THE ROLE OF PUBLIC LIBRARIES IN RURAL COMMUNICATION

INFOSTRUCTURE

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ABSTRACT

Dissemination of news and information is often challenging in small, rural communities, where sprawling geography and limited resources can limit the effectiveness of communication systems. While traditional media and local organizations attempt to inform the public through newspapers, flyers, radio, social media, and word of mouth, no one means of communication is entirely successful in reaching the masses. Rural institutions and organizations often lack a means of communicating current news to members of small towns due to the void of an integrated information infrastructure, or *infostructure*.

Borrowing from the framework of Communication Infrastructure Theory and previously suggested models for community infrastructure, this study was an effort to better understand how people in this small town communicate – how they create, disseminate and prefer to receive information about the community. This exploratory, qualitative, case study examined communications in one small, rural town to determine whether or not the library might be able to partner with local media, resident networks, and other organizations in the community, to maximize available resources, eliminate duplication, and increase overall effectiveness in the communication infrastructure. This new model would place the public library, or anchor institution, at the center of the storytelling network, as the hub for local news and information.

Through interviews and focus groups with 32 members of the community under study, I identified ways in which people communicate, connections between storytelling agents within the local storytelling network, and voids that, if addressed might improve the community's ability to communicate in general. This study suggested ways that libraries might serve a role as the anchor of anchors for communication in rural communities.

DEDICATION

This document is dedicated to my grandmother, my Mamoo, Carrie Belle Mills, who inspires me and blesses the hearts of all who are touched by her steadfast love, overflowing encouragement, and infectious desire to spread happiness and joy in this world. To my parents, Joe and Rene', who instilled in Joanna and me, a curious mind, a desire to help others, and a joyful heart – thank you for an insanely fun childhood and for years of love and laughter.

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CHAPTER I:

INTRODUCTION

The American Library Association's publication, *The Small but Powerful Guide to Winning Big Support for Your Rural Library*, comically noted that in the early 1900s, when Platte County, Wyoming was searching for a new librarian, the advertisement read: "Must be able to get along with Western people, ride and drive, as well as pack a horse, follow a trail, shoot straight, run an automobile and be able to rough it whenever necessary" (OLOS, ALA Publications). While the author jested about the requirements listed above, they also acknowledged, on a serious note, that Mabel Wilkerson, the librarian who landed the dubious job, was also responsible for winning support to keep the Platte County Library afloat financially and reaching out to the farthest outskirts of the county to share news and information with people in remote rural areas.

Today, while librarians might not be required to ride a horse or use a gun, they are expected to shoot straight when communicating and sharing information with the public, accurately navigate information trails toward understanding and knowledge for library users, and reach out in order to share news with people in areas of limited access to resources. Mabel Wilkerson might be pleased to know that a working knowledge of the community, a good sense of direction and planning, as well as the ability to "get along with" and provide for all types of people are all skills required by library and information professionals today.

As Mabel Wilkerson also knew, dissemination of news and information is often challenging in small, rural communities, where sprawling geography and limited resources can

limit the effectiveness of communication systems. While traditional media and local organizations attempt to inform the public through newspapers, flyers, radio, social media, and word of mouth, no one means of communication is entirely successful in reaching the masses. Increased avenues for news and media consumption require institutions to cast a broad net of advertisements that combine traditional media and online channels of information, which can be a time consuming, costly and, ultimately, ineffective process. Rural institutions and organizations often lack a thorough means of communicating current, useful, or urgent news to members of small towns due to the void of an integrated information infrastructure or *infostructure*.

Infrastructure within a community can be defined in different ways. The United States government defines critical infrastructure as "the assets, systems, and networks, whether physical or virtual, so vital to the United States that their incapacitation or destruction would have a debilitating effect on security, national economic security, public health or safety, or any combination thereof" (Department of Homeland Security, 2011, para. 1). Such infrastructure includes that which "delivers electricity and water, controls air traffic, or supports financial transactions" and is seen as "critical life-sustaining infrastructure." Many of these do depend on underlying communications and network infrastructure, however, are identified separately from them (The Whitehouse, 2011, p. 3).

The word infrastructure within the framework of Communication Infrastructure Theory is defined differently than the traditional governmental city planning definition. Within the communication action context (CAC), communication among storytelling network (STN) actors is enabled and constrained. The CAC of a community includes physical attributes and built environment of the community (e.g., organizational resources and technological infrastructure

characteristics, and a public transportation grid) as well as the psychological factors such as residents' perceptions about how safe particular parts of their community are (Ball-Rokeach et al., 2001; Matsaganis, 2007).

The storytelling network (STN), which is the network of actors involved in creating and sharing the "story" (or local news and content) of a community, exists within the CAC and is comprised of three groups of storytelling agents: community organizations (businesses, organizations, and institutions), local media (newspapers, television, and radio), and resident networks (neighborhood groups, social clubs, families, and friends). Communication occurs among these groups as well as between these groups and members of the public (Ball-Rokeach, 2005).

A lack of communication infrastructure is shown to affect collective efficacy, belonging, and participation, resulting in decreased civic engagement and resilience within a community (Kim & Ball-Rokeach, 2006a; Kim & Kang, 2010; Houston et al., 2015). Fortunately, public libraries already exist in most communities and could offer a model solution for communication challenges that these communities face, especially those that are small and rural.

Anchor institutions are permanent resources and fixtures in the community, usually non-profit or government-funded enterprises, and often include schools, hospitals, cultural institutions, and public libraries. The "anchor of anchors," however, is the community anchor, which rises above to serve the community as the primary anchor, leading and connecting together other anchors, and the community as a whole (Alemanne, 2011; Garmer, 2014).

Many libraries already serve as anchors in their communities regarding access to information, offering free informational and educational programs and services, and serving as technology hubs for communities of all sizes. They are also already serving, in many cases, as

the anchor of anchors, as partners and leaders among other organizations and institutions within the community in service projects and enrichment efforts throughout the community. However, while public libraries may often serve as an anchor, or the anchor of anchors, they are less often serving as the coordinator, or one-stop, single source of communications for the community as a whole.

However, due to the its suitability to serve as the "anchor of anchors," the rural public library could serve as a facilitator and leader, partnering with local media, resident networks, and other organizations in the community in efforts to maximize available resources, eliminate duplication, and increase overall effectiveness in the communication infrastructure. This new model would place the public library at the center of the storytelling network as the hub for local news and information and the anchoring institution for communications within a community.

This infrastructure could include community-wide websites, newsletters, and crosspromotional articles for traditional media. By leveraging their predisposition as an anchor among
anchors and coordinating these services, institutional capital and value could be increased for
public libraries, along with community identity, collective efficacy, and neighborhood
belonging; all elements of civic participation might also increase through successfully
coordinated efforts to inform the public through a more streamlined communications
infrastructure. This effort could address the lack of infostructure in rural communities by
providing a new or improved information infrastructure for more effective communications.

Background

Since its first observed use in a 1994 publication regarding the relationships between different segments of the information industry, the term infostructure has been used to describe

the infrastructure of information in various fields and applications such as technology, engineering, and government networks (Zurkowski, 1994; Ward, 1994; Taher, 2007). In his blog, *Hyperspace Pseudo-Philosopher*, James "Eric" Tilton (1994) claimed to have coined the term infostructure and defined it as "the layout of information in a manner such that it can be navigated -- it's what's created any time an amount of information is organized in a useful fashion. A table of contents is an infostructure, as is a bibliography, or an index. The World Wide Web is an infostructure" (Tilton, 1994, para. 1). Infostructure is also the name of an internet and telecommunications company in the United States.¹

In this study, the information infrastructure, or *infostructure*, of the rural community, RTX, Alabama, is examined to identify how residents, organizations, and media outlets communicate with each other. Under the guidelines of Communication Infrastructure Theory, existing communication assets (local resources which facilitate communication) are identified and connections, or communication relationships, between "storytelling agents" are examined. Also revealed are the widely used channels, or avenues, of communication, the avenues shown to be most effective, as well as any limitations or voids in the existing communication infrastructure in need of improvement. The goal of this study was to construct a model in which public libraries serve as the anchoring institution in the community through the creation of a more effective infostructure. Through this model, public libraries can improve overall communication systems, build social and economic capital in the community, open new avenues of communication between people, organizations, and media by integrating a community's infostructure.

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¹ InfoStructure Company, Oregon.

Problem and Purpose Statement

Communities of all sizes benefit from the information resources of public libraries and the knowledge and skills of their staff. Such is particularly the case for rural areas where access and resources are limited. Although public libraries have, in many cases, proven their role as resourceful, knowledgeable partners in the community, these institutions are not always utilized to their full potential as an integral part of the general communication creation and dissemination process in the community.

The resources of the public library and the potential benefits for citizens are vast, yet library administrators are rarely involved in community planning for a communication infrastructure. As Bishop and Veil (2013) suggested, libraries can serve more directly as a leader in communications within a community when they are "at the table" during the planning stages of communications instead of just a part of the reactive response to communication issues, such as those experienced during disaster relief. Kathleen de la Peña McCook (2000) also examined the necessity of the library's "place at the table" as she advised librarians to become involved and connected with comprehensive local initiatives and community-based programs.

To break the view that libraries are merely passive participants in the community and increase the role of the library in community building, librarians must be proactive partners in broad visioning initiatives and community planning projects (McCook, 2000, 2001; McCook & Jones, 2002). As McCook recommended, in an effort to ensure the library is not kept out of public planning, librarians should be at every table – in attendance and participating at every community meeting, every council meeting, and at community functions. Similarly, Marjatta and Clendening (2007) suggested that libraries cannot work apart from community planning and

expect to be remembered as they advised, that the library risks loss of value and visibility to the community whenever their presence in the community decreases.

This study was an effort to continue the work of McCook and others to justify the role of libraries as anchor institutions in the community. It also explored new roles that public libraries might serve in rural communities which leverage existing unique qualities of public libraries to more efficiently meet the communication needs of the community and increase the relevance and value of the public library in the community.

Research Questions

Sharing community-based news among citizens, institutions, and organizations is a challenge for many people in small, rural communities. In order to discover the underlying reasons and factors that contribute to this problem, this study first examined how people in one small town share information with each other, what avenues existed, which ones were used, and what voids in the communication infrastructure could be identified.

This study explored how this community actually communicated and what channels of communication were most relied upon for news and information. The study also examined the role of public libraries in creation, disseminating, and receiving of information in rural communities. Therefore, philosophical assumptions and theory were used to provide a framework for this study that asked the following:

- 1. Who creates local community news content and information in this town;
- 2. How do people use existing avenues of communication to both receive and share information;
- 3. What voids exist in the communication infrastructure that, if addressed, could increase communication effectiveness; and
- 4. What is the public's perception of the rural public library's services, overall importance, and its role in local community news creation, dissemination, and reception?

Assumptions of the Study

During the administration of the study, I made the assumption that all study participants have unique experiences with regular, local communication in this town and would be willing to provided honest responses to interview questions as well as follow-up questions that might arise in the analysis of data. My role as researcher was to listen carefully to participants, analyze their answers objectively and critically, and interpret the findings with respect for their individual perspectives and experiences. This process allowed me to try to give voice to a group of members respectively representing one small, rural community in south Alabama.

Limitations of the Study

Several factors including sample selection and researcher bias present limitations to this study. For this study, I chose to examine my hometown and the town in which I live and work. For the participant sample, I chose to select participants by combining a working knowledge of the community with some snowball and random sampling. Although there was a risk that this approach could ultimately influence my results, these measured and carefully considered decisions also allowed me to leverage existing networks to gain trust and participation in the community. The inclusion the techniques of snowball and random sampling was designed to attempt to mitigate, and hopefully, reduce the possibility of negative consequences of participation by members of the community whom I know and identified for the study.

Within the scope of this study, only so much could be examined and explored. Due to the closeness of my relationship to the community and my desire to create a comfortable atmosphere for discussion about communication experiences, I did not ask participants to share their income levels and other financial details of their socio-economic situation. I did not understand how relevant and significant one's income level is as an indicator for access to information in general

as well as one's willingness or ability to participate in opportunities for storytelling and community building. Those oversights could be addressed in future studies as research on this topic is furthered.

The study was also limited by time, and thus a decision was made to limit the geographical scope of the project to town instead of the entire county. Although this reduction in scope might be seen as a limitation, this decision could allow for future comparative study in other similar rural sites of which the researcher is not a member.

As the principle investigator and existing library director in the town under examination, I am familiar with the town, its people, and its resources. While these experiences informed the desire to conduct the study, the researcher made every effort to limit the impact of bias from influencing the participants' responses in this study.

Literature Review

Public Libraries' Impact and Value in the Community

Public libraries are reported in many studies to be facilitators of storytelling and social capital, both essential factors in communication infrastructure (Garmer, 2014; Alemanne et al., 2011). Using the theoretical lens of Communication Infrastructure Theory (CIT), this study investigated how public libraries may further facilitate social capital and encourage storytelling by serving as visible, tangible assets, or anchor institutions of a communications infrastructure.

Public libraries are one of the most extensive and most consistent parts of the community infrastructure in the United States. In most communities, public libraries are considered by citizens to be institutions, or permanent public fixtures, that play a significant role in meeting the informational and communication needs of the public. Pew research data reported that 96% of the U.S. population lives within the service areas of public libraries (Zickuhr et al., 2013).

Available in 98% of counties across America, in cities and towns, large and small, public libraries today are vibrant, valuable centers of reading, learning, technology, civic engagement, and cultural enrichment (Veil & Bishop, 2014). The system, or fabric, of information resources and communication facilities provided by public libraries is unique among civic institutions and touches hundreds of millions of lives every day. This valuable network of communication infrastructure and consistent resources could be more prominently activated, however, in rural communities across the nation.

Public libraries may be poised to serve in a more integral role within a community-wide communication infrastructure. Weigand (2015) and others noted that local public libraries today reflect the long-held image of libraries as trusted institutions of knowledge, advocates of equal access and rights, proponents of democracy and civic engagement, and safe, open, welcoming spaces where social capital is created, and stories are shared.

Andrew Carnegie's library construction project helped to improve equitable access to information for millions of U.S. citizens. Carnegie libraries are embedded in their communities and continued symbols of knowledge and growth. Over the years, they have been integral to providing access to information to those who might otherwise go without. Instead of being viewed as luxuries, Carnegie helped public libraries become necessities – instruments of change – valued institutions as vital to the community public schools or fire and rescue. This legacy of support for public libraries gave momentum and visibility to the valuable role public libraries play in a community (NPR, 2013).

These beautiful buildings were recognizable as people traveled from town to town, meeting the informational needs of residents and visitors. They also provided a space that brought, and continue to bring, the community together for shared experiences and interaction

(Weigand, 2015). However, while the Carnegie library construction project established libraries throughout the country, this process was complex and fraught with challenges.

Although inclusion of children in the library was a priority in Carnegie's plan, 70% of Carnegie libraries reported to limit entrance into and use of the library to citizens over the age of twelve. Larger Carnegie libraries were often designed with separate delivery counters and reading rooms for men and women, ultimately limiting access to certain materials and social interactions between genders in the library (Van Slyck, 1995). Rules for receiving a Carnegie funded library included agreement of the town to fax itself 10% of the Carnegie gift amount that was to be used to continue maintaining these structures, staffing these libraries, and sustaining these institutions into the future (Van Slyck, 1995).

Carnegie's construction movement is shown to have increased the idea of library as place, an anchor and facilitator of social capital. This idea of libraries as an established, safe space where people could gather comfortably to share and visit is echoed in literature today as scholars refer to libraries as a community living room (Hildreth, 2012) and the family room of the community (Garmer, 2014).

Even today, this notion of the public library anchoring a community is more than just a metaphor. It is an idea that the library can serve as the center of the community, an "anchor of anchor" institutions that provides informational, social, and economic value to a community (Alemanne et al., 2011; Hildreth, 2012; Goodman, 2014). From assisting with local economic development initiatives, proactive disaster planning for the community, and even locations of prized collections and national exhibits, libraries have become more than just a place to get

books, but a leader in the infrastructural growth of the community, for which citizens and leaders could be proud.²

Key trends detailed in the American Library Association's 2015 State of America's Libraries Report revealed that perceptions of how public libraries serve their communities and society are shifting. No longer just a place for books, libraries are viewed as community centers for technology and research and valued spaces for sharing and networking. Public libraries are known as community anchors that address economic, education, and health disparities across communities. "Educational programs, print and digital books, databases, meeting spaces, and instruction on how to use new technologies are among the many resources and services provided by libraries" (ALA, 2015, para. 4). The report has also shown that more than two-thirds of Americans agree that, "libraries are important because they improve the quality of life in a community, promote literacy and reading, and provide many people with a chance to succeed" (ALA, 2015, para. 4).

This idea that citizens desire and deserve a space to meet and share information is highlighted by Aabø and Audunson (2012), who have discussed the value that public libraries offer to citizens as they encourage social inclusion and accessibility to space where community belonging and social capital are created. Scholars have recognized that community is more than

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² Public libraries have a stated goal to be open and inclusive, but their history has been fraught with issues of exclusion for some. Social justice is a stated priority in the mission of public libraries, yet, who they help and how that mission is implemented has been troubled by bias and discrimination. Some groups, such as minorities, the poor, and the LGBTQ community, have suffered due to socially exclusive practices or policies that hinder access and inclusion. Weigand (2015) also noted that after the Montgomery (Alabama) Public Library was threatened with legal actions for discriminatory practices in the 1960s, libraries were finally desegregated to include access for all citizens. However, even as cities allowed for integration of public libraries, these efforts were sometimes veiled attempts to appear progressive, yet protect the segregated status of other institutions such as public schools, which were eventually fully integrated in the 1960s. Although integration of libraries was not a wholly peaceful and accepted at the time, once a light was shined onto the dark, segregated days in American history, public libraries became much more aggressively concerned with the fight for equal rights for all citizens. This can certainly be seen in the core values promoted in public libraries today, as they support equal access, rights to information, and opportunities to better one's self (ALA, 2015).

just a physical or geographical space in which people belong (Garmer, 2014; Swan et al., 2013; Zickuhr, 2013; Hildreth, 2012). Public libraries also offer citizens access to digital and online communities through computer and internet access as well as online book clubs, reading materials, and other online services.

During times of pronounced hardship, public libraries have historically been viewed as havens and providers for those in need. Throughout the World Wars and the Great Depression, as citizens could no longer afford books, people flocked to public libraries, seeking more than just materials, but also an escape from the devastating reality they faced each day. Studies show that people have often relied upon public libraries similarly for assistance during disaster recovery (Bishop & Veil, 2013; Veil & Bishop, 2014; Alemanne, 2011).

Public libraries have often established themselves as the information and technology hub in the community. With computer labs, internet, collections of information, and meeting rooms, public libraries already offer a broad range of the most useful resources for disaster relief. Often times, public libraries have generators that can quickly restore power to their facilities. Bishop and Veil (2013) reported that public libraries have served as supply distribution sites, shelters, and community headquarters for organizations such as FEMA, community service agencies, and local emergency services. Some libraries have even reported that people without access to power or water simply sought relief from the elements and a place to clean up or rest with their families (Veil & Bishop, 2014).

Whether in times of disaster or during the normal job application process, most applications for assistance, services, and employment must now be submitted online and are often long and arduous processes. Fortunately, library staff members are often already knowledgeable and trained to assist the public with e-government forms, applications for federal

programs and local services (Veil & Bishop, 2014). Their ability to provide the public with space, equipment and trained assistance with such tasks is unparalleled in most communities.

According to Jaeger et al. (2006), use of the internet to access FEMA disaster-relief services was shown to be the most frequently required service reported by libraries in the wake of disaster. Completion of FEMA aid forms, which are only accessible online, requires a certain level of computer and information literacy skills. In some communities, public libraries are the only places where people could get online and access FEMA forms post-disaster. One librarian in a study of Gulf Coast disaster relief noted, "Our staff helped customers file over 45,000 FEMA applications [and] insurance claims" (Jaeger et al., 2006, p. 207).

Another study showed that even when 35% of the Louisiana public libraries were closed after Katrina, overall number of visitors statewide decreased by only 1%, indicating that individuals sought library services elsewhere if their local library was closed (Skinner, 2007). The legitimacy of public libraries as critical agents in post-crisis and disaster recovery was affirmed on January 7, 2011, when FEMA changed its policy to allow libraries to secure temporary relocation during major disasters and emergencies (Bishop & Veil, 2013).

Similar reactions are seen during times of economic downturns today; this is reflected in the influx of library visits during times of recession, even as budgets are cut and resources are spread thin (Weigand, 2015; Garmer, 2014; Harris, 1975). Non-profits, such as public libraries, are shown to promote stability and encourage community revitalization in distressed communities (McCook, 2000).

Libraries also provide access to computers and internet for daily informational needs like email and banking. In addition to being the only provider of free public access to computers and the Internet in their communities, reports from the 2010–2011 Public Library Funding and

Technology Access Survey also states that 91.8% of libraries reported they helped people understand and navigate e-government websites (Bertot et al., 2012; Bishop & Veil, 2013). "Libraries have become essential access points to information and communication technologies, not only because they are often the only public provider of Internet in many communities, (Bertot, McClure, & Jaeger, 2008), but also because that is where one can get individual help to use the technology—and the information gained from it" (Johnson, 2012, p. 53).

Previous research also indicated that, for each dollar of taxpayers' money invested in public libraries, the average return on investment in value to the citizens is four to five times. For libraries seeking to instill a sense of necessity and value in the minds of decision-makers regarding libraries, this message is a strong affirmation of the importance of libraries. As Aabø (2009) stated, "Promoting the value of the libraries in the community also through economic statements can be quite effective. Speaking in terms of dollars and cents seem to have a heavy impact on people, both politicians, and ordinary citizens, who may not register the value of library services otherwise" (Aabø, 2009, p. 322).

Libraries have been credited by many as driving forces in civic engagement and economics. They connect people with opportunities to learn and become informed, as well as offering opportunities to improve lives through employment searches and a wide array of skills training. American Library Association recently reported that, in 62% of communities in the U.S., the public library is the sole provider of free open access to internet to the public (Garmer, 2014). With computer labs, internet, collections of educational and entertainment materials, meeting room and display spaces, public libraries offer a broad range of the most useful resources that are most often free to the public.

Public Library Service Responses

In 1998, the American Library Association (ALA) published *Planning for Results: A Public Library Transformation Process*, a guide for long-range planning of library services (Himmel & Wilson, 1998). The publication included the 1997 Public Library Association (PLA) list of Library Service Responses intended to inform the priorities of public libraries so that they might "manage the future rather than...react to the past" (McCook, 2000, 2001). A noticeable shift over time in service priorities suggested by PLA and ALA is observed between the Public Library Service Responses of 1997, and the following service responses in Garcia and Nelson's 2007-updated list, published in *Strategic Planning for Results* (Nelson, 2008). Although an emphasis on reading and learning can be found in the descriptions of service responses in both versions, the term literacy, found in two of the 13 service response titles in the 1997 list, does not appear in the titles of service responses from 2007 (Himmel & Wilson, 1998). However, the terms informed, connect, citizen, build, and community are all present in the updated version (Garcia & Nelson, 2007; Nelson, 2008).

The first service response on the 2007 list is "Be an Informed Citizen," which is a noticeable shift from the first item on the list from 1997, "Basic Literacy." In fact, the entire list of 1997 service response titles consists of nouns, indicating what libraries should strive to provide and what visitors should be receiving from the library. Conversely, authors of the updated response list in 2007 used action verbs conveying what library users can do and discover while at the library.

This active, participatory language in the 2007 service responses, emphasizing civic engagement and community building, also encourages library users to "Celebrate Diversity," "Express Creativity," "Make Career Choices," "Succeed in School," "Stimulate Imagination,"

and "Understand how to Find, Evaluate, and Use Information" (Garcia & Nelson, 2007; Nelson, 2008). Some of these ideas are similar to those listed in 1997, but the tone of involvement in the library and advice for citizens to *do* these things in the library indicates a change in approach for library administrators and expectations for the role of libraries in the community.

Updated directives for visitors to "Be an Informed Citizen," "Make Informed Decisions," and "Know Your Community" reflect an increased participatory role for library users and the evolving role of library services in fostering informed, engaged citizens in communities (Garcia & Nelson, 2007; Nelson, 2008). Libraries have long been responsible for the collection, care, and preservation of local history and community archives, an important, valuable and often sacred part of the role of many public libraries. Yet, even the conventional emphasis on genealogy research and local history curation has been transformed into a call for citizens to "Discover your Roots," lending an adventurous tone to the traditional image of local community collections and family history.

Economic Impact

In many rural communities, public libraries are natural partners in the development of local economies, as they are often centrally located, provide services designed to foster growth and development for all ages and interests, and promote workforce capacity (Walzer & Gruidl, 1997; Hamilton-Pennell, 2008). Efforts of rural public libraries assisting businesses, other community organizations, and potential employees are also increasing as libraries serve more vital roles in community and economic development (Walzer & Gruidl, 1997; Kennedy, 2014).

In *The New Librarianship Field Guide*, Lankes advised that the structure of a public library should not be so rigid that a community has to conform to use its resources. "Each library should look like its community," and librarians should "find great ideas in any industry or

structure and adapt them for our local conditions" (Lankes, 2016, p. 129). This could include more thoughtful marketing of community information. As Hill (2009) suggested, within the context of a public library, marketing is all about finding and meeting customer needs, in terms of a library's "bottom line," which is community building (p. 69). Hill suggested that these most basic principles of marketing can provide structure and reason on the path toward better, more effective communications in a library's service community.

Wilson (1986) noted that the benefits to both library and community as he described the economic development initiatives of the Parlin-Ingersoll Library, a library that learned to thrive on progressive ventures. Similar to the public library in RTX, the Parlin-Ingersoll Library enjoyed a unique relationship with local government, due to the fact it is affiliated with and supported by the town in several ways, but does not rely upon primary funding from the town or its limited tax base. Instead, most of its funding comes from a local family trust bequeathed to the sole benefit of the library. This relieves the burden that most towns have to fully fund and support the operations of the public library and allows for more specific and customized service approaches for meeting the informational needs of the community. After evaluating the abilities and potential partnerships offered by the library and its staff, the Parlin-Ingersoll Library became an active producer and provider of informational community resources in order to generate widespread support and a new service role for the library as a partner in economic development (Wilson, 1986).

