UTILIZING COMMUNITY CAPITALS TO REVITALIZE RURAL COMMUNITIES THROUGH EXTENSION PROGRAMMING

by

CHRISTINA T. GARNER

(Under the Direction of NICHOLAS FUHRMAN)

ABSTRACT

Evolving over time, Extension has expanded its programming to meet diverse needs across the nation. In Georgia, UGA Extension operates in all 159 counties, where agents and specialists collaborate to address community needs. Extension plays a unique role in building relationships, conducting needs assessments, and contributing to the development of healthier and more productive communities. This dissertation used the community capitals framework to assess the current state of community capitals in a rural Georgia county and the community-based social marketing theory to better understand what tools may be utilized for sustained behavior change and increased engagement within rural communities. Additionally, the dissertation introduced the Integrated Community Enhancement (ICE) Model as a resource for Extension professionals to align programming focused on behavior change with broader community development efforts.

INDEX WORDS: Community development; Community capitals; Extension; Needs assessment

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CHRISTINA T. GARNER

Bachelor of Science in Agriculture, University of Georgia, 2017

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CHRISTINA T. GARNER

Major Professor:	Nick Fuhrman
Committee:	Abigail Borron
	Alexa Lamm
	Alison Berg

Electronic Version Approved:

Ron Walcott
Dean of the Graduate School
The University of Georgia
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DEDICATION

This dissertation is dedicated to my parents, Tamara and Duggan Garner. Thank you for providing the foundation to my success. Your dedication in raising me has been a cornerstone of my academic and professional journey. The foundation of my childhood not only shaped my scholarly pursuits but also molded me into the person I am today. This doctoral dissertation stands as a testament to your relentless belief in me and the values you instilled in me – perseverance, resilience, and the pursuit of knowledge. Momma, I can't wait to celebrate with you at graduation!

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CHAPTER 1

INTRODUCTION

Enacted in 1914, the Smith Lever Act established Extension services, solidifying the collaboration between the United States Department of Agriculture (USDA) and land-grant universities to implement research and deliver agricultural education throughout the country (Gould et al., 2014). The Extension system was specifically designed by Congress to tackle issues exclusively related to rural agriculture (NIFA, n.d.). During that era, over 50 percent of the United States population resided in rural areas, with 30 percent of the workforce involved in farming. The Cooperative Extension System (CES) enables farmers, ranchers, and communities of various scales to confront their challenges, embrace evolving technology, enhance nutrition and food safety, ready themselves for emergencies, respond effectively, and safeguard the environment (NIFA, n.d.). In fact, the roots of Extension run deep; back to agricultural clubs and societies that emerged in the early 1800s following the American Revolution (NIFA, n.d.). In 1819, an influential agriculture journal named *American Farmer* encouraged farmers to share their accomplishments and problem-solving methods. Extension's early involvement in rural America made the American agricultural revolution possible with assisting fewer farmers to produce more food (NIFA, n.d.).

Despite the everchanging landscape, Extension serves a significant role in rural, urban and suburban areas across the nation. Still today, Extension agents can be found helping farmers, educating youth, leading financial education classes and so much more! Today, approximately 3,000 offices across 70 land-grant institutions form the Cooperative Extension Service nationally

(Bond et al., 2022). Extension relies on a complex blend of federal, state, and local funding to deliver research-based education, resources, and support to citizens in each state. Across the nation, there are a variety of different structures to the organization. In Georgia, there are several leadership positions such as Associate Dean for Extension, District Extension directors, Program Development Coordinators, and specialists. Additionally, there are agents and professional staff in the area of 4-H agents, Family and Consumer Sciences, Agricultural and Natural Resources, Administrative Assistants, and countless volunteers all working to make the Extension model work in Georgia (UGA Extension, n.d.).

Georgia Extension is unique in that all 159 counties have an Extension presence (UGA Extension, n.d.). Other states have similar models such as University of Tennessee which is divided into three districts with representation in all 95 counties (UT Extension, n.d.). Other states such as Missouri have four grand challenges that their Extension team is working towards; agricultural growth and stewardship, educational access and excellence, economic opportunity, and health and wellbeing (MU Extension, n.d.). Each state you looked at has a similar structure but different variances. As mentioned above, University of Georgia has 4-H Youth Development, Family and Consumer Sciences (FACS), and Agricultural and Natural Resources (ANR) program areas (UGA Extension, n.d.). While there may not be an agent representing all three program areas in every county, UGA offers the research-based knowledge and resources for all program areas within all 159 counties (UGA Extension, n.d.). UGA Extension is able to provide this education in each community through extensive community support. Community relationships are the foundation of Extension's ability to reach clients. Community support is critical to UGA Extension as we are partially funded by the county government in each county we have a presence. "Local funding sources provide 1/3 to ½ of our employee salaries…without

local funding, we would not exist" (A. Scarrow, personal communication, November 6, 2022). Community relations and monetary support both play a role in community research within Extension.

Community Development within Extension

Community development is a holistic and participatory process that aims to enhance the social, economic, and cultural well-being of a specific geographic area or a particular group of people. It involves collaborative efforts to empower communities, improve infrastructure, and create sustainable solutions to address local needs and aspirations (Kretzmann & McKnight, 1993). It involves the collaboration and active participation of community members, organizations, and institutions to identify and address social, economic, environmental, and cultural needs and challenges. Community development initiatives can take various forms, including housing and infrastructure projects, economic development programs, educational initiatives, health and wellness interventions, cultural and recreational activities, and environmental conservation efforts. The specific strategies and priorities pursued in community development often vary based on the unique characteristics, priorities, and challenges of each community.

While already taking place indirectly through Extension work, the formal acknowledgment of community development as an integral component of the Cooperative Extension Service system occurred in 1955 when the U.S. Congress amended the Smith-Lever Act (NIFA, n.d.). This amendment, known as the 1955 Act, empowered Extension to contribute to farm income supplementation by strengthening and expanding industries. Furthermore, additional federal funds were allocated to the land-grant system to hire rural development agents (Phifer, 1990). Another amendment to the Smith-Lever Act transpired in 1961, introducing

Section 3(d), permitting the use of federal funds to support community resource and economic development initiatives (Urbanowitz & Wilcox, 2013).

A pivotal moment for land-grant university-based community development programs unfolded in 1972 with the enactment of the Rural Development Act of 1972. According to Roth (2002), this Act "initiated a new era of Federal rural development policy, explicitly designating rural development as a Federal policy goal with specific purposes and programs" (p.5). The most influential aspect of the Rural Development Act of 1972 on the community development efforts of the land-grant system was Title V, one of the six titles in the legislation. Title V facilitated the allocation of funds on a formula basis to state land-grant colleges for research and Extension projects pertaining to rural development and small farms (Roth, 2002).

While the Extension community development program saw significant growth in the 1970s, the 1980s brought about challenging times. A major factor was the 1981 Agricultural Appropriations Act, which mandated the consolidation of all Title V funds into the general Hatch and Smith-Lever formula funds allocated to state land-grant universities (Gould et al., 2014). Although these funds were intended to remain designated for rural community development research and Extension, they gradually shifted towards non-rural community development activities (Brown, 1982; Beaulieu & Voth, 1984). Adding to the setbacks in the Extension community development program were substantial reductions in Smith-Lever funds proposed during Ronald Reagan's presidency (Dillman, 1986). While the severe cuts were not fully implemented, they set a precedent that led to noticeable reductions in the Extension community development program (Ahearn et al., 2003). Only in recent years has the Extension community development program started to recover from the significant challenges it faced in the 1980s (Gould et al., 2014).

The current priorities of the Extension community development program, also commonly known as "Community Resource and Economic Development" or "Community and Economic Development," were established by a national team (Beaulieu & Cordes, 2014). The team consisted of representatives from 1862, 1890, and 1994 land-grant universities, Regional Rural Development Center directors/staff, national program leaders, and key members of the National Association of Community Development Extension Professionals (Beaulieu & Cordes, 2014). Their report, entitled "Strategic Directions for Extension Community Resource and Economic Development," was released in March 2009 by the Southern Rural Development Center (2009). The document outlines three overarching themes that continue to shape the work of Extension community development programs today (Southern Rural Development Center, 2009).

Modern Community Development Efforts Within Extension

Three predominant themes have been highlighted which are most relevant to Georgia Extension, including Building Economically Viable Communities, Renewing Civic Engagement, and Enhancing Community Decision-Making and Governance Ideas at Work (Southern Rural Development Center, 2009). Extension Community Development (CD) is exploring pathways to assist communities in enhancing and expanding their distinctive assets. Building Economically Viable Communities involves initiatives to bolster entrepreneurship, stimulate business growth through ecommerce, enhance the health of existing firms via business retention and expansion programs, invest in local food systems development, promote eco-tourism, and capitalize on the competitive strengths of different regions (Beaulieu & Cordes, 2014). Community Development within Extension recognizes the essential need to revive and broaden civic participation among local individuals, institutions, and organizations (Beaulieu & Cordes, 2014). This is crucial for garnering support and momentum for the challenging decisions that communities must confront

today. To achieve this, Extension CD is actively pursuing established and innovative science-based strategies to diversify the active involvement of people and organizations in addressing the challenges impacting community well-being (Beaulieu & Cordes, 2014).

Today, the legislation continues to allow for professionals within Extension to directly engage in community development while assisting communities with the challenges they face. The position of Extension is a neutral one which enables the professionals to often become a key player in community coalitions. Often times, Extension is a crucial element in supporting rural livelihoods and sustainable community change (Davis, 2016). Even through budget reductions and shifts in organization priorities, Extension agents continue to provide community development, both directly and indirectly, within the communities they serve. Extension collaborates with various stakeholders, including government agencies, non-profit organizations, businesses, schools, and community groups, to conduct needs assessments, leverage resources, offer expertise, and support for community development efforts. By fostering partnerships, Extension enhances the effectiveness and sustainability of its programs and initiatives (Kahin et al., 2020). While Extension professionals strive to build community, little is known about combining programming efforts with community development.

Statement of the Problem

Understanding the social norms and networks within a rural community is foundational to understanding the community (Read et al., 2020). Demographic factors significantly shape the structure of social networks. For example, in rural areas, age plays a crucial role, particularly for older community members who establish social connections at senior centers or churches. They often rely on neighbors and friends, given the separation from their children who typically relocate to metropolitan areas (Wells, 2009). The social norms of older adults influence their

perceptions of independence and health (Wells, 2009). Consequently, a thorough understanding of a community's demographics is essential, particularly when preparing for health crises or assessing rural health (Kohon & Carder, 2014). Therefore, it becomes crucial to ensure representation from all community groups when developing programs and utilizing appropriate community diagnostics to assess rural community health, communication, and resilience levels (Borron et al., 2019).

Research has consistently shown that community leaders serve as effective instruments in guiding, supporting, and enabling community development and change (Kirk & Shutte, 2004). Consequently, the design, delivery, and evaluation of community-based programs must consider the unique attributes of each community. Extension professionals, who serve as agents of land-grant university systems, reside and work alongside community members, providing educational knowledge in the areas of agricultural and natural resources, youth development, family, nutrition, and community development. This engagement aims to address pertinent issues within communities. Extension professionals often function as catalysts for change, advocating for transformation from within the community (Buys & Rennekamp, 2020). These professionals actively immerse themselves in their respective communities, possessing a deep understanding of available resources and the specific needs and challenges that exist. This positioning empowers Extension to serve as a catalyst for facilitating community transformation. Nonetheless, county agents face constraints with regard to the tools and resources at their disposal for orchestrating these changes. To more effectively address the needs of the community, there is a pressing need for enhancements in the tools and resources provided to county agents.

Significance of the Study

Extension is responsible for bringing research carried out at the university-level to the community-level through programming and education. While many extension programs seek to demonstrate knowledge gained (Shaw et al., 2015), an alternative goal, especially in the area of health, is to create habits of desired health, such as positive family interactions and bonding, healthy living, or physical activity and emotional health (Pratt & Bowman, 2008). The success of many health initiatives depends on differing scales based on many factors. Yet, it remains challenging to educate the public in a manner that leads to targeted behavioral changes in individuals, let alone achieving significant community impact (Hood et al., 2018; Nancy & Dongre, 2021). However, there is mounting evidence that, with the right approach, individuals can be encouraged to adopt behaviors that eventually become enduring habits in their lives. Whether it's practices like recycling, composting, responsible pet ownership, or water conservation, the public is increasingly adopting new behaviors while relinquishing old ones (McKenzie-Mohr et al., 2012).

Despite the current research showing the ability to create measurable change at the individual and community levels, there is a gap in the literature specifically related to identifying and capitalizing on the strengths and assets of a community in the context of social norms and community member commitment for a more sustainable result. This dissertation has the potential to address this gap in the literature while also proposing a new model for engaging community members in improving both their community and lives. With this information, Cooperative Extension organizations may be able to directly align programming to fit the needs of communities across Georgia with specific attention to community resources and development.

Additionally, this dissertation includes a new model, designed by the combination of the community capitals framework (CCF) and community-based social marketing (CBSM) which provides a more comprehensive vision for Extension programming and community development than is possible by using either CCF or CBSM independently. CCF is a framework that provides a view point for understanding and assessing the many factors of community development (Flora & Flora, 1993). CBSM is a behavior-focused approach that uses specific marketing strategies to produce desired behavior changes (McKenzie-Mohr et al., 2012). The CCF, through tools such as the CD+SI toolkit utilized in article one, allows us to capture the perceptions of the community in regard to community capitals and perceived levels of personal agency of community members. The baseline diagnostics collected through the toolkit can be referenced throughout the planning, implementation, and evaluative process, ensuring a robust framework and toolkit for assessing community attributes. This facilitates programming efforts and impact analyses in the most suitable manner possible (Borron et al., 2020).

Purpose of the Study

This dissertation provides additional empirical evidence of how Extension practitioners can utilize CCF to capture the current state of the communities they serve. By combining those efforts with CBSM, professionals are able to create actionable steps to improve communities. Both identifying the levels of each of the seven community capitals and identifying community members' perceived levels of personal agency within their communities allows practitioners to create a baseline. This process can be incredibly helpful when conducting a community needs assessment used for strategic planning, program development, identification of community partners and even identifying goals to work toward in the communities they serve. This

dissertation provides more insight into the challenges that rural communities face while also proposing a useable model for Extension programming.

Introduction of the Studies

The purpose of this dissertation was to examine community capitals within a rural community using a two-fold approach described in articles one and two while also proposing a more comprehensive model for Extension programming and community development in the third article. This dissertation, including the model, will allow Extension agents to promote sustainable, long-term engagement among community stakeholders, especially connected to health-related programming and improvements. The dissertation utilized the community capitals framework (CCF) (2004) and community-based social marketing Theory (CBSM) (2011) to create the new Integrated Community Enhancement (ICE) Model.

This dissertation consists of three independent articles. Article one included a study with the purpose of evaluating the current state of community capitals within Stewart County, Georgia and identifying community members' levels of personal agency to establish a community profile based on local perceptions. Areas such as trust, concerns, and public leaders were examined through community capitals to establish the community profile. These perceptions were collected using the CD+SI Toolkit. The toolkit captured the dual perceptions of individuals within a community - their perceptions of the community as well as their perceived personal agency within the community (Borron & Lamm, 2019). The study in article one also included secondary data to support a holistic community profile. The secondary data were used to triangulate findings within the perception data collected by the CD+SI Toolkit.

The purpose of article two was to examine existing data sets from the Healthier Together (HT) project in Stewart County, Georgia through a community-based social marketing lens to

better understand what tools may be utilized for sustained behavior change and increased engagement within rural communities. CBSM is a behavior-focused approach to traditional knowledge-intensive programs that applies commercial marketing strategies to produce desired behavior change for the wellbeing of individuals and the whole community (McKenzie-Mohr et al., 2012). The study sought to answer research questions regarding the barriers and benefits within the community along with CBSM behavior change tools by reviewing one on one and focus group interview data collected with members of the community.

Finally, article three proposed a new conceptual model, the Integrated Community Enhancement (ICE) Model, for identifying and building community capitals through a CBSM approach. The proposed ICE Model focuses on one or more selected community capitals to be improved with a community-based approach spanning from beginning (assessment of community capitals) to end (broad scale implementation). The proposed model, a result of the combination of the CCF and CBSM approaches, instills a community-based approach to systematic improvement within a community. The frame combines the structure of CBSM to help Extension educators implement strategies that encourage sustainable behavior change that builds a thriving, strong community as defined within the CCF.

Research Questions

The dissertation will be guided by the following research questions:

1. What is the current perceived state of community capitals within Stewart County, GA and personal agency levels of community members?
2. What CBMS behavior change tools may be utilized for sustained behavior change and increased engagement within rural communities?

3. How can the combination of the community capitals framework and community-based social marketing theory, through use of the Integrated Community Engagement Model, guide Extension programming?

Theoretical Framework

Communities are complex with many parts to be understood. This dissertation was guided by both the community capitals framework (Flora & Flora, 2004) and community-based social marketing Theory (McKenzie-Mohr et al., 2012). Both models offer promise in the context of rural community development for positive social change. The influence of social factors on health is substantiated by robust and consistently observed connections between various health metrics and individuals' socioeconomic circumstances or social standing (Braveman & Gottlieb, 2014; Hosseini Shokouh et al., 2017; Whitman et al., 2022). These often encompass income, level of education, or position within an occupational hierarchy (Bravemen & Gottlieb, 2014). This work is a foundational component of the Extension Framework for Health Equity and Well-being (Burton et al., 2021) which Extension practitioners nation-wide use to develop effective outreach and intervention programs. By utilizing CBSM and CCF through the studies in this dissertation, we work toward many of the recommendations suggested in the framework such as utilizing community assessment processes, investing in success and visibility of Extension, utilizing a community development approach, and establishing partnerships (Burton et al., 2021) while also working towards sustainable behavior change, supported by CBSM. The proposed combination instills a community-based approach to systematic, improvement within a community.

