it could be understood and operationalized by the target population (Brown, 1980). The combination of these naturalistic and adapted statements represents a hybrid concourse of communicability (McKeown & Thomas, 2013).

The concourse is then purposefully sampled, a mirror of other forms of factor analysis sampling a population for a group of participants (Brown, 1980). A Q set of statements should be able to be reasonably read and sorted by a participant in a single sitting, generally between 30 and 50 items (Watts & Stenner, 2012). Statements in this concourse were placed into four categories of likeness: political, technical, economic, and social (Phillips & Pittman, 2014). This placement represents a Fisherian design, a structure intended to create variance (Brown, 1980). Since the four categories are each part of a single conceptual framework, the structure can be described as a four-by-one grid, wherein statements are placed based on how well they fit the description of that space. Likely, a statement could have been reasonably sorted into multiple categories,

and it was put into the category with fewer statements so each of the four categories had a roughly equal number of statements.

The political category included statements that could reflect individuals' views on local, state, federal and interpersonal politics. Statements like "I want the government to leave us alone, even if it means we lose our hospital," were part of the political category. In the economic category were statements that directly referenced the financial impact or business operations of a hospital or healthcare system, including statements like, "My insurance makes most of my decisions for me." Social category statements are those that show how rural people relate to one another, "In a small town if you go to the doctor, everyone finds out about your business," and to non-community members, "Having a hospital in my community gives me a reason to believe rural life matters to others."

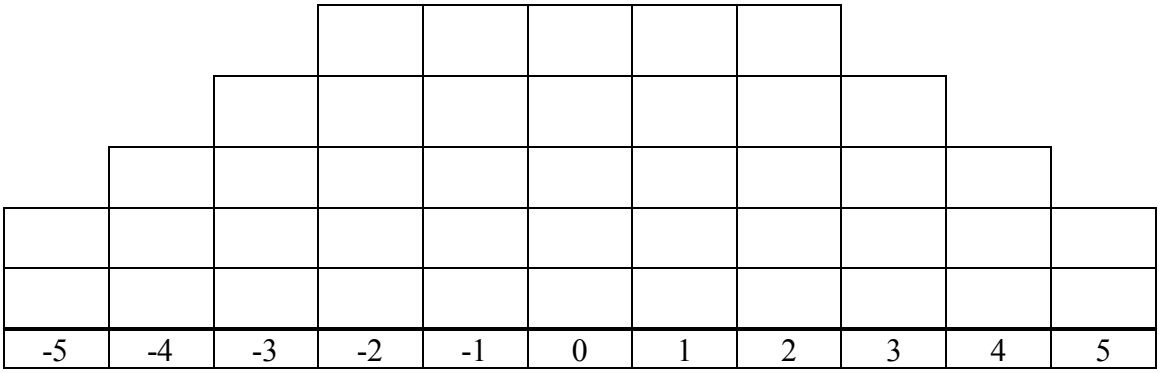
Each category was then reviewed for heterogeneity so statements within each category spoke to different thoughts or opinions about the topic (Brown, 1980). The final Q set for this study had 43 statements (Appendix B). In this study, there was one condition of instruction: What matters to you about having a hospital in your community? This condition was chosen to explore what sorters deem more personally important based on their own experience.

After the Q set was developed, a formboard was created based on the number of statements to be sorted. The Q sorting technique is best applied in a forced normal distribution of statements or a pyramid-shaped distribution (Brown, 1980). This form directs sorters to operationalize their strongest priorities on the sides of the board and working inward toward lower-priority placements. With this Q set of 43 statements, a

formboard was developed with 11 columns, labeled from -5 to +5. Figure 1 shows the formboard, with each blank square indicating a place for a sorter to put a statement.

Figure 1

Blank Formboard



A demographic sheet (Appendix C) was developed to collect additional information from participants after the sorting process was completed. The demographic sheet includes questions related to gender, age, and length of time the participant has lived in their current community. Participants are then asked how many people's healthcare they are responsible for and the general types of healthcare services they have used in the last five years. Further questions include inquiry about any other comments about the statements they just sorted.

The Q sort technique is inherently physical, so to be completed each sort requires a printed formboard (Figure 1), a set of printed statements cut into 1-inch squares, a printed demographic sheet (Appendix B), and a participant information form as specified in the IRB procedures. Due to the impact of COVID-19 requiring much of the sorting to be completed through virtual meetings, these materials were put into packets delivered

in-person or through the US postal service so each sorter could have a fresh, clean set of materials, which would be used through a Zoom call interview.

Data Collection Procedures

Sorts were completed through a variety of in-person and virtual means, depending on the possibility of social distancing measures and convenience. Participants were provided with a packet of materials and instructed through the sorting procedure in both in-person and virtual cases. Sorters were first asked to read and review the participant information form, which included IRB and confidentiality information. Continuing with the sorting process indicated consent.

Sorters were then asked to read the condition of instruction, printed at the top of the formboard page, "What matters to you about having a hospital in your community?" According to the condition of instruction, sorters then read each statement and created three piles in front of them: "like my thoughts" on the right, "unlike my thoughts" on the left, and a third pile in the middle for neutral statements they felt didn't fit into either of the first two categories.