Through a partnership with the local Chamber of Commerce and local government, it was decided that the library would lead community storytelling by gathering community information and creating a promotional folder to inform residents and visitors of the current resources, services, and contacts available in the community. This working relationship and active

partnership between the library, the city, and the chamber "enhanced the project's credibility, improved communications flow, and tapped [the library's] existing expertise effectively" (Wilson, 1986, p. 33). Community officials reported to have learned through the process, the vital importance a library can play in linking members of a community with the information they need to communicate more effectively.

Kathleen de la Peña McCook (2000) quoted community development scholars,

Kretzmann and McKnight (1993) as they echoed the idea of community building and connecting resources:

Wherever there are effective community development efforts, those efforts are based on an understanding, or map of the community's assets, capacities, and abilities. The key to community regeneration, then, is to locate all of the available local assets, to begin connecting them with one another in ways that multiply their power and effectiveness, and to begin harnessing those local institutions that are not yet available for local development purposes. (p. 40)

McCook also stated that connecting libraries with other community organizations is the best way to multiply the role and effectiveness of community building efforts by libraries.

In addition to community building, libraries also have a direct economic impact on the pocketbooks of citizens (Garmer, 2014; Zickuhr, 2013). For several decades, library leaders have partnered with community and economic developers on initiatives to support existing businesses and stimulate new economic growth (Walzer & Gruidl, 1996, 1997, 2000). As mentioned, public libraries offer computer classes, resume workshops, and assistance with applications online—all tangible ways that libraries affect local economies and improve quality of life (Walzer, Stott, & Sutton, 2001). In fact, several studies have calculated that the return on investment for every dollar invested in libraries can range from 300-900% (Glass et al., 2000; Walzer, Stott, & Sutton, 2001; Barron et al., 2005; Kennedy, 2014).

In South Carolina, the direct economic impact of library expenditures totaled \$222 million, while the cost of library services was \$75 million for state and local governments (Barron et al., 2005; Poll, 2012). When quantifying the value of libraries in Florida, previous studies showed that for every \$1 invested in public libraries services and programs returns \$6.54 into the local economy, \$9.08 in gross state product, and \$12.66 in wages. Overall, the direct impact of public libraries in the state of Florida, alone, totals \$6 billion (Poll, 2012).

Libraries are also useful in improving quality of life in a community in other ways that translate into perceived and real financial benefits for residents and businesses. When surveyed, 47% of South Carolinians said that proximity to public libraries increased their property value and 92% stated that libraries improve quality of life (Poll, 2012). In Philadelphia, homes located within a quarter of a mile from a public library are valued at an average of \$9,630 more than homes further than a quarter of a mile away equaling \$698 million dollars in home values throughout the city (Kennedy, 2014). This increases homeowners' ability to borrow more money for home improvements, educational expenses, and other monetary items that might improve quality of life.

One unique and valuable quality of public libraries is their ability to partner with other organizations within a community. Hildreth (2012) called for an outward reach of libraries to meet people where they are and take the services to the people. This approach is recurrent in the history of libraries, which have long sent books into the peripheral parts of the community by way of branches, bookmobiles and horseback (Weigand, 2015). Libraries can bind a community together, connect them with information that they want and need, and instill a sense of community belonging that spans geography and demographics.

Social Capital

Public libraries are believed by many scholars to increase opportunities for the creation of social capital, as they provide storytelling opportunities for a community. Resources that strengthen and cultivate community belonging are known as social capital. Social capital has been defined as one's ability to gain, maintain, or transfer resources to improve their life or the lives of others (Johnson, 2012). Hill (2009) referred to social capital as the glue or grease of human relationships and the value derived from those interactions among people. Influenced by Bourdieu in their explanation of social capital, Griffis and Johnson (2014) stated:

Social capital is a resource by which affluent classes distinguish themselves from less affluent ones, demonstrating a kind of social dominance over them by measure of their social connections, their values, and their tastes. It is a resource that binds people together *within* a group much more than between people of different groups. (p. 97)

Robert Putnam (1995) similarly defined social capital as a resource rooted in "dense networks of social interaction" that "foster sturdy norms of generalized reciprocity and encourage the emergence of social trust" (p. 67). In Putnam's definition, social capital produces greater social cohesion by helping connect people with each other, thereby helping them access and mobilize much-needed social resources such as support and useful information (information about job opportunities, for example), all of which help people 'get by' in the world.

In addition to traditional or literal storytelling and sharing, public libraries create social capital by giving a voice to marginalized populations, integrating new residents, providing meeting spaces and places for public forums, engaging citizens in cultural and educational enrichment, connecting people with technology and opportunities for better jobs or services (Hildebrand, 2005; Johnson, 2012; Varheim, 2014). All of these services can directly, and indirectly, improve people's lives and general quality of life in a community.

Communication Infrastructure Theory (CIT) explains both the reasons for and the need for storytelling within a community, as storytelling occurs among agents within a storytelling network. Kim and Ball-Rokeach (2006) suggested that storytelling increases social capital as neighbors share their experiences and develop the community fabric of their communication infrastructure.

Scholars have suggested that, as a community leader in institutional collaboration, the public library might be well positioned to provide opportunities for the creation of social capital on both micro- (individual) and meso- (community) levels (Svendsen, 2013; Vårheim, 2014). Hillenbrand (2005) argued that libraries create social capital in numerous ways such as encouraging civic engagement and an informed citizenry by delivering programs that bring citizens of all ages, backgrounds, and economic statuses; upholding democratic ideals by promoting information literacy and making information freely available to all citizens; partnering with other community organizations; encouraging trust through social inclusion through open, welcoming public spaces; and facilitating local dialogue and storytelling through individual and group interactions (p. 9).

Griffis and Johnson (2014) posited that rural libraries, specifically, create social capital by facilitating meetings, providing opportunities for people to share and interact, integrating new residents and visitors, symbolizing local identity, and networking with other organizations.

Griffis and Johnson (2014) also quoted John Cotton Dana, who in 1902 stated,

A public library can be the centre of the activities in a city that make for social efficiency. It can do more to bind the people of a city into one civic whole, and to develop among them the feeling that they are citizens of no mean city, than any other institution yet established or than we as yet conceive. (p. 70)

More than one-hundred years later, this statement remains encouraging, as public libraries strive to increase communication opportunities that bind us, yet celebrate the diverse composition of the fabric that covers the demographic and interest spectrum of their communities.

Miller (2014) suggested that interaction between library users can generate social capital by building trust, reducing isolation, and helping people develop various skills through both inhouse and online (Johnson, 2012) as both a public sphere and a virtual meeting space (Aabø, Audunson, & Varheim, 2010). "In order for communities to thrive, they need accessible gathering places such as libraries, where people can interact and feel part of a specific neighborhood or community" (Johnson, 2012, p. 54). Johnson clarified that this does not mean that beneficial social interactions do not also occur in virtual spaces. "Much of the work of Wellman and his colleagues has demonstrated that communicating by telephone, the Internet, and other media is effective in maintaining and building social networks, thereby contributing to social capital" (Johnson, 2012, p. 54).

As dependence upon internet access deepens the reach of technology in our lives, it is in the public's interest to ensure that all have opportunities to take advantage of the benefits of technology. The term "digital divide" became one of the political and academic hot-topics of the 1990s after a series of U.S. Government reports adopted the term, referring to the socioeconomic gap between communities that had access to computers and the internet and those who did not—the "technological 'haves' and 'have-nots' or 'information rich' and 'information poor'" (Erdiaw-Kwasie & Alam, 2016, p. 216).

According to Mehra et al. (2017), digital divides (intentionally plural to emphasize their difference) are, in addition to geography, based on many different variables such as income, race, ethnicity, gender, sexual orientation, education level, age, and physical or

mental disabilities. Mehra et al. (2017) noted that digital divides have traditionally revolved around the idea that if everyone had access to technology, then that alone would lead to effective technology use, which as the authors state, is not always the case.

Horrigan (2014) differentiated between the digital divide, which affects approximately 36 million adult Americans who do not have access to internet, and digital readiness, a much bigger problem, which affects 70 million adult Americans who lack useful digital skills, or digital readiness. Digital readiness is a measure of a person's ability to use digital equipment and resources once they have access to them (Horrigan, 2014).

According to Horrigan, access to technology and high-speed internet does not make one able and ready to use the internet effectively. Citizens with low levels of digital skills (even among those with home access high-speed internet and smartphones) engage in online activities such as job searches or educational applications at a fraction of the rate of those with high digital skillset (Horrigan, 2014).

Suggesting that cities create "community tech champions" as advocates for digital readiness, Horrigan (2014) highlighted the need for promoting digital skill-building as new technological applications are developed. As shown in Pew Research Center statistics, 54% of Americans age 16 or over have used libraries in a given year, either physically or remotely through library-provided online services (Zickuhr et al., 2013). Libraries, many of which already serve their community as the primary host of educational programs and access to technology, could embrace and expand their role as hubs of technology and learning to include encouraging more emphasis on digital readiness.

However, critics have shown that public libraries also have the opportunity to hinder social capital through exclusion and discrimination. Although contradictory to the values

expressed and encouraged by the American Library Association, some public library patrons have fallen victim to discriminatory practices and exclusion from library staff members, based on their appearance, interest, cultural/ethnic/sexual/gender/socio-economic status or association (Weigand, 2015; Griffis & Johnson, 2014). This type of exclusion limits the ability of both the library and the person to build social capital.

Libraries also risk social exclusion when personal prejudices affect the quality of services provided, materials collected or the staff members hired. Muddiman (1999) stated,

Social exclusion . . . relates not simply to a lack of material resources, but also to matters like low social participation, lack of cultural and educational capital, inadequate access to services and lack of power. In other words, the idea of social exclusion attempts to capture the complexity of *powerlessness* in modern society rather than simply focusing on one of its outcomes [such as poverty]. (p. 2)

For instance, in May 2006, the Porter County (Indiana) Public Library implemented a policy which barred children in homeless shelters from obtaining library cards. Administrators cited loss of materials as motivation and justification of the rule. However, due to adverse public reaction, the library reversed the policy just weeks later (Gehner, 2010).

Griffis and Johnson (2014) suggested that with the power to connect citizens and increase social capital comes the responsibility to remain inclusive and open to all people and avoid biases or discrimination against individuals or materials and their representation in the library. Librarians should remain aware of and actively dismiss practices that exclude any population, especially traditionally marginalized or targeted groups within a community.

British writer and journalist Holbrook Jackson once stated, "Your library is your portrait" and novelist Kurt Vonnegut observed, "the America I love still exists today, behind the front desks of public libraries" (Weigand, 2015, p. 1). This is an encouraging sentiment. However, if libraries are to be a reflection of the communities they serve, this ideal concept for libraries

should be a charge to library administrators that they must remain aware of the America reflected by the public library and library staff in a community.

Even with these challenges in mind, the recent application of CIT research in dissemination of information in rural communities, as well as the parallels between community technology centers and the provisions of public libraries, opens the opportunity for CIT research specifically on the role of public libraries in creating and maintaining a more effective communication infrastructure in rural communities.

As trusted institutions, public libraries provide for their local service communities by improving traditional and digital literacy, assisting people with new and innovative access to information, offering space and materials for life-long learning, and connecting people with opportunities for jobs, educational betterment, and critical community services. Despite the many tangible social benefits they offer a community, public libraries continue to face ongoing challenges of sustainable funding and the constant need for adapting in an increasingly mobile, diverse, digital society (Garmer, 2014). Libraries must approach public service in ways that are inclusive, democratic, and otherwise in the best interest of the public (Goodman, 2014). By offering more meaningful and effective forms of media communications, local public libraries are poised to transform rural communities into integrated *infostructures*.

Summary

This study consists of five chapters. Chapter I provided an overview of the study's purpose, significance, framework, assumptions, limitations, and relevant literature. Chapter II offers a review of the theoretical lens used to develop the framework and design of this study. Chapter III details the methodological plan for the study, including considerations for interview and focus group design as well as guides in the process of document analysis. Chapter IV

presents the findings of the study, while Chapter V concludes the study with applications of the findings, implications and conclusions and areas for further research.

CHAPTER II:

THEORETICAL AND CONCEPTUAL APPROACHES

Introduction

In order to develop answers to communication problems within a community, a framework known as Communication Infrastructure Theory (CIT) (Kim & Ball-Rokeach, 2006b) has been established providing a theoretical lens through which the problem can be examined. Informed by Friedland and McLeod's theory of community integration, CIT has been used primarily to study media and communications in urban communities rather than libraries and rural communities. However, concepts of CIT have been applied to studies of disaster preparedness in Alabama, as well as health communications in rural areas of Alabama, and should be applicable to the general communication needs of hard-to-reach³ rural communities -- needs that could be met by public libraries (Kim, 2009; Kim & Kang, 2010; Wilkin et al., 2010), which will be discussed. This chapter will provide the theoretical framework used to develop a new model of communication infostructure for one small, rural community. This new approach to local communication and storytelling may also be applicable in other areas seeking to improve the ability of community members to broadly share local news and information.

Theoretical Background

The phrase community integration is a fusion of the terms integration (the process of a system) and community (the social unit in which integration can be found) (Friedland &

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³ Hard-to-reach communities, which will be discussed later in the chapter, are often lack access to informational resources due to factors such as a lack of socio-economic resources, transportation, technology, and digital literacy.

McLeod, 1999, p. 201). Friedland and McLeod further defined community integration as the "set of relations and processes that tie communities together and direct their change" (p. 203).

Friedland and McLeod (1999) proposed a model of community integration which, when combined with an analysis of a community's communication system, takes on meaning only within the context of community democratic participation. This three-level model examines the relationship between each level in the hierarchy of networks and the condition and resources of the community during the decision-making process within a given community structure (p. 212). The three levels of this tiered structure of community integration include a) institutions and organizations, where elite community networks exist; b) associations, encompassing various voluntary organizations, neighborhood groups, and charitable non-profits; and c) individuals and personal networks.

Sotirovic and McLeod (2001) have used community integration to examine how communication patterns mediate the influences of values, decision-making, and political participation, echoing Kosicki and McLeod (1990), who stated that analytic strategies such as reflective integration (a person's replaying and thinking of news stories in their mind and using the information as a topic of conversation with friends and family) can enhance civic interest and community participation on a micro-level (Kosicki & McLeod, 1990; Sotirovic & McLeod, 2001; Hart & Shaw, 2001). McLeod et al. (1996) conceived that community integration can be examined at both individual (micro) and institutional (meso) levels of analysis, across or between communities and suggest that integration on the individual citizen level begins with a positive outlook upon the community itself, concern for problems within the community, and respect for its institutions. It is assumed that a working knowledge of community conditions and an informed understanding of local issues aids communication by providing material for

conversations at the micro, interpersonal level and meso, community level. The process of community integration can also occur among institutions within a community, between institutions and broader society, and between institutions and other groups or citizens. Both micro-level and meso-level integration are necessary for effective local democracy to exist (McLeod et al., 1996).

Friedland and McLeod (1999) argued that the "concept of community lies at the core of the sociological tradition" (p. 201). Friedland (2001) has questioned how and under what conditions individuals and groups identify with or develop a "democratic self" (p. 358). The democratic self is comprised of two related, yet separate, parts: the publics of citizens and the communities in which they live. Friedland (2001) posited that democratic groups are more likely to form in communities that are integrated through communication. Public libraries might increase involvement and support and transform their image and their institutional missions to incorporate a new, more social role as facilitators of civic participation and conversation in rural communities (Hopper, 2013).

Gordon et al. (2013) echoed these ideas as they discuss deliberation within communities, including discussions between individual citizens in organizations, social networks, or open meetings and forums that can spur future action, or be ends in themselves. Gordon et al. (2013) also referenced studies of civic and political participation within a community on this individual, micro-level (Sotirovic & McLeod, 2001; McLeod, Scheufele, & Moy, 1999) as well as on the community, meso-level, as institutions and extra-institutional sites (associations, networks, and organizations) facilitate deliberation and public conversation (Benhabib, 1996).

To provide for previously unmet socio-cultural needs in socio-economically depressed areas of Denmark, similar concepts are expressed by Delica and Elbeshausen (2013), who

applied the concepts of integrated area development to create "library-based community centres" (p. 9). This example might suggest that comparable integration of local media institutions in rural areas of the United States could render similar library-based community centers or other rural institutions suitable to address unmet information needs in the community.

Erentaite et al. (2012) also related concepts of community integration to examine civic participation in adolescents, referencing McLeod, Scheufele, and Moy (1999) who found that knowledge acquired through media use correlates positively to awareness about civic activities, leading to increased probability of civic participation. McLeod (2000) and Shah et al. (2005) both concluded that news media use, forums, and public compromise between conflicting parties, positively affect the development of civic engagement within a community. According to Friedland and McLeod (1999), while local news media institutions are capable of influencing community integration, other institutions including churches, schools, economic institutions, volunteer groups, and numerous other organizations may also operate as agents of community integration. Although not specifically mentioned by Friedland and McLeod, public libraries, which share many attributes with these institutions, could also be included in this group.

Computers and the internet have also affected a wide range of aspects of the rural economy, quality of life, and information sharing, but research shows that many residents of counties in predominantly rural states still have little or no free access to high-speed internet (Alemanne et al., 2011). In fact, as recently as 2011, residents in many rural communities in southern states were shown to be underserved or, in some cases, not served at all by high-speed internet providers (Alemanne et al., 2011). In Alabama, more than 80% of counties are rural, and most, if not all, face challenges of ineffective local communication infrastructure (ADPH, 2007).

While recent broadband grant-funding opportunities have assisted rural areas with their efforts to improve technology infrastructures, a lack of equitable access to information creates and perpetuates a gap in informability between those who primarily consume news online and those who do not.⁴ Libraries directly affect this issue by offering equitable access to computers, software, wireless/broadband internet, and training classes for the public.

Communications Infrastructure Theory

Informed by Friedland and McLeod's community integration and developed by Ball-Rokeach, Communication Infrastructure Theory (CIT) is based on the idea that a communication infrastructure (see Figure 1) is made up of a storytelling system (macro-, meso-, and micro-level storytelling actors) or storytelling network (STN) set within the communication action context (CAC), which enable or constrains connections between storytellers (Ball-Rokeach et al., 2001).

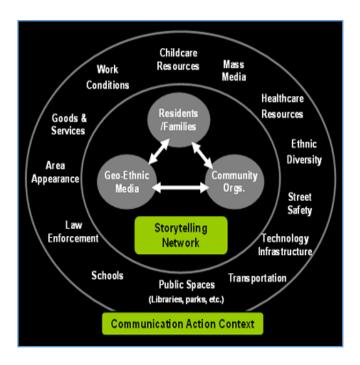


Figure 1. Communication infrastructure theory model demonstrating the storytelling network (STN) located within the communication action context (CAC) (Ball-Rokeach, 2005)

⁴ Although the findings of this study did reveal that some avenues of communication are perceived as more effective than others, this study did not seek to assess the value of the content of the avenue itself compared to other channels

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of communication.

Ball-Rokeach's Metamorphosis Project (2005), a research experiment guided by CIT, produced a framework that can be used to examine communication infrastructure within a community. CIT analyzes a community's capacity for storytelling and thus the ability of residents and local actors to build and maintain community. Kim and Ball-Rokeach (2006b) presented CIT as a theoretical framework that "differentiates local communities in terms of whether they have a communication infrastructure that can be activated to construct community, thereby enabling collective action for common purpose" (p. 413).

Communication Action Context

The Communication Action Context (CAC) of a community encompasses both the tangible (e.g., institutional resources, social services, transportation, technological infrastructure) and intangible resources (e.g., street safety and appearance, ethnic diversity, employment conditions) that facilitate communication between residents. This context consists of available resources and neighborhood factors that can promote or impede communication such as safety, spaces for civic and social engagement, quality of life and local services (Kim & Ball-Rokeach, 2006a).⁵

Two additional features included in the CAC are communication hotspots and comfort zones (Wilkin et al., 2011). These also combine both physical and psychological features of the

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⁵ As people are inundated with information, many possible avenues of communication may be presented to a member of a community. However, most people wish to find the information they need in the shortest amount of time possible. This phenomenon is known as the principle of least effort (PLE), or the principle of least resistance, which states that the one single primary principle exists in any human action (including verbal communication) -- a person's tendency to expend the least amount of energy necessary to accomplish a task (Kanwal et al., 2017). Also known as Zipf's Law, PLE was proposed in 1949 by Harvard linguist George Kingsley Zipf, who hypothesized that communication is affected by competing pressures to communicate both accurately and efficiently (Zipf, 1949). A desire to be accurate pushes against one's need to be efficient, leading one to look for the path of least resistance, or least effort (Kanwal et al., 2017). The law has been attributed to "the optimization of transmission of information between users" (Ellis & Hitchcock, 1986), which could be applied in the current study as communication effectiveness is examined as libraries and library staff members aid visitors who need to locate the path of least effort to efficiently access the information they need.

CAC. Communication hotspots are gathering places in the community where people engage with each other and residents naturally congregate to talk, whereas comfort zones are community institutions, including community-based organizations, to which residents feel closely connected. (Wilkin et al., 2011). These ideas are echoed by others (Garmer, 2014, Nyden, 2006; Davies et al., 2003) and were useful in the development of the action plan in Chapter V.

Neighborhood Storytelling Network

The storytelling network (STN) refers to an integrated network of local storytelling agents [residents (micro), local media (meso) and community organizations (meso)] who have been found to increase civic engagement (Kim & Ball-Rokeach, 2006a). Institutions located within a community (schools, health care facilities, cultural arts venues, service organizations, and public spaces) such as public libraries might act as meso-level storytellers within the STN or act as part of the CAC providing opportunities for local storytelling agents to interact.

Within the context of CIT, the term storytelling refers less to the act of telling a story to others, as it might often be used in reference to story times or storytelling events in the library. According to Ball-Rokeach (2005), storytelling is the act of storytellers within the community to "create a conversation about the neighborhood –its problems, opportunities, and events" through which "people are able to create the sense and reality of belonging to a community" (Theory section, p. 1). The author suggested that this type of storytelling, or conversation among members of a community, "is the basic way that all communities are created, whether they be neighborhoods or nations," and is, thus, a representation of the community itself, expressed through verbal, written, and implied communication (Theory section, p. 1).

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⁶ This suggestion aligns with the scholarship in communication history as regards the history of printing and its role in creating cultural and national identities. See, for example, Laurence de Looze, "Orthography and National Identity in the Sixteenth Century," (de Looze, 2012).

Within the neighborhood storytelling network (STN) are three categories of storytelling agents: geoethnic/local media, community organizations, and resident networks. According to Kim and Ball-Rokeach (2006b), three levels of storytelling agent participation also exist. They are macro-level (mainstream or mass media), meso-level (community organizations and local media), and micro-level (neighborhood residents and individuals). CIT focuses primarily on the micro and meso-level storytellers and suggests that the ability of an STN to build community is affected by the communication action context or (CAC) in which it operates.

The first community storyteller group in the STN, local or geoethnic media (mesolevel), targets specific geographical areas or ethnic populations in a community. Geoethnic and local media might include printed or electronically distributed materials from community newsletters and free pamphlets, to slick, commercially generated print or digital media generated to reach a specific geographic area or ethnic audience (Kim & Ball-Rokeach, 2006a).

Kim, Jung, and Ball-Rokeach (2006) analyzed ethnic neighborhood engagement and introduce the concept of geo-ethnicity, offering a more formal definition of geo-ethnicity as "ethnically articulated attitudes and behaviors grounded in a specific temporal and spatial situation" (p. 424). For other CIT studies not explicitly examining factors surrounding ethnicity, local media such as a newspaper or radio station might serve as the storytelling agent.

Within a targeted geographic or ethnic population, individuals tend to self-select media based upon their particular needs. For example, Wilkin and Ball-Rokeach (2011) found that Latinos with healthcare access problems tended to rely more on Spanish-language television for health goals while those without healthcare access difficulties were more likely to use health professionals, internet, mainstream TV, and printed materials.

The second storyteller group, community organizations (meso-level), encompasses everything from informal grassroots groups to formal non-profit organizations, businesses, service agencies, and public institutions, such as public libraries. Previous research has suggested that community organizations are channels, through which citizens gain social capital, which is the currency by which networks are valued as their ability to garner community commitment and mobilize collective action is measured (Putnam, 1995). Engagement with others and participation in community organizations offer citizens opportunities to contribute to a group beyond their family, friends, and work networks.

Previous studies also indicated that community organizations foster the development of civic skills and engagement (Kim & Ball-Rokeach, 2006b) increase social efficacy (Gordon et al., 2013) and provide meso-linkage in local communication infrastructure (Hayden & Ball-Rokeach, 2007). Both local media and community organizations represent meso-level interactions in the community and are generally considered to be weak ties for individuals, or people with whom one interacts less frequently as acquaintances.

A significant justification for weaker ties in a social network is the idea of bridging, which is shown to occur more often between weaker ties or acquaintances. Scholars have suggested that communities with limited resources may depend more upon bridging, as resources must be sought from outside of the community and imported (Williams & Durrance, 2008; Nah et al., 2016). Such is indeed true of rural areas, where resources may be scarce and must be sourced outside of the community (i.e., grants, state/federal programs, expert consultants). Bonding within the community is equally important to organizations like public libraries as research shows that sustainability is affected by an organization's ability to bond with citizens in the community. Strong ties to decision-makers may prove valuable to the sustainability and

maintenance of resources for an organization once resources are gained through bridging (Hillenbrand, 2005; Johnson, 2012).

The third category of storytellers are micro-level, resident networks of friends, family members, and neighbors who talk about their communities in public and private, participate in the task of imaging their community, and encourage civic involvement by one-on-one conversations. Resident networks generally include strong ties with people who, as Williams and Durrance (2008) stated, those you see several times a week or more. All of these storytelling agents within the network have the potential to increase connections between people, which could increase effective communication. Micro-level linkages can exist among individuals and between individuals and community organizations (Kim & Ball-Rokeach, 2006a).

Integrated Connectedness to a Storytelling Network

The extent to which community storytellers (local media, community organizations, and residents) are connected is expressed as integrated connectedness to a storytelling network (ICSN) (Kim & Ball-Rokeach, 2006a). Within the context of a neighborhood storytelling network, ICSN can be measured as the summation of interactions and connections between local media and community organizations, and the intensity of interpersonal neighborhood storytelling (Kim & Ball-Rokeach, 2006a; Kim et al., 2011).