Community Capitals Framework

The community capitals framework (CCF) provides a comprehensive lens for understanding and assessing the multifaceted dimensions of community development (Flora & Flora, 1993). Developed by Flora and Flora in the late 1990s, this framework identifies seven distinct types of capital that collectively contribute to the overall well-being and sustainability of a community. The Sustainable Livelihoods Approach (SLA) heavily influenced the community capitals framework. This approach emerged as a way of thinking about the conditions in which poor or vulnerable populations live their day to day lives (Flora et al., 2016). Beginning in the 1980s, the approach assisted in understanding the management of poverty as well as plans to reduce poverty (Gutierrez-Montes et al., 2009). As the approach evolved, it broadened to include elements of household financial plans to cover day to day expenses by blending incomes and assessing development (Gutierrez-Montes et al., 2009). Initially, the four key aspects were economic, social, environmental, and productive. Later, the aspects expanded to five; human, social, natural, physical, and financial. The approach focused on "improvement in food security, nutrition and health, increased sources and levels of income, greater resilience to stress and shocks, general improvement of household and community well-being, and sustainable natural resource management" (Gutierrez-Montes et al., 2009, p.108). Examples of objectives are food security, overall improvement in household and community well-being, and sustainable management practices – all of which are included in the CCF (Flora et al., 2016). The addition of cultural and political capital within the CCF allows for examination of power or access to power in addition to understanding the local knowledge and traditions that are not included in SLA (Gutierrez-Montes et al., 2009). In the context of this dissertation, the CCF provides guidance on capturing the perceptions of community members through the use of the CD+SI Toolkit.

CCF is a theoretical framework developed to not only analyze but also understand the multiple dimensions and interworking relationships of community development. The framework identifies seven key types of capital that collectively contribute to the overall well-being and sustainability of a community (Flora & Flora, 1993). The seven capitals included in the framework are natural, cultural, human, social, financial, political and built (Flora & Flora, 1993).

1. Natural capital encompasses the environmental assets and resources of a community, forming the basis for economic activities and influencing the community's resilience to environmental challenges (Flora & Flora, 1993). Examples include land, water, air quality, and ecosystems.
2. Cultural capital encompasses the unique identity, traditions, and heritage of a community, fostering social cohesion and influencing community resilience (Flora & Flora, 2004). A few examples are language, customs, art, folklore, historical sites, and community celebrations. Overall it contributes to a sense of community identity, social cohesion, and a shared understanding of values.
3. Human capital is crucial for community development, as it enhances innovation, productivity, and the overall quality of life. Human capital represents the knowledge, skills, health, and education of community members, contributing to innovation, productivity, and overall community well-being (Flora & Flora, 2008). Examples could be education levels, workforce skills, health status, and community members' ability to adapt to change.
4. Social Capital relates to the networks, relationships, and social cohesion within a community. It involves the networks and relationships within a community,

promoting cooperation, collaboration, and collective action (Woolcock & Narayan, 2000). A few examples are social networks, trust, community organizations, and civic engagement.

5. Financial capital relates to the monetary resources available within a community, influencing economic development and supporting community initiatives (Flora & Flora, 2004). It involves the monetary resources available within a community. Examples are income levels, savings, investments, and access to financial institutions.
6. Political capital involves the influence, power, and governance structures within a community, impacting decision-making processes and policies (Flora & Flora, 2008). A few examples are political leadership, community governance, and access to decision-making processes.
7. Built capital encompasses the physical infrastructure of a community, providing the foundation for economic activities and community life (Flora & Flora, 1993). Housing, transportation, utilities, schools, healthcare facilities, and recreational spaces are all examples.

The community capitals framework emphasizes the interconnectedness of these seven capitals, highlighting the need for a holistic approach to community development (Emery & Flora, 2006). By applying the community capitals framework, researchers and practitioners can gain an overall understanding of the diverse factors influencing community development, facilitating more targeted and effective interventions to enhance overall community well-being and sustainability (Emery & Flora, 2006). Analyzing and enhancing these capitals collectively contribute to building resilient, sustainable, and vibrant communities. Additionally, it is a

valuable tool that aids community development by providing a comprehensive and holistic approach to understanding the various dimensions that contribute to a community's well-being.

The CCF enables a thorough examination of a community's strengths and resources across the seven distinct capitals mentioned previously. This holistic assessment helps identify key assets and areas for improvement, ensuring a comprehensive understanding of the community's potential. The structure allows for strategic planning by categorizing the community resources into different capitals. Community leaders and Extension agents can prioritize and allocate resources effectively, addressing specific needs and capitalizing on existing strengths. This strategic approach enhances the efficiency and impact of development initiatives. Also, through this approach, the gaps and opportunities can be highlighted within the strategic plan (Emery & Flora, 2006). This insight is crucial for crafting targeted interventions that address specific challenges or leverage existing capacities, fostering sustainable development. Additionally, as the name suggests, it involves the community in the approach. By emphasizing the importance of community participation and engagement throughout the assessment process, it empowers them to contribute to decision-making and ensures that development initiatives align with the community's values and aspirations (Emery & Flora, 2006).

Community capitals framework serves as a powerful guide for community development efforts, facilitating a nuanced understanding of a community's assets and needs. By harnessing this knowledge, communities and development practitioners can work collaboratively to create sustainable, resilient, and thriving environments (Emery & Flora, 2006). The community capitals framework (CCF) was created to provide a tool to map strategies and highlight capitals that contribute to a community’s well-being. Within the framework, capital is defined as “the

resources people and/or communities possess" (Gutierrez-Montes et al., 2009, p.109). The community capitals framework (Flora & Flora, 2004) was developed with seven resources or capitals defined: natural, human, cultural, social, financial, built, and political shown in Figure 1.1 below.

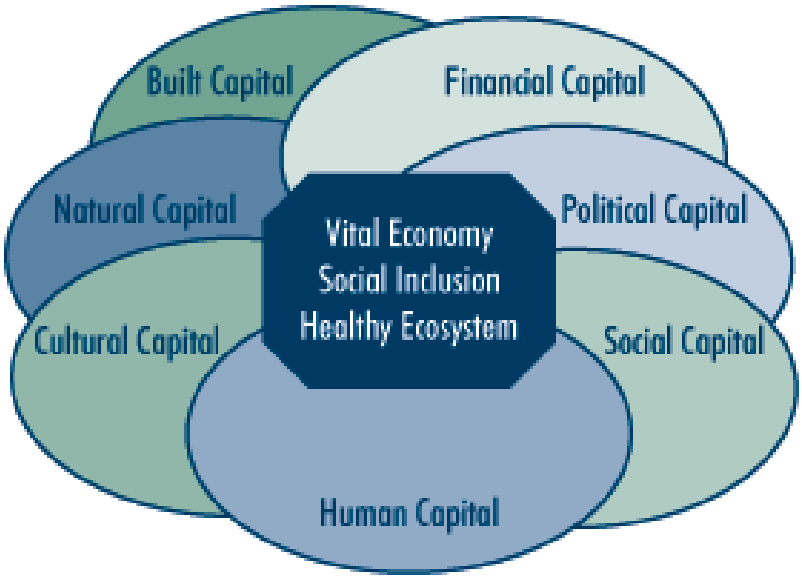

Figure 1.1. Seven community capitals (Flora & Flora, 2004)

Resources vary within each capital and can be leveraged to create additional resources as a contribution to a long-term community development process. From this more asset-based viewpoint, the process can be empowering as communities focus on what they currently have versus what they are lacking. Whether a community is ranked as one of the poorest or most established, CCF allows for communities to identify resources. When communities use these resources correctly, they are able to prosper and grow through a synergistic approach (Emery & Flora, 2006).

Table 1.1
Examples of Community Capitals

Community Capital	Example
Natural	Clean water, wildlife, timber, good soil, landscape
Human	Health, education, self-esteem of people, youth leadership
Cultural	History, beliefs, values, foods, festivals, cultural heritage
Social	Leadership, teamwork, mutual trust, shared future
Financial	Savings, debt capital, investments, fair wages, grants, banks
Built	Water systems, roads, buildings, internet, businesses, housing
Political	Leadership and engagement, voice in public issues

These seven capitals listed in Table 1 above are evaluated based on the extent to which they directly relate to community objectives. The CCF is built on the belief that communities have the ability to build capital and promote positive change by investing in already existing assets (Flora et al., 2016). The CCF approach allows for various elements, resources, and relationships to play a role in the contribution to the overall functioning of a community. The capitals can be divided into two main groups: human and material (Flora et al., 2004; Emery & Flora, 2006). Human refers to social, human, cultural, and political capitals. Material houses the natural, financial and built capitals (Emery & Flora, 2006). Interdependence, interaction, and synergy within the capitals creates a model in which one capital can affect one or more capitals, positively or negatively. In addition, if one or more capitals is severely affected or non-existent, the sustainability of the community can be affected, resulting in a domino effect (Gutierrez-Montes, 2005). Furthermore, an effort to balance among capitals has shown to be important since all capitals are needed.

Within CCF, the best results emerge when there is involvement from local and regional levels during each stage of projects: research, plan development and implementation, and evaluation (Gutierrez-Montes et al., 2009). For example, there are seven key principles that

projects should follow to achieve a people-centered dynamic. The principles any intervention should consider include:

- prioritizing and considering the objectives of the people involved first
- basing activities and initiatives on resources (human, social, cultural, natural, physical, financial, political) available
- recognizing the capacities of the people within the community to decide and act toward attaining a better quality of life
- proposing strategies to reinforce and use peoples' resources by focusing on existing assets to create more resources
- diversifying activities and links are considered key to centralize change efforts on multiple projects
- establishing strategic alliances and work coalitions
- reducing community vulnerability (especially of the poorest) and an increase of resilience through individual and collective actions (Gutierrez-Montes et al., 2009).

The CCF is often used within Extension programming and research to enhance community development initiatives. Extension professionals reaffirmed the importance of involving the community in both evaluation and learning by using the CCF to frame the rippling effects of tourism development in a local community with a participatory approach (Bhattacharyya et al., 2017). Additionally, the framework is often combined with other theories or frameworks to provide community development professionals with a spring board into revitalizing communities with limited resources. An example is the combination of the CCF with the community survival indicators (Fritz et al., 2007). The combination resulted in a realization

that intangibles such as social, cultural, human and political capital may be just as important if not more important in strong, viable communities (Fritz et al., 2007). This method can be used to pinpoint specific community partners to build a stronger foundation for improvement. Several other studies have employed the CCF to structure a data collection method with the intention of capitalizing strengths and cultivating capitals to advance communities for community members (Ricketts & Place, 2009; Cartwright & Gallagher, 2002; Robinson Jr. & Meikle-Yaw, 2007). While the CCF has been combined with other theoretical frameworks, little is known about the role of combining CCF with CBSM in the context of healthy living initiatives which are increasingly more relevant in Cooperative Extension program offerings nationally.

Community-based Social Marketing

Community-based social marketing (CBSM) is a theoretical framework that combines principles from social psychology, behavioral science, and marketing to influence and promote sustainable behaviors within communities (McKenzie-Mohr et al., 2012). CBSM aims to create positive social and environmental change by understanding and leveraging the factors that influence individuals' behaviors in a community context. CBSM represents a behavior-focused methodology, distinct from traditional knowledge-intensive programs, that integrates commercial marketing strategies (McKenzie-Mohr et al., 2012). Its primary goal is to prompt sustained and desired behavioral changes for the well-being of both individuals and the entire community (McKenzie-Mohr et al., 2012). The approach utilizes a toolkit known for its effectiveness in fostering behavioral change, placing significant emphasis on a community-based approach that emphasizes direct contact for optimal results (McKenzie-Mohr et al., 2012).

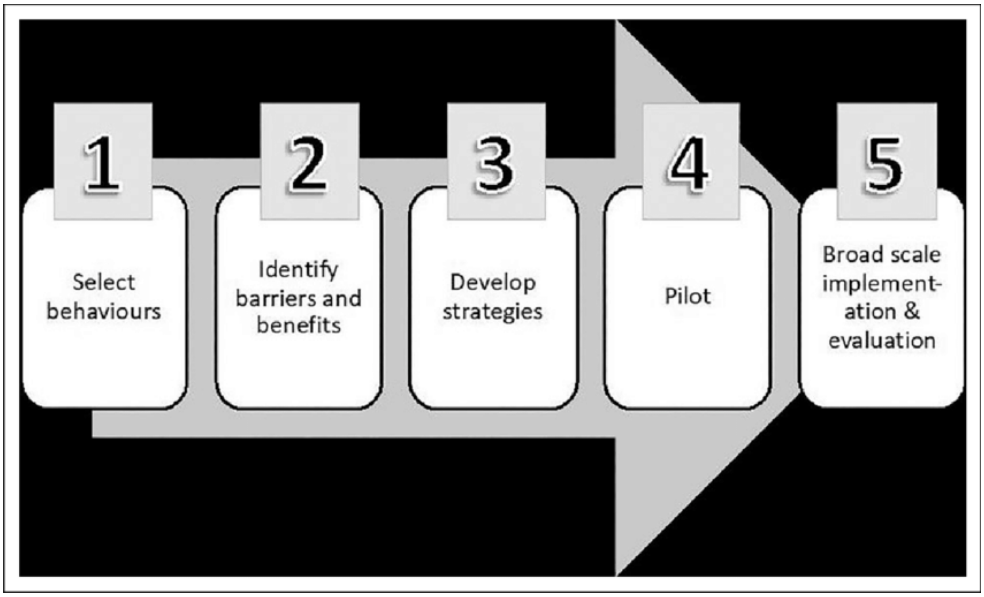

Figure 1.2. Steps included in community based social marketing theory (McKenzie-Mohr, 2011).

CBSM is built on key principles aimed at not only understanding the behavior but influencing the behavior within a community context. These principles guide the development and implementation of strategies to promote sustainable behaviors. CBSM follows a structured process consisting of five main steps (Figure 1.2): the selection of target behaviors, identification of barriers and benefits, development of strategies, pilot implementation, and subsequent broad-scale implementation and evaluation (McKenzie-Mohr et al., 2012). The first step includes a selection of the targeted behaviors. The targeted behaviors may be self-selected, selected based on specific data sets, grant funding based or other areas. It is important here to clearly define the desired behaviors that contribute to the overall well-being of the community. This step can also include beginning to build partnerships with local organizations, businesses, and government entities to enhance the reach and impact of interventions. These groups can also provide insight to the behavior. The team can collaborate to align CBSM initiatives with supportive policies and leverage existing community resources (McKenzie-Mohr et al., 2012).

The next stage is identifying barriers and benefits through gathering research aimed at understanding the behavior. This could include looking at individual and social factors. Individual factors include identifying and understanding the psychological and demographic factors that influence individual behaviors within a community (McKenzie-Mohr et al., 2012). Whereas, social factors look into examining the influence of social networks, relationships, and community structures on behavior. This area also recognizes the role of peer pressure, social approval, and community cohesion in shaping individual actions. It is important to identify perceived barriers preventing individuals from adopting desired behaviors and highlight the benefits associated with behavior change (McKenzie-Mohr et al., 2012).

This research leads right into the next step of developing strategies. This is a pivotal stage in the CBSM process involves crafting a strategy to encourage behavior change. This includes utilizing specific tools tailored to address the barriers and benefits identified within the target audience (McKenzie-Mohr et al., 2012). According to CBSM, there are seven key areas of focus that should be considered when designing strategies. The seven areas are commitment, social norms, incentives, convenience, social diffusion, prompts, and communication. This includes

- Attitudes, beliefs, values, and social norms that shape decision-making
- Developing strategies to overcome barriers and emphasize the positive outcomes and rewards associated with adopting sustainable behaviors
- Design interventions that utilize a combination of educational, normative, and structural approaches
- Foster community involvement and participation in the design and implementation of interventions

- Empower community members to take ownership of sustainable initiatives, creating a sense of collective responsibility and efficacy

The pilot test stage comes next. The pilot test might look different in each scenario based on the needs and project. It could be piloting with a smaller audience or only in one town of the county instead of the entire county at one time. This provides the opportunity for a test run of the project before too much time and resources are devoted to a project that may not meet the objectives. Once the pilot test has completed, feedback and evaluation can be solicited. The plan for the long-term sustainability of behavior changes by integrating them into the fabric of the community should be a topic of discussion. It should work to encourage the establishment of social norms that support sustainable behaviors, ensuring that the positive changes persist over time.

Additionally, implementing mechanisms for ongoing feedback and evaluation to assess the effectiveness of interventions is a way a community can continuously learn and grow (McKenzie-Mohr et al., 2012). This can be accomplished by monitoring changes in behavior, attitudes, and community norms over time. Also, adjust strategies based on feedback and learnings to endlessly improve the impact of the CBSM program. By integrating these elements into a cohesive framework, CBSM provides a systematic and community-centered approach to promoting sustainable behaviors, contributing to positive social and environmental outcomes (McKenzie-Mohr et al., 2012).

Summary of the Studies

Past studies have suggested that community change initiatives necessitate both the readiness and preparedness of citizens, involving awareness of the pertinent issue(s) and a commitment to change efforts (Walzer et al., 2016). Moreover, scholars and practitioners are

advised to give special attention to the implementation of an initiative, considering indirect impacts such as the augmentation of social capital and the enhancement of decision-making capacity within communities (Walzer et al., 2016). Through the three articles in this dissertation, Extension professionals are able to equip community members with the necessary knowledge and guidance to improve their communities. It provides the tools for Extension to continue developing trusted relationships and fostering collaboration that integrates citizen involvement and feedback which are crucial for the sustainability of community change efforts during formalized initiatives as well as the post-initiative phase (Bailey, 2014; Christens & Inzeo, 2015). With the information in these articles, Cooperative Extension organizations may be able to more seamlessly align programming efforts to fit the needs of communities with specific attention to community resources and development.

Key Terms

The following key terms are present throughout the study:

Community: represents a gathering of individuals united by a shared purpose or objective; social interaction and the enjoyment of companionship, bringing together individuals of diverse characteristics who are connected by social bonds, share common perspectives, and engage in collective endeavors within specific geographical locations or settings (MacQueen et al., 2001); Common interactions and key social relationships (Bellah et al., 1996).