Once all 43 statements were put into one of these three piles, participants were asked to look at the statements in the "like my thoughts" pile. They were asked to choose the two statements that most strongly matched their thoughts regarding the condition of instruction and place them in the two blank squares on the +5 column of the formboard. They were then asked to look at the statements in the "unlike my thoughts" pile and choose the two statements most dissimilar from their opinion to be placed in the -5

column. The sorters were instructed to continue working back and forth filling the columns with statements, pulling from the third statement pile as necessary.

Once sorting was complete, participants were given the opportunity to change any statement positions as they saw fit. Once participants were satisfied with the statements in priority order based on the condition of instruction, they wrote the number of each statement on the corresponding square on the formboard for recordkeeping purposes. Participants were then asked to complete the demographic sheet provided in the packet (Appendix B). If sorts were completed virtually, participants were asked to take photos or scan their documents and send electronically to the researcher. The researcher took field notes throughout the data collection process based on observation and conversation, answering questions as needed for procedural clarification.

Following data analysis, select participants who voluntarily shared their contact information were contacted for a post-sort interview. Sorters chosen for post-sort interviews were those with the highest and purest significant relationship of the sort to each factor and are called exemplar sorts because their individual sorts are most similar to the composite sort (Brown, 1980). For this study, the two most exemplar sorters for each factor provided the optional contact information and completed post-sort interviews. Interviews followed a standard format, asking participants to share their thoughts about themes found in the composite sorts for the factor they represented. This process expands the data for interpretation by allowing exemplar sorters to explain the beliefs that led to their sort and shed light on the reasons they might have sorted a statement as higher priority than another (McKeown & Thomas, 2013). Interviews generally followed a pattern in which the interviewer would indicate a theme relevant to the interviewee's sort,

then prompt the interviewee to provide any insight to their personal opinions on that statement. This provides the individual the opportunity to clarify their reasoning behind sorting a statement in a certain way or give more information to help interpret the larger perspective found in the study.

CHAPTER IV

FINDINGS

The purpose of this study was to explore perspectives of rural people regarding their priorities related to rural hospitals and healthcare. The research questions were 1: What are the prominent priorities of rural people regarding hospital access? and 2: How does the conceptual framework derived from Phillips and Pittman (2014) assist in understanding the priorities? This chapter describes responses to the research questions as the findings from this study and interprets the results of the data collection.

Participants

Twenty participants completed a Q sort for this study. One opted to not complete the demographic form. The sorters included 13 women and seven men, ranging in age from 22 to 74. Six participants lived within 10 miles of a hospital, while 14 lived farther than 10 miles to the nearest hospital. Eight had a primary care doctor or other healthcare facility in their community, if they did not have a local hospital. All 20 sorters had used at least some form of hospital services within the last year. Four were responsible for only their own healthcare needs, while the rest had at least one healthcare dependent, including parents, children, or other family members.

Data Analysis

Completed sorts were entered into PCQ (Stricklin, 2004), a Q methodology software, which utilizes all statistical procedures, starting with the correlation of all sorts to each other. After this correlation, centroid factor analysis was used to extract nine initial best-fit factors. After first trying graphical rotation to observe the greatest variance between factors, I then tried varimax rotation with three factors and again with two factors. After factor analysis and rotation, defining sorts were identified which best represent the factor based on significance, and standard scores for each statement for each factor are calculated to assist in choosing the best result. Significance was determined through an equation $1/\sqrt{n}*2.58$, where n equals the number of statements in the Q set, therefore for this study, $1/\sqrt{43}*2.58=0.39$ (Brown, 1980). These factor solutions were reviewed based on the number of defining sorts, the relationship between the sorts (correlation of factor scores), variance, and initial interpretation. The varimax rotations each produced factors with distinct defining statistically significant loadings allowing greater differences between factors than the graphical rotation, which was then not retained. The two and three factor solutions were reviewed, and the two-factor solution was chosen to be fully interpreted because there was a greater difference between the two viewpoints than the highly-correlated factor scores that resulted in the three-factor solution. Therefore, the two-factor varimax solution was retained using a 0.39 significance.

Interpretation of Factors

The interpretation of the two arrays provide the response to the first research question. Research Question 1: What are prominent priorities of rural people regarding hospital access?

The two factors have a positive correlation of 0.46 when the factor scores are compared. This correlation between the two factor scores shows these perspectives have opinions in common. However, there are key differences in priorities, shown by which statements are in a position of high positive or negative agreement, which is demonstrated by placement of statements toward the sides of the distribution using an ordering of standard scores for the statements within each factor. Exploring these differences is the intention of this study.

Every sort loads on each factor. Sorts that load above the 0.39 significance level on only one factor define that factor, meaning the statement placements from those sorts create a representative composite sort for that factor (Brown, 1980). In the composite sort, created by correlating the defining sorts into a representative array, the placement of each statement is indicated by the array position number, which is a ranking based on the columns in the formboard from "Most like my thoughts" at +5 to "Most unlike my thoughts" at -5 (McKeown & Thomas, 2013). Higher array position numbers (+5, -5) indicate stronger agreement or disagreement with that statement, with the lower array position numbers indicating a lower level of priority than statements on the sides of the formboard. Sorts reaching significance on both factors are confounded and are not included in the composite sorts for either factor. Sorts not reaching significance on either factor are called non-significant. In this study, there were two confounded sorts and one non-significant sort. Table 1 shows the loadings for each sort on both factors, with defining sorts for each factor listed in bold print.