Although conflicting goals often occur within a community, precipitating events may move communities to find common goals and interests that bring the citizens closer together. Collective efficacy is the confidence one has in a community to mobilize collective action toward a shared goal. Collective efficacy examines four dimensions: 1) willingness to intervene, 2) local political control, 3) a complicated mix of community and instrumental helping, and 4) shared organizational participation (Kim & Ball-Rokeach, 2006b). Civic participation, however,

is the temporal and monetary investment that citizens contribute toward a cause (Kim & Ball-Rokeach, 2006b).

Neighborhood belonging is expressed as feelings of attachment to the community. CIT suggests a correlation between the number of community organizations to which one is connected and levels of neighborhood belonging (Kim & Shin, 2016). Other data points, such as the number of conversations with neighbors, can be collected to indicate feelings of neighborhood belonging. Researchers also examined levels of neighborhood belonging by the number of connections one has to media, as well as other structural details such as home ownership and residential tenure (Kim & Shin, 2016).

The term civic engagement has been used broadly across multiple disciplines and is defined by Ehrlich (2000) as "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference...promoting the quality of life in a community, through both political and non-political processes" (p. vi). Putnam (1995) suggested that civic engagement is defined as the effort to better understand and improve society by participating in collective action to achieve goals, solve problems, and make decisions in a community. Civic engagement is described as working to make a difference in one's community by promoting quality of life through political and non-political processes. Scholars have defined civic engagement as the willingness of a community to problem-solve, improve civic life, and mobilize toward a common community goal (Kim & Ball-Rokeach, 2006a; Kim et al., 2011).

Studies by Kim and Ball-Rokeach (2006a, 2006b) have shown that storytelling within a community can lead to increased feelings of belonging and civic engagement. While the current

study did not explicitly measure civic engagement, future research might examine and measure civic engagement through this lens.

Previous CIT Research

The Metamorphosis Project has assisted the National Children's Survey in efforts to increase research response rates by offering a CIT-based recruitment approach that involves working with storytelling networks in a community to increase trust and approval from residents, and thus, increased participation in studies (Ball-Rokeach, 2005). CIT has been useful in studies of health communications throughout the nation, from Georgia to California. When health practitioners were faced with the dilemma of disseminating valuable information to individuals who qualified for medical assistance programs, a CIT approach was employed to identify the indigenous STN in the community where citizens meet and share in conversation (Wilkin et al., 2010).

Examples demonstrating the use of CIT in rural areas of Alabama were referenced in the development of this study. Specifically, in Alabama, Kim and Kang (2010) used the CIT approach to understand how an STN within a community functions as a reliable resource upon which citizens could depend during natural disasters or public health scares and epidemics. Similarly, Kim (2009) applied CIT in the development of strategies to help local rural residents in the Black-Belt region of Alabama overcome individual (micro-level) problems of low health literacy by connecting them to community (meso-level) communication resources. These examples provide foundations or models for a future study of possible strategies for public libraries wishing to connect citizens in small, rural communities with general information and opportunities for civic engagement.

As Ball-Rokeach and others have suggested, CIT has been especially useful in examining hard-to-reach communities. Through the theoretical lens of CIT, Matsaganis, Golden, and Scott (2014) reviewed the lack of connection between residents and community-based organizations in a small city to determine whether or not communications could be more efficiently integrated to encourage underserved populations to seek preventative health care.

Matsaganis et al. (2014), who applied CIT in smaller urban settings, suggested that promotional strategies that have been perceived as effective in large urban settings mayor may not be equally so in smaller settings, due in part, to differences in social and structural characteristics between larger and smaller communities. While much of the CIT research has been conducted in urban areas, Nah et al. (2016) used CIT in a more rural setting to examine social capital and engagement as did Abril et al. (2015), all of whom expressed the need for expanded future CIT research in rural settings. For the study of rural communities with limited resources and access to technology, CIT has proven to be an applicable perspective in need of further research.

CIT has also offered strategies for accessing other hard-to-reach populations, as observed in the Los Angeles-based community health information study examining connections between community organizations and valued media outlets. When research revealed a missing link between community organizations and local media, workshops were designed to promote community health and strengthen storytelling networks by improving the connections between these two vital institutions of communication (Wilkin et al., 2010). In a similar study, CIT was used to develop a campaign to connect Spanish-speaking communities with valuable health information and resources (Wilkin & Ball-Rokeach, 2011).

Potential for CIT Application

Since CIT research for rural public libraries would examine the communication infrastructure of a community, sensitivity to factors such as connectivity and access should be employed so that data may be captured from different socioeconomic areas of the population. Communities that have low social capital may be harder to reach in a study. However, in order for a study to be representative of a community, an effective means of studying populations considered hard-to-reach should be considered. Identification of these populations could indicate breakdowns in the existing communication infrastructure of a given community.

The same factors that affect opportunities for social capital can also influence the ability of a person to be engaged on a civic level in the community. CIT addresses these issues by examining how/if people are informed by media, community organizations, and their neighbors or networks. A noted positive characteristic of the public library is their mission to offer equitable access to information and services, which increases overarching goals of increased social capital and, ultimately, a better-informed public, leveling the playing field for the haves and have-nots in a community. This study explored the effectiveness of libraries to live up to this mission.

Rural public libraries provide opportunities for both micro-level and meso-level development in community participation and civic engagement, which could be observed in small communities where the storytelling network is not as strong as it could be. Wilkin and Ball-Rokeach (2006) demonstrated that, in areas where communication proves challenging, often a missing link can be identified between storytellers such as local, geo-ethnic media (e.g., newspapers, radio) to which residents are most strongly connected, and the community organizations that are important in their lives. A new role for rural public libraries as an anchor

and leader in the communication infostructure could include identifying missing or weak links in an effort to strengthen ties between meso- and micro-level storytellers in the community, and ultimately, increase communication effectiveness.

The Aspen Institute Dialogue on Public Libraries Report *Rising to the Challenge: Re-Envisioning Public Libraries* has illuminated the ways that communities can invest in public libraries to build stronger civic ecologies and implement new partnerships for achieving local goals by asking and answering the question, "What do we want for our communities and how can public libraries help us get there" (Garmer, 2014, p. vi). Specifically, the report proposed that rural public libraries foster human and social capital, and thus, rural communities can look to local libraries as hubs for community interaction and partners for creating long-term, self-sustained community development.

One way that public libraries in communities large and small do foster human and social capital, and thus help to develop their communities, is by providing access to digital communication technologies. Although some studies suggest that people tend to socialize online with people like themselves or people they already know offline, (Hulvila 2014), Williams and Durrance (2008) recognized Lin's proposal that technology has grown social capital in society as people have a broader opportunity to belong to diverse communities within many new digital platforms. Lin suggested that people who are not afforded access to online communities are at a disadvantage and stand to be excluded from many additional opportunities to create or build social capital. Similarly, Kim and Ball-Rokeach (2006a, 2006b) suggested that storytelling, which can occur both in person and in online environments, has the potential to increase social capital and ultimately, civic engagement in different types of community.

Nah et al. (2016) suggested that we are "not Homo sapiens, but Homo Narrans, the only species that can tell stories" (p. 14). This idea that storytelling is fundamental to our species is reflected in the study of the fabric of social networks and communication in our communities. CIT examines this network to determine how communication infrastructures are created and maintained by residents and decision makers. As seen through the lens of CIT, public libraries can play a more integral role as the "anchor of anchors" of a more effective, more integrated communication infrastructure within a community's storytelling network.

Anchor Institutions

Communities will need leadership and guidance during the process of integration the storytelling network. Public libraries have a unique ability to facilitate the informational needs of the citizens through access to resources such as computers, broadband internet, educational workshops, and other vital information services. This allows libraries to increase opportunities for storytelling and subsequently improve of the communication infrastructure.

As previously noted, a valuable combination of historical attributes associated with public libraries, such as knowledge, credibility, visibility, and local support, position libraries to leverage new communication services (Stoss, 2003) and create for themselves a leadership role as community anchors (Hildreth, 2012), anchor institutions (Goodman, 2014), and "sticky capital," permanent assets that remain in a community, unlike businesses, which are more dynamic and might open or close at any time (Alemanne et al., 2011, p. 19; Garmer, 2014).

Literature shows that institutions of higher education are often viewed as the "anchor of anchors" in the cities and town in which they are located (Department of Housing and Urban Development, 2013). However, according to other research, especially in communities without colleges and universities, public libraries are also ideally suited to serve as the "anchor of

anchors" in the communication infrastructures of communities large and small, providing a hub for communication in physical spaces and online environments (Alemanne, 2011; Garmer, 2014). This might be particularly true in rural communities where the services and resources are scarce, making those provided by public libraries particularly valuable.

Due to the rural public library's suitability to serve as the "anchor of anchors," this new model places the public library at the center of the storytelling network, as the hub and anchoring institution for communications within a community. In addition to existing partnerships with local media, resident networks, and other organizations in the community, in this new model, the public library serves as a coordinating force in efforts to maximize available resources, eliminate duplication, and increase overall effectiveness in the communication infrastructure. This infrastructure could include community-wide websites, newsletters, and cross-promotional articles for traditional media. Shared services for grant writing, overhead, and design/development could be used as the library partners more directly with other groups. By coordinating these services, institutional capital and value could be increased for public libraries, along with community identity, collective efficacy, and neighborhood belonging; all elements of civic participation might also increase through successfully coordinated efforts to inform the public through a more streamlined communications infrastructure.

One motivation for becoming the "anchor of anchors" in a community is to increase the relevance and sustainability of the public library. Public libraries compete for the attention and resources necessary to be considered a relevant part of a community. Relevance and sustainability are more than merely buzzwords in library literature; they are critical concepts that affect the ability of public libraries to remain the vibrant, necessary, available resources upon which communities depend.

Recent community informatics research takes this idea further, stating that for information and computer technology to be truly effective and impactful in a community, specifically in efforts to develop rural areas, "they must be sustainable at the social, cultural, institutional, economic, political, and technological levels in order to overcome challenges" that are unique to rural areas including "access to infrastructure, limited formal education, insufficient training and capacity building, financial and political constraints, and other social and cultural challenges" (Mehra et al., 2017). By leveraging and consolidating resources, libraries can maximize the impact of local tax dollars, demonstrating a visible return on investment to leaders and decision-makers in support of this shared effort to improve communications in small towns. A synthesis of community informatics and communication infrastructure theory research may be explored in future studies of communication in rural communities.

A fundamental assumption of CIT is that some communities have robust, deeply connected infrastructures for community building and others have weak, shallow infrastructures (Kim & Ball-Rokeach, 2006b). At the core of CIT is the premise that local communities, including rural communities, are based on shared discourse and resources for storytelling, which make building a community possible. As demonstrated in Figure 2, community organizations are the linkage between storytellers and precipitators of conversations and communications in the STN (Kim & Ball-Rokeach, 2006b). Similar suggestions could be made for rural communities.

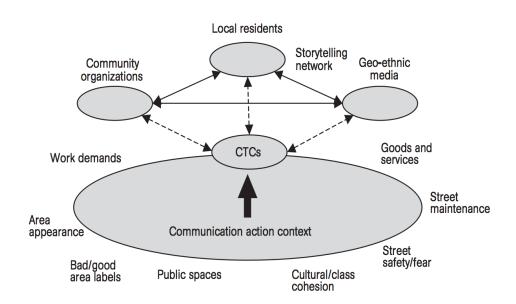


Figure 2. Elevation of the CTC from the communication action context to the storytelling network (Hayden & Ball-Rokeach, 2007)

Public Libraries as Community Technology Centers

Although public libraries were not individually examined, under the theoretical principles of CIT, Hayden and Ball-Rokeach (2007) explored and reconciled the ways in which community technology centers in the Los Angeles Area produce positive outcomes for local community building and social mobility enhancement. The authors referred to community technology centers, or CTCs, as integral components in the communications environments of urban communities, linking this essential role with capacity for community building. Internet access and its relationship to civic engagement and belonging is also shown as a meso-linkage within a communication infrastructure.

Although Hayden and Ball-Rokeach did not explicitly mention public libraries, Davies et al. (2003), whom the authors referenced, acknowledged that CTC is an umbrella term covering a wide variety of organizations, generally nonprofit and locally-based, that provide information

technology to groups that are otherwise unable to gain access. Davies et al. do specifically mention public libraries as a common institution of which CTCs are part (2003). In fact, in most examples throughout the Hayden and Ball-Rokeach study, one might substitute the words public library for CTC and make similar claims regarding capacity for community building and potential integral role in communications infrastructure.

As Hochman (2016) suggested, preconceptions of the role of the library can have serious political implications, warning that

By equivocating the library with stacks of books, the library and its contents are, quite literally, objectified. The objectification of the library as a space permits us to treat it as a second-class space, while at once extolling its former virtue. Nostalgically, we can look back with desire at the cozy library from the vantage point of a cold, contemporary computer screen from which we now gather information. (p. 140-141)

This idea of the library as a "warehouse of books also speaks to an antiquated view of information as something to be archived, warehoused and doled out by gatekeeping librarians," Hochman noted (p. 140).

Possessing a nostalgic view of the library as collection allows a person to idealize this notion of the space while acknowledging that it is outdated. The tendency to place the library collection and role in the past gives policy makers and leaders room to profess a great love of libraries, and in the same breath, shut them down. One's restoratively nostalgic memory can work against a library, as it preserves a particular stereotype of the library and librarian, inadvertently rendering the role of the library and its staff useless in the present and in the minds of the public. "It's a circular trap for librarians, who, if they celebrate this nostalgic vision of their work, embrace their own irrelevance," Hochman advised (p. 141). For libraries wishing to be viewed as more relevant and useful leaders, "anchors of anchors," in a small community, such preconceived notions could and should be addressed.

For example, propositions are made that in urban areas, CTCs "function as access points for individuals without access to technology," "serve as venues for social interaction," "bring the use of new media technology into the mainstream of everyday life and communication practices of its users over time," and provide a "digital hub" between anchor-points in the community - all roles that might also be attributed to rural public libraries in small rural communities (Hayden & Ball-Rokeach, 2007, p. 238). Hayden and Ball-Rokeach (2007) promoted CTCs as ideal public spaces, instruments of democracy, conduits between local media, residents, and local organizations, and essential components for community connectivity (Hayden & Ball-Rokeach, 2007).⁷

CTCs are also labeled as viable venues for storytelling and resources, providers of community literacy and empowerment for individuals (micro-level) and communities (meso-level), public spaces that engage diverse groups of people, connection points for residents and information about community services, and vital sources for healthy and sustainable communities (Hayden & Ball-Rokeach, 2007). Comparisons between these descriptions of CTCs and the roles of rural public libraries can be drawn, with rural public libraries as public spaces and sources of information at the center of the storytelling network.

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⁷ This aligns with the IFLA/UNESCO Public Library Manifesto 1994, which stated, "Freedom, prosperity and the development of society and of individuals are fundamental human values. They will only be attained through the ability of well-informed citizens to exercise their democratic rights and to play an active role in society. Constructive participation and the development of democracy depend on satisfactory education as well as on free and unlimited access to knowledge, thought, culture and information. The public library, the local gateway to knowledge, provides a basic condition for lifelong learning, independent decision- making and cultural development of the individual and social groups. (IFLA/UNESCO, 1994)

Image of Public Library

Unlike CTCs, which are relatively new to communities, public libraries have a history and a long-regarded mission to be fair, impartial, open, safe, trustworthy institutions that "enhance individual knowledge, community building, and empowerment by investing in people and communities rather than in technology alone" (Vårheim, 2014, p. 259). History has also shown that public libraries have at times complied with exclusionary laws that limited access to libraries for some populations, such as segregation and discrimination against minorities. Since the civil rights movement of the 1960s, most public libraries in the United States have made efforts to open doors and ensure access to library materials and facilities for all citizens (Weigand, 2015). However, libraries, like other institutions and industries, serve a public with a growing social conscious and mindfulness of the rights and expectations of equal access and service due all citizens.

Facilitating openness within the communication action context enables storytelling in a community (Hayden & Ball-Rokeach, 2007), which often occurs in libraries through participation in programs and services, interactions with other library users and attendees, as well as through equitable access to print and digital materials (Aabø & Audunson, 2012; Svendsen, 2013). Aabø (2005) identified the positive influence of public libraries upon community buy-in, strength, confidence, and the progressive growth of citizens, suggesting that public libraries can broaden their democratic role in today's digital society by "bringing together culture and technology, the local and the virtual, different ethnic and social groups...generations...arenas of interest [to] develop their potential as a social meeting place" (p. 209).

The speculative notion that libraries could serve as a digital hub or anchor institution is based on previous research indicating that "organizations can emerge from a communication

action context to function as an integral component in a neighborhood storytelling network" (Hayden & Ball-Rokeach, 2007, p.253). Similarly, this study suggested that rural communities need an anchor institution to emerge from the CAC to serve as an integral storytelling agent, an "anchor of anchors" in the community.

If previous communication infrastructure research demonstrates that organizations contribute to the storytelling network, then it may follow that public libraries (which are shown to be uniquely situated to lead due to communication imperatives and technologies) might play a new, unique role in a communication infrastructure as an anchor for creation, management, and dissemination of community news and content. As described earlier, libraries connect residents with vital information about services from other organizations, while at the same time provide key connections between organizations and the residents that, in turn, they serve (Hayden & Ball-Rokeach, 2007).

The existing research already points to the theoretical justifications detailed in communication infrastructure theory. The Communication Infrastructure Theory (CIT) (Ball-Rokeach & Kim, 2006; Ball- Rokeach et al., 2001; Ognyanova et al., 2013, Georgiou et al., 2016) brings community storytelling and communication to the center of the community, identifying different forms of communication agents – from local media to organizations – as assets that can promote community news and engagement in urban communities. Yet, less research has been devoted to the examination of rural communities. This study aims to lend new perspective to CIT research from the experiences of a small, rural community.

Acknowledging that places have unique qualities to foster community is a step toward recognizing what specific attributes of a space might encourage greater civic participation.

Reframed within the context of earlier theories of public opinion and storytelling discourse, these

spaces enable the storytelling practices that create the ties that bind within a given community or place. Ideally, future research into public libraries and their role in rural communities will not only strive to integrate findings of communication best practices, but also recognize the growing research base in storytelling as a vital source for healthy and sustainable communities and anchor organizations. (Hayden & Ball-Rokeach, 2007)

Evolving the CTC Model

Whether or not Hayden and Ball-Rokeach (2007) chose to consider public libraries within communities in these various roles, or only chose to avoid using the terminology public library in order to distinguish between traditional informational institutions and the more contemporary information outlet of CTCs, is unclear. The authors did, however, provide useful visual models (see Figure 3) for a CTC-centered storytelling network and the relationship between the communication action context and a storytelling network (Hayden & Ball-Rokeach, 2007).

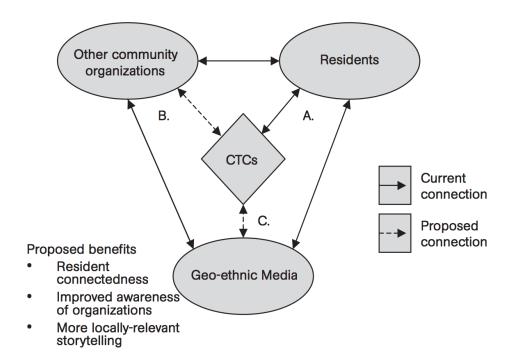


Figure 3. Hayden and Ball Rokeach's (2007) model for CTCs within the storytelling network

In the Community Technology Center (CTC) study diagram, the communication action context influences key storytellers within the communication infrastructure (which may be a CTC or a library). Consequently, this impact contributes to the capacity of the STN to foster experiences of belonging and collective action.

Hayden and Ball-Rokeach (2007) demonstrated how a CTC, yet still connected to the CAC, can be positioned to function as a primary conduit between a storytelling network and the CAC. Hayden and Ball-Rokeach (2007) suggested that CTCs, which could include public libraries

are a storytelling resource, both in their capacity to enable storytelling and their own intrinsic capacity to propagate community-relevant content. CTCs can serve as a 'digital hub' between the traditional anchor-points in communication infrastructure theory – residents, community organizations and local media – to provide not only increased competencies for storytellers, but also a clearinghouse for community narratives that are vital to the storytelling process. (p. 242)

As such, the CIT framework for CTCs provides a model for examining civic ecologies within rural communities to determine the role of the anchor institution such as the public library and its influence upon communication integration.

In an era of constant stimulation and connection, institutions are being forced to evolve to meet the rapidly changing needs of the public. Libraries have long been considered hubs of information and technology (Garmer, 2014; Swan et al., 2013; Goodman, 2014), but can this role include local communication systems and become more prominent for libraries in rural communities? The current study suggests that public libraries can better achieve their mission to inform and engage the public by becoming the anchor of anchors for more than just traditional library services. In this model, libraries become facilitators of more tangible services to create a more efficient communication infrastructure or infostructure in rural communities.

Although explicitly made in reference to broadband service, Alemanne et al. (2011) suggested that a role as the anchor of the anchors might also situate the rural library in a position to sustain funding and support for communication services in a community (p. 20). This emphasis upon community partnership reverberates the idea that an ICSN (integrated connectedness to a storytelling network) is formed when one neighborhood storyteller prompts a connection with another storytelling agent in a community, adding strength to the individual storytellers and the neighborhood storytelling network as a whole (Kim & Ball-Rokeach, 2006a).

Drawing upon concepts in Kim and Ball-Rokeach's model for a communication infrastructure (2006a, 2006b) and CTC-centered models offered by Hayden and Ball-Rokeach (2007), this study aimed to suggest similar roles for anchor institutions within an STN. The successful completion of research and the analysis of the data, which will be outlined in later chapters, informs a new model for communications in a small town.

When measuring the quality of the STN, the level of integration of communications between the three community storytellers is an important criterion. Rogers et al. (1995) provided an example of successful collaboration among community storytellers as regional media, as community service organizations and government agencies collaborate to create a shared story about HIV, instigating meso-level participation around a community issue. In another case, residents of close knit neighborhoods with strong friendship ties were reported to be less knowledgeable about organizations within their neighborhood, revealing a lack of storytelling on the part of community organizations and a missing link between micro and meso-level storytellers (Kim & Ball-Rokeach, 2006b).

In this new infostructure model, such voids in storytelling and effective communication within a rural community may be filled by public libraries and their efforts to bridge the gaps

between micro and meso-level storytellers within a communication infrastructure and increase civic participation. Further research could reinforce these suggestions that public libraries are ideally suited to serve this role as the anchor institution in rural communities.

This study is a qualitative exploration of how libraries might serve as both an anchor institution within the local communication infrastructure, but also as an important node within the neighborhood storytelling network (STN), acting as a storytelling agent that disseminates information, but also as a feature of the communication action context (CAC) that can provide a space for people to connect with other neighborhood storytellers.

Conclusions

Communication Infrastructure Theory offered grounded approaches and practical applications for the development of rural communication *infostructures* that could be facilitated by rural public libraries. CIT lends definition and process to the ideas of community, storytelling, and infrastructure for communication within a community. It also provides this study with a foundation for examining the communication assets as well as the integrated connectedness of the storytelling agents found within the community so that communication practices and preferences might be revealed. Previous CIT research regarding community technology centers provided a theoretical foundation for a new model in which the anchor of anchors in a community rises to the role of leader of a new communications infostructure in the community. Further research could be conducted to develop replicable communication infrastructure models by integrating public libraries with other media outlets within a rural community.

CHAPTER III:

DESIGN AND METHODS

Introduction

Data were collected through interviews as well as two focus group discussions conducted as follow up with interview participants. Interview protocols from previous research by Kim and Ball Rokeach (2006) and Wilkin et al. (2007) were referenced during data analysis to contextualize the data within the framework suggested by previous research. Previous research such as the Metamorphosis Project study was also used to inform the framework for analysis of communications assets and avenues within the community. By focusing on specific environments and community needs, this study offered a more holistic understanding of community associated with communication infrastructure theory and builds on previous research calling for renewed emphasis on environmental conditions and the importance of rural communities and locally-relevant content.

Previous research by Georgiou et al. (2016) took a bottom-up approach, examining the communicative opportunities generated through people's actions within and beyond their locale. This study used a similar bottom-up approach to examine communication efforts at the microand meso-level. Its aim was to understand the use of different forms and expressions of communication and their ability to promote or undermine effective communication. Hayden and Ball-Rokeach described how a CTC, yet still connected to the CAC, can be positioned to function as a main conduit between a storytelling network and the CAC.

Stake (1995), Creswell (2002), and Yin (2014) agreed that case studies are contextual and are used to examine an issue so that something else might be understood (Stake, 1995; Creswell 2002; Yin, 2014). Single instrumental case studies such as the one used in this study addressed one issue in an effort to better understand that chosen issue (Stake, 1995). One bound case is selected, which becomes a vehicle for understanding the issue within the context of the case (Creswell, 2002). The single case may be chosen because it is unique and unusual, or conversely, because it was common and thus, representative of other cases (Yin, 2014). Through embedded analysis and data collection, researchers can extract details and observations about the specific issue. Circumstances of the case are reported and described such as a brief history, a chronology of events, a day-by-day timeline of activities, and other descriptive elements of the situation (Creswell, 2002). In the current study, a single instrumental case study was used to examine the role of a local public library in disseminating information in its community.

Case Site

Before a new community can be adequately examined, a researcher would normally devote a significant amount of time learning about the community getting to know the people and the overall environmental context within which the members of the community live and operate. As an insider researcher and member of the community under study, I began with a working knowledge of the community and experience with the communication resources available. That knowledge proved valuable in identifying an initial list of existing communication assets within the town. While participants did express that geography is a major limitation for broader communications within the county, the size of the town in the study is relatively small, and most assets are separated by three miles or less.

Located in southwest Alabama's lower Black Belt Region, RTX is situated at a crossroads in the center of RTX County, a large, rural county, receiving traffic from residents and visitors traveling along Highways 43, 17, 56 and 45. Rich in history, wildlife, and timberland, RTX is the county seat of RTX County, Alabama's first county and home to Alabama's territorial capital, St. Stephens.