Community Capital: available resources within a community and exploring strategic investments that can stimulate developments in various resource areas, often referred to as capitals (Emery et al., 2006; Gutierrez-Montes et al., 2009; Flora et al., 2016).

Community Development: holistic and participatory process that aims to enhance the social,

economic, and cultural well-being of a specific geographic area or a particular group of people (Kretzmann & McKnight, 1993).

Extension (Cooperative Extension): Enacted in 1914, the Smith Lever Act established Extension services, solidifying the collaboration between the United States Department of Agriculture (USDA) and land-grant universities to implement research and deliver agricultural education throughout the country (Gould et al., 2014; NIFA, n.d.).

Rural Communities: population under 10,000 residents and located outside of a community zone of a larger city (Mendelson & Bollman, 1999).

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CHAPTER 2

UNVEILING COMMUNITY CAPITALS: A COMPREHENSIVE ASSESSMENT OF RESOURCES AND NEEDS IN STEWART COUNTY, GEORGIA[1]

[1] Garner, Christina. To be submitted to the *Journal of the Community Development Society*.

Abstract

This study used the Community Diagnostics and Social Impact (CD +SI) Toolkit, based on the community capitals framework, to collect community member perceptions regarding community capitals and personal agency. Additionally, an overall community profile, to be used to inform Extension programming, was created based on the perceptions of community members coupled with secondary data for the community for each of the capitals in the study. Overall, respondents ranked social capital as the highest present capital in Stewart County in relation to perception of community and their perceived personal agency. Built-financial and natural capitals were among the lowest identified by respondents. Results from this study can be used as baseline data for Extension professionals to identify entry points into the community with targeted programming tailored to the communities they serve. Implications and recommendations for Extension practice and future research are discussed.

Introduction

To grasp the essence of rural communities, it is crucial to establish a foundational understanding of communities. Essentially, a community represents a gathering of individuals bound by a shared purpose or objective. It serves as a realm for social interaction and the enjoyment of companionship, bringing together individuals with diverse characteristics who are connected by social bonds, share common perspectives, and engage in collective endeavors within specific geographical locations or settings (MacQueen et al., 2001). While the concept of community often suggests unity or commonalities in characteristics and interests, it does not assume homogeneity among all its members.

Rural Communities

Rural communities, with populations under 10,000 residents and located outside of a

community zone of a larger city (Mendelson & Bollman, 1999), grapple with numerous challenges as they strive to enhance the well-being of local residents. The term "rural" encompasses a broad spectrum of environments, as defined by the U.S. Census Bureau as “all territory, persons, and housing units not defined as urban” (Ratcliffe et al., 2016, p. 2). This definition indicates that rural regions cover almost 97% of the total land within the United States. Within these rural landscapes, communities struggle with a distinct array of issues, including but not limited to health disparities, declining populations, economic stagnation, limited access to healthcare, scarcity of resources, financial constraints, and a higher percentage of families and individuals who do not have adequate insurance (Coughlin et al., 2019; Gusfield, 1975). While these circumstances can be challenging, a variety of communities have seen positive outcomes through community development initiatives (Majee et al., 2014; Roberts, 2011).

Community Development Initiatives

Various conceptualizations, such as collective impact, social learning, grassroots community organizing, communities of practice, and coalitions, have been employed to explain community-involved change and development initiatives, emphasizing social and organizational collaboration (Homel et al., 2019; Bailey, 2013; Christens & Inzeo, 2015). These initiatives, rooted in a paradigm of shared knowledge rather than transferred knowledge, often lay a comprehensive foundation for local transformation (Bailey, 2013). Both researchers and practitioners advocate for the use of shared knowledge as it facilitates the pursuit of change-oriented goals (Christens & Inzeo, 2015; McKenzie-Mohr, 2011). This approach entails community-level buy-in and ownership from the citizens directly impacted by potential change.

Previous studies have suggested that community change initiatives necessitate both readiness and preparedness among citizens, coupled with an understanding of the relevant

issue(s) and a commitment to change efforts (Walzer et al., 2016). Furthermore, scholars and practitioners are advised to give special attention to the implementation of an initiative, considering positive indirect impacts such as the growth of social capital and the enhancement of decision-making capacity within communities (Walzer et al., 2016). The sustainability of community change efforts, both during and after formalized initiatives, hinges on trusted relationships and collaboration that integrate citizen involvement and feedback (Bailey, 2013; Christens & Inzeo, 2015). Many community change initiatives have used a coalition-based approach to achieve these efforts. In Georgia specifically, coalitions have been used to increase access to healthier food options and physical activities to reduce obesity over the last seven years through a collaborative partnership between University of Georgia and Centers for Disease Control and Prevention (Jones et al., 2021; Randall et al., 2023; Sanders et al., 2022).

The process of community capacity building can result in improved knowledge, attitudes, skills, reflection, and practices to support community-led changes (Christens & Inzeo, 2015; Walzer et al., 2016). Building capacity at the community level is an ongoing journey of co-learning (Bailey, 2013) as well as the development and exercise of local power (Christens & Inzeo, 2015). Before community change or community development initiatives can truly be put into action, an account of a community's strengths, assets, and challenges should first be considered (Cameron & Wasacase, 2017). While this form of evaluation and needs assessment can be carried out in a variety of ways (Burnett et al., 2014; Etling & Maloney, 1995; Vines, 2021), one is through exploring the levels of community capitals within a community (Flora et al., 2004). Community capitals are resources present within all communities that can be used to leverage additional resources (Flora et al., 2004).

The process of developing a community should also take into consideration key voices within the it – not just community leaders, but community members (Cameron & Wasacase, 2017). Based on their unique placement in local communities, Cooperative Extension leaders can play an active role in identifying community member and key stakeholder voices (Jones et al., 2021; Majee et al., 2014; Sanders et al., 2023). Within Georgia, Cooperative Extension personnel serve in all 159 counties, including rural Stewart County (Powell, 2022), offering programs and resources related to Agricultural and Natural Resources (ANR), Family and Consumer Sciences (FACS) and 4-H Youth Development. Extension programs offered within each county are tailored to the needs of the community with respect to history, culture and individual circumstances (Estienne et al., 2016; Garst & McCawley, 2015).

Introduction to Stewart County

Established in 1830 by the state legislature, Stewart County was known for its transportation stations such as the Chattahoochee River, Native American Indian trails, carriage, railroad, and dirt road highways (Moye, 2016). As a result of movement throughout the county, new communities and town were established, each with its own unique characteristics and history. Despite the differences, each town revolved around two things: cotton and transportation, specifically railway. In a rural community such as Stewart County, the two went hand in hand. As the amount of cotton produced rose, so did the need for transportation. The railroad in Richland was a part of a larger train station network that traveled from Cordele to Americus and grew rapidly. “At one time in the late 1800s, Richland was a stopping point for six passenger trains each day” (Moye, 2016, p. 3).

In addition to the individuals who traveled through Stewart County and permanent residents, there was another group of people who were essential to cotton production - slaves.

While cotton was not always the most profitable for agricultural production, cotton became a commercial fortune in 1793 when Eli Whitney improved the cotton ginning process (Chaplin, 1991). Much of American history is built on the toil of laborers including the dreams of cotton farmers (Dattel, 2009). The movement of the agricultural shift to primarily cotton resulted in 10,000-15,000 slaves per year being sold to cotton states in 1823 (Dattel, 2009). This number grew exponentially each year until slavery was abolished by the 13th amendment in 1865. However, even though the Civil War was over, and slavery was abolished, the war on a racially divided country and equal rights was only just beginning. These drastic changes in commodities, human rights and the need for transportation through the very rural community had major impacts on community resources (community capitals) and the wellbeing of Stewart County residents.

Today, the county is home to 4,674 people (U.S. Census Bureau, 2023) and is divided into four towns: Richland, Lumpkin, Omaha, and Louvale. It is also home to two state parks; Providence Canyon State Park, also known as the “Little Grand Canyon” and Florence Marina State Park. The county’s agricultural industry includes the production of timber, cotton, and peanuts (U.S. Census Bureau, 2022; USDA ERS, 2019). The county is composed of residents who are 47.9% African American, 44.3% White, 4.2% Asian and 3.0% of two or more races (U.S. Census Bureau, 2022). Despite its access to the two state parks and the agriculture presence within the county, it is classified as a food desert, as defined by United States Department of Agriculture. Additionally, Stewart County has one of the highest obesity rates in the state at 44% (County Health Rankings, 2024) with 37.9% of the population living in poverty (U.S. Census Bureau, 2022; USDA ERS, 2019).

Study Justification

Understanding the dynamics of community capitals and the abilities of community members to leverage them is essential for effective community development and programming (Borron et al., 2020; Jacobs, 2007; Lamm et al., 2020; Mattos, 2015). Stewart County, Georgia, like many other regions, faces unique challenges and opportunities that require tailored interventions (Substance Abuse and Mental Health Services Administration, 2022). By collecting baseline data about communities, Extension professionals can tailor their programs to address specific challenges and leverage existing assets effectively (Powell, 2022). Through this study, researchers seek to gain valuable insights into the unique contexts of Stewart County, enabling them to develop more targeted, impactful, and sustainable community programs. This study aims to evaluate the current state of community capitals within Stewart County and identify community members' personal agency through their own perceptions. By gauging community members' perceptions of the seven community capitals, this research sheds light on the strengths, weaknesses, and opportunities within the community (Borron et al., 2020; Lamm et al., 2020). Such insights are crucial for designing targeted interventions that align with the community's needs and aspirations. By establishing a comprehensive community profile based on local perceptions, this research provides valuable insights for Extension professionals and community program developers (Borron et al., 2020; Lamm et al., 2020).

Theoretical Framework

This study uses the community capitals framework (CCF) as its theoretical foundation (Flora & Flora, 2004). In community-based research, practitioners aim to identify and leverage existing strengths, resources, and relationships within a community to address communal concerns (Cameron & Wasacase, 2017; Israel et al., 1998). The CCF can aid in categorizing and

assessing factors within a community that may facilitate or hinder access to resources (Flora & Gillespie, 2009). Serving as an analytical framework, the CCF organizes and evaluates information comprehensively regarding community resources or capitals for community development (Borron et al., 2020; Emery & Flora, 2006; Pigg et al., 2013). Capital, in this context, is defined as "any type of resource capable of producing additional resources" (Flora et al., 2004, p. 165), and when these resources are invested to generate new resources, they transform into capital (Flora et al., 2004).

Different communities draw upon their community capitals in unique ways when addressing problems and initiating change (Borron et al., 2020). Extension offers promise in the realm of the CCF in that Extension professionals can assist in engaging the community members throughout the process of gathering data as well as in the development process (Meendering et al., 2023; Majee et al., 2014). The seven interconnected capitals are categorized into two groups – material and human (Flora et al., 2004). Capitals are outlined in the following two sections based on their categorization within the framework.

Material Capitals

Natural Capital

The natural capital encompasses all environmental resources, both renewable and non-renewable, within a community (Folke et al., 1994; Costanza et al., 1997). Specifically, natural capital refers to a community's natural assets, such as forests, water resources, air quality, soil condition, geography and topography, local climate and weather, and physical amenities (Emery & Flora, 2006; Flora et al., 2016). While presenting opportunities, natural resources can also inhibit certain activities and restrict growth. They are both influenced and shaped by community endeavors (Flint, 2010; Flora et al, 2016).

Financial Capital

Financial capital refers to actual economic resources—tax revenues, community savings, fees, donations, assets, and more—that a community and its residents can access for developing and supporting wealth accumulation (Turner, 1999; Emery & Flora, 2006). It is essential for critical expenditures, including investments in natural capital conservation, educational opportunities, and built capital (infrastructure) that supports all capital activities. Financial capital is often the most cited form, given its quantifiable nature, making it a readily understood metric for determining programmatic impact (Flint, 2010).

Built Capital

Built capital comprises constructed infrastructures, such as roads, bridges, railroads, and factories, that support community activities related to other community capitals (Emery and Flora, 2006; Flint, 2010; Flora et al., 2016). While generally seen as positively influencing community development efforts, built capital can have negative consequences when its relationship to other capitals is not considered. For example, its impact on natural resources must be considered, and controversial projects may reduce social capital if conflicts between built capital needs and natural resource conservation exist (Flora et al., 2016). Built capital is closely linked to natural resources, influencing the design, construction, and availability of community infrastructure. Local geography, such as in more isolated rural communities, may impact the accessibility of built capital due to outdated communication modes (Flora, 2004).

Human Capitals

Social Capital

Characterized by trust and reciprocity among community members, social capital embodies mutual trust, collective identity, cooperation, and the sense of a shared future (Flora,

2004). In a community development context, it signifies the collective sentiment of an engaged and organized community working for changes that benefit all residents (Brown & Ashman, 1996; Turner, 1999). Social capital encompasses various elements of social organization, such as networks, norms, and trust, that enable cooperation and coordinated activities while promoting shared goals and ideas (Putnam et al., 1993, 1995a, 1995b, 2000). Increased social capital sustains a higher quality of life by facilitating healthy networks of civic engagement, social trust, acceptance of reciprocity norms, and efficient collective action (Putnam et al., 1995b, 1995a; Iivonen et al., 2011).

Human Capital

Referring to the intrinsic or achieved physical and cognitive attributes of community residents, human capital includes knowledge obtained through education and training (formal and informal), skills and abilities, physical and mental health, and self-esteem (Becker, 1962). Human capital represents the characteristics and potentials of individuals determined by the intersection of nature and nurture (social interactions and the environment) (Flint, 2010). It also encompasses the quality of group leaders and their capacity for positive facilitation. Human capital advances programmatic solutions to community problems and extends a community's capacity for positive change by providing a source of physical and intellectual capabilities to identify and utilize intra-community assets and external resources (Emery & Flora, 2006; Flora et al., 2016).

Cultural Capital

Cultural capital refers to the manifestations of cognitive and physical qualities that enable individuals to engage in activities associated with higher societal status (Bourdieu, 2018). It entails an appreciation for the language, customs, and traditions associated with the dominant

culture (Sullivan, 2001; Bourdieu, 2018) and can determine personal and group agency within the existing community structure (Dutta, 2008). Cultural capital and the status it brings are associated with positive outcomes such as education and marital success which can allow individuals to establish and maintain their cultural standing (DiMaggio & Mohr, 1985; Sullivan, 2001). Cultural capital ultimately determines whose voices are heard, which voices have influence, and how creativity, innovation, and influence emerge and are nurtured (Emery & Flora, 2006).

Political Capital

Political capital his refers to a community's ability to maintain control of its affairs and exercise self-determination (Flint, 2010). More formally, it represents a community's capacity for transforming norms, practices, and values into rules that govern resource allocation (Flora et al., 2016). Political capital also refers to a community's ability to influence the enforcement of regulations (Flint, 2010). It has a consequential impact on a community's ability to decide which matters warrant attention and how policies and programs should be implemented to address important issues (Turner, 1999; Flint, 2010). Political capital results from the integration of social and financial capital, aligning community development strategies and programs with private sector assets and government resources (Turner, 1999).

Community Engagement as Measured using Community Capitals

Rural communities are systems in which each problem or issue is tied to the next (Fey et al., 2006). Communities and areas dedicated to addressing specific issues may discover that their endeavors offer only temporary relief, as they fail to tackle the intricately woven circumstances that give rise to numerous local challenges (Lamm et al., 2020). To examine the interworking pieces of communities, CCF can be used. CCF has been conceptualized as an interrelated web of

human and material assets. Lamm et al. (2020) introduced the Community Diagnostics and Social Impact Toolkit (CD+SI Toolkit) to assess community capital stocks, evaluating these assets based on community perceptions. Two scales were developed to collect two points of view: the individual's perceived personal agency within a community and the overall perception of community (Borron et al., 2019; Borron et al., 2021; Lamm et al., 2020). The data collected provided a baseline and insights into the community – shifting from an outside-in perspective to examine what an "inside-out perspective could look like" (Borron et al., 2019, p. 78). CCF data can be used as a baseline for any specific area – community, town, or county, and using the tool can enhance overall community development and vitality through distinct program areas (Borron et al., 2019).

CCF perception data can stand alone or be coupled with additional data to complete an inside out picture of a community. For example, county records might indicate there are five local parks within the community. However, the CCF perception data may indicate that while there are five local parks, many members of the community feel as though they cannot access the parks. Reasons for not being able to access the park could be transportation, location, safety, or the status of the park. The CD+SI Toolkit is designed identify community capitals as well as quantify them to establish entry points within a community (Lamm et al., 2020). Additionally, the tool is designed to highlight community strengths instead of focusing on what a community is lacking. It is recommended that professionals involved in community-level programming and capacity building should contemplate employing a tool capable of capturing a community's perceived capitals. Subsequently, utilizing this data to inform specific interventions is recommended (Lamm et al., 2020).

The CD + SI Toolkit's quantitative instrument has been tested for validity and reliability (Lamm et al., 2020). The instrument's validity was tested for individual and overall scales (constructs) using a panel of experts (contextual, scale development, and communication development) and descriptive statistics and Cronbach's alpha was used to gauge internal consistency (Lamm et al., 2021). Cronbach's alpha scores were calculated for each of the seven community capitals to determine reliability/consistency of responses within constructs, with built and financial sharing a combined construct. Individual construct alpha scores ranged from 0.85 (built-financial) to 0.94 (political) (Lamm et al., 2021). The overall index had a high level of internal consistency with a Cronbach's alpha of 0.97 (Lamm et al., 2021).

Data collected through use of the toolkit is helpful in creating comprehensive community profiles, pinpointing specific areas for thorough research or program design, steering policy formulation and implementation, and ultimately assessing the outcomes of community development programs and policies (Lamm et al., 2021). This viewpoint can support Extension programming with examining the levels of various capitals within a community, identifying where to begin interventions, and evaluating programmatic efforts (Sanders et al., 2023; Borron et al., 2021; Lamm et al., 2020).