Table 1

Factor Matrix

Q Sort	Demographics	Factor A	Factor B
1	Male, 27	**0.49**	0.25
2	Male, 29	**0.57**	0.25
4	Male, 63	**0.59**	0.28
5	Female, 42	**0.58**	0.23
6	Male, 74	**0.58**	0.14
7	Not reported	**0.40**	-0.03
14	Female, 35	**0.69**	0.18
16	Female, 61	**0.58**	0.19
18	Male, 22	**0.49**	0.29
19	Female, 63	**0.60**	0.11
20	Female, 68	**0.54**	0.07
3	Female, 62	0.18	**0.51**
9	Female, 64	0.18	**0.63**
10	Female, 43	0.26	**0.76**
13	Female, 58	0.34	**0.46**
15	Female, 29	0.16	**0.47**
17	Male, 52	-0.16	**0.47**
8	Female, 44	0.46	0.56
11	Female, 50	0.08	0.14
12	Male, 56	0.50	0.46

Note. Defining sorts for each factor are listed in bold.

This study explored the nuances between two perspectives of rural people regarding their hospital priorities. The condition of instruction for this study was, "What matters to you about having a hospital in your community?" The factor solution, field notes, post-sort interviews, and naturalistic observation informed the interpretation of the factors into holistic perspectives (Albright et al., 2019). These perspectives were named the Business Priority and the Relationship Priority.

The Business Priority

The Business Priority is defined by 11 sorts. One sorter did not provide demographic information. Of the remaining 10, five were male and five were female. Sorters' ages ranged from 22 to 74.

Interpretation of the Business Priority composite array is defined by three themes to best understand the values and opinions of this perspective: thrive mentality, economic impact, and determination. The thrive mentality demonstrates how important it is for the community to continue to use resources to maintain a vital existence. The economic impact demonstrates the priority this viewpoint has for its healthy financial status, and determination is a theme demonstrated by the data as a persistence and positive approach to problem solving. The Business Priority's "most like" and "most unlike" statements, or those placed in the two farthest right and two farthest left columns, are listed in Table 2, with statements distinguishing this composite sort from the Relationship Priority composite sort listed in bold.

Table 2

The Business Priority's Most Like and Most Unlike Statements

No.	Statement	Array Position	Z-Score
	Most Like Statements		
36	Current and future medical professionals in rural areas need to see a future in rural medicine.	+5	
37	Without a hospital in my community, people could die because of travel time.	+5	
4	**Constant changes in policy make healthcare scary and confusing.**	+4	
33	I will drive any distance to get quality healthcare for me and my family.	+4	
38	Rural people are good at making the most of what we have, hospital or no hospital.	+4	
	Most Unlike Statements		
32	My church family must approve of the local hospital, or I'll find an alternative.	-5	
34	I would only trust a scrappy little rural hospital if it was owned and backed by a big name like Integris.	-5	
2	I want the government to leave us alone, even if it means we lose our hospital.	-4	
13	**Without a hospital I'm afraid my town will disappear.**	-4	
23	**I need a doctor that is a figure in the community, someone I see at parades and ball games.**	-4	

Note. Distinguishing statements are listed in bold.

Thrive Mentality

The Business Priority focuses on the long-term success of the community, regardless of the healthcare situation in the town or county, placing statement 13 highly unlike their thoughts. In the face of many rural hospitals closing, people with a Business Priority look for alternatives to a traditional hospital system and focus on remaining resources. In a post-sort interview, Sorter 14 said, "Our town is without a hospital, and I don't think we'll disappear anytime soon without one." They believe their community can and will thrive and wouldn't give up on the community through hardships. Sorter 19

shared a similar sentiment, noting that a town would recover even after the shock of a hospital loss, "If a town with a hospital lost it all of a sudden, they would know about it, sure, but there are plenty doing just fine without one." Followers of the Business Priority are simultaneously realistic and optimistic. A thriving mentality means people with this perspective feel they must have a lasting, economic impact, a point of view commonly held in business strategy. Statements in support of this theme are listed below; those that are considered distinguishing for this array are listed in bold:

No.	Statement	Array Position
13	**Without a hospital I'm afraid my town will disappear.**	-4
38	Rural people are good at making the most of what we have, hospital or no hospital.	+4
3	**Not every county needs a hospital.**	+2
24	If my community does not have a hospital, I can see myself choosing between the town I love and living close to healthcare.	-3
11	**We have to have a hospital to keep businesses in town.**	-2
34	I would only trust a scrappy little rural hospital if it was owned and backed by a big name like Integris.	-5

Economic Impact

The Business Priority is aware of and prioritizes the economic role of a hospital in the community. They see a hospital as a place of business transactions, with a principal purpose of providing jobs and stability in the community. In a post-sort interview, Sorter 19 said, "It puts people to work, it's good for the community. Not just doctors, it takes a

lot like office people and people to cook and clean." Business Priority people recognize, though, that a hospital also requires people to consistently use services in order to maintain revenue, which can be a challenge in an area with low population density. Sorter 14 said, "Depending on how big the area is, if you have a small county, there's not enough revenue to make it work." The economic impact of the hospital is on the forefront of a Business Priority mind. Statements in support of this theme are listed below:

No.	Statement	Array Position
41	A hospital in my community would provide a clear path to specialists when they are needed.	+3
3	Without a hospital I'm afraid my town will disappear.	-4
12	A hospital means a lot of jobs.	+3
14	My insurance makes most of my decisions for me.	0