RTX is a rural town in south Alabama just north of the U.S. Gulf Coast. RTX County (population 16,500) has some diversity in its population (65% Caucasian, 25% African American, 8% Native American, 1% Hispanic, and 1% two or more races) due to the proximity to the local MOWA Reservation. RTX's population of 1,200 people is similarly distributed (62% Caucasian, 32% African, 5% Hispanic, 1% Native American, 1% 2 or more races) due to the location of a Mexican restaurant within the city limits which is owned and operated by a Mexican-American family. Gender identifications are 59% male, 41% female with a median age 45.8 years (U.S. Census Bureau, 2016).

Median household income in the county is \$40,293. However, in RTX, the median household income is \$38,889 and 25% of people, including 25% of children, are reported to live below the poverty line. Even though 80% of people have attained an education level of high school diploma or above, less than 10% have secured bachelor's degrees or higher (U.S. Bureau, 2016).

While holding the distinction of county seat since 1907, the town of RTX was incorporated in 1949. RTX is governed by a mayor and city council. RTX has ongoing projects such as grant-funded state bicentennial projects to install historical murals in town as well as community service organization beautification initiatives to improve local public spaces and buildings such as the public library, hospital, city park, community center event venue, and

walking trail, public lake, ballparks and two public schools (RTX elementary and the public county high school).

The town also hosts entertainment opportunities that bring together the community, such as its free Fourth of July celebration, open public music series, city league sporting, and numerous non-profit fundraisers such as the annual Relay for Life, Library Art Auction and Dinner, and Special Olympics. Due to its location and designation as the county seat, RTX is also home to the county's courthouse and all county-wide social services, law enforcement and emergency services as well as most county-wide non-profits and many of the county's businesses and retail shops.

For over 60 years, RTX Public Library has served as an anchor institution in the community. Although RTX Public Library does receive some public funding, the library is unique among small, rural libraries in that it has a legacy of primary funding from private local foundations and fundraising rather than local and state government. Unlike some institutions such as schools and state agencies, this locally generated funding provides the library budget with some protection from the rise and fall of the local tax bases or state funding and makes it a more secure institutional fixture or "sticky capital" in the community.

As an anchor institution at the geographical center of the community, RTX library partnerships currently radiate throughout as spokes on the wheel of the community, connecting many organizations and groups to the library. According to the Federal Communications Commission's National Broadband Map of Community Anchor Institutions, other anchor institutions exist in the RTX community such as schools, churches, hospital, and departments of local government (National Broadband Map, 2014). However, the scopes of service for these

institutions are limited by one's age, religious affiliation, ability, or willingness to pay for services, or residential area.

The public library is the only anchor institution missioned with freely serving all citizens, regardless of age, interest, socio-economic status, or geographic boundaries within the community. It is also already partnered with and connected to most organizations and agencies within the community, which, as shown in this study, ideally positions it to serve as the anchor of anchors within the community. RTX library is already serving as the anchor of anchors in the community for lifelong learning, technology and informational services, and go-to community partner, and may one day also be known as the anchor of the communication infrastructure in the community, connecting people with a single source for local news and community information.

Role of Researcher

In qualitative research, it is vital that the role of the researcher be clarified so as to make the research more credible (Unluer, 2012; Moore, 2015). Researcher roles may range from outsider when the researcher is unknown and not connected to the groups to insider when the researcher is a participating member of the group under examination. In general, insider-researchers choose to study a group to which they belong, as is the case in this study.

Some scholars suggest that insiders should not conduct research regarding their own groups. Because of their closeness to the research community, insider-researchers might have difficulties remaining objective, resulting in biased findings (Innes, 2009; Moore, 2015). Due to the risk that closeness to the community under study may create bias or lessen objectivity in the findings, some scholars have suggested that insiders should not conduct research within their own communities (Innes, 2009; Moore, 2015).

However, gaining the trust and buy-in of a subject can be daunting for an outsider (Collet, 2008). While challenges associated with insider-research might exist, many scholars theorize that the pros may outweigh the cons. Insider-researchers are already familiar with the formal hierarchy and politics of a community, and they often know the most effective approach to use with members of the community. Insiders have knowledge of a group that might take an outsider much more time and effort to acquire (Smyth & Holian, 2008; Unluer, 2012; Moore, 2015).

As scholars such as Unluer (2012), Bonner and Tolhurst (2002), and others have suggested, established contacts and informal initial interaction helped tremendously in my efforts to garner rapport and trust with participants before more formal moments in the data collection process were necessary. The current study also supported the suggestion by Collet (2008) that outsiders might be at a disadvantage, especially when conducting research in a small, deeply bonded community, such as the one under examination.

As an insider researcher, I credit much of my ability to communicate in this small town to my robust and extensive network of contacts and relationships with members of the community. Knowing people, having contacts, and understanding the historical dynamics of the community was an observed advantage in conducting this study.

For example, when contacting one member of the community to request an interview, I texted the person and requested their email address so that I could send a more formal interview request with information about participating in the study. This person had recently gotten a new phone and had lost most of his contacts and phone numbers, so while I had his number saved, he did not recognize the number associated with my text. Knowing this person my entire life and assuming he still had my number, I wrote, "Hello, Sir! I would like to interview you for my

Ph.D. dissertation study and was wondering if you might be willing to participate? :) I will email you the details. Is your work email still the same?" The response was a firm and unfriendly, "No. I no longer work there and do not wish to participate." I then responded, "Sorry, I did not say earlier, but this is Jessica Ross:) Is this still (Participant's) cell number?" He immediately responded, "So sorry. I thought this might be someone fishing for my info. I will help you any way I can! Just let me know when and what I can do."

Our existing relationship facilitated this person's willingness to participate in a study about this community. This person's perspective is distinctive in that they are the only person in town who could offer a unique experience combining years of work with a traditional local media outlet, coordination of organizational communications, and professional institutional experience, which would have otherwise gone unrepresented in this study.

While challenges associated with insider-research should be considered, many scholars argue that the pros may outweigh the cons. Because insider-researchers are already familiar with the formal hierarchy and politics of a community, they often know the most effective approach to use with members of the community. Insiders have knowledge of a group that might take an outsider much more time and effort to acquire (Smyth & Holian, 2008; Unluer, 2012; Moore, 2015).

Additionally, Bonner and Tolhurst (2002) offered three primary advantages of the insider-researcher: 1) they have a greater cultural understanding of the people and the community being examined; 2) they are less likely to affect the natural flow of social interaction; and 3) pre-existing contacts and relationships with people can promote truth-telling between the researcher and subjects (Unluer, 2012).

As the researcher in this study, I am an administrator in the local public library within the rural community in the study. Since I am a participant observer (observing member of the community) and am recognizable in the small community, it is possible that participants may feel obligated to skew their answers so as to offer an answer they believe is most desired, or so as not to offend me. Although efforts were made to provide a neutral, benign, comfortable atmosphere for interviews, there is no way to ensure the complete comfort of a participant or the forthcoming of the participant's answers in any research, and such is acknowledged in this study.

Participant Selection

The study consisted of 32 in-person interviews with a diverse and reflective sample of community members. Key storytellers in the community, such as local media, organizational administrators, and one randomly selected member of the community, were included in the selection of participants to gain perspective on how they, and the community as a whole, communicate. This process allows our research to determine which communication assets and channels participants feel are most important and efficient in the community.

Using pre-existing relationships and personal knowledge of the community, I identified 25 organizational/business leaders, institutional decision-makers, individual members of the community with experiences communicating within the community. Due to the risk that personal biases might be reflected in this kind of convenience sample, participant selection was supplemented with snowball recruitment, or network sampling, drawing from the network of interview participants (Roulston, 2010; Creswell, 2002). When given the opportunity to recommend others in the community for participation in the study, initial participant snowball suggestions provided six additional participants.

Efforts were taken as often as possible to interview the person who had on-site knowledge and had line, if not sole, authority to oversee the communication practices of the organization represented. Interview participants mostly included representatives of organizations, businesses, and institutions, along with individual representatives of community assets that could be found within the CAC of this community.

Each participant or the organizations they represent could also be categorized into one or more of the CIT storytelling agent groups found within the storytelling network: community organizations/businesses, local/geo-ethnic media, or resident networks. The list of participants is not an exhaustive list of the people or organizations considered to be storytelling agents in the community. Rather, it is meant to represent the diversity of experience across a variety of geographic, ethnic and socio-economic conditions present in the small town under evaluation.

Although careful consideration was made to include participants with local communication experience, levels of involvement and responsibility for communicating varied by participant. Each respondent's claims and comments are colored by his or her own experiences and personal noise as much as by objective observation. This method of thematic analysis can identify "the consciously held perceptions of participants, and how these perceptions explicitly shaped their behavior" (Cuff, 2017, p. 48). As Braun and Clark (2006) suggested, thematic analysis can be a realist method, which "reports experiences, meanings and the reality of participants" (p. 9) and, with it, carries a number of assumptions about the nature of the data and what they represent in terms of each person's own sense of reality. Thus, the findings of this study reveal participants' perceptions and beliefs which, although true within the context of their experience, may or may not be completely accurate or representative of every person. Gergen (2001) explained,

To tell the truth, on this account, is not to furnish an accurate picture of what actually happened but to participate in a set of social conventions ...To be objective is to play by the rules within a given tradition of social practices ...To do science is not to hold a mirror to nature but to participate actively in the interpretive conventions and practices of a particular culture. The major question that must be asked of scientific accounts, then, is not whether they are true to nature but what these accounts ... offer to the culture more generally. (p. 806)

Data Collection

Critics of qualitative methods, such as interviews and focus groups, question whether responses are dependable, pointing to findings showing that subjects' answers often do not accurately reflect their beliefs, opinions, or their actions (Roulston, 2010). Similar to methods used in recent studies examining the complex, overlapping networks of communication ecologies (Kamberelis & Dimitriadis, 2005; Broad et al., 2013), a combined approach of in-depth interviews and focus groups were chosen as appropriate methods for this qualitative study.

Interviews

In qualitative research, data are often collected by interviews and questionnaires. Interviews, however, are said to draw out narrative responses that reveal people's feelings and views more deeply (Kvale, 1996; Alshenqeeti, 2014). Interviews allow researchers to explore the inner beliefs and attitudes of participants, which can generate valuable information based on experiences and feelings of those being interviewed. Authors described the interview as "a specialized form of communication between people for a specific purpose associated with some agreed subject matter" (Anderson, 1990; Dilshad & Latif, 2013, p. 191) and "a valuable method for exploring the construction and negotiation of meanings in a natural setting" (Cohen et al., 2007, p. 29; Alshenqeeti, 2014, p. 39).

To guide the data-collection process, semi-structured, in-depth, I conducted one-on-one interviews with community participants. Semi-structured interviews are generally more flexible,

which allowed me to guide the participant through a series of questions within determined parameters while also allowing for the conversation to be expanded as needed (Ashenqueti, 2014; Roulston, 2010).

IRB protocol was followed for attaining consent from participants whose names were changed to protect their identity. Interview protocols for this study included techniques articulated by Creswell (2012) and Alshenqeeti (2014) for ensuring good interview process. In addition to the convenience sampling of subjects, interview participants were chosen using criterion-based selection (Roulston, 2010) as data was collected in a specific, rural, geographical area in south Alabama. Data collection targets participants within this specifically identified geographic, rural area, namely, residents of a small rural town, RTX, which is categorized as 100% rural per recent census population information (U.S. Dept. of Health & Human Services, 2016).

After participants completed basic demographic questionnaire, a preliminary interview with each subject was conducted to gain a broad, over-arching perspective in this case. In the preliminary interview, specific contextual questions began the conversation followed by broader, more abstract questions. Borrowing from previous research, including the Metamorphosis Project telephone survey inquiring about the use of community organizations, Appendix A includes sample questions that were used during interviews and focus groups for this study (Ball-Rokeach, 2005).

Focus Groups

In addition to interviews, focus groups were used to add an additional perspective for discussion. Social science researchers have noted many benefits of using focus groups, making this approach an ideal additional method for this study. The socially-oriented nature of focus

group participation is one advantage (Krueger, 2000) as they often provide an environment in which participants can discuss problems and collectively develop possible solutions (Duggleby, 2005). Within focus groups, a sense of belonging to the group can increase a participant's sense of cohesiveness (Peters, 1993) and may encourage a person's willingness to share more openly (Vaughn, Schumm, & Sinagub, 1996). Interactions between participants may even inspire spontaneous discussion and responses (Butler, 1996) from which valuable data can be collected (Morgan, 1988).

Krueger and Casey (2000) described focus groups as an economical and efficient method for obtaining data from multiple subjects. They can be conducted quickly over a shorter period of time than that required by some other methods such as survey, allowing for an increased overall number of subject participation in a particular qualitative study (Krueger, 2000). However, focus groups are not easily conducted, as they require planning for adequate equipment and rely upon an understanding between the moderator, the researcher, and recorders.

Based on suggestions for focus group planning and organization by Onwuegbuzie et al. (2009), two focus groups, each consisting of between ten participants, and lasting an hour and a half, were hosted for this study. The use of multiple focus groups provides researchers with the opportunity to make comparisons and better assess the extent to which data saturation has been reached. The rationale for focus group size results from findings that "focus groups should include enough participants to yield diversity in information provided, yet they should not include too many participants because large groups can create an environment where participants do not feel comfortable sharing their thoughts, opinions, beliefs, and experiences (Onwuegbuzie et al., 2009, p. 3).

All interview participants were invited to attend one of two focus groups, FG1 or FG2. To better accommodate the participant's schedules, the focus groups were held at different times of the day, FG1 at 11:30 am and FG2 at 5:30 pm. Of the 32 interview participants, 10 attended FG1 and 9 attended FG2. During both focus groups, I gathered data from audio recordings, observations, and notes taken during interviews, as well as notes on discussions between subjects during group interaction.

Ideally, a focus group has a moderator team, led by a moderator, who is responsible for facilitating discussion, encouraging members to speak and to let others speak, and encouraging participation in general within the group. As director of the library in the community under study, I chose to hire an outside, professional moderator who was familiar with the community, to lead the focus group discussions. This decision was made in an effort to project subjectivity and confidence to participants, reduce possible bias, and provide distance from the librarian for participants who were answering questions involving the library.

As in most cases, for this study, the moderator presented the focus group participants with a series of questions, while I, serving as the assistant moderator, monitored the recording of the session, took notes, and helped maintain an environment conducive to group discussion (Krueger & Casey, 2000; Onwuegbuzie, 2009).

While some researchers may choose to analyze only the actual transcribed text from participants' statements during the focus group, other sources of focus group data can be gathered and used. Audio recordings of focus group sessions, notes made by the moderator team, and researcher recollections are all useful data (Kruger, 1994) and were used during this study.

At the recommendation of Krueger (1994) and other focus group scholars, a transcript-based analysis was used in the current study. Unlike note-based or memory-based analyses,

transcript-based analysis includes the transcription of audio recordings and represents what Krueger and others identify as the most rigorous and time-intensive mode of analyzing data. Analysis frameworks such as keyword-in-context and constant comparison were used for analysis in the proposed study (Krueger 1994; Onwuegbuzie et al., 2009).

One of the most commonly used qualitative data analysis techniques is constant comparison analysis, developed by Glaser and Strauss (1967). First used in grounded theory research, constant comparison analysis has also been used to analyze various types of data, including focus group data (Onwuegbuzie et al., 2009). Three major stages characterizing constant comparison analysis are the first stage (open coding), when the data are chunked into small units and assigned a descriptor, or code. During the second stage (axial coding), assigned codes are separated into categories. Lastly, in the third and final stage (selective coding), one or more themes that express the content of each of the groups are developed by the researcher (Strauss & Corbin, 1998).

Onwuegbuzie et al. (2009) recommended that researchers design their studies with multiple focus groups in order to test themes. The authors called this design as "an emergent-systematic focus group design, wherein the term *emergent* refers to the focus groups that are used for exploratory purposes and *systematic* refers to the focus groups that are used for verification purposes" (p. 6).

As focus group data is analyzed through constant comparison analysis, especially in a case such as the current project, where multiple focus groups within the same study are examined, the focus group researcher is allowed to assess saturation, which is observed when information occurs so repeatedly that the researcher can anticipate it and whereby the collection of more data appears to have no additional interpretive worth (Onwuegbuzie et al., 2009; Lincoln

& Guba, 1985). In the current case, focus group data are analyzed one focus group at a time, allowing researchers to use the multiple groups to assess if the themes that emerged from one group also emerged from other groups.

Although more formal interviews and moderately structured focus groups may provide researchers with a majority of the data collected, recorded, and transcribed, less formal interactions may also be observed and reported through researcher field notes and interactions in the community. The informal initial interaction may help pave the way for more formal interactions as researchers build rapport and trust with subjects. As shown in previous research, established contacts and previous collaborative work within the community proves advantageous in this study during the introduction of the project to potential participants (Broad, 2013).

Data Analysis

Beginning with the initial questionnaire potion of the interview sheet, an informative profile of each interview participant, which included organizations or groups, if any, in which the participant represents, whether or not they reside or work in RTX, and how many years they have lived and/or worked in RTX. I also asked whether or not they are a member of the RTX Public Library.

Data analysis began as participants were grouped using CIT (Ball-Rokeach, 2005) categories for storytelling agents: community organizations, local media, or resident networks. All participants could be categorized as representatives of one or more of these three groups. However, most participants were included in two or more of these groups, which was used to infer community connectedness, as is explained in later chapters.

Recorded interviews and focus group discussions were trimmed for transcription and limited to include interview questions without the verbal responses from the initial questionnaire

portion and introductions. Interviews conducted with a total of 32 participants rendered over 28 hours of interview time and 409 pages of transcribed data. Each focus group lasted one and a half hours. FG1 transcript was 19 pages and FG2 transcript was 18 pages. After interview and focus group transcriptions were completed by a third-party service, I then reviewed and corrected them while listening to each audio recording a second time.

Using the guidelines suggested by Saldaña (2016), transcribed data was then qualitatively coded. Data were analyzed through two rounds of coding: initial (line-by-line) and focused. Initial coding produced more than forty code words, which were grouped and narrowed by focused coding and categorized. In the current study, coded words representing channels of communication, (i.e., news, social media, website, newsletter), names of organizations, as well as words that indicate the efficiency of communication efforts (i.e., fast, slow, good, bad, easy, difficult) were coded and grouped. From these categories revealed through the coding process, themes also emerged that were used to answer research questions.

Focus group transcriptions were coded similarly, as discussions were coded line-by-line. Themes which emerged from focus groups were compared and contrasted with overall themes from interviews, which will be expanded upon later in the findings. Information provided by each participants was compared and contrasted with that individual's interview responses, in case perspectives were enriched, expanded or contradicted his or her responses in the interview.

I performed and analyzed all coding using spreadsheets and written tally sheets without the assistance or coding software. In the future, I would like to explore software that could be used to analyze data in other ways, including easily generated graphics for visual interpretations of the results.

Conclusions

A qualitative methodological plan for this study including semi-structured, one-on-one interviews and multiple focus groups was used to collect and analyze collected data. Interview questions provided answers to four research questions about communication in the RTX community. The following chapter presents findings of this study, while the final chapter reveals conclusions and recommendations for future research based upon these findings.

CHAPTER IV:

FINDINGS

Introduction

The purpose of this case study was to better understand how people in one rural community in Alabama communicate with each other as well as to explore the role of the public library in communications is within this town. This study was intended to expand the understanding of communication and neighborhood storytelling assets within a specific rural community and assess use and perceived effectiveness of these assets in the storytelling network. The researcher was interested in revealing the communication assets, challenges, and needs of the community so that the public library might identify ways to increase its role in better meeting those communication needs in the future. This study is a first step toward future research, which, informed by the findings in this study, may take a step further in understanding and measuring levels of civic participation, efficacy, and feelings of belonging in this small town.

This study was an effort to gain a better understanding of how people in a small town use communication, what voids exist that affect effective communication, and, ultimately, potential ways the library could help address voids if and when such were identified. Thus, I delved into an exploration of one small town's communication infrastructure that draws from ecological approaches to urban communication (Ball-Rokeach & Kim, 2006; Ball-Rokeach, Kim, & Matei, 2001; Hayden & Ball-Rokeach 2007), however, applied in a rural setting.

Communication Assets

While symbolic and institutional resources have been systematically studied as community-building resources in urban environments (Georgiou et al., 2016), rural public libraries' role in communication infrastructures are little studied, and their potential as a primary asset for communication remains under-recognized. However, with more than 80% of the population in southern states like Alabama living in rural counties (ADPH, 2007), how people communicate with each other in rural societies matters greatly. This is particularly challenging in a small town where access to resources are limited. Such a study has application and potential benefit for policy writers and decision makers as they develop communities and plan for solutions to communication infrastructure deficiencies. The current study represents a systematic effort to record the avenues, assets, and challenges for effective communications and community building as well as in increased role for the public libraries in these small towns.

Communication infrastructures can benefit individuals and groups in a community by providing them with communication assets, or tools, that help them manage everyday life as well as access to resources and to others in the community. Such assets are similar to those in previous research (Ball-Rokeach & Kim, 2006) which are used to advance community participation, place-making, and a sense of belonging in a community (Georgiou et al., 2016). Similar to communication mapping conducted by Villanueva et al. (2016), known existing communication assets in the county are listed, or mapped, across the town under examination for the researcher's knowledge and as a basis for comparison with interview responses.

As interviews and focus groups were conducted, this list of communication assets continually expanded. This list was shared with participants at the end of the focus group for general debriefing discussion. This process allowed the current research to pinpoint which

communication assets and channels participants felt are most important and effective in the community.

Previous communication asset mapping research (Broad et al., 2013; Villanueva et al., 2016; Georgiou et al., 2016) has aimed to create a visual map of the community so that proximity to and between assets can be considered. However, RTX is not an urban, pedestrian community. For work and most other daily activities, most people must drive between locations due to their distance from one another and the sprawling rural landscape.

Therefore, in this study, instead of physically mapping the communication assets in the town, a list was compiled of more than 33 community assets confirmed or suggested by interview participants for inclusion into what became the following four categories: resident networks, institutions and organizations, local media, and technological.

Resident Network Assets

Interview participants in the current study reported relying heavily on communication among resident networks in the community. Resident networks are often comprised of family, friends, and neighbors and generally represent the strong ties that occur during micro-level communication.

Most participants confirmed that in addition to family and friends, communications frequently happen among people and groups within their social circles and networks such as social clubs (28), churches (20), and other associations. Other popular assets categorized under resident networks are the many public events (21) and meetings held in town, which provide opportunities for sharing and gathering information while communicating with others. These assets offer members of a community access to people and places where face-to-face interactions and community storytelling can occur naturally and regularly.

Although it was not originally included as a separate community asset, word of mouth was listed by every participant interviewed and in the discussions of both focus groups as being an asset for communication in this small town and is included here under resident networks as it is primarily shared among those closer knit relationships or people with who one may interact on a regular basis. Also acknowledged is the fact that much of the information shared by word of mouth can actually by communicated through formats other than face-to-face such as through cell phones and social media, which will be discussed in more detail later in the findings.

Institutional/Organizational Assets

Institutions and organizations make up the largest category of assets for this community. The most widely noted local institutions in the community listed by participants include public spaces such as the public library (30), public elementary and high schools (24), post office (23), parks, and the hospital. Such places offer space for interaction and storytelling among community members. Local governmental, municipal buildings such as town hall, courthouse, and small local airport were also listed as well as social services including the health department, Department of Human Resources and E911 rescue, and non-profits such as the Chamber of Commerce, Red Cross, United Way, and the local Center for Adults with Cognitive Disabilities. Businesses including grocery stores, local restaurants, and certain retail shops were listed by many as assets or locations for frequent communication as well.

Local Media Assets

A majority of participants did comment on how limited the number of local media resources are in RTX. As in many small, rural communities, the low population numbers in this town with a low tax base and limited physical infrastructure do not attract traditional media outlets. Although regional radio and television stations exist sixty miles away in the nearest

urban area and serve to inform the broader area, there is no local radio station nor is there a local television station. The weekly local newspaper is the only local traditional news media source available mentioned by 31 of the 32 participants and both focus groups. There was once a radio station in a neighboring community, but it closed early in 2018 with no announced plan to resume broadcasting.

Another form of local media that is often found within the storytelling network of a community is geo-ethnic media (sources that target a specific geographic and/or ethnic population), though this was found to be limited in RTX. Outside of informative bulletins for churches in ethnic neighborhoods, occasional politically motivated printed materials targeting ethnic groups, and general information materials printed in Spanish and made available at local community service outlets, no geo-ethnic media were identified. One participant, a member of a small population of Spanish-speaking citizens, said that no services or information outlets exist that specifically serve the Spanish-speaking population. Due to the close proximity of the town to a Native American reservation within the county located approximately 30 miles away, local public schools have a Native American Education Coordinator who provides information and educational programming as well as promotion of events and news about the Native American community. However, as one participant who is a member of that community confirmed, no specific media were found that specifically targets members of minority communities in this town.

In addition to traditional local and geo-ethnic media sources, media, signage and printed materials were also included in this category. This includes printed flyers and materials (28), the library's large digital sign (27), large promotional banners frequently posted at busiest

intersections (27), locally distributed newsletters (15), and other road-side business message boards and ad spaces.

Technological Assets

A fourth category of assets was included to recognize the significance that technology has upon communication in this town. Although cell phones/texts, computers/email, and social media are considered to be avenues of communication in this study, cell phone service (30), internet service (30), and social media (32) were listed by participants as primary assets necessary for communication in this town, and thus, are included in this extra section for technology. These four categories of communication assets offer context and allow the reader some insight into the existing resources within the community under examination so that four research questions might be answered.

Relationship Between Communication Assets and Communication Infrastructure

The first three of the four categories identified by participants as communication assets align with the categories of neighborhood storytelling agents within the STN. The fourth category, technology assets, could be located among the community assets that can be found in Ball-Rokeach's Communication Action Context such as Technology Infrastructure and Connectedness.

General Communication Experience

Relative to this study, communication includes the regular efforts of individuals, and the groups or organizations represented, to share local news and information within the community. Examples of such communication might include sharing information about a new service, promoting an event or fundraiser, or distributing publications and informational resources such as newsletters, social media posts, or website content.