Purpose and Research Objectives

The purpose of this study was to evaluate the current state of community capitals within Stewart County, Georgia and identify community members' levels of personal agency to establish a community profile based on local perceptions. This information is important for Extension professionals and community program developers because the combined perspectives provide a comprehensive view of the community in which strengths, opportunities, consistencies, and gaps can be examined (Borron et al., 2021; Lamm et al., 2020). These areas provide a

platform to inform program development opportunities within the community. This article was guided by the following three research objectives:

1. Determine community members' perceptions of the current levels of the seven community capitals in Stewart County, Georgia
2. Quantify community members' perceived levels of personal agency with regard to each of the community capitals
3. Create a community profile based on the perceptions of community members and secondary data for the community to be used to inform Extension programming

Methods and Procedures

Population and Sample

The targeted population of respondents in this study included those who have a vested interest in Stewart County. In this case, someone with a vested interest was defined as someone living or working within the county. These individuals contribute to the economy of Stewart County and participate in local organizations through volunteering, serving on leadership boards, and spending much of their time in the community. Specifically, this population was selected because these are the individuals who are most impacted by the levels of community capitals in the county. The respondents were selected through a non-probability convenience sampling method in which any individual within the population could participate in the study.

Potential respondents included residents of Stewart County who are 18 years of age or older, excluding those currently housed in the Stewart Detention Center, as well as individuals employed in Stewart County but living outside of the county. At the time of the study, there were 4,674 people living in Stewart County with 4,095 individuals 18 years of age or older. On average, since 2021, the Stewart Detention Center housed 1,181 detainees daily (Stewart County

Detention Center, 2021). According to the worker flows in, out and within Stewart County, approximately 944 individuals living in a different county commute into the Stewart County for work (U.S. Census Bureau, 2021).

Thus, the total potential number of respondents for this study was 3,858 (U.S. Census Bureau, 2021; U.S. Census Bureau, 2022; Stewart County Detention Center, 2021). As outlined by Israel (2012), sample size for this population with a percent error of ±10% where the confidence level is 95% and a precision of 0.5 would be 98 responses. Therefore, the goal for the current study was 100 respondents that live or work in Stewart county.

Instrument Development and Pilot Test

Quantitative data were collected using the preexisting (CD+SI toolkit) survey instrument (Lamm et al., 2021). The CD+SI instrument incorporates a community capitals framework based scale to analyze specific aspects of each community capital at a county level. This provides unique entry points into each community based on the indices of each capital and allows for a more targeted and intentional design in program planning and evaluation in each community (Borron et al., 2020; Lamm et al., 2020). The instrument gauges the perceptions of community members by asking respondents to indicate their levels of agreement with statements on a five-point Likert-type scale (strongly disagree to strongly agree) for each of the included community capitals that serve as individual constructs. Part one of the instrument measured community members' perceptions of the current levels of the seven community capitals in the county while part two of the instrument measured community members' perceived personal agency in regard to each of the community capitals. The built-financial construct was a combined construct within this tool as these capitals both have assets that are closely interconnected (Fey et al., 2006; Flora & Bregendahl, 2012). Additionally, an exploratory factor analysis indicated that the items

represented one latent variable so the capitals were combined to form the combined construct (Borron et al., 2020). Each of the other capitals had its own individual construct.

Although the instrument had been used previously, a pilot test in a neighboring county with similar demographics was conducted to assess validity and reliability of part one and part two of the initial instrument with the local population. Part three, regarding the overall perception of the community was excluded from the pilot test due to time constraints of the survey setting (coalition meeting). This was deemed acceptable with consideration of the simplicity of items included within the construct. Pilot testing is a frequently employed method for pinpointing elements in a questionnaire that might require revision or removal (Fisher et al., 2001). Individuals were selected to participate in the pilot test based on their involvement in the community coalition within the neighboring county with a goal of 12 responses.

As respondents completed the pilot survey, they were asked to circle or highlight any words or phrases they did not understand. Respondents were also encouraged to provide feedback during or after the pilot testing to the researcher. Once the pilot responses were collected, final edits were made to the instrument to improve readability and reduce survey error. For example, the word advocacy within the political construct was replaced as suggested by the pilot test respondents. Tables 2.1-2.3 below reflect the final instrument items after pilot test changes were made.

Descriptive statistics and scale reliability for the pilot test can be found in Tables 2.1 and 2.2 below. Cronbach's alpha coefficients were calculated for each of the 12 constructs related to community capitals (parts one and two) that were included in the pilot test survey. Cronbach's alpha was used to establish each scale's level of internal consistency (Tavakol & Dennick, 2011). Cronbach's alpha values range between 0.00 (indicating no correlation among item responses)

and 1.00 (representing perfect correlation among item responses), with higher values suggesting greater internal consistency (Shaw et al., 2011). Generally, a Cronbach's alpha score of 0.7 or higher is deemed acceptable, signifying a high level of internal consistency for the construct (Tavakol & Dennick, 2011). Pilot test constructs ranged from 0.50 (perceived personal agency – political construct) to 0.92 (perception of community – human construct).

Table 2.1

Descriptive statistics and scale reliability for perception of community capitals – pilot test Scale

	N	Minimum	Maximum	Mean	SD	Cronbach's Alpha (α)	Number of items
Human	16	2.13	3.94	2.74	1.07	0.92	7
Built-Financial	16	2.31	3.75	3.10	.77	0.77	7
Cultural	16	2.38	3.75	3.16	.91	0.82	5
Political	16	3.38	3.75	3.51	.71	0.78	5
Natural	16	3.25	3.87	3.58	.73	0.79	5
Social	16	3.50	4.06	3.85	.60	0.90	7

While the political, natural, and social constructs within the perceived personal agency section of the instrument had observed Cronbach's Alpha coefficients below the traditional threshold for acceptability (Tavakol & Dennick, 2011), the scale was deemed acceptable and retained based on guidance within the literature regarding the previously established scales (Borron et al., 2020; Peters, 2014).

Table 2.2

Descriptive statistics and scale reliability for perceived personal agency – pilot test Scale

	N	Minimum	Maximum	Mean	SD	Cronbach's Alpha (α)	Number of items
Natural	16	2.94	3.62	3.20	.50	0.61	5
Built-Financial	16	2.94	3.81	3.41	.63	0.81	6
Political	16	2.56	4.18	3.58	.35	0.50	7
Social	16	3.13	4.18	3.63	.50	0.69	6
Human	16	2.75	4.43	3.63	.48	0.71	7
Cultural	16	3.06	4.00	3.68	.67	0.85	6

As consistent with the pilot test, part one of the final instrument, in Appendix B, measured community members' perceptions of the current levels of the seven community capitals in Stewart County, Georgia. Part one included six constructs with five to seven items on a five-point Likert-type scale (strongly disagree to strongly agree) for each of the included community capitals (Lamm et al., 2020). Constructs began with "Today, I believe my community…" with the exception of the social construct which began with "Today, I believe my community is made up of individuals who…" The constructs and items for part one of the instrument utilized in the current study are displayed in Table 2.3 below.

Table 2.3

Perception of community capitals construct items (Lamm et al., 2020).

Capital	*Item*
Social	Value the concerns that other community members have
	Associate with their neighbors
	Trust their neighbors
	Associate with their local leaders
	Trust their local leaders
	Feel they can voice their concerns
	Feel they can be part of a project to solve problems
Human	Has meaningful employment to attract young people
	Has access to strong educational opportunities from Kindergarten through 12th grade
	Has access to strong higher education opportunities
	Offers residents access to a wide range of healthcare
	Offers residents access to professional development opportunities
	Offers residents access to personal development opportunities
	Community diversity is represented in the community leaders
Cultural	Reflects the potentially diversity values held by individual in the community
	Hosts events that recognize the community's heritage
	Has organizations that preserve the community's history
	Has local retail shops that offer culturally-relevant products
	Is culturally diverse
Political	Has public leaders (non-elected officials) who work to affect change
	Has public leaders (non-elected officials) who listen to community groups
	Has political leaders who work to affect change
	Has political leaders who listen to community groups

	Has community groups that have the ability to mobilize resources for community change
Natural	Has valuable natural resources
	Takes advantage of natural resources for community development
	Takes advantage of natural resources for job creation
	Has parks accessible to the public
	Works to preserve natural resources
Built-Financial	Has many types of employers
	Has stable employment
	Seeking opportunities to bring in new businesses
	Has charitable organizations that invest in the community
	Has access to necessary transportation services
	Has access to necessary communication services (internet, cable, cell service, etc.)
	Has a vision for the future

Part two of the instrument measured community members' perceived personal agency in regard to each of the community capitals. Part two consisted of six constructs with five to seven items each. Constructs began with "If I choose to, I have the ability to…" The constructs and items for part two of the instrument utilized in the current study are displayed in Table 2.4 below.

Table 2.4

Perception of personal agency construct items (Borron et al., 2020)

Capital	*Item*
Social	Listen to the concerns of community members
	Join others to support community efforts
	Join others to support local change efforts
	Voice my concerns
	Help develop a conversation around important issues
	Feel part of my community
Human	Be a leader in my community
	Manage differences among community members and groups
	Learn about techniques and tools that can be used for community-based decision making
	Take action related to the challenges that affect my community
	Collaborate to impact community change
	Make my community better
	Access resources for personal needs

Cultural	Live out my moral beliefs
	Live out my ethical values
	Practice cultural traditions
	Participate in one or more important social movements
	Access culturally-relevant products
	Develop a connection to the place I live
Political	Be part of a group that works to affect change
	Communicate with local government leaders
	Communicate with county and state government leaders
	Communicate with federal government leaders
	Join advocacy coalitions that address local issues
	Develop advocacy coalitions that address local issues
	Mobilize resources for community change
Natural	Develop projects that support my community's natural resources
	Access parks in my community
	Access quality water
	Voice my opinion on the use of our natural resources
	Voice my opinion on land development issues
Built-Financial	Contribute to the local economy
	Help create local jobs
	Help save local jobs
	Apply for grants to support a community project
	Apply for grants to support business development
	Inform the development of information-sharing tools (i.e., websites or phone apps)

Additionally, there was an overall perception of community construct included within the instrument. This construct asked respondents to indicate their levels of agreement or disagreement with the items listed in Table 2.5 on a five-point Likert-type scale (strongly disagree to strongly agree).

Table 2.5

Overall perception of community construct items (Lamm et al., 2020)

Construct	*Item*
Overall	I can get what I need in this community
	This community helps me fulfill my needs
	I feel like a member of this community
	I belong in the community
	I have a say about what goes on in my community
	People in this community are good at influencing each other

	I feel connected to this community
	I have a good bond with others in this community

Before completing the survey, respondents had the opportunity to respond to relevant demographic questions. Respondents were asked to identify their gender, race, ethnicity, tie to Stewart County (resident and/or location of employment), household income, and highest level of education (Appendix B).

Data Collection

Using the tailored design method (Dillman, 2014), the survey instrument, developed online via Qualtrics, was distributed using mixed modes. Mixing modes, allowed the researcher to take advantage of the strengths of certain modes, such as convenience of online surveys, to overcome the weaknesses of others, such as lack of internet access (online) or inability to meet in person (paper) to minimize total survey error as much as possible with consideration of access within the community (Dillman et al., 2014). The instrument was distributed electronically through email and social media as well as face-to-face paper distribution by the researcher (Extension agent) via food pick-ups, community events and during Extension meetings. The two methods, online and paper, were selected to help "all types of sample members to respond within resource and time constraints" (Dillman, 2014, p. 16). The researcher also shared status updates regarding survey distribution via email and social media as "knowing that others have completed a survey can encourage people to participate" (Dillman et al., 2014, p. 30).

To increase response rate, those who participated in the study had the opportunity to be entered into a drawing for an Amazon gift card valued at $25. There was a statement included on the page that informed respondents that sharing their personal information was optional and should only be completed if respondents wished to be entered into the drawing for the gift card.

To maintain anonymity, the last page of the physical survey was removeable, allowing respondents to write their name, email address and phone number for contact in the event they won the incentive.

The survey yielded 94 usable responses out of 133, representing a 70.7% completion rate for those who started the survey. Approximately 28 of the respondents abandoned the survey after completing the first 8 constructs. The demographic data collected by the survey are shown in Tables 2.6-2.8. The majority of community members who responded were female (54.3%) and white (58.5%). Respondents' ages ranged from 20 to 60 and above with the largest percentage being 30 to 39 (34%). Additionally, total income for respondents ranged from less than $14,999 (9.56%) to $250,000 and over (2.13%) with most respondents indicating a total income between $25,000 to $49.999 (41.49%). Of the 94 responses analyzed for the highest level of education received, the largest number of respondents (29.8%) indicated a 4-year degree but most respondents (55.3%) had completed two years or less of college.

Table 2.6
Demographics of respondents

Characteristic		*f*	*%*
Gender			
Female		51	54.3%
Male		43	45.7%
	Total	94	100%
Race and/or Ethnicity (Check all that apply)			
White		55	58.5%
Black or African American		28	29.8%
American Indian or Alaska Native		10	10.6%
Asian		3	3.2%
	Total	96	102.1%
Age			
20 to 29		13	13.8%
30 to 39		32	34.0%
40 to 49		13	13.8%
50 to 59		8	8.6%
60 and over		28	29.8%
	Total	94	100%
Total Income			
Less than $14,999		9	9.56%

$15,000 to $24,999		12	12.77%
$25,000 to $49,999		39	41.49%
$50,000 to $79,999		15	15.96%
$80,000 to $149,999		12	12.77%
$150,000 to $249,999		4	4.26%
$250,000 or more		2	2.13%
Missing		1	1.06
	Total	94	100%
Highest Level of Education Completed			
Less than 12th grade		4	4.3%
High School graduate or GED		13	13.8%
Some college, no degree		18	19.1%
2-year college (Associates, technical, etc.)		17	18.1%
4-year college (Bachelor's)		28	29.8%
Graduate or Professional (Master's, PhD, M.B.A., EdD)		14	14.9%
	Total	94	100%

Furthermore, the survey requested residence information from the respondents. The residency demographics collected by the survey are shown in Table 2.7. Of the 94 useable responses, the majority of respondents (83%) currently live in Stewart County. The amount of time lived in the county ranged from less than 1 year (3.2%) to 20+ years (31.9%) with most of the community members living in Lumpkin (30.9%) or Richland (25.5%).

Table 2.7

Demographics of respondents – residence Information

Characteristic		*f*	*%*
Do you currently live in Stewart County?			
Yes		78	83.0%
No		13	13.8%
Missing		3	3.2%
	Total	94	100%
How long have you lived in Stewart County?			
Less than 1 year		3	3.2%
1 – 4 years		21	22.3%
5 - 9 years		12	12.8%
10 – 14 years		11	11.7%
15 – 19 years		8	8.5%
20+ years		30	31.9%
Not applicable		9	9.6%
	Total	94	100%
In which zip code do you live?			
31815 – Lumpkin		29	30.9%
31825 – Richland		24	25.5%
31814 – Louvale		16	17%
31821 – Omaha		11	11.7%

Other		5	5.3%
Not applicable		9	9.6%
	Total	94	100%

Lastly, the survey requested occupation information from the respondents. These data are shown in Table 2.8. Of the 94 useable responses, the majority of respondents currently work in Stewart County (68.1%). Many of the respondents worked in the school system (24.5%) with others indicating other employers (18.1%) listing entities such as Dollar General, gas stations or other government organizations. The amount of time working in Stewart County ranged from less than 1 year (5.3%) to 20+ years (16%).

Table 2.8

Demographics of respondents – occupation information

Characteristic		*f*	*%*
Do you currently work in Stewart County?			
Yes		64	68.1%
No		29	30.8%
Missing		1	1.1%
	Total	94	100%
Workplace in Stewart County			
School System		23	24.5%
Core Civic		12	12.7%
Retired		12	12.7%
County Government		9	9.7%
City Government		8	8.5%
Other		17	18.1%
Not applicable		13	13.8%
	Total	94	100%
How long have you worked in Stewart County?			
Less than 1 year		5	5.3%
1-4 years		25	26.6%
5 – 9 years		20	21.3%
10 – 14 years		8	8.5%
15 – 19 years		3	3.2%
20+ years		15	16%
Not applicable		18	19.1%
	Total	94	100%

Data Analysis

After completion of the survey, quantitative data were analyzed using SPSS version 28 to examine the respondents' perceptions of the community and personal agency in relation to the seven community capitals within Stewart County. An overall score for each capital's construct was calculated in SPSS to determine the mean and standard deviation of responses following an item analysis examining each item's contribution to the overall construct's reliability. As noted above in the pilot test, Cronbach's alpha was used to establish each scale's level of internal consistency (Tavakol & Dennick, 2011). A Cronbach's alpha score of 0.7 or higher is deemed acceptable, signifying a high level of internal consistency for the construct (Tavakol & Dennick, 2011). Cronbach's alpha coefficients were calculated for each of the 13 constructs that were included in the final instrument to establish each scale's level of internal consistency (Tavakol & Dennick, 2011). Descriptive statistics, one-way analysis of variance, and Pearson correlations were used to address the research objectives. Analysis of variance examined the potential for significant differences among mean community capital construct scores and the communities with which respondents resided within Stewart County. Pearson correlations tested for significant relationships among community capitals. Alpha was set a priori at 0.05 for all tests of significance.

Results/Findings

The objectives of this study were to (1) determine community members' perceptions of the current levels of the seven community capitals in Stewart County, Georgia, (2) quantify community members' perceived levels of personal agency with regard to each of the community capitals, and (3) create a community profile based on the perceptions of community members and secondary data for the community to be used to inform Extension programming. The results

are organized by each community capital included within the instrument. Within each capital, the results are structured as follows: (1) perceived levels of community capitals frequency counts, (2) one-way analysis of variance between zip codes (towns) based on perceptions of community capitals, (3) perceived personal agency frequency counts, (4) one-way analysis of variance between zip codes (towns) based on perceptions of personal agency, (5) and secondary data regarding each capital derived from sources including the U.S. Census Bureau, River Valley Regional Commission, Stewart County Comprehensive Plan, and Georgia Department of Public Health to support a community profile. Each of the six capital constructs are organized in this order.

Following the capital constructs are frequency counts and analysis of variance between the zip codes for the overall perception of community construct. Descriptive statistics for perceived levels of community capitals, perception of personal agency, and the overall perceptions of community follows. Finally, correlation matrices between each of the six constructs for perceived levels of community capitals and perception of personal agency are included at the end of the results section to test for significant associations.