Determination

The Business Priority people are determined to overcome obstacles to care. They recognize the financial, time, and travel burdens inherent in rural healthcare, and are willing to do what it takes to receive sufficient care while continuing to reside in a rural setting. People who have a Business Priority perspective recognize there is sometimes a need for outside influence, like government intervention, and can accept that reality if it means their community continues to thrive. Speaking on this influence on the community, Sorter 19 said, "We want everybody to have healthcare. It was hard for a time, and it's getting better now, but we want people in office who will fight for healthcare. I lost my brother because he had no insurance." Sorter 14 shared the push-

through opinion of the determined Business Priority when facing shifts in the system, "It's healthcare, it's going to change. Hopefully those changes make it better." Statements in support of this theme are listed below; those that are considered distinguishing for this array are listed in bold:

No.	Statement	Array Position
9	**Going to the doctor doesn't matter if there isn't food on the table.**	+1
18	I just want to feel safe.	+2
33	I will drive any distance to get quality healthcare for me and my family.	+4
2	I want the government to leave us alone, even if it means we lose our hospital.	-4
37	Without a hospital in my community, people could die because of travel time.	+5

The Relationship Priority

The Relationship Priority is defined by six sorts. Five were female and one was male. Sorters' ages ranged from 29 to 64.

Interpretation of the Relationship Priority composite array is defined by three themes to best understand the values and opinions of this perspective: survive mentality, idyllic view, and unity. The survive mentality demonstrates the desire to protect and preserve in order to maintain the rural way of life. The idyllic view theme is demonstrated by the data showing a fonder perception of the rural social environment, and unity demonstrates the need for individuals to come together to solve problems and

work for the betterment of the whole. The Relationship Priority's "most like" and "most unlike" statements are listed in Table 3, with distinguishing statements in bold.

Table 3

The Relationship Priority's Most Like and Most Unlike Statements

No.	Statement	Array Position	Z-Score
	Most Like Statements		
16	My heart breaks for my neighbors who can't afford medical care. The town pitches in with donations when we see a need.	+5	
37	Without a hospital in my community, people could die because of travel time.	+5	
13	**Without a hospital I'm afraid my town will disappear.**	+4	
36	Current and future medical professionals in rural areas need to see a future in rural medicine.	+4	
39	We have to protect our first responders, who take on far more responsibility when there is no hospital in the area.	+4	
	Most Unlike Statements		
30	In a small town if you go to the doctor, everyone finds out about your business.	-5	
32	My church family must approve of the local hospital, or I'll find an alternative.	-5	
3	**Not every county needs a hospital.**	-4	
15	My community can't afford a hospital and trying to support one is a waste of our resources.	-4	
21	A doctor can only treat me if they understand the rural way of life.	-4	

Note. Distinguishing statements are listed in bold.

Survive Mentality

People with a Relationship Priority are concerned for the future of their community, particularly if there is an absence of a traditional healthcare system. They rely on the resources that exist in their community and fear for its decline if the situation changes. These person-focused rural people see the closure of a rural hospital as a significant landmark in the decline of a town that can cause a domino-effect of negative

impacts. In a post-sort interview, Sorter 10 said, "We are starting to see the effects in older populations. I have several friends with parents in their 80s, families who would be OK with leaving them here, but without a hospital they are choosing to move the family away to wherever they live now. It changes the lifestyle. If there was a healthcare facility, things would be totally different. I'm fearful because without that, well, I don't know what will happen." Sorter 9 also feared for the risks involved in not having a hospital nearby: "It is important to have a hospital in every community. It helps to have one for emergencies where a life could be saved, there are so many rural accidents that can happen." Relationship Priority people love their communities, which can bring the worst-case scenarios to their minds regarding the town's sustainability. Statements in support of this theme are listed below; those that are considered distinguishing for this array are listed in bold:

No.	Statement	Array Position
13	**Without a hospital I'm afraid my town will disappear.**	+4
39	We have to protect our first responders, who take on far more responsibility when there is no hospital in the area.	+4
11	**We have to have a hospital to keep businesses in town.**	+3

Idyllic View

People with a Relationship Priority perspective has a more idyllic view of rural life and the community they inhabit. They believe in the traditional values associated with rural communities, ideas like giving a hand to those who need it and protecting the community from outsiders. Relationship Priority people want to maintain that culture,

even if there is pushback from non-rural people. They believe the negative impacts on rural communities, like losing hospitals at high rates, come from a misunderstanding of rural life. Sorter 10, in a post-sort interview, spoke about passing those values on to younger generations, "If you open the door, if you can make that connection, it shows students how to do more, how to help, how to be part of the community." Statements in support of this theme are listed below:

No.	Statement	Array Position
22	I'm tired of people looking down on rural systems.	+2
19	Having a hospital in my community gives me a reason to believe rural life matters to others.	+2
27	A hospital gives service-hearted people a place to volunteer.	+3
38	Rural people are good at making the most of what we have, hospital or no hospital.	+3
15	My community can't afford a hospital and trying to support one is a waste of our resources.	-4
7	Government officials would fight harder for rural hospitals if they were in my shoes.	+3

Unity

The Relationship Priority prioritizes coming together as a community above all else. They believe the common needs and problems of rural people create a bond that is to be nurtured and protected across rural communities. They value the personal connection they can have with healthcare professionals in their community because of

this tight-knit atmosphere. In a post-sort interview, Sorter 10 said her family was able to get treatment in an emergency situation because of their personal relationship with a local physician. “If you have a nurse friend, it’s something that can make a big difference in certain situations,” Sorter 10 added.