In this study, I demonstrate that overall, communicating in a small town can be challenging. This opinion is based upon experiences as an active member of the community, my observations of those coming to the library for assistance with communication, and informal discussions with other members of this community and many other small, rural communities similar to RTX. In order to better assess the overall communications experience in this town and determine if my observational assumptions are found to be true for others, I conducted interviews and focus group discussions that allowed me to gather the perspectives of other members regarding their communication experiences.

Easy Communication Experience

Participants were asked, "Overall, do you find it easy or difficult to communicate in this town?" Many of the responses were unexpected. More participants, 14 of 32, did respond that communicating was decidedly difficult for them and/or their group while an almost equal number, 12 of 32, answer that communicating is easy for them and the groups they represent. However, of the 32 participants, 6 admitted that communicating is equally both easy and difficult, depending upon several factors embedded within the context of the communication attempt. These factors include but are not limited to the audience targeted, the connectedness of a person to local networks, and the type of communication avenues being used. There was no observed correlation between one's demographic information and their perceived ease in their overall communication experience.

Participants who described their overall experience as easy highlighted many positive attributes of the community including feelings of closeness to others, partnerships between businesses, organizations and the people they serve, and frequent opportunities for face-to-face contact with others. Another positive element expressed by those communicating in RTX is the

fact that geography requires that most travel paths fall inside a few miles radius, leading most people down the same roads together multiple times a day. Some participants claimed this to be advantageous for the use of signage such as large vinyl banners hung at the busy intersection beneath the only red traffic light in town or the library's digital road sign, which is located on a main highway through town.

Several study participants remarked of an atmosphere of warmth and trust and a close-knit community of citizens and agencies working together to help each other. While many participants responded that most people are friendly and approachable, five participants commented specifically on the approachableness and availability of local elected officials. Two participants who had lived in large cities like Los Angeles or Atlanta commented that, unlike larger cities where one must schedule appointments and wait months to meet with elected officials such as the mayor or state representative, in smaller communities, leaders, and decision-makers seem much more available. Damien, a retiree and transplant from a large urban city, stated, in his experience as a recent transplant from a large, urban area, he felt that the "open door policies" and opportunities to visit with elected officials in local restaurants or businesses were more likely in small towns like RTX increasing his feelings of community inclusion and belonging.

When commenting on the ease of their overall communication experience in RTX, Alex, a local media representative, commented, "in a small town, you are surrounded by friends and family members, so there is always someone you can reach out to for information." Gerald, a local industry leader, shared his perspective in regard to the town's citizen's willingness to help each other.

One of the things about being in a small town is, if you need help and don't have service on your phone, it wouldn't be a problem to stop by somebody's house, because most of us know each other, and know each other's face, and most of us wouldn't have a problem if you came and knocked on our door and wanted to use the phone. It would be ok. You know, that is one of the advantages of living in a small area like this. This has been easy really because it is the only way I know. I don't know any other way, so that in itself makes it easy for me because that is my comfort zone.

Similarly, senior center director, Selina, described a day at the local senior nutrition center where she is an administrator, when one of her daily visitors, who had no family or caretakers, did not show up for lunch. The administrator knew something was wrong and asked local law enforcement to go by her home and check on her, only to find that the woman had died in the night. She said,

In this center, we're like a family. If someone gets sick, we are on the phone to check on them and find out what they need. If I need help from the local hardware store, they come over to help me and let me come pay my bill whenever I can, and you can't do that in a big city. In this small town, we have a support system and take care of each other.

Stuart, a business owner and member of an economic development organization, noted,

I do fifty percent of my business face to face and fifty percent on my cell phone. If I need paperwork signed, I walk across the street and get it from my customers. When I go to lunch and see customers with questions, they follow me back down the street to my business, and I take care of them. They have my cell and text me questions or orders, but it is easy for me to communicate with my people. We use many other methods, but our success is due in part to the unique access you have to people in a small town. The asset is the community itself.

Stuart stated that these frequent, in-person interactions in town facilitated opportunities for regular, face-to-face conversation which make overall communication less challenging.

Difficult Communication Experiences

Conversely, the closeness of a community can work to exclude those who are outsiders or have not yet been accepted into existing local resident and social networks. Alex, a community journalist, commented that communication is easy for them because they have local contacts with whom they have built relationships. He acknowledged that, while those networks are

advantageous for someone who has close-knit connections here, it is unlikely that a new-comer to the community would have that same experience. Members of a small town can become suspicious, and networks often remain exclusive, as conveyed in the experience of Damien, a retiree who moved to RTX from a huge city, who stated,

It's easy to talk to people in this small town, but it's difficult to integrate into those social circles where you feel like you're actually a participating member of the community. If you are different, speak differently, or do not have roots or networks here, people are less likely to include you or involve you in things. For me, word of mouth is my main source, and since I am limited as far as the people I associate, my information is also going to be limited.

Taylor, director of a local health institution and a new community member, responded that overall, communicating in RTX was difficult due to the fact that she is an outsider and lacks the knowledge of, and access to, local communication and social networks needed to communicate effectively. Several who were interviewed said that some information is only made available to those involved in certain organizations or members of certain clubs and associations in the community, which can hinder one's ability participate in the message circuit.

As interviews progressed, each of the 18 participants, who reported that communicating is easy or a combination of easy/difficult, did, however, go on to elaborate on many challenges that they or their organization do face when trying to communicate in RTX, both to share and to receive information. Almost everyone, including many of those who found sharing information with the public on behalf of their organization or themselves to be somewhat or mostly easy, commented that, in order to reach as many people as possible, multiple avenues of communication must often be used. This, in itself, was a challenge confirmed by every participant, expending time, money, and energy by the communicator. A significant number of participants from all areas and responsibilities in the community expressed a lack of funding needed to communicate effectively.

Several people who cited money and community funding as a limitation for communication also said that several of the most effective avenues for their offices are also the most expensive, such as newspaper space and staffing needed for management of communications. For those participants, who are responsible for creating and sharing news and information from their local organization or business, funds needed to hire staff to create, manage and disperse effective communications throughout town are simply not available.

Even free avenues such as social media or mass email software are only free up to a point at which time restrictions are placed such as a cap on the number of email addresses that can be sent within a database at one time or event promotion to targeted groups through social media. Such restrictions require users to pay or subscribe for a fee to access additional data storage or a broader reach into the community.⁸

Also acknowledged was the obligation many organizations feel to provide the public with informational sources about the organization such as newsletters, calendars of events, websites, social media pages, and events. Communication through such avenues can be costly in time, money, and energy and may also result in the duplication of efforts by multiple organizations throughout town. Such duplication of effort wastes both tangible resources and staff time.

With this in mind, some organizations seek to eliminate the duplicated effort. For example, when the local Chamber of Commerce needed a website, instead of creating duplicate websites with the same overall information, links, and resources related to the community, the Office of Economic Development offered to partner with the chamber to share a website, saving both money and management time for the organizations. This upholds the CIT principle showing that, as meso-level connections among storytelling agents such as organizations and institutions

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⁸Examples of free, yet, limited use software might include survey and data collection sites, photo editing, newsletter and website creation, and some social media platforms.

are made, these community organizations can become the linkage between storytellers and can facilitate communications in the neighborhood storytelling network. Perhaps similar future partnerships and consolidation of efforts for managing sources of community information could make communicating more manageable for both seekers and providers of information in RTX.

None of those interviewed claimed that their efforts to communicate are never challenging. Most participants even identified needs in the community such as improved internet and cell phone service as well as ways to improve local communications.

A wide range of challenges was offered by the 20 participants who viewed communicating in town as somewhat or mostly difficult. Participants described the area as very rural, which was stated as a reason for the lack of resources participants believed are needed to communicate effectively. An observation was made by the researcher regarding the use of the term small versus the term rural. While all of the comments attributing positively to the fact that the town is small, many of the negative or more challenging issues presented by participants referred to the community as rural. Within the context of these interviews, the use of the word rural was used almost always used when describing a characteristic that limits communication. One participant, frustrated, and trying to convey the deep void of resources present said, "We are just so rural...We have to improve our technology infrastructure in order to attract new people and business and to grow our community."

While some participants believed accessibility to people in the community to be an asset, an overwhelming majority of participants (20 of 32 and participants across both focus groups) recognized that the gaps in access between those who have and those who have not severely hinder public communications. Gaps in technology included the lack of cell phone service, high-speed internet, and equipment or devices. Identifying such gaps led to conversations about the

socioeconomic factors negatively affecting one's ability to access communication, such as poverty, weak or truncated levels of education, a lack of transportation, and a lack affordable access to services that many experience in rural areas.

Denice, social worker and volunteer, shared, "As with most rural populations, transportation is a huge issue here. People are so limited by their inability to travel independently." Although, the public library is a free source of computers, internet, and information, as Ruby, a public library administrator noted, "Some people don't have the means to get there." As she stated, many people would access computers and free high-speed internet and lots of other information if they could get there, but they have no transportation and live too far away to walk to the library, so they tend not to go there unless they happen to be in town for other needs. This observed void of transportation and mobility in the RTX communication action context indicates an area that could be addressed to aid in bridging the access gap for some members of the community.

Individuals and entities throughout the storytelling network expressed the fact that affordability is often as limiting as accessibility. Service for cell phones and internet are not available in some areas, and while such services are mostly available in town, that does not mean that people can afford to purchase them for themselves. Damien addressed the issue of access by adding, "Just because you have access to it doesn't mean that you can get it." Affordability and one's ability to use technology are two of many issues related to access in a rural area.

Similarly, participants expressed a need for assistance when using technology and seeking information in the community. This observation supports previous research indicating that having access to technology does not necessarily mean that a person will be able to effectively use and enjoy it (Horrigan, 2014; Mehra et al., 2017) and indicates a need for more

efforts to remove barriers to effective communication by improving both access and education and assistance for using many digital avenues of communication.

Another limiting factor shown to challenge communicators is the generational gaps between users of different avenues such as that between those who rely solely on the newspaper for news and information and those who primarily use social media. Many participants felt that their inability to reach multiple audiences at one time, especially those audiences of divided by age groups, was a hindrance to communication. Some participants suggested that reaching seniors in the community is a challenge, due to the fact, in their observations, most seniors prefer printed materials to social media, devices, and web-based communications. They also shared their frustrations with trying to reach a younger generation who, they believed, read less printed media and prefer social media platforms targeting younger populations.

Finding a balance between the use of all avenues was a primary challenge for all but a few. Participants who target relatively narrow audiences found communicating in town easier than most. They still reported the need to use most avenues of communication to reach their audience, but indicated that they felt successful, which resulted in a much easier and more effective experience communicating in town. Those participants came from the field of law enforcement and narrow-market business sectors; they were also not involved in community organizations that require communication with the general public.

In general, most participants admit they must use most available avenues to have a chance at communicating successfully throughout the town. This amount of time, energy and expense results in communications efforts that can be complicated and difficult for members of the community at large.

Research Question One

Who creates news and community content? Research question one (RQ1) identified those in this community who create news or community content and other information about the community. As Ball-Rokeach and Kim (2006a), Broad et al. (2013), and others have suggested, community storytelling agents contribute to the community's story, or image, every time news or information about the community is shared. To answer RQ1, participants' responses indicated that sharing the story of a community is a responsibility that falls upon many in a rural town.

As was confirmed in this study, most organizations, businesses, and even local institutions such as schools and libraries in a rural community rely upon a small number of individuals to manage or conduct many different communication-related duties including planning, promotion, and reporting of all events hosted or provided by their organization. The same is shown to be true for clubs and social groups promoting events or meetings.

In RTX, local newspapers report little news from outside the community, relying instead on their own journalistic abilities to write or gather submitted local stories and pictures, in lieu of national or global information. In order for small newspapers with limited staff to capture local news for the many events and activities for which they cannot attend in person, press releases are often relied upon as stories and pictures are written and submitted by local organizations. This relationship and partnership between newspapers and community members seems unique to smaller communities and necessary in order to represent as much news and information as possible.

News content created by a person or organization across a range of formats may include, but is not limited to, newspaper and local business and industrial magazine articles⁹,

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⁹ Local magazines in the RTX community included the energy cooperative business magazine, local chemical company magazines, and regional magazines for small businesses.

organizational newsletters, printed posters and signage, advertisements and posts on social media, radio spots, group text and email blasts, and calendars of events. This connection between residents, organizations, and local media to create content and tell the story of the community supports the CIT model for shared storytelling and community building within the STN in this town.

Individual or In-House Content Creation

A significant majority, 24 of 32, of participants in the current study reported being responsible for creating original content to be shared about themselves or the groups they represent. When asked, "Who creates content shared by you or your organization," most responded, "I do," or "We do." Unlike larger cities where such responsibilities may be shared across a group of staff members, small-town businesses and agencies are often staffed by a single person. Some participants commented that since they are the only person on staff, they do all required tasks including the writing and design of any news, publicity, or promotional materials, which is reported as a cumbersome, time-consuming, and overall challenging part of their job. Individuals not representing anyone other than themselves responded that they create their own social media posts and often share those created by others.

Corporate or Administrative Content Approval or Creation

However, a number of other participants stated that, although they create their own news content to share with the public, an administrative process is in place to proof and approve content that is shared with the public. Those participants primarily represented government entities, social services agencies, businesses, or institutions such as schools and libraries. Ruby, a library administrator, stated that, while staff members are allowed to write and create news and information for the organization, their institutional administrative approval process is a positive

step, as it alleviates the opportunity for mistakes in the news they are sharing and contributes to the cohesiveness of the overall information they transmit to the public.

Noted was the fact that even messages which reach their target audiences are not always understood in the way intended by the sender. ¹⁰ The importance of risk management and message control was also addressed by Harris, a government official who stated, "We are very careful about the information that we send out because once it's out, you cannot get it back." Another participant echoed the fact that message control was the reason their institution did not use social media, stating a fear that the original message would be misconstrued upon sharing or within the section for commenting on posts. While beyond the direct scope of this study, the implications of misunderstood and misconstrued messages are an important factor to explore for further research on this topic.

Daniel, a principal and coach, expressed the challenges of representing an entire institution, stating, "In today's world, there's so much potential to offend...you have to be hypersensitive as to what you send out. It is important that messages are reviewed, and there are gatekeepers so that you're not in a situation that's uncomfortable, that you have to explain."

Who creates the information that is shared is sometimes determined by more than merely the individual or corporate entity's desire to communicate with others. Having resources to develop a compelling message is also shown to be a limitation for many in this small community. Josie, an artist, who also represented an educational institution, community

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¹⁰ In *The Mathematical Theory of Communication*, Shannon and Weaver (1949) sought to identify the quickest and most efficient way to get a message from one point to another through the systematic process of communication. In their theory of information. "Noise" is any factor in the process that works against one's ability to predict the outcome of the communication process.

¹¹ This issue of the "gatekeeping" of information within a community will be examined further in Chapter V.

volunteer organizations, and resident networks, stated that resources and skills for content creation and design are extremely limited in their community. She said,

I am the only person in town who has the experience or expensive software needed to design professional looking posters, logos, invitations, which is a blessing and a curse. On the one hand, I am happy to have the skills and be able to help, but on the other hand, everyone here needs help making their communication pieces. It's a small town, so people and organizations don't have the money to pay for that kind of service. And everyone knows each other and tries to help each other. I know how to do this for you and am happy to because tomorrow I will need help with this other thing that you are really good at...so we all just barter our skills and do each other favors to maximize the few resources we have.

This observed feeling that the RTX community lacks necessary skill sets and technological resources indicated a void in the communication action that could be addressed through this project as an action plan is developed for the town.

Only four participants reported that they create and share little-to-no original news information and, instead, primarily share information generated by someone other than themselves. Two of these work in law enforcement or emergency-related fields and the others are individual citizens not representing a local organization or group. Those working in emergency services and law enforcement stated that their jobs require less content creation and more sharing of information regarding weather or environmental alerts and warnings generated through regional offices and emergency systems. The individuals who reported little to no creation of news were not directly responsible for information creation for anyone but themselves personally and expressed no interest in writing, preferring instead to share information through word of mouth and face-to-face interactions with their friends and families. While both expressed the need to know about school activities and community events, neither was connected to many organizations or groups outside of the local school and their own

personal resident networks, and thus, were under less pressure to contribute news and information for the community.

Combination of In-house and Administrative Content Approval or Creation

Similar to the number of those who create community content for themselves, 24 of the 32 participants interviewed say that they share a combination of both their own original content and content from other sources such as corporate or state offices, executive administrators, or social media posts. Many participants commented that due to their involvement in multiple organizations and groups in the community, they frequently write and create communication pieces of their own while also sharing news and information produced by a marketing team or administrative staff at work and social media posts about the community created by other organizations or individuals.

In response to RQ1, community news and content were created and shared by many organizations and individuals within the town. A vast majority of participants create their own individual or in-house content, while some rely upon content that is handed down from corporate offices or, at least, approved by an administrative authority, which offers message control and consistency. Most participants report using a combination of in-house and corporate-created or approved information that is then shared with the public through various avenues of communication.

This observation of community news and content creation directly relates to the CIT concept of community storytelling, as organizations, media outlets, and residents determine the story of the community itself by developing stories that are culturally significant and locally relevant to the people of the community. As CIT suggests, these conversations among storytelling agents are representative of the community, as storytellers in RTX were observed

creating the conversation about the problems, opportunities, and happenings of the community through various methods including verbal, written, and implied communication.

Research Question Two

How do people actually use existing avenues of communication? To better understand how people and groups communicate in RTX, Research question two (RQ2) asked participants to reveal what avenues they and their group currently use to convey their message to the public as well as their preferred methods for receiving information about the community. I thought that if people's preferences for how they receive information about the community are better understood, future planning of communicating efforts might be informed by this knowledge and effectiveness of local communication might be improved. It is also believed that by first discovering what avenues people are using, voids in communication can be identified and used to inform future planning and community improvement. Although some overlap of use does naturally exist, these two questions were kept separate in the interview and in the explanation of the findings below for clarity.

Disseminating Information

Once their general communications experience was captured, participants were asked to discuss, "What do you/your organizations use to share information with the public?" Participants reported using many avenues of communication for disseminating news and other types of information. These avenues are chosen for both personal and professional reasons, which combine to produce a person's overall use of media and community information.

Many responded that traditional printed letters and flyers, which are often mailed or hung in local businesses, restaurants, and the post office or shared in churches and public meetings,

were common avenues of communication. The most popular avenues, however, included the use of cell phones, email, and social media, the local newspaper, and local personal networks.

Each of the interviewees reported regular use of phones to communicate with the public. During the day, both at work and at home, many who still have landline telephones said they do use landlines in addition to their cell phones. However, most admitted that a large part of their communication happens on their cell phone through calls and texts. Group texts and messages through apps can connect large groups conveniently into the same conversation. Many participants said they also used cell phones daily for social media access, email, and various methods of communicating with others. Some participants, such as Damien, a retiree and relative newcomer to the community, said that his use of the cell phone was limited to phone calls and text messages if needed, preferring not to use their phone for access to people due to the impersonal nature of the interaction. He stated,

I like my cell phone, I really do, but it's a tool to get me through life. I use it to pay my bills and do my banking from a distance. But I do not worship it, and I'm not big on texting. I prefer human interaction and face-to-face contact, but if I can't have that, I prefer to call and be called. I want to hear your voice.

Others, like Matt, an emergency services agent, stated that he does not go anywhere without both his work cell and a separate personal cell phone, each of which uses a different service carrier due to the spotty cell service connections in the area, and would be uncomfortable with a family member being without a cell phone. Other participants voiced the advantages and challenges associated with cell phones, in that, while they reach many people, use is still limited to those who can afford them and can afford to keep a consistent phone number. Often, individuals with limited funds bounce between temporary minute plans which vary in levels of data and accessibility, making contact information challenging to maintain. Josie, school career coach and local volunteer, noted,

Some of the students I work with can't afford the data plans needed to use their phones for internet. These kids have cell phones but turn them off unless they are near wi-fi, which is extremely limited here because they can't afford the data plans. I have a hard time getting in touch with them sometimes because, half the time, their phones are turned off to save data or have been cut off due to money troubles.

Another participant observed that some people also use their phone as their primary access to online information such as email and web browsing. They stated, "I have family members who can afford computers, but they do not like technology and do not want a home computer. They choose not to use technology any more than they absolutely have to, so they just use their phone like a computer."

In addition to using cell phones, most participants stated that they frequently use computers and other devices to communicate locally through email and social media. Email was said to be used to blast organizational newsletters and information to large numbers of people at a time through online software programs, some which are free or available for a nominal fee. Such software allows businesses and organizations to quickly reach a broader targeted audience, sharing news and information with hundreds, and for additional subscriptions, thousands of people at a time. Some organizations mentioned the use of email software both internally, such as the hospital's newsletter that goes out to staff and employees, and publicly, like the library's newsletter that is sent to nearly 1,000 people who have signed up to receive news and information about the community from the library through their email.

Social media was also revealed to be a widely-used avenue for communicating with a large group simultaneously. Participants report that social media is often utilized both on computers and on devices such as smartphones and e-readers. Felicia, a local restaurant owner, says that local social media networks are digital word-of-mouth, allowing their restaurant the ease of posting information, which is then shared by friends and family members throughout the

community. Many others attribute the ease of their communications experience to the prevalent use of social media across age groups and audiences. As Alex, the local newspaper reporter, explained,

Social media is a primary avenue for all of us, as well as for businesses here. There's not a business I know of that does not use it. I mean, it's free, and you can create events. Even our clubs and social groups share everything through it, like memberships, pictures, and events...why not use it if it is free?

Whether their experience with communication was reported to be easy or difficult, one commonality that all of the participants revealed was the fact that, to share information with the public, one must use multiple avenues of communication. Most participants listed this dilemma as their primary frustration limiting local communication, one that will be addressed further in chapter five.

In order to cover all bases and effectively share news and information, the efforts many of those participants representing groups or organizations could be strengthening connections between their organization and the public. For example, an organization wishing to ensure that a community member receives the message might post the information onto social media, and then reinforcing the likelihood that the message will be seen and absorbed by also sending an article expressing the message to the newspaper. Through the CIT perspective, the sender has strengthened the potential for storytelling and communication, and thus increased the ability for members to be informed, attend local events, and ultimately build community.

A majority of participants went on to say that if you want to reach the whole community, you have to use all available channels and, even then, you will still miss people. However, the more communication channels you cover, the higher the probability that the message will be received and acted upon. These efforts for increased connections, while cumbersome for every

organization to duplicate, could be useful for the anchor of anchors to consider when facilitating a more effective means of communication and alleviating the work for others.

Local or resident networks identified in this study and previously listed as communication assets represent some of the closest relationships and strongest ties for communication reported by members of this community. Community members use their resident networks to share community news in their homes, their neighborhoods, and interactions with groups of which they identify as a member. As previously stated, word-of-mouth is an avenue that every participant reported using to communicate. Similarly, face-to-face contact with people was an avenue that many people commonly use.

Preference for Receiving Information

When asked "How do you prefer to receive information about the community," participants' preferences for receiving information differed somewhat from the avenues they report to currently use. Every participant acknowledged that they prefer to use more than one avenue to increase their opportunities for finding information about the community. For a large number, this included a combined use of electronic avenues with printed newspaper, local signage and/or mailed information. However, preferences for digital and electronic avenues were listed by a significant majority of those interviewed, 26 of 32. The top three preferred avenues for receiving information included social media, text, and email, followed closely by the newspaper and mailed information.

In addition to its prevalent use throughout the community, one of the main reasons offered for participants' preference for digital methods of communication was convenience and the ease with which one can access such avenues on devices already used frequently during the day. Rita, a pharmacist, assures that, when communicating, she preferred to use "email, texts,

and social media, and that's about as good as it gets." One participant who works in emergency services estimated that most RTX residents have cell phones, which are often used to access social media applications and sites. He stated, "They may not have a computer, but most have [a cell phone]."

Slightly more than two-thirds of the participants, 22 of 32, stated a preference for using social media, either by cell phone or computer, to receive information. Although several mentioned that they do not personally use social media at all, they did acknowledge their dependence on community information shared by word-of-mouth from family members who do use social media regularly. The principle of least effort, or Zipf's Law, is demonstrated through the participants' preferred use of social media and word of mouth to communicate (Zipf, 1949; Kanwal et al., 2017).

Patrick, a college senior, echoed this statement in his explanation for the user-friendly features of communicating with social media, such as the interactive event invitations that allow users to respond with ease. Unlike postal mail, one can express an interest in, RSVP for attendance, and easily share information received through social media with friends. He commented,

I can take a screenshot with my phone and have it in my pictures to share with friends and family or refer back to it later. And it reminds you when you have events coming up, so event notifications on social media are my most preferred method. It [social media] makes it so much easier when you are busy.

The need to be reminded and refer to information that can be easily found through a digital paper trail arose several times during this question. Denice, a social worker, said, "Me, personally, I would rather get an email or a text that I can come back to. I like email and texts because it leaves some kind of paper trail." Matt, who works in emergency services and disaster

relief, also justified his preference for text messages and email by addressing his desire to reference previously received information. He shared,

In my line of work, there are many instances when I have to refer back to information from previous correspondence. Texts and emails are documented, and I keep them. I don't get rid of them. I make a folder for any groups or individuals that I regularly email with, and I move [their emails] in there so I can come back to it in the future.

One participant stated, "Send it to us in an email because we communicate with that. In our business, email is a way to kind of backtrack when you are thinking about or looking for what people have done or said."

Similarly, Jenny, executive director of an adult education center and director of the county's public transportation, relied upon email to receive information partly due to the ability to sync essential dates and information from emails to her calendar. She stated,

I like electronic. I love email, because, when you send it to me, I can easily add it to my calendar and receive notifications thereafter. If you sent me a text, I might see it and forget to write it down. If you tell me something, I'll most definitely forget it. But if I get something on my email, it goes to my calendar. I can also refer back to it, in a communication trail for reference.

She appreciated the ability electronic communication offers to refer back to a digital paper trail of information and be reminded by her calendar about the events she has saved.

Several of those who preferred text messaging to other avenues touched on the role that immediacy plays in one's reception of information. Rita, a pharmacist, stated that, although she relied upon email and social media, "Text messages are great for me because I don't check my email quite as often as I should and might miss some things." Noah, a public official, stated that while he felt as though he must use and rely upon all avenues to communicate.