Built-Financial Capital

Perceived Levels of Community Capitals – Built-Financial Capital

Tables 2.9-2.13 display respondents' perceptions regarding the built-financial construct. When asked if respondents believe Stewart County has many types of employees, 52.1% of respondents disagreed (33.0%) or strongly disagreed (19.1%). Additionally, 50% of respondents did not believe the county has access to adequate transportation as 25.5% disagreed and 24.5% strongly disagreed. Similar results were seen within the access to communication services as 51.1% either disagreed (27.7%) or strongly disagreed (23.4%). The majority of respondents

(55.4%) agree (42.6%) or strongly agree (12.8%) that the community has charitable organizations that invest in the community.

Table 2.9
Participant responses for perceived levels of community capitals – built-financial construct (N=94)

Statement "Today I believe my community…"					
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Has many types of employers	19.1	33.0	17.0	19.1	11.7
Has stable employment	14.9	27.7	16.0	28.7	12.8
Seeks opportunities to bring in new businesses	16.0	22.3	11.7	39.4	10.6
Has charitable organizations that invest in the community	12.8	16.0	16.0	42.6	12.8
Has access to necessary transportation services	24.5	25.5	8.5	27.7	13.8
Has access to necessary communication services	23.4	27.7	7.4	21.3	20.2
Has a vision for the future	13.8	24.5	17.0	25.5	19.1

One-way analysis of variance, shown in Table 2.10, revealed a statistically significant difference ($F = 5.077$, $p = 0.001$) between the towns based on the perceived levels of community capitals within the built-financial construct. Multiple comparisons examined using Tukey and Games-Howell tests revealed statistically significant differences between Louvale and Lumpkin ($p = 0.032$) and Louvale and Richland ($p = <0.001$).

Table 2.10
Perceived levels of community capitals comparison between towns - built-financial capitals

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	22.460	4	5.615	5.077	.001
Within Groups	88.478	80	1.106		
Total	110.938	84			

Perceived Personal Agency – Built-Financial Capital

Table 2.11 displays respondents' perceived personal agency regarding the built-financial construct. A majority of community members agreed (57.41%) or strongly agreed (21.3%) that if they choose to, they have the ability to contribute to the local economy. Additionally, 44.7% of respondents strongly agree or agree that they can apply for grants to support a community project.

Table 2.11

Participant responses for perceived personal agency – built-financial construct (N=94)

Statement "If I choose to, I have the ability to…"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Contribute to the local economy	4.3	9.6	7.4	57.4	21.3
Help create local jobs	7.4	22.3	22.3	30.9	17.0
Help save local jobs	7.4	23.4	20.2	36.2	12.8
Apply for grants to support a community project	2.1	27.7	20.2	30.9	19.1
Apply for grants to support business development	2.1	29.8	23.4	27.7	17.0
Inform the development of information-sharing tools	3.2	25.5	20.2	35.1	16.0

One-way analysis of variance, shown in Table 2.12, revealed a statistically significant difference ($F = 4.126$, $p = 0.004$) between the towns based on the personal agency perceptions within the built-financial construct. Multiple comparisons examined using Tukey and Games-Howell tests revealed statistically significant differences between Louvale and Richland ($p = 0.003$).

Table 2.12

Perceived personal agency comparison between towns - built-financial capitals

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	13.418	4	3.355	4.126	.004
Within Groups	65.037	80	.813		
Total	78.456	84			

Secondary Data – Built-Financial Capitals

The built and financial capitals included areas such as roads, bridges, factories, geography, infrastructure, tax revenues, donations, and charitable organizations. Survey data indicated 41.5% of respondents strongly agreed or agreed that the county had stable employment while 52% strongly disagreed or disagreed that the county had many types of employers. According to 2022 U.S. Census data, Stewart County had a 31.7% employment rate with 70% of those employees working for a private company, 22.4% working for local, state or federal government, and 4.1% being self-employed. There were 58 employers listed with the top 10 employers for the county being B & S Air, Inc., Dixie Discount, Dollar General, Four County Health & Rehabilitation, Omacare, Perry Brothers OIL CO., INC., Southwest Georgia Health Care, Inc., Stewart Correctional Facility, Transcor America, LLC, and WC Bradley Farms, Inc (U.S. Census Bureau, 2022). While the Census (2022) indicated several types of employers, most of the companies have less than 10 employees. Additional employment values are detailed in Table 2.13 below.

Table 2.13

Employment values for Stewart County (U.S. Census, 2022)

Measure	Value (%)
Agriculture, forestry, fishing and hunting, and mining	6.0
Construction	6.8
Manufacturing	17.6
Wholesale trade	0.0
Retail trade	8.6
Transportation and warehousing, and utilities	13.2

Information	0.0
Finance and insurance, and real estate and rental and leasing	5.0
Professional, scientific, management, administrative, and waste management services	4.5
Educational services and health care and social assistance	20.6
Arts, entertainment, and recreation, and accommodation and food services	4.1
Other services, except public transportation	6.4
Public administration	7.2

Additionally, the average travel time to work is 36 minutes for workers age 16+ (U.S. Census Bureau, 2022). The Stewart County worker flow can be found in Figure 2.1 (U.S. Census Bureau, 2021). Many residents (764) travel to surrounding counties for work while some residents (197) work within the county. Many people (944) residing outside of Stewart County, travel into the county for work.

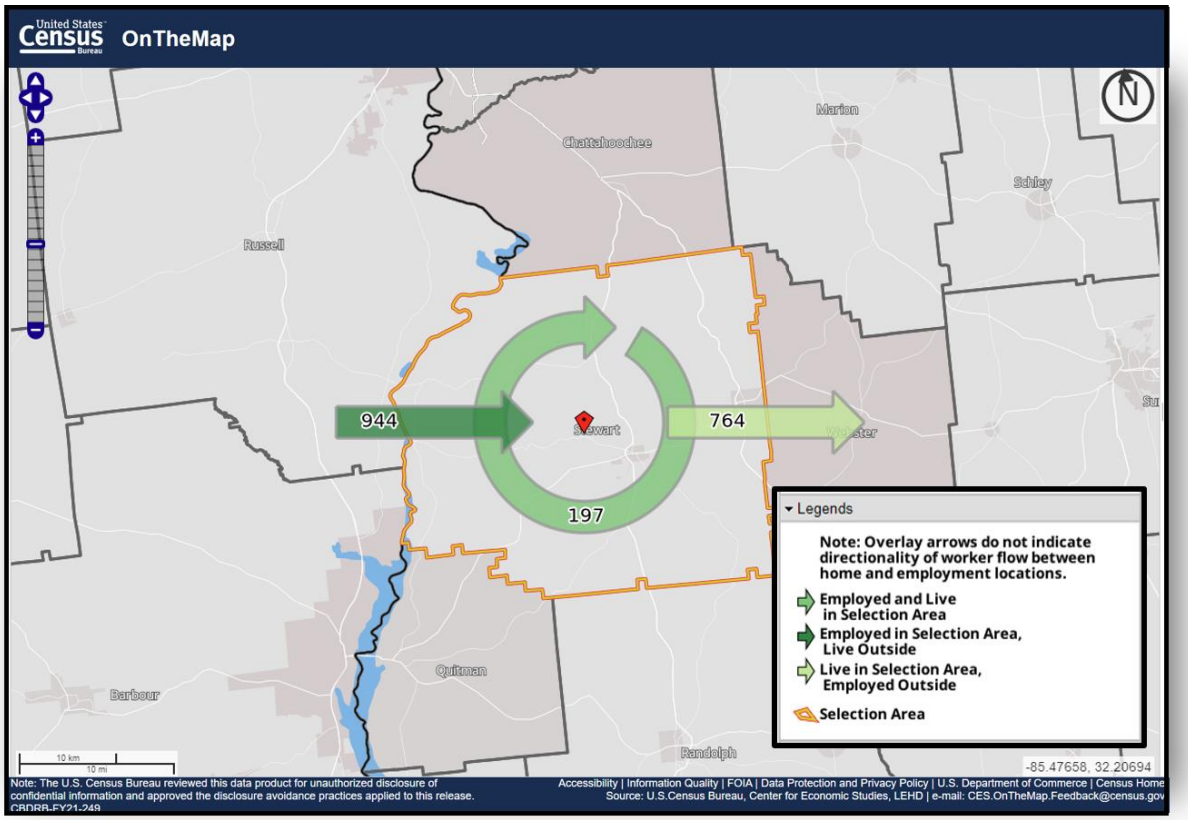

Figure 2.1. Stewart County worker flow (U.S. Census Bureau, 2021).

While many residents travel outside of the county for work, survey data indicated that 50% of respondents did not believe the county has access to adequate transportation. Additional research also investigated the condition of the roadways in which respondents travel. The county facility crew has approximately 290 miles of county roads, 45 miles of which are dirt or unpaved, that they are responsible for maintaining according to the River Valley Regional Commission (Morris, 2022). Several major highways that pass through the county account for a total of 423 miles of roadway. These include U.S. Route 27, U.S. Route 280, and numerous state highways. Notably, there were 7 deaths on Stewart County roadways from 2016-2020 according to the Georgia Department of Public Health (2022).

In regard to infrastructure, survey data indicated that 51.1% of respondents disagreed or strongly disagreed that the county has access to communication services. Secondary data showed approximately 70% of the county has access to some form of internet (U.S. Census Bureau, 2022).

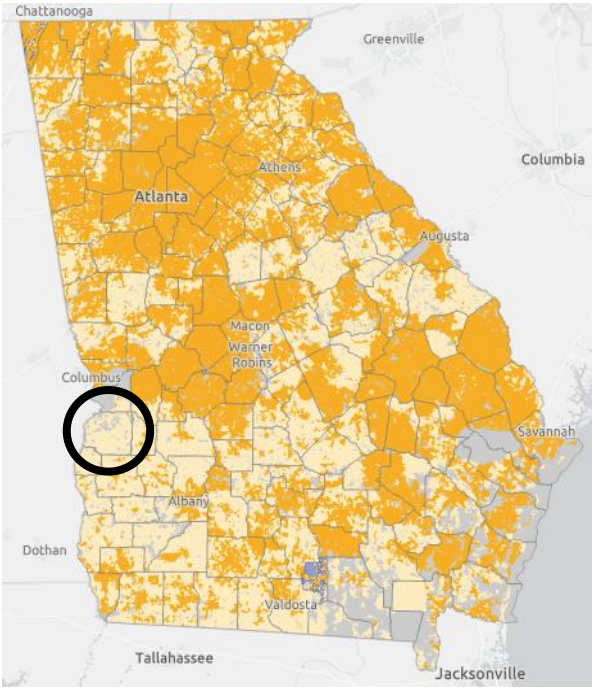

Figure 2.2. Georgia broadband availability (Georgia Broadband Development Initiative, 2020).

Additionally, there is only a limited number of companies servicing the area (Georgia Broadband Development Initiative, 2020). Survey data also indicated a significant difference between the towns of Louvale and Lumpkin and Louvale and Richland with regard to the built-financial construct (Table 2.10).

Stewart County is the circled county in Figure 2.2 which indicates broadband availability. In Figure 2.2, the gray color indicates no locations (no internet available) and the light yellow indicates unserved locations. It should be noted that Louvale is located in the northern part of the county which is mostly gray in the figure.

Secondary data also reflected over 40 non-profits or organizations such as Family Connection, Stewart-Quitman Alumni Association, Historical Society, 4-H and many churches listed for Stewart county (Tax Exempt Organization Search, 2023). This number of organizations supports the survey data in which 55.4% of respondents agreed or strongly agreed that the community has charitable organizations that invest in the community.

Cultural Capital

Perceived Levels of Community Capitals – Cultural Capital

Items associated with respondents' perceptions regarding political capital in Stewart County are displayed in Tables 2.14-2.17. 51% of respondents agreed (37.2%) or strongly agreed (13.8%) that Stewart County reflects the potentially diverse values held by individuals in the community. The majority, 62.8%, also agreed (46.8%) or strongly agreed (16.0%) that the community has organizations that preserve the community's history. A majority of respondents (58.5%) agreed (41.5%) or strongly agreed (17.0%) that the county is culturally diverse.

Table 2.14
Participant responses for perceived levels of community capitals – cultural construct (N=94)
Statement "Today I believe my community…"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Reflects the potentially diverse values held by individuals in the community	5.3	18.1	25.5	37.2	13.8
Hosts events that recognize the community's heritage	8.5	25.5	22.3	28.7	14.9
Has organizations that preserve the community's history	5.3	16.0	16.0	46.8	16.0
Has local retail shops that offer culturally-relevant products	8.5	38.3	13.8	27.7	11.7
Is culturally diverse	6.4	22.3	12.8	41.5	17.0

One-way analysis of variance, shown in Table 2.15, revealed a statistically significant difference ($F = 5.177$, $p = <0.001$) between the towns based on the perceived levels of community capitals within the cultural construct. Multiple comparisons examined using Tukey and Games-Howell tests revealed statistically significant differences between Louvale and Lumpkin ($p = 0.041$) and Louvale and Richland ($p = <0.001$).

Table 2.15
Perceived levels of community capitals comparison between towns - cultural capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	17.544	4	4.386	5.177	<.001
Within Groups	67.780	80	.847		
Total	85.324	84			

Perceived Personal Agency – Cultural Capital

Table 2.16 below displays respondents' perceived personal agency regarding the cultural construct. Most community members agreed (58.5%) or strongly agreed (21.3%) that if they choose to, they have the ability to live out their philosophical beliefs in Stewart County.

Additionally, a majority (80.9%) also agreed (59.6%) or strongly agreed (21.3%) or that they can practice cultural traditions in Stewart County if they wish to.

Table 2.16
Participant responses for perceived personal agency – cultural construct (N=94)
Statement "If I choose to, I have the ability to…"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Live out my philosophical beliefs	6.4	2.1	11.7	58.5	21.3
Live out my ethical values	4.3	5.3	6.4	59.6	24.5
Practice cultural traditions	5.3	1.1	12.8	59.6	21.3
Participate in one or more important social movements	3.2	9.6	13.8	55.3	18.1
Access culturally-relevant products	5.3	23.4	12.8	44.7	13.8
Develop a personal connection to the place I live	4.3	12.8	13.8	50.0	19.1

One-way analysis of variance, shown in Table 2.17, revealed a difference between the towns. However, the difference was not statistically significant ($F = 1.399$, $p = 0.242$) between the towns based on the personal agency perceptions within the cultural construct. No multiple comparisons tests were used with this data.

Table 2.17
Perceived personal agency comparison between towns - cultural capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	3.463	4	.866	1.399	.242
Within Groups	49.502	80	.619		
Total	52.965	84			

Secondary Data - Cultural Capital

While Stewart County has not enacted any ordinances or preservation through the county commission, the importance of culture and history is noted in the comprehensive plan for the

county. “Stewart County understands the significance of cultural resources and places high importance on conserving the area’s history, tradition and culture through preservation” (Morris, 2022, p.51). These efforts seem to support the survey data which indicated 62.8% of respondents agreed or strongly agreed that the community has organizations that preserve the community’s history.

There is an active historical society that works to preserve buildings and historical landmarks in the county. Additionally, the houses and remains of Europeans and Africans are considered cultural resources as these groups have had a presence and influence over the last five hundred years (Morris, 2022). “In 1989, a comprehensive survey of the Stewart County historic resources was completed” (Morris, 2022, p. 41). This survey resulted in 177 sites being identified as historic with some being listed as National Register Historic Districts (Morris, 2022). Four districts are located in Lumpkin and one in Richland (Morris, 2022). The comprehensive plan for the county states,

> The county and the cities of Lumpkin and Richland make the conservation of the area’s history, tradition, and culture through preservation a priority. They also know the benefits of preservation are far-reaching, and can lead to increased heritage tourism, growth in small businesses because of available locations, and a sense of community and tradition (Morris, 2022).

Louvale nor Omaha were mentioned. It should also be noted here that there was a significant difference between Louvale and Lumpkin and Louvale and Richland within this construct.

Furthermore, the Explore Stewart County website (2024) indicates several community events and celebrations which take place within the county. Survey data indicated 80.9% agreed or strongly agreed that they can practice cultural traditions in their community. Celebrations

currently in place include annual events such as Pig Fest, Carter Butts Memorial Bike Ride and various church related festivals (Explore Stewart County, 2024).

Human Capital

Perceived Levels of Community Capitals – Human Capital

Items associated with respondents' perceptions regarding human capital in Stewart County are displayed in Tables 2.18-2.21. Most respondents (47.9%) disagreed (26.6%) or strongly disagreed (21.3%) that the community has meaningful employment to attract young people. 50% of respondents disagreed (33.0%) or strongly disagreed (17%) that they have access to a wide range of healthcare within the community. 55.3% of respondents agreed (35.1%) or strongly agreed (20.2%) that community diversity is represented in the community leaders. 51% of respondents disagreed (37.2%) or strongly disagreed (13.8%) that they have access to higher education opportunities.

Table 2.18

Participant responses for perceived levels of community capitals – human construct (N=94)

Statement "Today I believe my community…"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Has meaningful employment to attract young people	21.3	26.6	6.4	26.6	19.1
Has access to strong educational opportunities from K-12th grade	10.6	27.7	18.1	28.7	14.9
Has access to strong higher education opportunities	13.8	37.2	9.6	25.5	13.8
Offers residents access to a wide range of healthcare	17.0	33.0	7.4	21.3	20.2
Offers residents access to professional development	14.9	33.0	13.8	19.1	19.1
Offers residents access to personal development	13.8	27.7	17.0	25.5	16.0
Community diversity is represented in the community leaders	10.6	19.1	14.9	35.1	20.2

One-way analysis of variance, shown in Table 2.19, revealed a statistically significant difference (F = 5.969, p = <0.001) between the towns based on the perceived levels of community capitals within the human construct. Multiple comparisons examined using Tukey and Games-Howell tests revealed statistically significant differences between Louvale and Lumpkin (p = 0.004) and Louvale and Richland (p = <0.001).