This glorification of unity doesn’t stop at the relationship between provider and patient, it extends to the community’s concern for each other’s wellbeing. In a post-sort interview, Sorter 9 spoke about the willingness of rural people to help each other when needed, “I know in a town this small everyone knows about everyone or someone who knows someone in a situation. If there’s a loss, our community tries to support them. Monetarily, yes, but also with food, taking care of kids, anything they need.” They don’t fear their neighbors taking advantage of this close interaction because the benefits can be so great. Statements in support of this theme are listed below; those that are considered distinguishing for this array are listed in bold:

No.	Statement	Array Position
16	My heart breaks for my neighbors who can’t afford medical care. The town pitches in with donations when we see a need.	+5
5	A win for one rural community is a win for them all.	+3
23	**I need a doctor that is a figure in the community, someone I see at parades and ball games.**	+1
30	In a small town if you go to the doctor, everyone finds out about your business.	-5

Consensus Statements

The arrays resulted in 15 consensus statements, meaning that in the composite arrays for these two perspectives, 15 of the 43 statements had similar placements, which indicates a non-significant difference in the *z*-scores of the statement between the two arrays (Stricklin, 2004). These consensus items can depict similarities between the two perspectives, but they can also highlight differences by comparing why each perspective prioritized a statement in a certain way. Table 4 lists the consensus statements and their array position for each perspective.

Table 4

Consensus Statements

No.	Statement	Business Priority Array Position	Relationship Priority Array Position
6	We are all vulnerable to statewide politics because we can't or don't keep up.	0	-1
10	All my decisions come down to money.	-1	-2
14	My insurance makes most of my decisions for me.	0	-1
20	Hospitals are for broken arms and heart attacks.	-1	-2
22	I'm tired of people looking down on rural systems.	2	2
26	Tiny rural hospitals have so few people working it becomes a dangerous spiral of similar opinions.	-1	-2
29	Volunteers and churches do more for community health than doctors in a hospital.	-3	-3
32	My church family must approve of the local hospital, or I'll find an alternative.	-5	-5
36	Current and future medical professionals in rural areas need to see a future in rural medicine.	5	4
37	Without a hospital in my community, people could die because of travel time.	5	5
38	Rural people are good at making the most of what we have, hospital or no hospital.	4	3
39	We have to protect our first responders, who take on far more responsibility when there is no hospital in the area.	3	4
40	Creative solutions like telemedicine are the best path for rural areas.	-2	-1
42	The COVID-19 pandemic has highlighted the weaknesses in the rural healthcare system.	0	0
43	I wouldn't have to depend on a hospital in my community if we had better broadband internet access.	-3	-3

Both the Business Priority and the Relationship Priority prioritize statement 37 above all other statements, showing a deliberate concern for the preservation of life regardless of other differences. This shows an indication from both perspectives of understanding the possible setbacks of rural life and a compassionate concern for the potential results of those realities.

The two perspectives also reach consensus regarding statement 36, about the need for current rural youths to see a future in rural life. The Relationship Priority holds this statement in high esteem because the strongly value the connection to the young people in the area and want that to continue. They are interested in young people feeling the same positive draw toward rural life as they feel. The Business Priority instead placed this statement as a high priority because it increases the availability of long-term, qualified practitioners who are familiar with rural life and its customs.

On the other side, both perspectives placed statement 32 about approval from church family as the lowest priority regarding their healthcare decisions. Those who agree with the Business Priority would make their choices based on financial and technical differences, not paying any mind to personal talk. The Relationship Priority followers would be more likely to rely on their own experience with the professionals they contact than listening to the opinions of others. However, it is also possible that people with both priorities recognize a lack of alternatives and would not choose to go without healthcare despite possible negative pressure if any were to occur.

Consensus statement 42, "The COVID-19 pandemic has highlighted the weaknesses in the rural health system," was placed in the center column, array position 0, for both perspectives. However, this positioning relays different meanings for the two perspectives. In both cases, the impact of COVID-19 was not a priority. The Business Priority sees the pandemic as a temporary, universal setback in the normal operations of life that doesn't carry as much weight as the more enduring challenges faced by rural systems. People with a Relationship Priority perspective instead focus on the individual

impacts of COVID-19 rather than its impact on the rural healthcare system because that evaluation can come later, after the people in the community have been cared for.

Conceptual Framework

The response to the second research question concerns the conceptual framework. Research Question 2: How does the conceptual framework derived from Phillips and Pittman (2014) assist in understanding the priorities found from RQ1?