Absolutely, I rely on texting, because, pretty much, if somebody's texting me, I'm going to pay attention. That means they've got my cell phone number and it's probably somebody that I know and want to hear from. And I know, for the younger generation, they definitely prefer getting texts over calls.

As an educator and community volunteer, Josie agreed that she preferred to receive information digitally and believed it to be the most immediate avenue, stating,

I would prefer something direct to my phone, like texts, because I am always going to get that, you know? Emails, you only get them if you pull them up, but with a text message, you are going to get an alert. Especially if it is more urgent, a text -- something directly to my phone is best.

A common thread throughout this discussion of how members of this community prefer to receive information is the fact that no one feels comfortable relying upon any one avenue to stay informed. Instead, those wishing to become more informed and involved are required to use many different avenues to get the information they need. Daniel, a principal, coach, and Sunday school teacher, said,

In my leadership style, I believe in constant communication, and I believe in reminders. I think people are so busy today that you can communicate something to them and, three minutes later, it's gone. I think, not only, it is important that we use different avenues, but I like different avenues. I like receiving a text message, I like seeing things on social media, and I like seeing the banners at the red light. I love driving by and reading the library sign because I always feel informed when I see your sign at the library. It reminds me of events that are coming up. All those are important and then if you get a phone call as much as to say, 'Just want to remind you this,' that helps. I think in the age of, just inundation of information, that there's got to be constant reminders.

Ruby, an administrative staff member of the RTX public library, concurred, saying, "There are so many places you have to check to get information about the community, and still you miss things. You have to use several things to find out, several avenues. I don't think you can rely on just one [avenue]." Local economic developer, Mollie, commented that, "It takes being active in all of these means of communication to know what is going in this town." Daniel elaborated,

I don't think there's any one way that catches everybody... You can only get to so many people with word of mouth. Not everyone has social media, and not everyone has access to internet, but most people have a phone, so with some folks, you can reach people through group messaging or text messaging. I think you have to use multiple avenues to get to people.

He also commented on the effectiveness of one versus many avenues, saying,

I really couldn't tell you which one is absolutely the most effective. When we have an important event, we're going to try to hit it from several different angles. I really couldn't tell you which one has been the most effective, I probably have to say multiple uses of different communications is probably the most effective way of getting it out. In the advent of social media, it made it easier to get a certain targeted group... So, between the text messages and between the social media, we use that at times to target certain folks.

Effectiveness of Avenues

When examining the efficacy for each avenue, a wide range of opinions were expressed. When asked, "What communication efforts or avenues are most effective for sharing information with the community," the top five avenues listed in order of frequency were social media, local signage, cell phones, word of mouth through local networks, and newspaper.

Most effective. Over two-thirds, 22 of 32, of participants listed social media as most effective, the same number of people that prefer social media for receiving information. Previously discussed advantages of using social media including ease of use, cost-effectiveness, and ability to target an audience were also stated as reasons for effectiveness. An overwhelming advantage expressed by participants in this study desiring to communicate in a small town arises from the fact that most individuals, businesses, and organizations use social media and can be more easily be reached, and reach others, as larger audiences are targeted at one time. Many participants mentioned that communications have been made easier through their use of social media for both personal and organizational communication.

Even local and state institutions such as schools and government agencies, which are required to legally inform the public through at least three forms of public communication, expressed their reliance upon social media. As Brittany, an administrator for the local Board of Education, stated,

The fact that people can share our posts is very helpful for spreading the word about closings or schedule changes that affect many in the community at a time. We sometimes have hundreds of people share the information we post to social media. They usually just

hit "share," which actually, prevents the information from becoming changed and distorted and helps us maintain our message to the public.

Denice, a state agency employee, reiterated this point, stating "our local office used social media, and each county in the state uses social media to communicate with the public." In addition to listing the newspaper as effective, local newspaper representatives also listed social media as particularly effective, stating,

Social media is one of our main ways to connect with people in the community for local leads. Citizens, and even law enforcement, will snap pictures about emergent news, like, 'Come cover this event that is underway' or 'Bridge is out on this road,' or other info that needs to be shared quickly. People also use social media to share our stories, like, snap a picture of an article and post it onto social media and say, 'Hey, this is from the newspaper.' We also often share our own news stories on social media, especially for information that needs to be shared fast.

However, the second highest listed method, believed to be most effective by 12 of 32, was local signage including banners and signs along transportation routes through town.

Several participants acknowledged that, while the audience of signs is limited to those who pass by, local signs are also a most effective way to share info with a larger group, a broader audience than just the targeted audience. "I think signs and banners are most effective in that there is little effort on the part of the communicator; it is easy, quick, cost-effective and requires little in the way of permission from the town. You also have a captive audience in a car, and they are going to look at it." Halley, a preschool teacher, echoed this, saying, "Banners at the red light in town and road signs are the most effective way to communicate locally because most everyone has to go through that way to do their business in town."

¹² Traffic Audit Bureau (TAB) released enhanced ratings in a 2014 study measuring dwell time in the field by driving respondents at different speeds and in different traffic congestion patterns past billboards. It was confirmed that slower passages, which create longer dwell times, do increase the noticing of all billboards (Wilson & Casper, 2016). Also see The Arbitron National In-Car Study (Williams, 2009).

Also, Ruby, library administrator, stated that, in addition to social media, road signs are the most effective way to get the word out to the public. As Shane, a radio show host and event coordinator, noted, banners and digital signs, like the library's road sign, are one of the most effective ways to spread the word. He said, "I put up a big banner at the red light every time we have an event that hangs there at least a week or two, so we can get the message to everyone that passes by under the red light." Similar sentiments were also expressed during the forums as Josie, a career coach, commented, "I swear, the best communications in this town are those signs at the intersection. I know they may be obnoxious, but that is the best." Gerald, a long-time employee at a local industrial site, agreed, following that comment with "Out there and at the end of the road at the library," which was met with agreement by the crowd.

Within the rural context of this study, local signs and banners are shown to play a unique role in CAC of the town by providing physical structures and assets that present information on narrow transportation routes. In small, rural areas where roads and bridges are few and far between, these paths include very few main streets and highways, which increases the likelihood that people will drive past the signs and, thus, pick up the information as they travel by. Such limited potential travel routes might not present such opportunities in a larger city, where many different roads might lead you to the same location. This could also indicate another opportunity for ways that the CAC could play a bigger role in communication outreach through additional signs and banners in the community.

The effectiveness of local signage was followed on the list by cellphones used for texts and calls. As Candice, a local event coordinator and active community volunteer, pointed out, "people pay attention to their phones, so if you get a call or a text, that's VIP, and you are going to answer that call or text, more so than you would an email. Right in town, we have cell service

unlike those who live right outside of town in the most rural places. So, we are fortunate to have some towers and some infrastructure that allows our phones to work here in the city limits."

Fourth on the list of most effective avenues was word of mouth information shared between local networks. Many participants credited the small-town environment with the effectiveness of word of mouth and their ability to easily share information with people with whom they come in contact. Local newspapers fell in fifth place in the list of most effective avenues, listed by only 7 of the 32 participants.

Least effective. When asked, "What do you feel is the least effective avenue of communication" many people responded that "having to use all avenues to communicate" was the most contributing factor for loss of effectiveness in local communication. Although it is overwhelmingly referred to as an asset in the community and a necessity for most in a small town, the local newspaper was conversely, listed as the least effective avenue for communicating by the largest number of participants, 10 out of 32.

This belief was due to several factors. Several participants claimed not to read the newspaper. Other participants commented that the audience is limited by the number of people who buy the paper or have the ability and time to read the paper. Denice, a social worker and community volunteer, stated that, although she enjoys occasionally holding and reading information in print, she did not believe the local newspaper reaches a large enough audience, commenting:

It really depends on the population you're trying to reach. A lot of the people we serve either cannot read or choose not to purchase a paper. Our newspaper here in town is really generous and is usually good to donate space so that we can promote our free services, but I am still not sure how many people read the paper.

Limited audience was also listed by Jenny, executive director of a local adult education center, who also commented that timing is the main deterrent to using the newspaper.

There is definitely some strategy involved in using the newspaper to share information. The paper comes out once a week, on Fridays, which is a terrible day. Most events are held on the weekend, which makes it necessary to advertise a week in advance and the week of or risk the news coming out the day of or before the event. Sometimes it is a blessing to have it, and sometimes it just feels frustrating to try and use it effectively.

Another participant complained that he does use the newspaper, but is often faced with the questions of its effectiveness, stating,

When I put informational ads, job listings, or articles in the newspaper, I hear this, -- 'I don't read a newspaper.' I talked with someone about this very thing yesterday, about how to get the word out. If you don't read the newspaper or use social media, or get out and work or become involved, I just don't know reach you. I always want to use the newspaper, but the feedback is clear, that many do not have the time or interest in reading the paper.

Tina, a local mental health professional and business manager, agreed stating that the newspaper is not timely and the lack of immediacy is a problem for her business. She stated that the paper does not allow them much ability to target an audience, nor does it convey news in an immediate sense. "When we have special events or a new product, I cannot wait around for the newspaper to promote the activities. I need the info to go out fast if the event is the next few days."

The challenges expressed by organizations associated with local media use could be indicative of a loss of information sharing and storytelling potential for the residents relying on information that should or could be shared through the connections between these storytelling agents. A disconnect between the newspaper and local organizations and residents desiring to use the newspaper could indicate weak connections that could be remedied within a plan to improve communications in the community.

The cost of advertising in the newspaper was also cited as a factor in the perceived effectiveness of the newspaper in communication. Stuart, a local business owner, admitted, "I have tried every avenue of advertising that you can possibly do in this town, and the newspaper never worked for us. We just don't have a humongous budget for that stuff." Another participant

stated that "by the time they get the newspaper, the news is old. I have put stuff in the newspaper and then gone around and polled people, asking, 'Did you see our article or ad in the newspaper?' I've heard the same thing – 'I did not see that.' By far, no one ever sees the article."

Next on the list of perceived least effective avenues of communication and tied at six mentions were radio and printed flyers. It has been determined that no local radio station exists and the closest station, in a neighboring town, was recently shut down. Thus, the participants who listed radio acknowledged that they once used radio to communicate and promote their news to the public but are no longer able to do so due to the lack of a local station.

Printed flyers were reported to be an ineffective avenue for several reasons. Tosha, a single mom, employed in town, explained, "They don't work. People don't really look at them or pay attention to printed flyers." In regard to printed information and flyers from school that go home with students, Susan, Native American education and cultural arts coordinator, admitted that there is no guarantee that flyers or printed information sheets will make it home to a parent, stating, "Printed information can be a problem simply because sometimes kids don't know where they're going in the evening." Patrick, a senior in college, noted that, unlike social media, printed flyers are much less effective than other avenues, explaining,

Printed flyers always feel like someone is trying to sell you something, so people tend to ignore it. Or, because it is not kept up-to-date in real-time, they think it has already passed and just ignore it. I often pass by and think, 'Well, that already happened,' so it is not reliable.

As Josie, a career coach and volunteer, lamented, "Printed posters in the post offices or public places, work great for an older audience, but flyers are a waste. It's a waste of time if you are sending them home with students. Alex, a member of the press, claimed that printed information dispersed as flyers in the community are hit and miss at best in their effectiveness, noting,

"Everyone is so distracted when they are out and about and not really paying attention to what's posted right in front of them."

As observed during the findings for the most effective avenues, most participants firmly stated that the most determining factor for effectiveness of communications is the fact that one must use all avenues in order to avoid their efforts being rendered ineffective. As Brittany, an education administrator, stated, "Really, you have to do it all to reach all the age groups, to me....the negative side of the effort is that everything works ok. You just have to do all things to reach everybody." This frustration is further explained by Sony, agricultural extension officer, who stated.

It seems like it's so broad. It seems like one week, text messages are not as great because this person's not receiving, or not the correct information, so it's better to do multiple ways. I like to cover all bases. Send out the emails, and if there's email address that come back, I've sent text out to and vice versa. If there are numbers that come back; they have an email and plus, I put it on social media to where when they are there, they see it at some point. There's been times that I'll think, Well, this is not a situation where I need to put this in the newspaper. I can put this word out through text messaging or even emailing only. And just as sure as I don't put it in the paper, there's this one person that didn't find out, and that's how they know-- that's their form of communication, the paper, so covering all those bases, is the struggle...It's a constant struggle.

Shane, a retired educator and radio show host, stated similarly, "We have to work everything we can. We have to pass the word through every angle. We try to use every angle that we can to entice the people there. That's what we have to do....The challenge is you got to do it all."

To summarize RQ2, participants and the groups they represent must utilize many avenues in their attempt to communicate with the public. While participants' use of available avenues of communication varied, all agreed that no one avenue could be solely depended upon to effectively share news and information with the public. Often times, the avenues that participants reported to use most often differed from the avenues they revealed as their preferences for receiving information.

Although many limitations such as generational and technological access gaps associated with social media use were expressed, more than two-thirds of people reported to believe that social media is most effective due to its prevalence, cost-efficiency, and ease of use. Believed to be least effective was the local newspaper, even though, conversely, it was felt by many to be a necessity for communication with the public. Deficiencies identified in these communication avenues could indicate a loss of storytelling potential and could indicate areas in the communication infrastructure and storytelling network that could be improved.

Research Question Three

What voids exist in the communication infrastructure that, if addressed, could increase communication effectiveness? Through the process of determining the avenues currently used, the preferred avenues for receiving information, and the avenues viewed as most and least effective, several voids in communication effectiveness were also identified.

One of the most obvious voids noted was the lack of traditional media outlets such as radio and television. Population numbers are not anticipated to be large enough to support local instances of these media in the future. Other voids included the lack of adequate, reliable cell phone service in the area and the lack of high speed, affordable internet service. As previously noted in the findings for hindrances to communications in the town, while many of those interviewed do have personal or professional access, the overall lack of access to internet service and cell phone service are major concerns for most of the RTX population.

However, an overwhelming majority of participants listed a lack of a centralized, convenient source for community news and information as the biggest void affecting the effectiveness of communications in the community. Noted by 26 of 32 participants, and both focus groups, was the lack of a central, single source of community news and information. This

desire for a community information clearinghouse and one-stop source for information including a community-wide events calendar was a recurring theme throughout many interviews for this study. As Noah, an elected official and information technology professional, noted, the community lacks a central source,

We have no way to know what is happening here. There is no central repository for information that people can share....We need a calendar of events that's more comprehensive for the community. My desire is anything that can help an individual, save them time, save them frustration about getting their information out and that's why it's so important for us to find the most effective way.

Taylor, hospital administrator and newcomer, challenged, "Someone needs to be our clearinghouse...I'd love for somebody, somehow or another, to come up with that because it would be effective." As Anya, an executive for a local telecommunications company, suggested, there is a need for "someone to figure out where all the resources are, someone who also has the ability to tie all of that together in one place." In addition to technology and internet upgrades in the community, Harris, a local elected official, identified a need for a coordinated effort to gather information, stating,

We have to figure out somewhere that we could have a community calendar, where people would know to contact or call...for events throughout the community, where everyone would know, if you're having an event, you call and put it on the events calendar, and then everyone in the community and surrounding areas can know that it's going on.

Jenny, adult educational center executive, also expressed this need for a community-wide source several times during the interview and came to the same conclusion, noting,

I would love for there to be one website, one that everybody knows what it is, maybe even an app on your phone, where if I'd like to check what's going on this weekend, or if there are any new jobs posted...If there was a website that had the one-stop shop [of information], people could access it. Searching the web 'haystack' to try to find stuff absolutely drives nuts...I want a site that has everything on it – one-stop for information, community calendar, job postings...Maybe even an app, a community app.

Matt, an experienced emergency services officer, suggested, "We need a way to notify people about community meetings and events – a calendar or something like that....I think you can create an app [for phones and devices]." After considering the need for a more timely, accessible news source, Patrick, a college student, suggested the need for "... an app, something up-dated in real-time with a stream of community events information. Something where people in the community knew that they could get the word out to a vast majority of people." Similarly, Daniel, a long-time educator and principal, stated, "A mobile app would be helpful. Then you can communicate through that with the public."¹³

In summary, a lack of some traditional media such as radio and television outlets exists, yet participants do not see a viable path for these avenues in a town of low and ever decreasing population numbers. Nearly all, however, answered RQ3 by identifying the biggest void to be that of a single, effective source of local news and community information – a problem for which solutions did seem possible. An app could be designed to strengthen connections between people in all areas of the community, especially those who are underserved and most in need of information. This app could also prompt storytelling as information is shared and received through different avenues including digital platforms, local newspaper, flyers, and word-of-mouth between family, friends, and acquaintances. If the message is not received through one avenue, a person might receive the information by someone who *is* connected to the avenue.

¹³ Possible solutions to this problem could be led by public libraries and will be discussed in Chapter V.

Research Question Four

What is the public's perception of the rural public library's services, overall importance, and its role in local community news creation, dissemination, and reception?

Participants' Involvement in the Library

In order to first gauge the general involvement and contextualize each participant's experiences with the library, the researcher relied upon answers to the initial questionnaire, interview responses, and personal knowledge about library usage. Four levels of involvement were established: 1) regular users - those who regularly use and/or participate in library services and programs; 2) occasional users – those who sometimes use and participate in the library activities throughout the year; 3) infrequent users – those who rarely use the library; and 4) non-users those who never use the library or attend programs.

Sixteen participants were regulars, often participating in library programs or events and using library materials and services. Eleven participants were identified as occasional users, leaving 5 participants who reported infrequent use of the library services and materials and attendance at only a few annual programs and events. No participants were identified as non-users. An interesting revelation was that several of the infrequent users still considered the library to be very important to the community and are generous financial contributors and in-kind supporters of the library.

Perception of Library Services and Importance

RQ4 was answered, in part, by the fact that every participant agreed that the services provided by the library are very important. Some noted that, while they have supported the library and participated in library programs, they knew very little about the services of the library or its role in communication. These participants were, however, eager to learn more about the

library and also indicated a belief in the importance of having a public library in the community.¹⁴ According to Brittany, and an educational administrator, "It would be detrimental to a lot of people if we didn't have the library." They shared,

I'm dependent on the library a lot to get resources that our schools could not afford to get or are no longer available to students. I can remember back, when I was a child, when the bookmobile would come to our community. It kept me reading the whole summer because I loved to read and I didn't have a way to come to town to get the book, but the library brought the books to me. So, the library's been around for a long time and has had great value since I can remember ... When you started thinking about what would happen if it wasn't there, it's not even a thought you want to have because it's so important to our community. Not just to this town but to the outlying communities as well.

Expectations associated with the library being knowledgeable or a place to find information already exists in the mind of many in this town. Daniel, a local school principal, said that the library is "such an important piece in the community," expressing,

I think the library does a great job at getting the [information about] events communicated to the public. I think part of their role is also public service. What the library does -- it's important that they communicate to the community what's available for them because the library is a beacon in the community that people turn to. Many people that don't have internet come here to get internet. ... It is one of the most important places in the county for communicating information that people need to know...making public service announcements, events that are scheduled, I feel like that serves the community well. The library does that. The sign outside is fantastic for communicating. I do think that that's part of, not necessarily the responsibility of, but the opportunity for the library to get information out. If we did not have the library, we would lose more population. I think it's a necessity having the opportunity to have a place like this where the whole county can come to and get the things that they need or get information that they need....So yes, I can't imagine our community without it. It's extremely important.

Denice, a social worker and library user, mentioned the long-standing reputation of the library as a source of information, noting,

I say our library is the hub of [the community]. I expect the library to know about what's going on, community-wise. I don't know if that is mainly because they always have — That's how I get my information about what's going on, is from the library. I mean I know

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¹⁴ It should be recognized that the question was being asked by the local librarian, which may have resulted in answers that were more favorable to the library. However, a large majority of participants are regular library users, which perhaps had just as much of an influence on their answers.

about outer lying things for what's going on in town, the road sign, and just walking in and having someone who knows how to answer your questions. The library has all the computers and the free Wi-Fi. It's an option for people they don't have other options.

Well, it's not just the computers and the internet, but the fact that the library has people there who can help with resumes or better, bettering their lives. There are some skills that some people may not have that the library staff can help with—resumes and job applications.

One participant, a library regular, said that library services are "absolutely vital." He enthusiastically endorsed the role the library plays in communication, admitting,

I would have a hard time getting through certain days if the library all of a sudden was non-existent. I mean it's is more than just basically trying to do research or printing out something or doing any [web] surfing or whatever the case may be. It's more to it than just that because the people that work at the library are part of the community, so when you walk in there, it is like almost family. A lot of folks will go in there, I'm sure even though they check out books, they will have conversations and that's how you basically keep knowing what's involved in the community and so forth, whether it be news or community announcements. The library is almost like a...media outlet.

One government official stated that the library is a priority in the community as is demonstrated in the annual budget from the town, which contributes generously to the library to "shed light on how important we feel that the library is here in the town." He stated "the library brings everybody together for the common good and that wouldn't be happening if we did not have a strong library in this community." He stated, "The library has a hard role in today's society...to teach people how to use information, how to digest information and to use critical thinking skills in order to know what is good information and what is not good information." Mollie, economic developer, said,

I feel like its [role is] huge because everybody is welcome at the library. It doesn't matter if you don't have a phone; you could be at the library and be connected to the world. If you don't have the internet at your house or you don't even have a computer at your house, you can be at the library and connect to the world.

Echoing this statement, Josie, a high school career coach, noted that the library has helped her students "one gazillion percent" with test prep and applications for college and stated, "I think the library plays a big role" in communications.

Perception of the Library's Role in Local Communications

When asked about the role of the library in communications, many acknowledged that the library facilitates communication by connecting people with information. Gerald, an industrial worker, called the library an educational and informational outlet whose role is to "connect our little town with the rest of the world" and stated that the role of the library is very important to those who come in. He said, "Not only could they come in and tap into the information, but they'd also come in and get assistance from the library staff in some of the areas that they're having problems with as well as understanding how a computer works, how books are strategically located in here."

The public library was also acknowledged to provide access to computers and internet to those who do not otherwise have access. This idea of the library as a bridge between haves and have-nots in the community was offered by Jenny, adult education center director and public transportation director, who said,

The library has very important services. It provides an avenue for people to come here and access the computer and Wi-Fi, which is huge because the people need to communicate. I don't have internet access at home, so this is a place that I can go to be able to get online. The library is important to our town... It's central, and it's, like the headquarters.

Alex, a representative of local media, concurred, stating that the library provides access to news and information that helps them with their work covering what is happening in the community. They also commented that the library's ability to help provide students and parents with technology and internet access is impressive. "Some people can't afford internet or computers needed to get work done," he adds, "but students and parents who need to go online, do

homework or anything else, they just go to the library and access the internet through the library computers."

Some of the participants' answers regarding the importance of library services and the role of the library in local communications were conflated, as they related the importance of the library to the existing role that the library plays in communication. Several participants admitted that although they value the library and understand the importance of the services of the library, they had not given much thought to the role of the library in local communications. However, the findings did demonstrate that this discussion has created a better understanding of how the people of RTX currently communicate, what avenues they use and prefer, and the communication voids that exist. The next step in this effort to better understand communications in this rural town was to talk about what could be done to improve the ability of members in this town to communicate and possible solutions suggested by the participants to address the lack of effectiveness in local avenues of communication.

To summarize, most participants were regular or occasional users of the public library. Every participant indicated that from technology to community space to educational resources, the services of the library are very important. Perceptions of the library's role in local communication varied from those who believed it to be vital to those who were unsure what role, exactly, the public library serves in the community. The findings of RQ4 demonstrated the positive image of the library and the importance of current services. Discussions regarding RQ4 revealed participant's perspective of the role of the library and offered a better understanding of what the library actually does, which could be helpful in identifying the library's potential role in plans for possible solutions to address voids in the current communication infrastructure. As several participants explicitly stated, resources are limited in RTX as are the number of

institutions or organizations. The library could be an ideally situated location when considering the selection of a single-source to gather, create, and disseminate effective communication for the town and foster storytelling for the public.

Community Connectedness

As referenced, Kim and Ball-Rokeach (2006) found that the extent to which community storytellers (local media, community organizations, and residents) are connected is expressed as integrated connectedness to a storytelling network or ICSN. Within the context of a neighborhood storytelling network, ICSN can be measured as the summation of interactions and connections between local media and community organizations and the intensity of interpersonal neighborhood storytelling (Kim & Ball-Rokeach, 2006a; Kim et al., 2011).

As demonstrated through previous research by Wilkin and Ball-Rokeach (2006), the connectedness, or strength of ties between meso-level storytelling agents such as local/geoethnic media and community organizations/institutions, can affect the ability of micro-level storytelling agents to receive information. Weak connections and deficiencies in some avenues of communication between local media and organizations such as those who expressed difficulty in timing and affordability of newspaper publicity or the time and energy involved in maintaining websites and newsletters were observed in this case study. This lack of connection could be interpreted as a potential barrier between citizens and information as organizations neglect to make connections with local media, and thus, fail to effectively utilize those avenues of local communications.

A plan to improve communication by leveraging the ability of the library to gather, manage, and distribute information would strengthen the connections between the meso-level storytelling agents such as local media and organizations and increase the potential for micro-

level storytellers such as residents and visitors to receive and share information about the community, resulting in increased community participation and storytelling.

Through initial questionnaires and interviews, participants were asked to reveal any organizations they represent as well as any clubs or associations with which they are involved or affiliated. Through these answers, the researcher was able to ascertain how connected each participant was to the three storytelling network agent groups—local media, resident networks, and/or organization—within the community. Participants were then grouped into categories of those with stronger or weaker connections, identifying those who were involved in two or more of the agent groups as having stronger connections and those with ties to only one of the agent groups as more weakly connected.

Strongly connected. Of those interviewed, 18 of the participants were very strongly connected, revealing ties to all three storytelling agent groups as they stated involvement in community organizations, regular use and participation with media, and membership in various clubs and resident networks. Also, strongly connected were seven participants who showed ties to two of the three groups, which totaled 25 strongly connected participants.

Weakly connected. Only seven participants were classified as more weakly connected, involved in one of the three possible storytelling agent groups. Those included participants whose situations might include being a newer resident, being unemployed, having limited social and organizational involvement, or having limited involvement in the community outside of business interactions.