Table 2.19

Perceived levels of community capitals comparison between towns - human capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	28.838	4	7.210	5.969	<.001
Within Groups	95.415	79	1.208		
Total	124.253	83			

Perceived Personal Agency – Human Capital

Table 2.20 below displays respondents' perceived personal agency regarding the human capital. A majority of community members agreed (46.8%) or strongly agreed (11.7%) that if they choose to, they have the ability to be a leader in their community. A majority of community members either agreed (43.6%) or strongly agreed (19.1%) that they can collaborate to impact community change. Similarly, most community members agreed (56.4%) or strongly agreed (21.3%) that they can make their community better if they choose to.

Table 2.20

Participant responses for perceived personal agency – human construct (N=94)

Statement "If I choose to, I have the ability to…"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Be a leader in my community	0	19.1	22.3	46.8	11.7

Manage differences among community members and groups	3.2	22.3	21.3	41.5	11.7
Learn about techniques and tools that can be used for community-based decision making	1.1	22.3	18.1	39.4	19.1
Take action related to the challenges that affect my community	2.1	21.3	22.3	39.4	14.9
Collaborate to impact community change	5.3	16.0	16.0	43.6	19.1
Make my community better	4.3	8.5	9.6	56.4	21.3
Access resources for personal needs	3.2	22.3	6.4	45.7	22.3

One-way analysis of variance, shown in Table 2.21, revealed a difference between the towns. However, the difference was not statistically significant ($F = 2.464$, $p = 0.052$) between the towns based on the personal agency perceptions within the human construct. No multiple comparisons tests were used with this data.

Table 2.21

Perceived personal agency comparison between towns – human capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	6.182	4	1.545	2.464	.052
Within Groups	50.178	80	.627		
Total	56.360	84			

Secondary Data - Human Capital

Healthcare, education, and leadership are important factors of the human capital (Emery & Flora, 2006). Secondary data showed limited healthcare availability within the county (County Health Rankings, 2024) which supports the survey data that indicated 50% of respondents disagreed or strongly disagreed with having access to a wide range of healthcare. In addition to the County Health Department, the county does have access to two doctors ‘offices, Care

Connect and Dr. Mobley, for primary healthcare concerns. These are needed services as the county is one of the least healthy in the state with a health outcome ranking of 141/159 counties, obesity rate of 44%, and 19% of the residents of Stewart County do not have health insurance (County Health Rankings, 2024).

Within education, the survey data indicated a split response in which 38.6% of the respondents strongly disagreed or disagreed while 43.6% of respondents strongly agreed or agreed to the county having access to strong educational opportunities for K-12th grade. Secondary data included one K-12th grade school system in the county with an average of 450 students annually. However, it is also noted that students living within the county are able to attend a local STEM Charter school housed in a neighboring county.

Most individuals in the county (72.6%) have a high school diploma or equivalent and 15.8% have a bachelor's degree or higher (U.S. Census Bureau, 2022). While (29.8%) of survey respondents indicated having a 4-year degree, most respondents (55.3%) had only completed two years or less of college. This indicates that those who completed the survey may have a higher education level than the majority of community members, which is a limitation to the study. Detailed educational information in relation to labor force can be found in Table 2.22 below.

Table 2.22

Education of the labor force (U.S. Census Bureau – 2021: ACS 5-Year Estimates)

Stewart Area		*Percent Distribution by Age*				
	% of Total	*18-24*	*25-34*	*35-44*	*45-64*	*65+*
Elementary	6.5	2.6	3.4	6.6	5.9	14.5
Some High School	12.2	8.2	12.1	12.8	11.5	16.3
High School Grad/GED	36.3	48.9	29.6	29.2	38.7	33.9
Some College	24.2	29.8	30.6	2..0	22.2	17.6
College Grad 2 Year	6.5	2.6	8.6	6.6	8.5	4.7
College Grad 4 Year	9.9	6.2	13.2	13.2	9.9	6.8
Post Graduate Studies	4.5	1.6	2.4	11.5	3.2	6.3
Totals	100	100	100	100	100	100

Note. Totals are based on the potion of the labor force between ages 18-65+. Some College category represents workers with some.

While Stewart County is positioned within driving distance of several colleges, survey data indicated that 51% of respondents disagreed or strongly disagreed that they have access to higher education opportunities. Columbus Technical College, Andrew College, Georgia Southwestern, and South Georgia Technical College are all within an hour's driving distance of Stewart County. Some are as little as thirty minutes away depending on location within the county. While these institutions for higher education are located relatively close, without a reliable car or public transportation, attendance would be challenging.

Within this construct, respondents agreed or strongly agreed in several areas regarding leadership and community. Overall, respondents believed diversity is represented in the community leaders. Secondary data supports that city councils, county commission, board of education, and several local leadership boards appear to be representative of the county demographics (Stewart County Georgia, 2023).

Social Capital

Perceived Levels of Community Capitals – Social Capital

Items associated with respondents' perceptions regarding social capital in Stewart County are displayed in Tables 2.23-2.26. The majority of community members agreed (42.6%) or strongly agreed (16.0%) that the community values the concerns that other community members have. A majority of community members agreed (51.1%) or strongly agreed (14.9%) that they associate with their neighbors. Community members also agreed (42.6%) or strongly agreed (13.8%) that they associate with their local leaders. Most agreed (37.2%) or strongly agreed (12.8%) that they trust those local leaders. Whereas, a majority of community members agreed (42.6%) or strongly agreed (14.9%) that they can voice their concerns and agreed (39.4%) or strongly agreed (16.0%) that they feel they can be part of a project to solve problems.

Table 2.23

Participant responses for perceived levels of community capitals – social construct (N=94)

Statement "Today I believe my community is made up of individuals who…"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Value the concerns that other community members have	8.5	19.1	13.8	42.6	16.0
Associate with their neighbors	4.3	7.4	22.3	51.1	14.9
Trust their neighbors	5.3	10.6	23.4	16.0	17.0
Associate with their local leaders	4.3	14.9	24.5	42.6	13.8
Trust their local leaders	4.3	22.3	23.4	37.2	12.8
Feel they can voice their concerns	4.3	17.0	21.3	42.6	14.9
Feel they can be part of a project to solve problems	8.5	18.1	18.1	39.4	16.0

One-way analysis of variance, shown in Table 2.24, revealed a statistically significant difference ($F = 3.467$, $p = 0.012$) between the towns based on the perceived levels of community capitals within the social construct. Tukey and Games-Howell multiple comparisons tests revealed statistically significant differences between Louvale and Richland ($p = 0.010$) specifically.

Table 2.24

Perceived levels of community capitals comparison between towns - social capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	9.739	4	2.435	3.467	.012
Within Groups	56.171	80	.702		
Total	65.910	84			

Perceived Personal Agency – Social Capital

Table 2.25 below displays respondents' perceived personal agency regarding the social capital construct. Community members agreed (63.8%) or strongly agreed (18.1%) that if they choose to, they have the ability to listen to the concerns of community members. A majority of respondents agreed (55.3%) or strongly agreed (20.2%) that if they choose to, they have the ability to join others to support local change efforts. The majority of community members also agreed (46.8%) or strongly agreed (21.3%) that they feel as though they can help develop a conversation around important issues. Lastly, a majority of respondents agreed (55.3%) or strongly agreed (22.3%) that they feel part of the community.

Table 2.25

Participant responses for perceived personal agency – social construct (N=94)

Statement "If I choose to, I have the ability to…"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Listen to the concerns of community members	1.1	10.6	6.4	63.8	18.1
Join others to support community efforts	2.1	10.6	6.4	60.6	20.2
Join others to support local change efforts	2.1	11.7	10.6	55.3	20.2
Voice my concerns	3.2	12.8	8.5	58.5	17.0
Help develop a conversation around important issues	3.2	14.9	13.8	46.8	21.3
Feel part of the community	3.2	10.6	8.5	55.3	22.3

One-way analysis of variance, shown in Table 2.26, revealed there was a difference between the towns. However, the difference was not statistically significant ($F = 2.336$, $p = 0.062$) between the towns based on the personal agency perceptions within the social construct. No multiple comparisons tests were used with this data.

Table 2.26

Perceived personal agency comparison between towns – social capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	5.858	4	1.465	2.336	.062
Within Groups	50.161	80	.627		
Total	56.020	84			

Secondary Data - Social Capital

The social and political capitals include areas such as trust within the community, civic engagement, governmental structure, and community involvement. Over 50% of respondents indicated in the survey that they can join others to support local change efforts, develop conversation around important issues, and be a part of a project to solve a problem. One current initiative in Stewart County that could potentially impact these perceptions and assist with fostering these relationships is community group meetings that have been established. The community group meetings are led by a member of county leadership who organizes and conducts the meetings. These meetings are open to anyone who would like to attend and cover a wide variety of topics (Stewart County Georgia, 2023). This community groups could also be one of the initiatives that respondents had in mind when they indicated on the survey that they associate with and trust their local leaders. Lastly, 77.6% of respondents felt a part of the community which could be related to the activities and opportunities to gather through the 15 churches present in Stewart County and several civic groups such as the garden club, historical society, senior center, alumni association, Better Hometown, and community and city work groups.

Political Capital

Perceived Levels of Community Capitals – Political Capital

Items associated with respondents' perceptions regarding political capital in Stewart County are displayed in Tables 2.27-2.30. Most community members agreed (41.5%) or strongly agreed (10.6%) that Stewart county has public leaders who work to affect change while most also agreed (31.9%) or strongly agreed (13.8%) that they have political leaders who work to affect change. The majority of community members agreed (43.6%) or strongly agreed (16.0%) that the community has public leaders who listen to community groups. A majority of community members agreed (39.4%) or strongly agreed (18.1%) that their community groups have the ability to mobilize resources for community change.

Table 2.27
Participant responses for perceived levels of community capitals – political construct (N=94)
Statement "Today I believe my community…"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Has public leaders (non-elected) who work to affect change	8.5	20.2	19.1	41.5	10.6
Has public leaders (non-elected) who listen to community groups	7.4	14.9	18.1	43.6	16.0
Has political leaders who work to affect change	7.4	22.3	24.5	31.9	13.8
Has political leaders who listen to community groups	6.4	21.3	22.3	36.2	13.8
Has community groups that have the ability to mobilize resources for community change	8.5	12.8	21.3	39.4	18.1

One-way analysis of variance, shown in Table 2.28, revealed a statistically significant difference ($F = 3.846$, $p = 0.007$) between the towns based on the perceived levels of community capitals within the political construct. Multiple comparisons examined using Tukey and Games-

Howell tests revealed statistically significant differences between Louvale and Richland (p = 0.004).

Table 2.28
Perceived levels of community capitals comparison between towns - political capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	15.230	4	3.808	3.846	.007
Within Groups	79.201	80	.990		
Total	94.431	84			

Perceived Personal Agency – Political Capital

Table 2.29 below displays respondents' perceived personal agency regarding the political capital. A majority of community members agreed (53.2%) or strongly agreed (22.3%) that if they choose to, they have the ability to be a part of a group that works to affect change. Most community members agreed (54.3%) or strongly agreed (18.1%) that if they choose to, they have the ability to communicate with local government leaders. Many respondents also agreed (46.8%) or strongly agreed (19.1%) that they feel as though they can communicate with county and state government leaders. Lastly, a majority of community members agreed (53.2%) or strongly agreed (21.3%) that they can join work groups that address local issues.

Table 2.29
Participant responses for perceived personal agency – political construct (N=94)

Statement "If I choose to, I have the ability to…"	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Be part of a group that works to affect change	4.3	10.6	9.6	53.2	22.3
Communicate with local government leaders	5.3	12.8	9.6	54.3	18.1
Communicate with county, state government leaders	4.0	17.0	13.8	46.8	19.1
Communicate with federal government leaders	4.3	16.0	19.1	44.7	16.0

Join work groups that address local issues	4.3	8.5	12.8	53.2	21.3
Develop work groups that address local issues	3.2	12.8	13.8	52.1	18.1
Mobilize resources for community change	4.3	17.0	20.2	37.2	21.3

One-way analysis of variance, shown in Table 2.30, revealed a difference between the towns. However, the difference was not statistically significant ($F = 2.111$, $p = 0.087$) between the towns based on the personal agency perceptions within the political construct. No multiple comparisons tests were used with this data.

Table 2.30

Perceived personal agency comparison between towns – political capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	6.525	4	1.631	2.111	.087
Within Groups	61.822	80	.773		
Total	68.347	84			

Secondary Data - Political Capital

Respondents indicated that if they choose to, they have the ability to communicate with local, county, state and federal governments. This may be an indication that community members feel their government leaders are representative of them demographically. Research has shown that Latino and black populations place a high level of importance on having similar descriptive qualities (education, partisanship, race, ethnicity, income) with their own elected officials (Casellas & Wallace, 2014; Minta, 2012). Stewart County has two major cities, Lumpkin and Richland. Lumpkin is the county seat with a city council board of five members and a mayor. Richland follows a similar structure with a city council board of five members and a mayor. Stewart County's Board of Commissioners represents five districts. The five commissioners consist of three black males, one white male, and one black female. There is also an active

county manager who is a white male. The Board of Education also has five districts represented by their board along with a superintendent, a black male. The Board of Education consists of two black males and three black females.

The survey data indicated that over 45% of respondents believe that their political leaders work to affect change and listen. Stewart County is also part of the Senate District 12 represented by Freddie Powell Sims and congressional District 2 represented by Sanford Bishop. Both Freddie Powell Sims and Sanford Bishop (or representative) have hosted listening sessions in Stewart County over the past five years or been involved in a community event such as the grand opening of a storybook walk (E. Turner, personal communication, 2023). Also, in 2021, Sanford Bishop secured $1.5 million that came directly to the counties he represents to help with literacy efforts (Georgia Family Connection, 2023). In Stewart County, residents have been able to provide input into the way this money is spent within the community through a leadership group, organized by the local Family Connection group. This is one example of the information respondents could be recounting as over 50% of respondents indicated that they strongly agree or agree with having Stewart County leaders who work to affect change and public leaders who listen to community groups.

Natural Capital

Perceived Levels of Community Capitals – Natural Capital

Items associated with respondents' perceptions regarding natural capital in Stewart County are displayed in Table 2.31-2.34. A majority of community members agreed (52.1%) or strongly agreed (16%) that their community has valuable natural resources. Most community members agreed (33%) or strongly agreed (16%) that Stewart County takes advantage of natural resources for community development. Most also agreed (37.2%) or strongly agreed (25.5%)

that the county has parks accessible to the public and the majority of community members agreed (31.9%) or strongly agreed (22.3%) that the community works to preserve valuable natural resources.

Table 2.31

Participant responses for perceived levels of community capitals – natural construct (N=94)

Statement "Today I believe my community…"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Has valuable natural resources	6.4	9.6	16.0	52.1	16.0
Takes advantage of natural resources for community development	7.4	21.3	22.3	33.0	16.0
Takes advantage of natural resources for job creation	9.6	26.6	22.3	28.7	12.8
Has parks accessible to the public	10.6	13.8	12.8	37.2	25.5
Works to preserve valuable natural resources	6.4	14.9	24.5	31.9	22.3

One-way analysis of variance, shown in Table 2.32, revealed a statistically significant difference ($F = 3.452$, $p = 0.012$) between the towns based on the perceived levels of community capitals within the natural construct. Multiple comparisons examined using Tukey and Games-Howell tests revealed statistically significant differences between Louvale and Richland ($p = 0.017$).

Table 2.32

Perceived levels of community capitals comparison between towns - natural capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	12.047	4	3.012	3.452	.012
Within Groups	69.800	80	.873		
Total	81.848	84			

Perceived Personal Agency – Natural Capital

Table 2.33 below displays respondents' perceived personal agency regarding the natural capital. Most respondents agreed (50%) or strongly agreed (18.1%) that if they choose to, they have the ability to access parks in their community. While the majority agreed, there are over 20% that strongly disagreed (14.9%) or disagreed (5.3%) that they have access to parks. A majority of community members also agreed (39.4%) or strongly agreed (18.1%) that if they choose to, they have the ability to access quality water.

Table 2.33
Participant responses for perceived personal agency – natural construct (N=94)

Statement "If I choose to, I have the ability to…"	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
Develop projects that support my community's natural resources	4.3	21.3	19.1	31.9	23.4
Access parks in my community	14.9	5.3	11.7	50.0	18.1
Access quality water	3.2	22.3	17.0	39.4	18.1
Voice my opinion on the use of our natural resources	3.2	19.1	16.0	41.5	20.2
Voice my opinion on land development issues	5.3	18.1	16.0	35.1	25.5

One-way analysis of variance, shown in Table 2.34, revealed a statistically significant difference ($F = 3.409$, $p = 0.013$) between the towns based on the personal agency perceptions within natural construct. Multiple comparisons examined using Tukey and Games-Howell tests revealed statistically significant differences between Louvale and Richland ($p = 0.014$).

Table 2.34
Perceived personal agency comparison between towns – natural capital

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	12.971	4	3.243	3.409	.013

Within Groups	76.102	80	.951
Total	89.073	84	

Secondary Data - Natural Capital

The natural capital includes geography, soil condition, water, parks, and land use. Prime agricultural land is characterized by soil types ideally suitable for crop production. Stewart County spans 296,960 acres, with 59,254 acres designated as farmland, including 12,699 acres dedicated to harvesting crops (Stewart County Comprehensive plan, 2022). The forested regions within Stewart County hold both aesthetic and ecological significance, contributing to natural beauty, wildlife habitats, and water quality preservation. The county encompasses 238,200 acres of forestland, primarily privately owned, serving as a sanctuary for diverse wildlife (Stewart County Comprehensive plan, 2022). According to the River Valley Regional Commission (2022), the hunting and fishing sectors have become progressively vital components of the county's economic landscape (Morris, 2022). Interestingly enough, according to the Georgia Department of Natural Resources (as cited in Morris, 2022), the county is home to a variety of endangered or threatened plant and animal species such as the Gopher Tortoise, Southern Hognose Snake, and Red-cockaded. Many community members seem to recognize these unique, natural features as over 50% agreed or strongly agreed that Stewart County has valuable natural resources and that they work to preserve this nature as represented by the quantitative data.