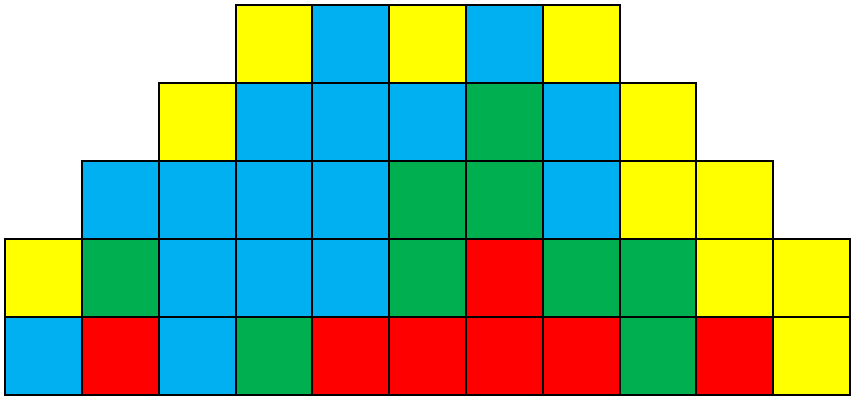
The foundation for this study was the political, social, economic, and technical influences that formed the conceptual framework (Phillips & Pittman, 2014). Each statement's category can be seen in the color-coded composite arrays of Figures 2 and 3. The boxes indicating a political statement are colored red, social are blue, economic are green and technical are yellow. Specifically, these were categories that assisted in the structure of the Q set of statements used for sorting. The placement of the statements in each category on the composite arrays indicates which areas people with each perspective might weigh more heavily in their rural health concerns. Both perspectives weighed political statements generally as lower priority than other categories, with most political statements falling in the center of both arrays. This indicates the political aspect of rural healthcare – which often combines relationships and business concepts – is neither a priority or a non-priority.

While the social-based statements are fairly spread out for the Relationship Priority, most of the social statements fall on the "Most Unlike My Thoughts" side of the array for the Business Priority. The statements that fill most of the "Most Like My Thoughts" side of the array for the Business Priority are the technical statements,

showing that the realities of available resources and opportunity for an edge are far more important to those ruralists than to those who focus on relationships.

Figure 2

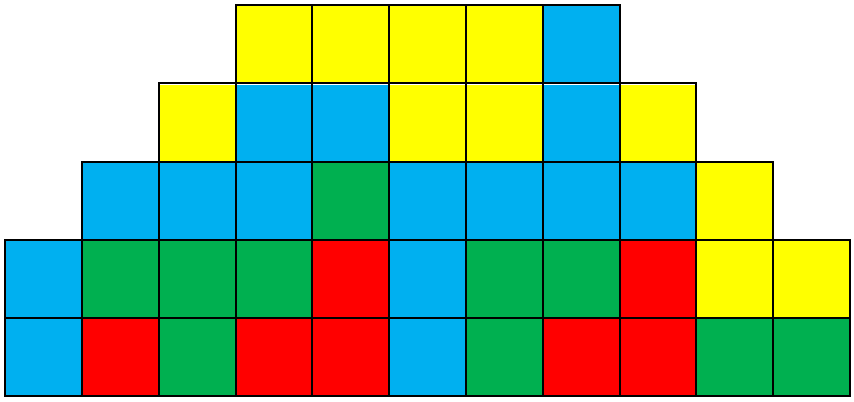
Business Priority Composite Array Color-coded According to Conceptual Framework



Note: Political statements are red, social statements are blue, economic statements are green, and technical statements are yellow.

Figure 3

Relationship Priority Composite Array Color-coded According to Conceptual Framework



Note: Political statements are red, social statements are blue, economic statements are green, and technical statements are yellow.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The purpose of this study was to explore perspectives of rural people regarding their priorities related to rural hospitals and healthcare. This chapter provides a summary of the findings, conclusions, and implications for theory, practice, and future research.

Summary of the Findings

This study found two perspectives of rural people regarding rural healthcare: the Business Priority and the Relationship Priority. The two perspectives in this study care deeply for rural life and want to see it continue. Both believe healthcare is a necessary part of that rural lived reality moving forward. The difference in these perspectives lies in what they see as the primary aspects of a rural hospital or healthcare system. If the end goal is to save lives, which matters most to people who hold both perspectives, individuals can have a common ground from which to create good-faith arguments during discussions about how to best sustain rural healthcare (Baker et al., 2021).

It is crucial to remember members of both perspectives value their community and the rural way of life as a foundational characteristic, despite the

differences in their viewpoints (Ulrich-Schad & Duncan, 2018). This commonality is reflected in the similarities in the composite arrays showing the representative sorts for the two perspectives. The consensus statements in this study display a baseline desire in rural perspectives for the preservation of life. Though the particulars in how that might be accomplished can differ, the top priority reflected in both of these perspectives is how to improve the possibility of life-saving care, shown by both perspectives placing the statement "Without a hospital in my community, people could die because of travel time" in the +5 column, the strongest agreement possible on the formboard.

The Business Priority and the Relationship Priority view different characteristics as signs of quality in healthcare. Due to the Relationship Priority's primacy of personal connection, a quality hospital will be one that involves the community in its operations through volunteerism and the individual effort of the providers to entrench themselves in the local scene. The strong involvement of rural people in the necessary operations of their area creates community support for the healthcare system while avoiding the narrow group of public participation described by Ford (2016). This creates a culture of holistic concern for wellbeing rather than a transactional interaction with the healthcare system in an area. People who follow the Business Priority instead value a hospital that is efficiently run, with a focus on the best possible technology and resources being available to their neighbors (Rivza & Kruzmetra, 2017). Whether the hospital employees are any more or less part of the community is of little consequence, as long as the bottom line is covered.

The findings in this study are not limited to what's happening in healthcare today. The Relationship Priority highly values the emotional draw to the rural way of life. They

believe in nurturing that image of rural life at the same time as encouraging young people to achieve highly in what they do, which will later enrich rural life while avoiding the dreaded brain drain described by Vazzana & Rudi-Polloshka (2019). The Business Priority perspective is concerned with the ability to stay competitive in the future as technology and education move forward.