One unexpected finding was the fact that, among those who were strongly connected, equal numbers indicated they found local communication to be easy or difficult. Precisely 50% of participants who were identified as more strongly connected claimed their overall

communications experience to be difficult and 50% of strongly connected found it to be easy. However, the ratio of those who were observed to have weaker local connections showed a slightly greater difference with 57% finding overall communications to be difficult and 43% finding it easy.

In future phases or replications of this study, deeper connections between storytelling agents within the STN should be examined. The interview questions for this study limited the possibility of a more thorough examination of the participant's experience with communication and community storytelling within the theoretical lens of CIT. Better, more specific questions about how STN agents are connected might reveal additional voids that could be addressed to improve the quality and effectiveness of local communications.

Conclusions

An extensive list of communication avenues and assets were identified through this case study. A slight majority of participants did reveal that, from their perspective, communicating in a small, rural town is challenging. Although opinions differed between those who found communicating in a small community to be easy overall and those who found communication to be difficult, most agreed that challenges exist for those whose rely upon current avenues of communication. A majority of participants expressed their frustrations over the need to use all avenues of communication to increase the effectiveness of communication efforts. An overwhelming majority expressed a need for a better, more effective, comprehensive, central source of community news and information. Even many of those who found communicating in this community to be easy stated that such a source would be useful and beneficial for them and the community as a whole.

CHAPTER V:

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

This study recognizes the benefits of having libraries as partners in planning and implementation of communication infrastructures in a rural community and allows us to identify the most widely used, most effective channels of communication in a community. Also identified are specific needs of storytelling agents in the community expressed in participant interviews. I argue that public libraries are uniquely situated to offer informational resources in new, more effective ways that can be leveraged to maximize communications in such a community and reveal the potential for replication of the proposed model in other communities.

Discussion

As study findings were compared with the literature, three specific aspects proposed in the literature review were reinforced during this study: 1) exclusion of outsiders in small communities; 2) inclusive nature of public libraries; and 3) bridging the access gap.

Exclusion of Outsiders in Small Communities

For people in a small, close-knit community, exclusion of outsiders—those who are non-members of the community, who speak or look different from the demographics of a local social norm or are different in some other way—by institutions including libraries is noted in the literature (Weigand, 2015; Griffis & Johnson, 2014; Gehner, 2010). Unfortunately, feelings of exclusion were also revealed in this study in two ways—directly through the perspectives of several participants and through the experience of the insider researcher.

Feelings of exclusion were conveyed by the three participants who considered themselves to be outsiders, newly transplanted, and striving to become accepted members of the community. Residents who do not feel accepted or included are more likely to be over-looked and under-informed by those responsible for communications in small towns. Whether by newer residents still frustrated with exclusion from local social networks, business owners with Spanish-speaking relatives, or institutional administrators who have limited local contacts and less knowledge about the community, this study echoes previous research showing that exclusion happens, even in small towns like the one examined in this study. As Damien, a retired, newcomer to the community, shared, while it may be easy to talk to people in this small, friendly town, it is also difficult to integrate into established social circles, especially for those who do not have roots or networks here. As he said, "People are less likely to include you or involve you in things if you are not connected into their social circles already." Thus, outsiders like Damien may be more likely to go uninformed and uninvolved unless they find the information through other public avenues of communication.

Taylor, a hospital administrator and recent resident of the community, expressed the challenge she has faced of not having contacts or knowing how to navigate the networks of a small town when needing to share information with the public about services and programs available to the public. She stated that her status as an outsider has made communicating in her job and personal life more difficult.

Similarly, Felicia, a Latina mother and businesswoman, shared her frustrations with the lack of services for Spanish-speaking members of the community, stating that her children are often taken out of their own class to interpret between teachers or administrators and other Spanish-speaking students. Although she stated that she was happy that her family members

could help others in the community, she also expressed her concerns that her children may be missing valuable information in class due to the frequency of their use as make-shift interpreters in local public schools. The lack of diverse services and resources could indicate voids and barriers for marginalized populations in the community and areas that could be improved.

Inclusive Nature of Public Libraries

The previous research presents libraries as centers of learning, cultural enrichment, and civic engagement (Griffis & Johnson, 2014; Veil & Bishop; 2014; Weigand, 2015). In the literature, these scholars and others have suggested that public libraries are trusted institutions of knowledge, advocates of equal access and rights, proponents of civic engagement and democracy, and welcoming, inclusive places for the sharing of stories and the creation of social capital. The findings of this study supported these notions as participants expressed positive feelings from previous experiences in the library. Echoed in the findings are the ideas from previous research that public libraries are inclusive and welcoming, as participants noted, "Everybody is welcome at the library" and, "During the year, the library brings everybody together for the common good."

All three of these participants did, however, express that their move to the community has been improved by the services provided by the public library. Even with the absence of personal social networks and local contacts, participants commented that the library served, and in cases, continues to serve, as a primary source of community news and information through various programs, online newsletters, and email announcements, social media pages, and the digital road sign.

Damien stated that he felt welcomed and engaged upon his first visit to the library and now visits the library almost daily for wifi, computers, and print services. Taylor said that library

sign is her main way to find out about what is happening in the community, often driving out of the way in the opposite direction of her house and work route to read the sign and get informed about upcoming events and services. Felicia said that her children have enjoyed attending library programs and reading library materials since their move to town. She did suggest that members of the Spanish-speaking community could benefit from more language assistance programs, as well as more diverse programs and services in the community. This is an area that could be improved both within the library's collection and programming decisions and through the library's outreach into underserved areas of the community.

Bridging the Gaps

Gaps in access exist in communities large and small. However, the literature shows that in small, rural communities, disparities and gaps between those who have access to technology and knowledge enough to effectively use technology, and those who do not, present two observable challenges known as the digital access gap and the digital readiness gap.

Digital access cap. One of the most common themes revealed in both the literature and in the interviews with participants is the belief that public libraries bridge the access gap and the digital divide between resources such as computers, internet, and information and the people who need it most and would not otherwise have access. According to Mehra et al. (2017), digital divides (intentionally plural to emphasize their difference) are, in addition to geography, based on many different variables such as income, race, ethnicity, gender, sexual orientation, education level, age, and physical or mental disabilities.

A positive characteristic of the public library noted in the literature is its mission to offer equitable access to information and services, which increases overarching goals of increased social capital and, ultimately, a better-informed public, leveling the playing field for the haves

and have-nots in a community. The effectiveness of libraries to live up to this mission was demonstrated in this study as participants reported the observed efforts of the local public library to provide equitable access to people in the community and bridge the access gap for all who suffer from a lack of access to information.

Responses from a majority of study participants support previously reported research findings which recognize the library's ability to address the digital divide by providing the public with free access to technology (Erdiaw-Kwasi & Alam, 2016; ALA, 2015; Alemanne et al., 2011; Bertot, McClure, & Jaeger 2008; ADPH, 2007). Most participants expressed their appreciation and understanding of the library's efforts to provide technology services and connection to online information to the public.

While recent broadband grant-funding opportunities have assisted rural areas with their efforts to improve technology infrastructures, a lack of equitable access to information creates and perpetuates a gap in informability between those who primarily consume news online and those who do not. As Garmer (2014) stated, 62% of American public libraries report being the sole provider of free computer and wifi internet access in their communities, which was definitely the case in the studied community. Participants confirmed that the local public library in this town is the only place where citizens and visitors can freely access computers as well as high-speed internet, available twenty-four hours a day, seven days a week.

Digital readiness gap. Digital divides in access, knowledge, application between the haves and have-nots can also affect one's digital readiness. As previously noted, digital divides have traditionally revolved around the idea that if everyone had access to technology, then that alone would lead to effective technology use (Mehra et al., 2017).

However, also shown to affect the public's ability to access information through technology is the lack of digital readiness, as is revealed in the current study.

Several participants credited the knowledgeable and helpful library staff, who are known to help address the lack of digital readiness by providing assistance for library users. Library staff help users navigate the vast amount of information available through online resources (Veil & Bishop, 2014; Bishop & Veil, 2013; Bertot et al., 2012). Participants noted that the local library staff help library users locate information, search and apply for jobs through online application processes, use technology to connect with others, create news and information, perform research and homework requirements, complete government forms, and use print, scan, and fax services.

Theoretical Implications

In this study, Communication Infrastructure Theory (CIT) is used as a framework for exploring this community's ability to communicate, to evaluate the storytelling potential of the community, and to identify the storytelling agent that should or could rise to the top as the anchor institution. The findings of the study supported several theoretical implications expressed in previous literature including communicating with hard-to-reach populations, the connectedness of the community, and the idea that an organization can serve as an anchor institution for communications in a community.

Hard-To-Reach Populations

As Ball-Rokeach and others have suggested, CIT has been especially useful in examining hard-to-reach communities. Communities that have low social capital are shown to be harder to reach in a study. Previous research (Matsaganis et al., 2014; Abril et al., 2015; Nah et al., 2016) examined the lack of connection between residents and community-based organizations in small

communities to determine whether or not communications could be more efficiently integrated to encourage use of local services or increased social capital and engagement.

The same factors that affect opportunities for social capital can also influence the ability of a person to be engaged on a civic level in the community. CIT addresses these issues by examining how/if people are informed by three groups of storytelling agents within a community: media, community organizations, and their neighbors or networks. This study found that, indeed, people in this town are informed by all three groups of storytelling agents with varying degrees of effectiveness and satisfaction.

All of these scholars have expressed the need for expanded CIT research in rural settings. For the study of rural communities with limited resources and access to technology, CIT has proven to be an applicable perspective in need of further study, which has in part, been achieved by this study, as one rural, hard-to-reach community was examined. In addition to its small population and limited resources, participants confirmed that many factors contributed to the community being labeled as hard-to-reach, or difficult with which to communicate, as defined by Wilkin and Ball Rokeach (Wilkin et al., 2010; Wilkin & Ball-Rokeach, 2011).

Previous research suggested that identification of hard-to-reach populations could indicate breakdowns in the existing communication infrastructure of a given community and identify areas for improvement. CIT literature has also offered strategies for accessing other hard-to-reach populations within urban areas such as bringing together community organizations and valued media outlets (Wilkin et al., 2010; Wilkin & Ball-Rokeach, 2011). However, in this study, connections between local media and organizations were found to be existing and strong as most organizations reported using local media such as the newspaper. Yet, these avenues remained ineffective in the minds of many users who listed other factors for ineffectiveness.

Connections between media outlets and organizations and their effectiveness in a rural setting may be an area for future research.

CIT research for rural communities has examined the communication infrastructure of a community and sensitivity to factors such as connectivity and access was employed so that data could be captured from different socioeconomic areas of the population. Such areas were identified in this study, which shed light on the fact that all avenues must be used, few were reported to be completely effective, and most participants expressed a need for a better, more comprehensive avenue of communication.

Community Connectedness

Kim and Ball-Rokeach (2006) found that the ICSN or depends upon the extent to which community storytellers (local media, community organizations, and residents) are connected. Within the context of a neighborhood storytelling network, Kim and Ball-Rokeach suggested that the ICSN can be measured as the summation of interactions and connections between local media and community organizations and the intensity of interpersonal neighborhood storytelling (Kim & Ball-Rokeach, 2006a; Kim et al., 2011). This CIT concept of the connectedness of one to the ICSN was supported in the findings as those who were more connected to storytelling agents were observed to have stronger connections or ties to the community and the storytelling network as a whole versus those who were more weakly connected.

However, what was not found was a correlation between connectedness of a participant and their perceived overall effectiveness of communication. An equal amount of those who were strongly connected found local communication overall to be easy and those who found it to be difficult. Precisely 50% of participants who were identified as more strongly connected found communication to be hard and fifty percent of strongly connected found it to be easy. The ratio

of those who were observed to have weaker local connections was also nearly split with 57% finding it difficult and 43% finding it easy.

Before interviewing all participants, the researcher imagined that the more connected one was to the storytelling network, the easier the experience of communicating might be. However, this study shows that connectedness to the community does not necessarily determine one's ability to effectively and comfortably communicate within a small community. Thus, factors other than connectedness to the community must affect communication in this particular small town, and possibly others.

Anchor institutions. As numerous scholars have suggested in previous literature, public libraries possess a valuable combination of historical attributes long-associated with them as institutions such as knowledge, credibility, visibility, and local support and have served as anchor institutions in communities large and small (McCook, 2001, 2002; Stoss, 2003; McCook & Jones, 2002; Alemanne, 2011; Hildreth, 2012; Goodman, 2014). Public libraries also have a unique ability to facilitate the informational needs of the citizens through access to resources such as computers, highspeed internet, educational workshops and training, and other vital information services (Bertot et al., 2012; Bishop & Veil, 2013; Veil & Bishop, 2014). Also contributing to the suitability of public libraries as anchors in the community is the fact that, as Aabø and Audunson (2012) expressed, public libraries encourage social inclusion as they provide access to space where community belonging and social capital are created. Citizens desire and deserve a space to meet and share as well as effective avenues of communication for sharing and finding community news and information. All of these sentiments and desires are echoed by this study which supports the assertion of previous scholars that the public library is

an inclusive, valuable, anchoring source of information, technology, and knowledgeable assistance.

The findings of this study also bolster the proposition by the researcher that public library in a rural community is ideally suited to serve a more significant role as "anchor of anchors" for community news and information because, as forum participants noted, to the agreement of the room, "It touches everybody." In the literature, Dana was quoted as saying, "A public library can be the centre of the activities in a city that make for social efficiency. It can do more to bind the people of a city into one civic whole...than any other institution." Mollie, economic developer, reiterated this notion, saying, "I think the library is a lifter of other organizations, a tide that lifts all boats, especially in a small community like ours." It is this finding that most supports the new model proposed by the current study.

In their Community Technology Center (CTC) model, Hayden and Ball-Rokeach (2007) demonstrated how a CTC still connected to the communication action context (CAC) can be positioned to function as the primary conduit between a storytelling network and the CAC. CTCs can serve as a digital hub between the traditional anchor-points in communication infrastructure theory—residents, community organizations, and local media—to provide not only increased competencies for storytellers, but also "a clearinghouse for community narratives that are vital to the storytelling process" (p. 242). As such, the CIT framework for CTCs provided a model for examining this rural community to determine the role of the library as an anchor institution and its potential to influence future communication integration in the community.

The findings of this study support this verdict as many participants described the local library as "the hub," "the headquarters," "the central place," and "the best" organization to address the communication deficiencies in this town. As Noah, an elected official and

information technology professional, noted, "the library might be able to solve a great mystery" of how to effectively share information and communicate with the general public in a small community. During a forum conversation, Harris, local government representative, suggested to the group, "This library can help get the word out" because it is "a hub for info and access and all things in our community." Emergency services director, Matt, added, "Somebody has got to [manage and disseminate] the information, which could be done by the library. Coming from the library...what better source would we have?"

Conclusions

This study revealed several other significant insights to the researcher including contradictions within the use of avenues, a comparison between the ALA service responses, and the perception of library services in the community and the library as a content creator in a community.

Contradictions in the Use of Communication Avenues

As advantages and disadvantages for different avenues were discussed, many participants discussed their preferences and uses of local avenues of communication. For example, participants noted that social media is most effective due to the fact that it is inexpensive and relatively easy to use. However, participants also shared that oftentimes that the information available through social media lacks accuracy, lacks broad use by generational groups, and requires access to technology, which could be prohibitive and hinder effectiveness. Similarly, signs and banners were reported to be effective, yet were limited to those driving past particular road and routes. Word-of-mouth was said to be widely used in a small, tightly knit community, but easily and often misconstrued. Several stated that people in a small town are generally very accessible, and face-to-face communication is preferred and possibly, most effective, but is time

intensive for both sides of the communication, and most people do not have or make time for meetings.

Although the newspaper was said by many to be a necessary avenue when wishing to reach a broad audience, the audience is limited and the return on investment for businesses and sometimes, non-profits, did not seem in some participants' opinions to outweigh the cost.

Mailouts often go to each mailbox, but are many times costly, require time to post, and are frequently overlooked and thrown away. Even an avenue as effective as the school call out system was said to only be useful because it is limited to use by the schools, rendering it exclusive and of little use to any other organizations or for any other information that is not school related.

Surprisingly, many of most used avenues as well as those most preferred for receiving information seemed to contradict the avenues participants believed to be most effective, overall. Participants reported using personal interaction such as word-of-mouth and face-to-face communication as well as traditional media such as newspapers for communicating. However, they reported the newspaper to be the overall least effective avenue of communication for sharing community-wide announcements and information, and word-of-mouth/face-to-face communication to be one of the less preferred avenues for receiving information. This contradiction points to what could be a void in the use of communication avenues and a possible area for improvement in the communication infostructure of this community.

Similarly, a large majority of participants named social media, followed by cell phone use and physical signage and banners in town, to be the most effective means of communicating with others. They also reported preferences for receiving information through digital avenues

such as social media, cell phone texts and calls, and email over newspapers, printed mail, word of mouth and local signage.

Relationship Between Service Responses and Perceptions of Library Services

An interesting comparison was made between how library services as well as the role of the library in communication are perceived by members of the public. In other words, responses revealed the public perceptions, and possible misconceptions, of what libraries do in the community. Some participants even admitted that they had given no thought to the role of public libraries in communications prior to these interviews.

While every participant stated that they found the local library services to be important, and even necessary and vital in the community, some were not regular users, and several did not even have library cards, stating that they have not really needed the library since their children were young, but they stated that they "know that it is there for them if and when it is needed." This disconnect between the feeling that something is important, and for some, vital, yet, not relied upon regularly by most, was an indicator that the local public library has room for improvement in efforts to become more valuable to the public and better ensure future sustainability. It seems imperative that public libraries find a way to transition from being simply nice to becoming necessary. This highlights an opportunity that libraries have to capitalize on their ability to problem-solve and be resourceful by leveraging their strengths in order to meet a critical communication need in the community.

Identifying new ways for the library to become more useful by providing and promoting services with which members of the community might better communicate could help the library to become more relevant and necessary in the minds of its citizens and stakeholders. A new role

as a central source of community news and information could be one way for the library to increase its social capital and image as a necessary resource in this rural community.

As noted in the literature, a noticeable shift occurred in the ALA/PLA Library Service Responses updated list published in *Strategic Planning for Results* (Nelson, 2008). Action verbs such as inform, connect, and build are used alongside the terms community and citizens (Garcia & Nelson, 2007; Nelson, 2008), impressing upon libraries the importance of incorporation of services built around building a more informed, connected citizenry in communities today.

This active, participatory language in the 2007 service responses emphasizing civic engagement and community building was reflected in the responses from participants regarding their perception of the services provided by the RTX public library. Some of the Service Responses encourage library users to do the following: *Celebrate Diversity, Express Creativity, Make Career Choices, Succeed in School, Stimulate Imagination,* and *Understand how to Find, Evaluate, and Use Information* (Garcia & Nelson, 2007; Nelson, 2008). Participants used similar characteristics such as inclusive, creative, and imagination when describing the programs offered by the library.

Participants also expressed their appreciation for the relationship the library has with schools and students in need of resources and access to technology as well as the importance of the library staff who help people navigate information and technology in the library. Many participants commented on the career building and workforce development efforts of the library. Although necessary and valuable, all of these sentiments described more about what the library provides rather than the experiences or results of people who use the library.

Updated directives encourage library users to *Be an Informed Citizen*, *Make Informed Decisions*, and *Know Your Community*, which all reflect an increased participatory role for

library users and the evolving role of library services in fostering informed, engaged citizens in communities (Garcia & Nelson, 2007; Nelson, 2008). As participation lags and communication breakdowns occur, such participatory language and encouragement are still needed in RTX as citizens appear to remain in need of better sources of information which would presumably create a more informed public and, consequently, increase civic and community participation.

Library as Content Creator

Dating back to the oldest libraries of ancient civilizations, libraries have told the story of the community through collections. The public library today also tells the story of a community as collections are developed for and in the image of the community. This role as curator of local collections brands librarians as gatekeepers of information and gives most libraries power over the information chosen and made available to the local public. Such responsibility for ensuring the integrity and diversity of collections intended to serve the informational needs of everyone in the library's service community extends beyond just the books, materials, and software purchased. In addition to collections, library administrators are responsible for ensuring that library programs, services, policies, and even staff members also represent and reflect the community served. Aforementioned, Holbrook Jackson, was quoted, saying, "Your library is your portrait." In regard to a community, the public library should reflect the local community served. As observed by the researcher, in this study, increased diversity across the public library's collections, programs, and staffing could be considered in order to better reflect the local community.

Hayden and Ball-Rokeach (2007) suggested that CTCs, which could include public libraries "are a storytelling resource, both in their capacity to enable storytelling and their own intrinsic capacity to propagate community-relevant content." In this study, the library's role in

content creation is reflected in responses from several participants. The importance of the public library's role in creating, collecting, and preserving community news and content was expressed by participants in one forum who stated that the library "tells our community story." Some participants specifically commented that they see the library as a "media outlet."

Findings from this study that libraries create news and informational content in the community as well as collect and preserve the story of the community supports literature on the role of public libraries in local collection curation and preservation. As listed in both the 1997 Service Response, "A library that offers Local History and Genealogy service addresses the desire of community residents to know and better understand personal or community heritage" or the 2007 Service Response encouraging library users to "Discover Your Roots" through genealogy and local history to help people "connect the past with the present and understand the history and traditions of the community" curating local collections has long been a role of the library. In their efforts to gather, preserve, and pass down histories and local content, librarians create and share the story of their community.

As was revealed through this study, no single, reliably effective avenue of communication exists for those wishing to share or receive information about the community. It has been determined by the participants in this study that most people do want and could benefit from a single, reliable, more comprehensive source of community news and information.

Surprisingly, an overwhelming majority of both strongly and weakly connected people/groups expressed a common struggle to share information effectively. However, weaker connections between local media and community organizations did indicate a potential void in the communication infrastructure that could be addressed by the library's new plan to serve as a facilitator of community news and information, connecting time-sensitive information about

organizations and services in the community to local news outlets and alleviating duplicated efforts among organizational social media pages. More specific attention to the connectedness of storytelling agents and the impact of these connections on communication effectiveness should be explored in future studies.

All participants expressed the fact that multiple avenues of communication must be used to share and to find or receive information, and yet, the number of avenues of communication used was not necessarily an indicator of effectiveness. In rural communities with limited resources, the public library may possess a unique combination of characteristics and skills which could position them as ideally suited to serve a new role as communication anchor institution and facilitator of a more integrated and effective communication infostructure for the community.

Recommendations

Future Research

This study provided new insight into small rural communities, how they communicate, and potential ways for public libraries to make a noticeable difference in their service areas as facilitators of more effective communication infrastructures. This study is a first step in an effort to examine multiple rural communities in an effort to identify existing and future roles for libraries. Similar studies could be conducted in other small and rural communities. Application of this research in similar communities would deepen the data available for rural communities and the public libraries as solutions to communication challenges are developed.

Because each small town and rural community is unique, this model allows the role of the central, anchoring institution in a community to be served by institutions and organizations beyond the public library. This model broadens the possibility of application for many different

institutions in various disciplines which may be suited to serve as the anchor for communications in a small town, such as economic development groups, chambers of commerce, or other educational and cultural organizations.¹⁵

Immediate Impact on Stakeholders

Those considering replication of this study may be encouraged by some of the immediate results and benefits observed for those involved. Stakeholders for this research included the public library, potential partnering organizations, citizens, and the community as a whole. This study was worthwhile as it accomplished the original purpose to discover how this community understands the role of public libraries serve, and could serve, in communications in a small town. However, as interviews were completed, and conversations were begun between library staff and participants, definite, tangible benefits for the library were realized as a result of having the interview.

Improved image of library. Each conversation in itself had a noticeable effect on the way people viewed the library and the likelihood that the participant would think of the library as a potential partner for future opportunities and needs fulfillment. Just by talking about the problems currently facing the community, participants were included in a conversation about the community that otherwise would not have occurred. This interview drew the library to the forefront of the participants' minds, had them thoughtfully consider the services, role, and importance of the library to the community. For many, the conversations post-interview were an opportunity to inform people on what the library does, the many services and resources made

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¹⁵ Just before publication of this dissertation, I was introduced to recent research conducted in rural areas which examine the role of rural librarians as change agents and the application of community informatics. This area seems complimentary to the current study and provides opportunities for future collaboration on issues of communication in rural communities. Income levels were not specifically examined in this study. However, it is apparent that income is a primary factor in one's access to technology and information avenues, and thus, will be considered more explicitly in the continuation or replication of this study.

available by the library, as well as other community assets that might be better utilized, and efforts that could be combined toward common goals.

Newly-formed partnerships. Once better informed about the local library, participants began to suggest ways they could work with the library to address communications issues as well as a number of other community needs. For example, a representative from the local communications company realized during the interview that their company could partner with the library to address the lack of internet access by installing satellite hotspots throughout this county that would coordinate with stops along the route of the library's Bookmobile Outreach program. Another participant, a local emergency services director, after learning about the ability of the library to assist during disasters, invited the library director to have a "seat at the table" and join a local emergency planning committee with leaders from industry, local officials, and decision-makers throughout the area. They also asked the library to partner in writing grants to secure life-saving equipment in public buildings in the community.

Another participant, an elected official, expressed that although he always believed the library to be an essential resource for the public, admitted he had no idea the library had such an active and integral role in the community. Consequently, he offered manpower and in-kind help on various projects to beautify and improve the library facility and grounds. Partnerships were forged on health literacy projects, institutional training, joint educational workshops with public schools and new volunteers were recruited, all as a result of the interview process.

Personal fulfillment and participation. Others who visited the library for interviews and forums expressed surprise about services and programs for people of all ages, and began using new formats of materials, such as free e-books and test preparation materials, of which they were previously unaware. In addition to the residual benefits for the participants, such as

increased knowledge about free, available services, materials and programs provided by the library, participants were given an opportunity to join and contribute to a meaningful conversation about the community to which they belong. They were also able to participate and share their experiences in public forum discussions about communication and hear the stories and opinions of others. The library's role as a "space and place" for sharing, storytelling, civic participation and community building was reinforced by the activities of this study.