Despite the county's physical inactivity rate of 43% and 1% having access to exercise opportunities (County Health Rankings, 2024; U.S. Census Bureau, 2022), survey data indicated that the majority of respondents have access to parks in their community. There are two state parks in the county - Florence Marina State Park and Providence Canyon State Park. There are also a few parks throughout the county but through observational data, the parks were noted to

be lacking in equipment, located in unsafe areas, and not maintained. In fact, each of these areas were mentioned in a quote from the Stewart County Comprehensive plan (Morris, 2022, p.1):

> We want Stewart County to be a drug-free place where citizens and elected officials work together to improve the community. We want all residents of Stewart County to have a job and an affordable, healthy and safe home. We want to use our plentiful natural resources, state and local parks, and abundant available land to draw new residents to Stewart County. With sincere, ethical elected officials collaborating with residents in a community-wide effort, we can address these needs and become a progressive Stewart County.

There was a statistically significant difference between Louvale and Lumpkin within this construct. None of the aforementioned parks are located in Louvale. Louvale also has minimal city infrastructure to support change initiatives.

Regarding critical facilities within the natural construct, survey results indicated a majority of community members agreed or strongly agreed that have the ability to access quality water. Stewart County operates three water systems One system is in the Brooklyn community in the eastern part of the county. In the northwest corner of the county (Louvale and Omaha) are two other systems according to the River Valley regional Commission (Stewart County Comprehensive plan, 2022).

Overall Perception of Community

Table 2.35 below displays respondents' perceptions regarding the overall perception of community construct. Most respondents felt they were members of the community as they strongly agreed (20.2%) or agreed (47.9%) with the statement. Respondents strongly agreed (17.0%) or agreed (45.7%) that people in the community are good at influencing each other.

Additionally, community members felt connected to the community as most strongly agreed (21.3%) or agreed (54.7%) with the statement. Furthermore, respondents also felt they have a good bond with others in the community as they strongly agreed (26.6%) or agreed (45.7%) with the statement.

Table 2.35
Participant responses for overall perception of community construct (N=94)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	%	%	%	%	%
I can get what I need in this community	12.8	28.7	20.2	26.6	11.7
This community helps me fulfill my needs	9.6	21.3	16.0	33.0	19.1
I feel like a member of this community	4.3	7.4	20.2	47.9	20.2
I have a say about what goes on in my community	6.4	24.5	20.2	33.0	16.0
People in this community are good at influencing each other	4.3	16.0	17.0	45.7	17.0
I feel connected to this community	6.4	10.6	16.0	54.7	21.3
I have a good bond with others in this community	4.3	9.6	13.8	45.7	26.6

One-way analysis of variance, shown in Table 2.36, revealed a statistically significant difference ($F = 3.455$, $p = 0.012$) between the towns based within the overall construct. below. Multiple comparisons examined using Tukey and Games-Howell tests revealed statistically significant differences between Louvale and Richland ($p = 0.005$).

Table 2.36
Overall perceptions comparison between towns

	Sum of Squares	*df*	Mean Square	F	Sig.
Between Groups	12.971	4	2.607	3.455	.012
Within Groups	76.102	79	.754		
Total	89.073	8.			

Construct-level Results

Tables 2.37-2.39 display the number of responses (N), minimums, maximums, means, standard deviations (SD), Cronbach's alpha (α) scores, and the number of items within each construct regarding respondents' perceptions of community capitals, personal agency and the overall community. Each construct was deemed acceptable based on the Cronbach's alpha coefficients greater than at least 0.70.

Table 2.37 provides a summary of construct scores ranked in mean order from lowest to highest. Of the six constructs reflecting respondents' perceptions of community capitals within Stewart County, social capital (M = 3.46) ranked the highest. Additionally, the construct received a high Cronbach's Alpha value (α = 0.90) indicating a high level of internal consistency (Tavakol & Dennick, 2011). The built-financial construct received the lowest response (M = 2.97).

Table 2.37
Descriptive statistics and scale reliability for perceived levels of community capitals

Scale	N	Minimum	Maximum	Mean	SD	Cronbach's Alpha (α)	Number of items
Built-Financial	94	2.71	3.26	2.97	1.15	0.94	7
Human	94	2.89	3.38	3.04	1.21	0.96	7
Cultural	94	2.96	3.52	3.28	1.01	0.91	5
Political	94	3.22	3.46	3.34	1.04	0.94	5
Natural	94	3.09	3.62	3.40	1.00	0.90	5
Social	94	3.32	3.65	3.46	0.86	0.90	7

Table 2.38 displays a summary of construct scores ranked in mean order from lowest to highest. Of the six constructs reflecting respondents' perceived personal agency regarding community capitals, social capital (M = 3.80) ranked the highest. Additionally, the construct received a high Cronbach's Alpha value (α = 0.91) indicating a high level of internal consistency

(Tavakol & Dennick, 2011). The built-financial construct received the lowest response (*M* = 3.39).

Table 2.38
Descriptive statistics and scale reliability for perceived personal agency of community capitals Scale

	N	Minimum	Maximum	Mean	SD	Cronbach's Alpha (α)	Number of items
Built-Financial	94	3.23	3.82	3.39	0.98	0.93	6
Natural	94	3.47	3.57	3.52	1.05	0.94	5
Human	94	3.37	3.82	3.55	0.84	0.90	7
Political	94	3.52	3.79	3.66	0.91	0.94	7
Cultural	94	3.38	3.95	3.75	0.80	0.88	6
Social	94	3.68	3.87	3.80	0.81	0.91	6

Table 2.39 below displays respondents' overall perceptions of Stewart County. Overall, respondents had a relatively positive perception of the county represented by a mean score of 3.52. Additionally, the construct received a high Cronbach's Alpha value (α = 0.93) indicating a high level of internal consistency (Tavakol & Dennick, 2011).

Table 2.39
Descriptive statistics and scale reliability for overall perception of community construct

	N	Minimum	Maximum	Mean	SD	Cronbach's Alpha (α)	Number of items
Overall perception	94	2.97	3.87	3.52	0.93	0.93	8

Correlation between each of the six constructs within the perceived levels of community capitals portion of the survey were calculated. Correlation coefficients and statistical significance between items are provided in Table 2.40 below. Levels of statistical significance are noted below and interpreted according to Davis's (1971) convention. As evident by the significant correlations (.70 or higher indicating very strong association), the individual community capital constructs are highly related.

Table 2.40
Correlation matrix of perceived levels of community capitals scales

	1.	2.	3.	4.	5.	6.
1. Built-Financial	-					
2. Cultural	.86**	-				
3. Human	.90**	.85**	-			
4. Social	.76**	.77**	.79**	-		
5. Political	.78**	.78**	.80**	.84**	-	
6. Natural	.85**	.83**	.84**	.76**	.78**	-

***. Correlation is significant at the 0.001 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Correlation between each of the six constructs within the perceived levels of personal agency portion of the instrument were calculated. Correlation coefficients and statistical significance between items are provided in Table 2.41 below. Levels of statistical significance are noted below and interpreted according to Davis's (1971) convention. As evident by the significant correlations (.70 or higher indicating very strong association or .50 to .69 indicating substantial association), the individual community capital constructs are highly related with the exception of political and social (.27) indicating low association.

Table 2.41
Correlation matrix of personal agency perceptions scales

	1.	2.	3.	4.	5.	6.
1. Cultural	-					
2. Built-Financial	.70**	-				
3. Human	.66**	.85**	-			
4. Social	.69**	.78**	.84**	-		
5. Political	.61**	.78**	.82**	.27**	-	
6. Natural	.59**	.85**	.81**	.81**	.78**	-

***. Correlation is significant at the 0.001 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Conclusions, Implications, and Recommendations

The purpose of this study was to evaluate the current state of community capitals within Stewart County, Georgia and identify community members' levels of personal agency to establish a community profile based on local perceptions that could be used as inform Extension community development initiatives. The community capitals framework allows researchers and practitioners to categorize resources in order to better understand community strengths and limitations. In regard to the community level, respondents ranked the capitals from most prevalent to least prevalent in the order of social, natural, political, cultural, human, and built-financial. Likewise, in regard to perceived personal agency, respondents ranked capitals from most prevalent to least prevalent as, social, cultural, political, human, natural, and built-financial.

Secondary data were collected from various sources including the U.S. Census Bureau, River Valley Regional Commission, Stewart County Comprehensive Plan, and Georgia Department of Public Health to create a more comprehensive community profile regarding community capitals within Stewart County. Overall, secondary community data supported the survey data collected from community members as outlined for each capital within in the results section. While these findings provide a robust assessment of the overall county and nuances among smaller communities within the county, it's essential to recognize the encountered limitations of the study. These limitations impact the generalizability and interpretation of the findings. Thus, the conclusions section not only summarizes the key findings but also reflects on these limitations, discusses practical implications for the Extension field, and proposes recommendations future research.

Implications for Practice

These community capitals framework emphasizes the interconnection of the capitals and their ability to influence each other (Emery & Flora, 2006). Within the present study, all capitals showed very strong or substantial associations with one another within the perceptions of community capitals portion of the study. Additionally, all capitals showed strong or substantial associations with one another within the personal agency portion with the exception of the political and social constructs. This is consistent with similar studies which found community capitals were moderately related at the community level (Lamm et al., 2020) and highly interconnected for the personal agency level (Borron et al., 2020). The interconnectedness between the capitals can serve as an opportunity to create a spiraling up process, where positive change in one capital can positively affect another capital (Emery & Flora, 2006). However, the connection can also have a negative impact in spiraling down through the same process (Emery & Flora, 2006). This interconnected relationship between capitals can be used by Extension leaders to influence the positive development of multiple community capitals through informed program design. Additionally, Extension leaders who know the levels of the capitals within the communities they serve can utilize higher levels of an individual capital to increase the presence of another lower ranking capital.

Overall, respondents in Stewart County ranked social capital as the highest present capital in relation to the overall community and personal agency. These results were consistent with the results in a similar study which sought to evaluate a health-related project in rural communities using the CD+SI Toolkit (Sanders et al., 2024). This indicates that respondents value the concerns of others, associate with neighbors, and trust their local leaders. However, significant differences exist between Louvale and Richland within community perceptions.

Secondary data supports many available opportunities to be a part of active community groups or organizations within the county but most of these groups are located in Lumpkin or Richland. Louvale is also an unincorporated town without many of the features of Richland such as a city council or organized hometown board which could influence residents' abilities to gather or feel community cohesion, which is a major component of social capital (Emery & Flora, 2006). These data can inform Extension program development decisions when it comes to working with community coalitions and enlisting the support of local (elected and non-elected) leaders on Extension advisory committees as community members value concerns of others and trust their local leaders. Additionally, paying attention to the make-up of advisory committees with consideration of their geographical representation within the community, including Louvale and Omaha, may be helpful.

On the contrary, respondents ranked built-financial as the lowest present capital in Stewart County in relation to community and personal agency. The ranking is supported by the lack of overall infrastructure that exists within the county: lack of internet connectivity and availability, dirt or unpaved roads, and parks. Within the personal agency portion of the survey, most community members agreed that they contribute to the local economy but disagreed that Stewart County has many types of employers. This was supported by the limited number of employers as well as the diversity of employers found within the secondary data. Similarly, the county lacks a sustainable transportation system which was reflected in both the survey and secondary. Additionally, there were significant differences between Louvale and Lumpkin and Louvale and Richland in the built-financial construct for community and Louvale and Richland in the personal agency which could be explained by the differences in infrastructure in Lumpkin and Richland compared to Louvale.

These data may indicate the need to limit Extension programs offered exclusively online. Programs offered during the typical work day may also see limited participation if community members are commuting from outside of the county. Furthermore, Stewart County covers a large geographic area with towns spread throughout. The size of the county coupled with limited transportation access may inhibit community members from being able to participate in Extension programming that is not offered within walking distance of their residence.

While natural capital was the second highest within the community level, it was the second lowest capital with regard to personal agency. A majority of community members agreed that their community has valuable natural resources, but less community members agree that they have adequate access to parks. Most also agreed that the county has groups that have the ability to mobilize resources for community change, which aligns with the number of community groups as mentioned above. Stewart County takes advantage of natural resources for community development according to the survey, but secondary data suggests that this effort is not maximized.

Two state parks are present within Stewart County, but secondary data revealed that the community does not take advantage of visiting these locations as the majority of guests are out of town residents, especially at Providence Canyon (Powell, 2024). There were also significant differences within the natural capital. Differences were seen between Louvale and Richland within the overall perceptions of community personal agency.

Because most community members believe public and political leaders listen to community groups and work to affect change, Extension leaders may see a positive response from community groups when working alongside other local leaders. Secondary data suggest the representation at the local government level is similar to the demographics of the area in which

they serve. However, there were significant differences noted between Louvale and Richland within this construct. As mentioned previously, Louvale lacks some of the city infrastructure that exists within Richland which includes a mayor and city council board. Despite this lack of formalized (elected) leadership, Extension professionals can identify and partner with respected, public leaders within Louvale and Omaha.

Cultural capital was the second highest ranked capital for the personal agency portion of the of the survey. Overall, community members believed that if they choose to, they have the ability to live out their philosophical beliefs and ethical values as well as practice cultural traditions in their community which was supported by secondary data. Recognizing the importance of philosophical beliefs and ethical values held by community members is important for Extension professionals. While these beliefs and values may not be the same for Extension professionals and each community member, the understanding and respect of values can greatly impact the relationship between Extension leaders and community members which directly affects the productivity of the Extension program in the community.

The human capital ranked low for both perceptions of community and personal agency. There were also significant differences between Louvale and Lumpkin and Louvale and Richland regarding community perception. Despite the lack of employment, respondents perceived their employment to be stable. Considering human capital refers to the intrinsic or achieved physical and cognitive attributes of community residents obtained through both formal and informal education and training, skills and abilities, Extension is well-positioned within the community to bolster human capital through research-based programming within schools and the broader community. While this is a great way for Extension to help develop the community, programs must be offered in a way that is accessible to community members in respect to

geographical location. If a community member cannot make it to the program because they do not have adequate transportation, Extension leaders must consider alternative measures that can be taken to support the participation of all community members. In 4-H, this can be done by picking up youth from school for afternoon practices and events or by utilizing certified volunteers to coordinate carpool groups for program participants based on their town.

Across each of the capitals, a common thread of agreement between the survey data and secondary data points was observed. However, it is interesting to compare the differences in the rankings of the community perceptions and perceived personal agency data. While the significant differences between the towns indicated access to different resources throughout the community, the majority of the means suggested that in general, people feel as though if they want to accomplish something or want to access a resource, they can. This seems to occur even if the community is lacking the resource. Furthermore, respondents overall feel a part of the community and feel as though each person is easily influenced by the next. They feel as though they belong and want to be a part of the community.

Recommendations for Practice

The instrument used in this study was designed to "identify and quantify community capitals in order to establish entry points and valuate programmatic impacts" (Lamm et al., 2020, p. 260). Additionally, the tool is designed to highlight community strengths instead of consistently focusing on the what a community is lacking. It is recommended "that professionals who are engaged in programming and capacity building at the community level consider administering an instrument capable of capturing the perceived capitals of a community, and to then use that data to inform particular interventions" (Lamm et al., 2020, p. 261). With this in

mind, based on the results of this study, the following recommendations for practice within Extension are proposed.

Respondents ranked social capital as the highest present capital in Stewart County in relation to perception of community and perceived personal agency. This information can be helpful for community leaders and Extension practitioners. When Extension agents are planning programming, they should keep in mind that community members really value associating with one another. Social capital can come in the form of peer influence and encouraging others to attend events (Sanders et al., 2024). Obtaining buy-in from respected community members and trusted elected leaders through attendance at Extension programs is recommended as a way to use social capital to enhance other capitals such as human which may be more concerned with the transfer of knowledge and skills for personal and professional development.

This capital should also be considered by Extension leaders while identifying solutions to problems within the community. Community members indicated that they like to be included in the conversation and voice their concerns with open lines of communication. Extension agents should keep in mind that community members closely associate with each other so even if a problem does not directly affect them, they may still participate and influence those around them to contribute to the solution. When implementing needs assessments, Extension agents should apply methods that encourage group collaboration and discussion for prioritizing needs.

Alternatively, the built-financial capital was the lowest ranked for perception of community and was towards the bottom of the ranking for perceived personal agency. Extension programming directly and indirectly impacts community development in the areas of built and financial capitals. This community development could be in the form of serving on local leadership boards not led by Extension, connecting community initiatives to resources from

external/out-of-county partners, or providing programming specifically related to finances. It is specifically recommended to capitalize on other university resources and entities (outside of Extension) to assist in promoting the county to new businesses, building parks, improving walkability, and safety. Agents should also consider building physical infrastructure within the county using existing funds, resources, and expertise where appropriate. For instance, the combination of many residents' lack of access to parks with the high inactivity rate of residents could indicate a lack of proper, safe places for physical activity for respondents within this survey - specifically, in Louvale as there were significant differences identified. Extension agents could use this information to target specific audiences or areas within the community for unique, needs based interventions.

Several capitals aligned closely in the middle of both perception of community and perceived personal agency. As mentioned, one area Extension can excel is in the development of human capital. By providing in-school and out-of-school experiences for youth, capitalizing on 4-H base programming, and offering other 4-H activities, Extension professionals can enhance the education students are already receiving. Additionally, programming can be offered for both youth and adults in the areas of healthy living, financial education, and physical activity. Extension programming is designed to cover a wide array of topics and needs which can benefit the development of individuals within any community through professional development or coalition-based opportunities to build capacity.

When it comes to political capital, Extension professionals can also assist individuals with understanding how to vote, directing resources to voting, and encouraging community members to be involved in their local governments. This is a common educational practice within 4-H opportunities for youth, but there is also room for growth in this area with adult

audiences. Extension agents simply attending city and county board meetings can show the importance of political influence and the cooperation between elected and non-elected community leaders.