Data collection for this study occurred during 2021, while the world was consumed with the effects of the coronavirus pandemic. It would be impossible that this study was not impacted by the events surrounding the infectious disease in some way, but no perspective was interpreted as feeling strongly about COVID-19 in relation to the condition of instruction. Concerns about the COVID-19 pandemic were generally lower in rural areas across the country, despite some of those areas being hit as hard as some densely populated disease centers (CDC, 2021). This was also reflected in the two perspectives discussed in this study. With both the Business Priority and the Relationship Priority, many other issues took precedence, both in agreement and disagreement, over the impact of COVID-19 in relation to the condition of instruction.

Conclusions

There are three conclusions based on the findings of this study. Rural people have diverse and nuanced perspectives about their healthcare systems, which lead them to prioritize different aspects of rural hospital availability and operation (DeKeseredy et al., 2017). Two of the many perspectives that may exist in rural Oklahoma are those who prioritize *business* and those who prioritize *relationships*. A second conclusion is rural perspectives should be investigated as unique and diverse rather than any outdated

stereotype of rural culture (Ison & Russell, 2000). Finally, the third conclusion based on the findings of this study is that due to the nature of their rural lives and attitudes toward healthcare necessities, people with either of the perspectives explored in this study have similar foundational beliefs about preserving life, but that does not diminish the importance or value of their different opinions.

Implications for Theory

The distribution of statements in the composite arrays indicates support for the Phillips and Pittman (2014) conceptual framework in understanding rural healthcare. The statements were combined within each perspective, and no indication of the categories was given to the participants or used in factor interpretation. Yet, there were observable differences in the colored composite arrays indicating the categories were useful in organizing and sampling the concourse. The Business Priority tended to positively prioritize technical resources, including statements about expertise and physical assets that are highly favored in business settings. The Relationship Priority put statements regarding economic factors in positions of negative priority, showing they did not hold economic concepts as important as the Business Priority group.

Implications for Practice

Though the Business Priority and the Relationship Priority have different desires for a healthcare system, their basic needs are the same: safe, affordable, accessible care. Rural people are diverse and unique, and the providers who serve them must offer health and wellness solutions that are similarly individual (Harrington et al., 2020). Rural health

systems should attempt to facilitate interpersonal connection, but not at the expense of quality and affordability.

This study emphasizes the need for increased familiarity with rural life in arenas where decisions are made about operations in rural communities. Without an understanding of the most prevalent perspectives of the community, hospitals could easily be mismanaged for that community, increasing the likelihood of closure (Ison & Russell, 2000).

However, the perspectives in this study give insight to the balance needed in rural hospitals. These hospitals should be efficient, but not lacking human warmth. A Business Priority person will be easily frustrated with a health system that is not the most beneficial for the town's bottom line. A Relationship Priority follower would be slightly more lenient when it comes to the operations if there is room for a meaningful connection. At a local level, the findings in this study, along with other current research in the field such as Macaulay et al.'s 2021 study about rural residents' willingness to participate in productive conversations about heatlhcare, demonstrate that local government agents and healthcare administrators should engage with willing residents in public forums about changes to the healthcare structure in the community. This information should be taken into consideration along with statistical results from other sources such as healthcare needs assessments to glean a full picture of the current state and future potential of the local healthcare system.

The Business Priority and Relationship Priority agree a fully operational hospital might not be necessary in every area, but an accessible emergency-serving facility is

often seen as a minimum requirement for survival in a rural area. Increasing the business competition of hospitals in rural areas creates long-term positive benefits for all (Frakt, 2019).

Further Research

Own-voices research continues to be increasingly necessary as decisions are made in government buildings and population centers that most strongly impact those living in rural areas. The Business Priority and the Relationship Priority are two perspectives out of the infinite possible perspectives regarding healthcare in rural areas, and all rural people should have a voice in their own healthcare decisions if they wish to. With the great number of hospitals at risk in rural areas, planning for solutions must come from many directions (Farmer et al., 2012) and must leave room for the nuances in perspectives held by rural people. Following this study, which included a broad P set of rural Oklahoma residents, future research into this topic would be benefitted by a more narrowly defined P set of rural healthcare decisionmakers or legislators who have worked on rural healthcare policy.

Based on the finding that neither perspective had a strong priority either for or against the statement about the impact of COVID-19 on rural healthcare systems, future research should focus on the retrospective effects of COVID-19. This study was conducted during months with some of the highest COVID-19 infection numbers, and participants may have different opinions about the impact with the benefit of hindsight and a more focused subject.

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APPENDIX A

Oklahoma State University Institutional Review Board

Application Number:	IRB-20-493
Proposal Title:	Voices from the field: A Q study about rural hospital priorities
Principal Investigator:	Katelyn Miller
Co-Investigator(s):	
Faculty Adviser:	Angel Riggs
Project Coordinator:	
Research Assistant(s):	

Status Recommended by Reviewer(s): Approved

Study Review Level:	Exempt
Modification Approval Date:	02/15/2021

The modification of the IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46. The original expiration date of the protocol has not changed.