New model for a more effective communication infostructure. Drawing upon concepts in Kim and Ball-Rokeach's model for a communication infrastructure (2006a, 2006b), CTC-centered models offered by Hayden and Ball-Rokeach (2007), and the findings of this study, I suggest a similar role for anchor institutions within an STN and propose a new model demonstrating the anchor institution's position within the STN and CAC. Unlike the CTC model, this new model suggests that the role of the anchoring institution (in this case, the public library) as a central hub and facilitator for communication would be a new concept for the community, requiring the anchor to establish connections as such with all three storytelling network agents. This could be done by leverage existing community relationships which already position the organization as an anchoring institution in other areas, such as technology, cultural arts, and information access (see Figure 4).

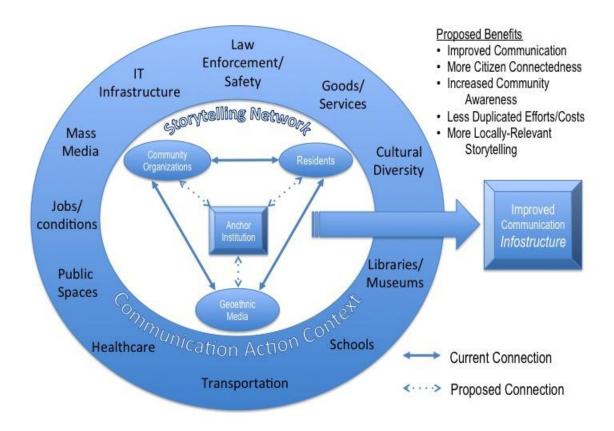


Figure 4. Model for an integrated communications infostructure

In this new model, an anchor institution, in this case, the public library, becomes the central facilitator of a new local avenue of more effective communications in a community. An action plan to strengthen the communication infostructure in a community could be developed in which the anchor institution leads initiatives to address community-wide communication problems. The model may prove applicable in other rural communities, as well as communities of other sizes and locations.

Plan of action for RTX community. With this newly proposed model in mind, and borrowing from the first cycle of the participatory rural development process by Bodorkós and Pataki (2009) (see Figure 5), an action plan was developed and proposed as an initial step toward positioning the public library as the anchor of anchors for a more effective communication infostructure in RTX, Alabama.

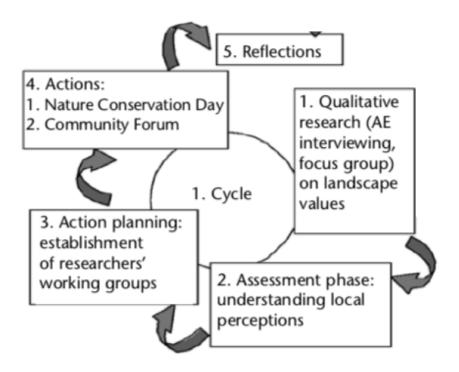


Figure 5. First cycle in the participatory rural development process (Bodorkós & Pataki, 2009)

After completing the first step, qualitative research (interviews and focus groups) and the second step, assessment phase (understanding local perceptions), step three involves action planning (establishment of groups and plans to work for change). These steps will be followed by Step 4, action (implementation of action plan), and Step 5, reflections (evaluation of effectiveness).

Step three in the cycle of the participatory rural development process suggests that the researcher complete a capability assessment to identify all local resources and skills that could serve as a foundation upon which the concrete actions and projects can be built in order to bring shared vision to reality. According to Bodorkós and Pataki (2009), capability assessment is a tool to map the traditionally ignored gifts or skills and non-economic abilities of residents, which may contribute to development. This process is similar to that of identification of communication assets in RTX, which named 34 resources or facilitating factors for local communication.

In creating an action plan for this community, the researcher has used the communication asset list and interview and focus group findings, as well as personal experiences and professional judgement to support the suggestion that the library might be the best group or organization to serve as an anchor of anchors for communications and lead the development of a communication solution for RTX. This action plan initiative determines: *project vision, target audience, intended action, facilitator of action, resources needed, and project evaluation.* Thus, the following action plan has been proposed.

The *project vision* will entail local communication efforts in RTX, Alabama which will be made easier and more effective by creating a new, comprehensive one-stop source of community news and information. The *target audience* will include all citizens – all generations, races, genders, income levels, interests, and educational levels – who will be targeted in this plan to better inform the general public.

It is the *intended action* that in its new role as anchor of anchors for local community news and information, the public library will provide a better avenue of communication for the community – a new, integrated community "infostructure." Community information will be gathered, organized, managed and disseminated through a communications infostructure, which will collect and share information through a combined platform of print, online, and app-based resources. Since one does not appear to exist, a new MySmallTown app (application downloaded by a user to a mobile device) will be created by the staff at RTX Public Library. This new app will be especially designed to assist rural communities to share and locate information about the local community. Existing apps appear to be economically driven and business-centric or designed for communities such as assisted living facilities and condominiums or for visitor assistance to larger cities, whereas, this app would be focused on the needs and dynamics of

small towns. While ideas for monetization or sponsorship of advertisement space may be considered in the future, the intention is for these new sites and materials will be free of advertisements. Specifications for this app will be developed in future steps.

Community content will be gathered from local organizations, institutions, and individuals and condensed into a web-based, interactive community calendar accessible through social media, websites, and the new MySmallTown community app. Tabs and links for local information about the community, elected officials and government agencies, job-listings, social media feeds will be included and updated for accuracy. Content will also be contributed by the public to these platforms and reviewed for accuracy and inclusion by site/app managers. Due to the fact that many do not have access to computers, internet, or web-based resources, the content and news created through these online applications will also be shared through the following means: local media for distribution in print news outlets, printed community calendars distributed in local public buildings and service organizations, and notifications on cell phones.

The *facilitator of action* (or infostructure) will be centered at the Washington County

Public Library (RTXPL) located in RTX, Alabama. A new job position, communications

coordinator, will be established as a part of the library staff to create and maintain this new

avenue which will contribute to the success of the new infostructure. As members of the

community become better informed, more participatory citizens, this project will help RTXPL

fulfill its mission to "strengthen and enrich our community by connecting people to the world of

information, ideas and imagination in order to support their work, education, personal growth,

and enjoyment."

In order to thoroughly test the effectiveness of this new role for the public library, funding for *resources* will be needed for a two-year pilot program. Implementation will coincide

with the beginning of the fiscal year, October, and will conclude in September of the second fiscal year of the project. In-kind resources such as staff support, facilities, internet and telecommunications access, and promotion will be provided by RTXPL and community partners. In addition to these resources, an estimated \$50,000 in annual funding will be needed to cover expenses, such as additional contract staff salary, equipment, software development, and supplies, for a two-year project total of \$100,000. On behalf of RTXPL, I will seek to secure these funds through stakeholder buy-in, ongoing fundraising efforts and by applying for federal, state and local grants. In recent years, RTXPL has secured, implemented and administered more than \$600,000 in grant funds and raised over \$750,000 for local programs and services. Although this project is large in its scope, it is well within the ability and experience of the RTXPL to successfully implement.

As findings in the study show, many people look to RTXPL as the hub of the community for technology, informational resources, and shared space for community storytelling. Of the institutions and organizational resources available in RTX, no other public entity was reported to serve such a role in the community, and like many of the study participants, it is believed that many citizens have come to expect such efforts as those proposed in this action plan and, thus, will not be surprised that the public library will be taking the lead on this new project. Few institutions have the fundraising or grant-writing ability that RTXPL has demonstrated over time. Therefore, a public promotion (or campaign) to endorse RTXPL as a natural leader and partner for communications will be implemented and is expected to be well received.

Initial promotion of this project, and this new effort by RTXPL to create better, more effective communication options for the public, will rely upon existing local avenues of communications identified in this study, such as social media, newspaper, printed flyers and

posters, signage and banners, organizational websites and newsletters, and word of mouth until the public is made aware of the new avenue's platforms. Ongoing promotions for this project will be written, designed, and created by RTXPL's new Communications Coordinator, and distributed through the new avenue, as well as existing avenues. ¹⁶

Cycle 1 in the participatory rural development process concludes with Step 5, which requires reflection, or *project evaluation* of the results of the project. As stated before, while RTXPL will be a primary stakeholder, other partners, local entities, citizens, and the community as a whole all stand to benefit from this project. Success for stakeholders will be measured in several ways, including but not limited to, the number of users, responses to user and partner surveys, library staff and board member surveys, and observed public opinions expressed in the community and in the comment sections of the sites and app platforms. ¹⁷

Conclusion

In today's world of constant stimulation and connection, institutions are being forced to evolve to meet the rapidly changing needs of the public. Libraries have long been considered hubs of information and technology. This study expanded the body of work examining the existing role and potential role that public libraries serve in rural communities.

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¹⁶ The irony of this necessary reliance upon *all* of the same old avenues in the community, which led to the birth of this effort to create a more effective, single source of information, is not lost on the researcher. However, it supports the findings of the study, which imply that one must use all available avenues to get the word out about something new. This project aims to reduce the laborious efforts for communicating effectively down from that of every organization and storytelling agent, to that of one, facilitating agent of communication – the local public library. The ability of the library to save all other agencies and citizens duplication of this effort to use all available avenues will be evidence for the success of this project.

¹⁷ Potential for Resistance. Although the impacts of this study's proposed initiative appear to beneficial, the possibility of resistance is recognized. This study is not an effort to negate the efforts of local media, such as the newspaper, or render publications such as local newsletters or magazines obsolete. On the contrary, this new model would be an active partnership to contribute to local media without competing for attention. Unlike the original news articles and rich community content provided by the newspaper, this plan will gather information about "the happenings" of a community such as events and services, and share the information with the local newspaper as well as through other avenues of information, providing a constant flow of leads for further news coverage in addition to the one-stop-source, or guide, for community resources. Services and events.

This study answered the research questions in several ways. Findings identified who creates news and content and ways that members of this small town currently communicate. They also recognized existing voids in communications that, if addressed, could improve overall communication experiences. The study also suggested that public libraries might be ideally suited to serve in more prominent roles as leaders for local communication systems. In its effort to explore new opportunities to increase the role and relevance of rural public libraries, this study suggested and confirmed that public libraries might also better achieve their mission to inform and engage the public by becoming the "anchor of anchors" of local community news and information creation and dissemination.

Broadened through this study was the body of research informed by Communication Infrastructure Theory, as theoretical perspectives of CIT were applied in a rural context. Drawing upon previous research and the findings of this study, a new model demonstrating the anchor institution's position within the STN and CAC was proposed.

This new model ensures that an anchor institution, such as the public library, becomes the central facilitator for more effective communications in a community. This new role might generate additional value and social capital for the image of the library, increasing opportunities for the library to remain relevant and sustainable. Action plans to strengthen the communication infostructure in a community, such as the one proposed for the RTX community, could be developed in which the anchor institution leads initiatives to address communication problems. The model may prove applicable in this community as well as other rural communities desiring to create a more efficient communication infrastructure or infostructure.

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APPENDIX A:

INTERVIEW QUESTIONNAIRE

Initial Participant Questionnaire

c. 41-55

1.	Name:		
2.	Organization/Group:		
3.	Do you reside in RTX, Alabama? Y / N		
4.	If applicable, how long have you resided in RTX?		
	a.	5 years or less	
	b.	5-10 years	
	c.	10-20 years	
	d.	More than 20 years	
5.	Do you work in RTX, Alabama? Y / N		
6.	If applicable, how long have you worked in RTX?		
	a.	5 years or less	
	b.	5-10 years	
	c.	10-20 years	
	d.	More than 20 years	
7.	Please select the age groups to which you belong:		
	a.	0-20 years	
	b.	21-40	

- d. 56-75
- e. 76 and older
- 8. Do you have a Washington County Public Library card membership? Y/N

Interview Questions

Individual interviews were conducted one-on-one and included semi-structured, open-ended questions that allowed the researcher to focus in on the issue of interest in the study. These questions included:

- 1. Is it easy or difficult to communicate and share information in RTX? Why? What hinders or helps the lines of communication?
- 2. How do you or your organization share information with the public?
- 3. Who creates/manages these communications?
- 4. How do you prefer to receive information about the community?
- 5. What communication efforts are most successful in sharing info with the community?
- 6. Which communication efforts don't work as well?
- 7. List of communication assets in RTX?
- 8. What could be done to improve communications in RTX?
- 9. What is the role of the public library in communication?
- 10. How important are the services provided by the library in the community?
- 11. How could public libraries improve lines of communication in RTX?
- 12. Who would you suggest also be interviewed for this study?

APPENDIX B:

LIBRARY SERVICE RESPONSES

Basic Literacy: A library that offers Basic Literacy service addresses the need to read and to perform other essential daily tasks.

Business and Career Information: A library that offers Business and Career Information service addresses a need for information related to business, careers, work, entrepreneurship, personal finances, and obtaining employment.

Commons: A library that provides a Commons environment helps address the need of people to meet and interact with others in their community and to participate in public discourse about community issues.

Community Referral: A library that offers Community Referral addresses the need for information related to services provided by community agencies and organizations.

Consumer Information: A library that provides Consumer Information service helps to satisfy the need for information to make informed consumer decisions and to help residents become more self-sufficient.

Cultural Awareness: A library that offers Cultural Awareness service helps satisfy the desire of community residents to gain an understanding of their own cultural heritage and the cultural heritage of others.

Current Topics and Titles: A library that provides Current Topics and Titles helps to fulfill community residents' appetite for information about popular cultural and social trends and their desire for satisfying recreational experiences.

Formal Learning Support: A library that offers Formal Learning Support helps students who are enrolled in a formal program of education or who are pursuing their education through a program of home schooling to attain their educational goals.

General Information: A library that offers General Information helps meet the need for information and answers to questions on a broad array of topics related to work, school, and personal life.

Government Information: The library that offers Government Information service helps satisfy the need for information about elected officials and government agencies that enables people to participate in the democratic process.

Information Literacy: A library that provides Information Literacy service helps address the need for skills related to finding, evaluating and using information effectively.

Lifelong Learning: A library that provides Lifelong Learning service helps address the desire for self-directed personal growth and development opportunities.

Local History and Genealogy: A library that offers Local History and Genealogy service addresses the desire of community residents to know and better understand personal or community heritage.

Updated Library Service Responses (2007)

Be an Informed Citizen: Local, national, and world affairs. Residents will have the information they need to support and promote democracy, to fulfill their civic responsibilities at the local, state, and national levels, and to fully participate in community decision-making.

Build Successful Enterprises: Business and non-profit support. Business owners and non-profit organization directors and their managers will have the resources they need to develop and maintain strong, viable organizations.

Celebrate Diversity: Cultural awareness. Residents will have programs and services that promote appreciation and understanding of their personal heritage and the heritage of others in the community.

Connect to the Online World: Public Internet access. Residents will have high-speed access to the digital world with no unnecessary restrictions or fees to ensure that everyone can take advantage of the ever-growing resources and services available through the Internet.

Create Young Readers: Early literacy. Children from birth to age five will have programs and services designed to ensure that they will enter school ready to learn to read, write, and listen.

Discover Your Roots: Genealogy and local history. Residents and visitors will have the resources they need to connect the past with the present through their family histories and to understand the history and traditions of the community.

Express Creativity: Create and share content. Residents will have the services and support they need to express themselves by creating original print, video, audio, or visual content in a real-world or online environment.

Get Facts Fast: Ready reference. Residents will have someone to answer their questions on a wide array of topics of personal interest.

Know Your Community: Community resources and services. Residents will have a central source for information about the wide variety of programs, services, and activities provided by community agencies and organizations.

Learn to Read and Write: Adult, teen, and family literacy. Adults and teens will have the support they need to improve their literacy skills in order to meet their personal goals and fulfill their responsibilities as parents, citizens, and workers.

Make Career Choices: Job and career development. Adults and teens will have the skills and resources they need to identify career opportunities that suit their individual strengths and interests.

Make Informed Decisions: Health, wealth, and other life choices. Residents will have the resources they need to identify and analyze risks, benefits, and alternatives before making decisions that affect their lives.

Satisfy Curiosity: Lifelong learning. Residents will have the resources they need to explore topics of personal interest and continue to learn throughout their lives.

Stimulate Imagination: Reading, viewing, and listening for pleasure. Residents will have materials and programs that excite their imaginations and provide pleasurable reading, viewing, and listening experiences.

Succeed in School: Homework help. Students will have the resources they need to succeed in school.

Understand How to Find, Evaluate, and Use Information: Information fluency. Residents will know when they need information to resolve an issue or answer a question and will have the skills to search for, locate, evaluate, and effectively use information to meet their needs.

Visit a Comfortable Place: Physical and virtual spaces. Residents will have safe and welcoming physical places to meet and interact with others or to sit quietly and read and will have open and accessible virtual spaces that support networking.

Welcome to the United States: New immigrants will have information on citizenship, English Language Learning (ELL), employment, public schooling, health and safety, available social services, and any other topics that they need to participate successfully in American life.

SOURCE: 2007 Public Library Service Responses by June Garcia and Sandra Nelson, for the Public Library Association, a division of the American Library Association

"Planning for Results: A Public Library Transformation Process" (1997)

APPENDIX C:

GLOSSARY OF TERMS AND ACRONYMS

Anchor Institution – permanent resources and fixtures in the community, usually non-profit or government funded enterprises, and often include schools, hospitals, cultural institutions, and public libraries.

Anchor of Anchors – the community anchor, which rises above to serve the community as the primary anchor, leading and connecting together other anchors, and the community as a whole.

CAC – Communication Action Context - the tangible (e.g., institutional resources, social services, transportation, technological infrastructure) and intangible resources (eg., street safety and appearance, ethnic diversity, employment conditions) that facilitate communication between residents; available resources and neighborhood factors that can promote or impede communication, such as safety, spaces for civic and social engagement, quality of life and local services.

CIT – Communication Infrastructure Theory - idea that a communication infrastructure (Figure. 1) is made up of a storytelling system (macro-, meso-, and micro-level storytelling actors), or storytelling network (STN), set within the communication action context (CAC), which enable or constrains connections between storytellers. CIT is used to differentiate local communities in terms of whether they have a communication infrastructure that can be activated to construct community, thereby enabling collective action for common purpose by analyzing a community's capacity for storytelling, and thus the ability of residents and local actors to build and maintain community.

ICSN – "integrated connectedness to a storytelling network" – The extent to which community storytellers (local media, community organizations and residents) are connected. The summation of interactions and connections between local media and community organizations, and the intensity of interpersonal neighborhood storytelling.

STN – Neighborhood Storytelling Network - network of actors involved in creating and sharing the "story," or local news and content, of a community, exists within the CAC, and is comprised of 3 groups of storytelling agents: community organizations (businesses, organizations, institutions), local media (newspapers, television, radio), and resident networks (neighborhood groups, social clubs, families, friends). Communication occurs among these groups as well as between these groups and members of the public

RTX – Rural Town X - the rural town under study

Storytelling - the act of storytellers within the community to "create a conversation about the neighborhood –its problems, opportunities, and events" through which "people are able to create the sense and reality of belonging to a community." A representation of the community itself, expressed through verbal, written, and implied communication.

APPENDIX D:

LIST OF INTERVIEW PARTICIPANTS

(NUMBERED AND RENAMED)

- 1. Alex Local Newspaper Reporter
- 2. Anya Executive, Local Telecommunications Company
- 3. Brittany Board of Education Administrator
- 4. Candice Local Events Coordinator and Social Club Coordinator
- 5. Denice Social Worker
- 6. Damien Retired Businessman
- 7. Daniel Principal and Sunday School Teacher
- 8. Felicia Restaurant Owner
- 9. Gerald Industrial plant leader
- 10. Harris Mayor, Retired Educator
- 11. Halley Preschool Teacher
- 12. Josie Career Coach, Artist
- 13. Jenny Non-Profit Executive Director
- 14. Janice Retired Educator, Volunteer
- 15. Jack Business Manager, Restauranteur
- 16. Mollie Economic Developer
- 17. Matt Emergency Services Director
- 18. Noah Elected Official, Military, IT
- 19. Peggy Social Worker, Jobs Program Coordinator
- 20. Patrick College Student
- 21. Rita Pharmacist
- 22. Ruby Library Administrator
- 23. Roger Law Enforcement Officer
- 24. Sandy Homeschool Mom, Social Media Volunteer Communications
- 25. Selina Senior Center Director
- 26. Sony Agricultural Cooperative Services Officer
- 27. Stuart Business Manager
- 28. Shane Radio Station Personnel, Retired Educator
- 29. Susan Native American Education Coordinator
- 30. Tina Business Manager
- 31. Taylor Hospital Administrator
- 32. Tosha Single, Employed Mom

APPENDIX E:

IRB APPROVAL



August 28, 2017

Jessica Ross School of Library & Information Studies The University of Alabama Box 870252

Re: IRB # 17-OR-288, "Examination of Communication 'Infostructures' in a Rural Community"

Dear Ms. Ross:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your application will expire on August 24, 2018. If your research will continue beyond this date, please complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, please complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Request for Study Closure Form.

Please use reproductions of the IRB approved <u>stamped</u> consent forms to obtain consent from your participants.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Carpantato T. Myles, MSM, CIM, CIP
Director & Research Compliance Officer
Office for Research Compliance

358 Rose Administration Building | Box 870127 | Tuscaloosa, AL 35487-0127 205-348-8461 | Fax 205-348-7189 | Toll Free 1-877-820-3066

UNIVERSITY OF ALABAMA HUMAN RESEARCH PROTECTION PROGRAM CONSENT FORM FOR NONMEDICAL INTERVIEW STUDY UNIVERSITY OF ALABAMA

Individual's Consent to be in a Research Study

You are being asked to be in a research study. This study is called "Examination of Communication "Infostructures" in a Rural Community." This study is being done by Jessica Ross. She is a doctoral student and research assistant in the College of Communication and Information Science at the University of Alabama and is not receiving additional salary for this work.

What is this study about?

Communicating in a rural area is often challenging. The purpose of this study is to identify and better understand existing avenues of communication in a small, rural municipality. By identifying the primary ways people create, share and use information in rural communities, communication voids will be identified so that the challenges of communication may be addressed in the future. This study also intends to identify the role of the public library in rural communication, as well as whether or not it is viewed as a leader, among organizations within the community. You will be asked about the forms of communication you use most often, which ones are most or least successful.

Why is this study important—What good will the results do?

We hope to discover how people and organizations actually communicate in rural communities as well as possible ways to improve communication in a rural community by examining the resources or deficiencies in the community that contribute to a more or less efficient communications. This study may reveal ways that public libraries can become a more integral part of the communication system within a rural community by leveraging the unique resources libraries provide and activating a new role as an anchor institution for local communication.

Why have I been asked to take part in this study?

You are 18 years old or older and have agreed to participate in this study. When contacted by Jessica Ross, you gave us your contact information. You told us that you are a resident of Chatom, AL or are employed in the town of Chatom.

How many other people will be in this study?

The investigator hopes to interview a total of 15-20 people from Chatom, Alabama within the next 2 months.

What will I be asked to do in this study?

If you agree to be in this study, Jessica Ross will interview you in the library, your place of work, or a place of your own choosing about your experiences with sharing information with others in Chatom. You will be asked questions about how you and your organization prefer to share information with the public and which means of communication are the most successful or most challenging and possible ways to improve communications. The interviewer would like to audio record the interview to be sure that all your words are captured accurately. However, if you do not want to be recorded, simply tell the interviewer, who will then ask that a research assistant

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CONSENT FORM APPROVED: \$-25-17
EXPIRATION DATE: 8-24-18

join in the interview to take only handwritten notes. In order to participate in the study, you must also agree to participate in one of 2 forums to continue discussion on this topic once all interviews are completed. During each forum, a group of 8-12 previously interviewed participants will further discuss their experiences when communicating with the community and possible improvements and solutions that could be suggested.

How much time will I spend being in this study?

The interview should last about 45-60 minutes, depending on how much information about your experiences you choose to share. The forum will last approximately 60 minutes. The total amount of time required will be 2-3 hours of your time.

Will being in this study cost me anything?
The only cost to you from this study is your time.

Will I be compensated for being in this study?

No compensation will be offered for participation in the study.

What are the risks (problems or dangers) from being this study?

We do not anticipate any risks to you participating in this study other than those encountered in day-to-day life. You can control this possibility by not being in the study and can decide to withdraw from the study at any time.

What are the benefits of being in this study?

There are no direct benefits to you unless you find it pleasant or helpful to describe your experiences regarding communicating with others in our community. You may also feel good about knowing that you have helped researchers learn more about the strengths and challenges associated with communications in Chatom so that they might be addressed in the future.

How will my privacy be protected?

You are free to decide where we will visit you so we can talk without being overheard. We will visit you in the privacy of your office, conference rooms at the library, or other places that you find most comfortable.

How will my confidentiality be protected?

The only place where your name appears in connection with this study is on this informed consent and a master list that will be used only by Jessica Ross. This master list and records of this study will be kept private during the study. In any sort of report we make public, we will not include your name or organization name. Research records will be kept in a locked file; only the primary researcher, Jessica Ross, will have access to the identifying records during the study. After data is collected and transcribed, all identifying information will be destroyed or deidentified. If we audio record the interview, we will destroy the recording after it has been transcribed, which we anticipate will be within two months of the recorded interview. You may also refuse to be audiotaped, in which case the interviewer will take handwritten notes. We will write research articles on this study but participants will be identified only as persons from Chatom, Alabama and by participant interview in articles and publications.

What are the alternatives to being in this study? The only alternative is not to participate.

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What are my rights as a participant?

Being in this study is totally voluntary. It is your free choice. You may choose not to be in it at all. If you start the study, you can stop at any time. Not participating or stopping participation will have no effect on your relationships with the researcher. The University of Alabama Institutional Review Board is a committee that looks out for the ethical treatment of people in research studies. They may review the study records if they wish. This is to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if I have questions or problems? If you have questions about this study right now, please ask them. If you have questions later on, please call Ms. Ross at 251-490-2947 or Dr. Jeff Weddle at 205-348-4610. If you have questions or complaints about your rights as a research participant, call Ms. Tanta Myles, the Research Compliance Officer of the University at 205-348-8461 or toll-free at 1-877-820-3066. You may also ask questions, make a suggestion, or file complaints and concerns through the IRB Outreach Website at http://osp.ua.edu/site/PRCO_Welcome.html.

I, chance to ask questions. I will receive a cop	, have read this consent form. I have had a y of this consent form.
I agree to have my interview and f	focus group discussions audio recorded.
I do not agree to have my interview	w and focus group discussions audio recorded.
Signature of Research Participant	Date
Signature of Researcher	Date

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