Modifications Approved:
Modifications Approved: add electronic transfer of data for remote procedures

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved.
2. Submit a status report to the IRB when requested
3. Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
4. Maintain accurate and complete study records for evaluation by the OSU IRB and, if applicable, inspection by regulatory agencies and/or the study sponsor.
5. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Sincerely,

Oklahoma State University IRB
223 Scott Hall, Stillwater, OK 74078
Website: https://irb.okstate.edu/
Ph: 405-744-3377 | Fax: 405-744-4335| irb@okstate.edu

APPENDIX B

No.	Statement	Business Priority AP	Relationship Priority AP
1	I want my community to be independent from hospital bureaucracy.	-1	2
2	I want the government to leave us alone, even if it means we lose our hospital.	-4	-2
3	Not every county needs a hospital.	2	-4
4	Constant changes in policy make healthcare scary and confusing.	4	-1
5	A win for one rural community is a win for them all.	1	3
6	We are vulnerable to statewide politics because we can't or don't keep up.	0	-1
7	Government officials would fight harder for rural hospitals if they were in my shoes.	1	3
8	Traveling to a big city to access healthcare is a massive luxury.	1	-3
9	Going to the doctor doesn't matter if there isn't food on the table.	1	-3
10	All my medical decisions come down to money.	-1	-2
11	We have to have a hospital to keep businesses in town.	-2	2
12	A hospital means a lot of jobs.	3	1
13	Without a hospital I'm afraid my town will disappear.	-4	4
14	My insurance makes most of my decisions for me.	0	-1
15	My community can't afford a hospital and trying to support one is a waste of our resources.	0	-4
16	My heart breaks for my neighbors who can't afford medical care. The town pitches in with donations when we see a need.	2	5
17	There is a big difference between using a lunch break for a checkup and taking off half a day to drive into town.	3	1
18	I just want to feel safe.	2	-1
19	Having a hospital in my community gives me a reason to believe rural life matters to others.	0	2

20	Hospitals are for broken arms and heart attacks.	-1	-2
21	A doctor can only treat me if they understand the rural way of life.	-2	-4
22	I'm tired of people looking down on rural systems.	2	2
23	I need a doctor that is a figure in the community, someone I see at parades and ball games.	-4	1
24	If my community does not have a hospital, I can see myself choosing between the town I love and living close to healthcare.	-3	0
25	I rely on having a doctor who knows my family history because they've treated everyone in my family for years.	-2	0
26	Tiny rural hospitals have so few people working it becomes a dangerous spiral of similar opinions.	-1	-2
27	A hospital gives service-hearted people a place to volunteer.	1	3
28	The fear of the unknown is too big without a close hospital.	-2	0
29	Volunteers and churches do more for community health than doctors in a hospital.	-3	-3
30	In a small town if you go to the doctor, everyone finds out about your business.	-3	-5
31	Adding my concern to the prayer list is part of my healthcare just like going to appointments or taking medicine.	-1	2
32	My church family must approve of the local hospital, or I'll find an alternative.	-5	-5
33	I will drive any distance to get quality healthcare for me and my family.	4	1
34	I would only trust a scrappy little rural hospital if it was owned and backed by a big name like Integris.	-5	-2
35	Adding diversity to the medical system benefits everyone in the long run.	2	0
36	Current and future medical professionals in rural areas need to see a future in rural medicine.	5	4
37	Without a hospital in my community, people could die because of travel time.	5	5
38	Rural people are good at making the most of what we have, hospital or no hospital.	4	3

39	We have to protect our first responders, who take on far more responsibility when there is no hospital in the area.	3	4
40	Creative solutions like telemedicine are the best path for rural areas.	-2	-1
41	A hospital in my community would provide a clear path to specialists when they are needed.	3	1
42	The COVID-19 pandemic has highlighted the weaknesses in the rural health system.	0	0
43	I wouldn't have to depend on a hospital in my community if we had better broadband internet access.	-3	-3

APPENDIX C

Demographic Sheet

What is your gender?

____ M _____ F _____ Other/prefer not to answer

What is your age?

_____

About how long have you lived in your current community?

_____

How many people's healthcare are you at least partially responsible for? This may include financial or decision-making responsibilities. (Include number of those whose healthcare you are involved in for each age range, including yourself.)

_____ 0-6

_____ 7-12

_____ 13-17

_____ 18-26

_____ 27-64

_____ 65+

What hospital services (if any) have you used at your community hospital in the last five years? (Include number of visits for each category.)

_____ Emergency visit

_____ Non-emergency physician visit (outside of well-patient checkups)

_____ Annual physician visit (well-patient checkup or physical)

_____ Specialist visit

_____ Testing (radiology, bloodwork, etc.)

Have you ever been employed in a hospital?

_____ Yes, but I am no longer employed at a hospital

_____ Yes, I am currently employed at a hospital

_____ No, I have never been employed at a hospital

_____ No, I work in a non-hospital healthcare setting

(If so, what type? _____)

How far do you travel to the nearest hospital? (In minutes and miles to the best of your knowledge)

_____

How far do you travel to see a primary care physician? (In minutes and miles to the best of your knowledge)

_____

How far would you expect to travel to see a specialist? (In minutes and miles to the best of your knowledge)

_____

Is there anything you'd like to add after reading and sorting all statements?

VITA

Katelyn E. Miller

Candidate for the Degree of

Master of Science

Thesis: VOICES FROM THE FIELD: A Q METHODOLOGY STUDY ABOUT RURAL HOSPITAL PRIORITIES

Major Field: Agricultural Communications

Biographical:

Education:

Completed the requirements for the Bachelor of Science in Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma in 2019.

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Experience:

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Graduate Teaching Assistant, Oklahoma State University Department of Agricultural Education, Communications and Leadership, 2019-2021