Moreover, the cultural capital can be supported by Extension professionals by encouraging the preservation and celebration of historical sites and community points of pride. Extension can work to complement existing programs and organizations taking place within the community by providing related programming or facilitation during the event. The event could be a market Saturday in which vendors are able to bring their products to sell or helping with a clean-up day at one of the historical landmarks. While the types of programming each county Extension program offers differs, each of these areas falls within the Extension realm. Even the smallest of efforts, if informed by needs assessment, can allow Extension professionals to work alongside communities to benefit from and continue building community capitals.

Implications for Research

There are several implications for research regarding the community capitals framework, specifically. CCF has the ability to be applied in the contexts of community development and Cooperative Extension in a variety of communities. The differences noted between survey data collected from respondents and secondary data available on the community shows the importance of examining the perceptions of community members from multiple perspectives. As this study shows, resources may be present, but if community members perceive a lack of resources, that is their reality. Alternatively, experts outside of a community may categorize the community in one way, but community members may have different perceptions based on their lived experiences. In this study, respondents overall indicated that if they needed something, they would be able to get it even if it was not in the county or community in which they lived.

Recommendations for Future Research

To better pinpoint Extension efforts, future research should seek to identify the differences between towns and resources in Stewart and other counties. Significant differences were indicated between Louvale and Richland and Louvale and Lumpkin in relation to several of the community capitals. Additional research could further investigate how differences between the towns could inform tailored interventions for members within the population. This would enable Extension professionals to more closely align efforts with the actual needs of specific audiences within the community. Additionally, these data could be shared with local leaders or external partners for leveraging funds for specific Extension projects or initiatives within a community.

Future research, specifically qualitative methods, could be used to obtain a more detailed explanation of respondents' perceptions within this study. For instance, respondents reported that they believe Stewart County takes advantage of natural resources for community development. However, community development efforts related to the natural capital within the secondary data seem to be lacking (which was highlighted by its focus in the county comprehensive plan). While there is great value in quantitative data, especially when triangulated with secondary data, it still may not paint the full picture of a community. It is recommended to follow the quantitative portion of this study with a qualitative study utilizing methods such as individual or focus group interviews, which can explore in more detail the contexts which contributed to community members' responses. Furthermore, it may be interesting to conduct a longitudinal study in the same community following targeted community development strategies based on the community capital data to determine if community member perceptions of capitals have changed.

Additionally, it is also recommended that the CD+SI Toolkit be employed by other Extension professionals in their respective communities. For this to take place, it must be accessible to agents in a way they can understand. Including the CD+SI Toolkit on the Extension website with a general overview page outlining the methodology for the approach and requirements would allow more agents to utilize the resource. Offering more professional development sessions for agents, in Georgia and throughout the nation, to understand the value and learn how to implement the instrument is also recommended.

Limitations of the Study

The CD+SI toolkit primarily collects perception data, which is subjective and varies from person to person (Blevins et al., 2020). While specific to each community, obtaining perception data can be challenging due to its subjective nature regarding access and comprehension (Lamm et al., 2020). To help negate these limitations, the researcher employed the use of secondary community data to triangulate findings within each of the community capitals.

The present study employed the use of convenience sampling. While it is a commonly used method in the field, it comes with some limitations that make it challenging to generalize the findings to the overall population. The sample for this study was primarily female (54.3%) and white (58.5%). In relation to the overall county demographics, the county is 44.3% white and 47.9% black (U.S. Census Bureau, 2022). Additionally, the median household income for the county is $43,094 (U.S. Census Bureau, 2022). Within the respondents of the survey, over 50% of respondents indicated an income of $25,000 to $49,999. Nearly 45% of respondents to the survey indicated having a bachelors college degree or higher (29.8% bachelors and 14.9% graduate degree) in comparison to the 15.8% in the county according to the U.S. Census Bureau (2022). As presented, there are differences between the study sample and the demographics of

the overall county which should be considered for implications. Despite these constraints, this study presents a meaningful contribution to the literature and yielded valuable data for Extension practitioners and community development professionals alike.

Conclusion

While the data presented in this study were primarily based on community member perceptions which change over time, this study represents the current snapshot of community members perceptions regarding community capitals and personal agency within Stewart County, Georgia. The data support that while the community agrees that all seven community capitals are present, they recognize there is room for improvement for each. By capitalizing on the strengths within the community and working alongside community members, Extension leaders have the ability to aid in the development of individual, lower ranking capitals which can support overall community development and vitality. With this in consideration, future studies should utilize CCF to identify local strengths and prioritize areas most in-need of support from Cooperative Extension.

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CHAPTER 3

ENLISTING BEHAVIOR CHANGE TOOLS: ADDRESSING CHALLENGES AND FOSTERING HEALTH IN STEWART COUNTY, GEORGIA THROUGH A COMMUNITY-BASED SOCIAL MARKETING ANALYSIS[2]

[2] Garner, Christina. To be submitted to the *Journal of Human Sciences and Extension*.

Abstract

The term "community" is multifaceted, with some defining it in a geographical context while others emphasize human relationships. Understanding communities is crucial for county Extension professionals working with land grant universities to enhance community partnerships. A community, at its core, represents individuals united by a shared purpose, fostering social interaction and companionship. Cooperative Extension professionals are well-positioned to play a vital role in designing and implementing sustainable community-based interventions, leveraging their relationships with community members. This article utilizes deductive thematic analysis methods with community-based social marketing behavior change tools as themes to enhance effectiveness, broaden community engagement, and foster long-term positive outcomes within a health initiative in a rural, Georgia community. By exploring strategies for sustained behavior change within rural contexts and the role of Extension, the study identified valuable insights to inform future initiatives and advance the collective goal of improving health outcomes in rural communities. Specifically, Extension agents should focus on communication and social diffusion as key elements among the seven behavior change tools identified in the study to achieve lasting impact within communities.

Introduction

Although defining the term "community" can be a challenging endeavor, its significance is frequently highlighted in the literature (Syme & Ritterman, 2009; Theodori, 2003). Some scholars offer definitions of community as being rooted in a geographical context, such as a town, city, or neighborhood (McMillan & Chavis, 1986; Warren, 1987). Others expand this definition to encompass a focus on human relationships, irrespective of a specific location (Gusfield, 1975), thus combining both geographical and relational dimensions.

At its core, a community represents a gathering of individuals united by location or a shared purpose or objective. It serves as a space for social interaction and the enjoyment of companionship, bringing together individuals of diverse characteristics who are connected by social bonds, share common perspectives, and engage in collective endeavors within specific geographical locations or settings (MacQueen et al., 2001). While the concept of community often implies coming together or sharing common characteristics and interests, it does not necessarily presuppose homogeneity among all its members.

The intricate aspects of a community form the backdrop for where families live, work, engage in recreational activities, and spend the majority of their time. These individual characteristics have a major impact on the development of individuals within the community as well as individuals' relationships with each other (Israel et al., 2001). The emotional attachment individuals have to a community often becomes the motivating factor for them to live in or stay in a community long-term. Those who experience a sense of belonging in their community are compelled to contribute to its betterment for their own well-being, that of their families, and the benefit of their neighbors (MacQueen et al., 2001; Kaholokula et al., 2018). These emotional ties also have the ability to create positive health and community participation outcomes (Anton, 2014).

Rural Communities

Every individual community is unique, but rural communities often share some strengths and challenges. The term "rural" encompasses a wide array of environments. Rural is defined by the U.S. Census Bureau as "all territory, persons, and housing units not defined as urban," (Ratcliffe et al., 2016, p. 2). According to this definition, rural areas constitute nearly 97% of the total land area in the United States. Rural communities specifically grapple with a distinct set of

issues, including, though not limited to, health disparities, dwindling populations, economic stagnation, limited healthcare access, resource scarcity, financial challenges, and a higher proportion of underinsured residents (Coughlin et al., 2019; Gusfield, 1975).

Each of these challenges contributes to the prevalence of chronic diseases and health inequalities among rural residents. Obesity disproportionately affects rural areas, particularly in the United States, where it stands as one of the primary comorbidities linked to chronic diseases and mortality (Okobi et al., 2021). Rural residents are more significantly affected by the obesity-driven public health crisis compared to their urban counterparts because they are influenced by factors like physical inactivity, limited healthcare options, and socioeconomic disparities (Trivedi et al., 2015). While these challenges can be found in any community, they are particularly pronounced in rural areas (Trivedi et al., 2015).

Community Development and Behavior Change

Each community possesses a distinct array of challenges, reflective of its unique characteristics. Much like the definition of community itself, the vision for community development varies considerably. Some community leaders seek to enhance their communities by conducting needs assessments. These assessments within communities may examine statistics related to poverty rates, crime incidence, income disparities, unemployment rates, and often healthcare accessibility and health indicators (Billings & Cowley, 1995). Each of these individual metrics contributes to the collective community wellbeing.

Developing the overall community is one of the most fruitful ways to improve the lives and incomes of individuals within a community (Syme & Ritterman, 2009). By building, leveraging, or modifying community assets, health equity can be achieved (National Academies of Sciences, Engineering, and Medicine, 2017).

Community change initiatives, grounded in a framework of shared knowledge, trust, and purpose frequently establish a comprehensive groundwork for local transformation (Auspos & Fulbright-Anderson, 2006; Bailey, 2013; Emery & Flora, 2020; Substance Abuse and Mental Health Services Administration, 2022). Researchers and practitioners express a preference for leveraging shared knowledge to reach goals oriented towards change (Christens & Inzeo, 2015). Shared knowledge involves securing buy-in and ownership at the community level among citizens who are directly impacted by potential changes. This shared knowledge broadens the scope and potential of change from individual improvement and extends to encompass larger-scale collective development (Bailey, 2013).

While there is literature supporting policy, systems, and environmental changes within communities in reference to improving health (Berg et al., 2023; Golden et al., 2015), less is currently known about the process of designing and implementing sustainable community-based health initiatives that improve the lives of community members in rural communities specifically. The relationship Cooperative Extension professionals have with community members at the local level positions them well to assist in designing, implementing, and evaluating these types of interventions (Majee et al., 2014).

The Role of Cooperative Extension

A particularly important partner at the community level is Cooperative Extension which was created with the passing of the Smith-Lever Act in 1914 (Wang, 2014). The Cooperative Extension Service added an outreach component to the traditional teaching and research elements that were occurring at land grant universities, including the University of Georgia (UGA). Extension's history includes over 100 years of providing unbiased, research-based information from land grant universities across the nation (Wang, 2014). Extension educators

serve as change agents for improving both food systems and public health (Sanders et al., 2023), provide community development-focused education (Rasmussen et al., 2017), and play a pivotal role in spreading essential knowledge and nurturing community advancement across a wide array of disciplines, spanning from agriculture and natural resources to family and consumer sciences and positive youth development (Rafie et al., 2021).

More recently, the role of Extension in reducing chronic disease has been explored. Research identified Extension professionals as both educators and collaborators in preventing chronic disease within their respective communities (Remley et al., 2018). While serving in the educational role, Extension personnel should facilitate and teach evidence-based programs within the communities they serve. A potentially more impactful position though is Extension's role as a collaborator. This emphasizes the importance of Extension facilitating and nurturing partnerships that effect sustainable change throughout communities (Remley et al., 2018).

Community Coalitions

As described previously, Cooperative Extension is one organization which is often well-positioned to help communities identify shared goals as well form teams of individuals working to accomplish them (Jones et al., 2021; Majee et al., 2014: Meendering et al., 2023). One way this work has been made more effective is through the use of community coalitions. A community coalition is a group of people (often volunteers, local elected officials, business owners, educators, and other invested community members) representing a specific community who are working together to achieve a shared goal (Homel et al., 2019: Jones et al., 2021).

Coalitions are collaborative endeavors with organizational structures that have demonstrated success and positive impact, especially in community settings (Christens & Inzeo, 2015). The effectiveness of coalitions is influenced by factors such as group cohesion, diversity,

and structure (Zakocs & Edwards, 2006), in addition to the social, cultural, and historical context of the community (Kegler et al., 2010). Members of coalitions collaborate to address problems collectively, exchange feedback, and implement actions aligned with mutually agreed-upon priorities (Butterfoss & Kegler, 2002; Gillespie et al., 2021; Meendering et al., 2023).

The coalition model of community collaboration serves as a strategy for local and state partnerships to address the multifaceted issue of obesity. This collaborative effort builds upon previous initiatives dedicated to promoting health at the community level (Christens & Inzeo, 2015; Meendering et al., 2023). Within community coalitions, studies have noted cultural shifts within conversations surrounding food within the community and the impact of community gardens on food access (Randall et al., 2023).

Recently, in Georgia, coalition efforts have been focused on improved health through increased access to healthy food options and physical activity (Sanders et al., 2023; Jones et al., 2021). Community coalitions have secured improvements to walking trails, playgrounds, sidewalks, community and school gardens, healthy eating options, and progress toward additional health initiatives (Jones et al., 2021). In many instances, community coalitions worked alongside local Extension leaders to engage with local data and brainstorm activities and improvements for potential food and physical activity interventions within their communities (Berg et al., 2023).

Healthier Together Stewart

Rural Stewart County, home to Providence Canyon, is located in southwest Georgia with a total population of 4,674 (U.S. Census Bureau, 2023). The county residents identify as 44.3% White, 47.9% African American, 4.2% Asian and 3.0% of two or more races according to Census data. In addition to being classified as a food desert according to the United States

Department of Agriculture's standards, 37.9% of the population lives in poverty (USDA ERS, 2020). The county also has one of the highest obesity rates in the state at 44% (County Health Rankings, 2024; USDA ERS, 2019). Cooperative Extension leaders have worked to address these challenges through the Healthier Together (HT) initiative.

The High Obesity Program (HOP) is a collaborative effort between the Centers for Disease Control and Prevention and the Cooperative Extension System (Jones et al., 2021). HT is the Georgia-specific initiative based on the national HOP program which utilizes the social-ecological model as a basis (Berg et al., 2023). The social-ecological model considers the complex interaction among individual, relationship, community and societal factors. The partnership includes Extension (at the county and district levels), local communities, and an interdisciplinary team at the university level. HT is currently working to address food and physical activity access in five rural counties in Georgia: Calhoun, Clay, Dooly, Stewart and Taliaferro, where over 40% of adults are obese. Calhoun and Taliaferro counties joined the project in 2016, while the other counties joined a second round of funding in 2018 – 2023. The objective of the HT project is to utilize community Extension services to implement evidence-based strategies aimed at enhancing the well-being of county residents (Dobbins et al., 2020). This includes promoting increased physical activity, ensuring access to healthy food options, and establishing food policies that foster lifelong healthy eating habits (Jones et al., 2021).

To begin working towards the strategies of the HT initiative, mentioned above in Stewart County, a Healthier Together Stewart Coalition was formed (Dobbins et al., 2020). Stewart County, the team was composed of formal and informal leaders, local residents, and community stakeholders who were able to provide local expertise and input to the project (Jones et al., 2021; Randall et al., 2023; Sanders et al., 2022). Led by the Extension team, the coalition members

worked together to identify projects to help reach the aforementioned goals of increased physical activity, ensuring access to healthy food options, and establishing food policies that foster lifelong healthy eating habits (Jones et al., 2021). The projects include community gardens, signage for walking trails, improvements to local parks, and Grab-n-Go Coolers in local businesses in Stewart County (Dobbins et al., 2020; Sanders et al., 2022).

To gauge the progress in relation to HT objectives and identify impacts of the coalition's strategies, evaluations were conducted annually. Evaluation methods included both surveys of community members and focus groups with HT coalition members. The data from surveys and focus groups were presented through annual reports that highlighted both positive outcomes and areas for improvement (Dobbins et al., 2020; Sanders et al., 2022). Among the highlighted successes of the initiatives were increased healthy food access within the community, improved health through increased walking, and the development of a sense of community among coalition members (Dobbins et al., 2020).

While these positive impacts were directly related to program objectives, the evaluation reports also included several obstacles identified by community members and coalition members that are hindering the progress of the project. The highlighted obstacles included limited buy-in from local businesses, difficulty recruiting volunteers, and the division between white and black community groups (Sanders et al., 2022). Conversation related to the racial divide brought up historical roots within the community and the continued division between community groups. When asked about visioning for the future, many coalition members identified the need for diversifying coalition membership specifically in regard to adding younger members and more people of color (Sanders et al., 2022).

Based on data collected within the county, several recommendations were made within the evaluation reports. These included capitalizing on progress made, developing new strategies for involving local businesses (stores), helping non-project volunteer community members understand when and how to access produce from community gardens, improve communication efforts to the general public about resources and opportunities available, conduct visioning sessions to determine leaders with influence in non-represented groups with the goal of recruiting more diverse volunteers (Dobbins et al., 2020; Sanders et al., 2022).

Study Justification

This study aims to address a need to understand what steps and tools may be necessary for sustained behavior change within rural communities and how Cooperative Extension can effectively work within communities to implement these steps. While many initiatives within the HT project were deemed successful, continued obstacles have been identified by coalition members which are creating challenges for sustainable change within the Stewart County community. Based on the documented effectiveness of community-based social marketing in achieving sustained behavior change (more in theoretical framework), the researcher hopes to identify how HT and similar projects can be improved by applying the framework. By investigating the topic through the CBSM lens, the study aims to contribute valuable insights to the fields of community development, program design, and Cooperative Extension, ultimately working towards the goal of improving health outcomes in rural areas.

Theoretical Framework

This study used community-based social marketing (CBSM) to guide data interpretation. CBSM is an approach to traditional knowledge-intensive programs that applies commercial marketing strategies to produce sustained, desired behavior change (McKenzie-Mohr, 2011).

This theory emphasizes the need for direct contact with community members and the strategic removal of barriers to implement behavior change for the wellbeing of individuals and the overall community (McKenzie-Mohr, 2011). It relies heavily on a community-based approach to promote behavior change – identifying these initiatives is most effective when involving direct contact (McKenzie-Mohr, 2011). CBSM has five main steps: (1) selecting behaviors to be changed/promoted, (2) identifying the barriers and benefits that affect the behavior that was selected through research, (3) developing strategies using behavior change tools that correlate with the barriers and benefits identified, (4) implementing programming through a pilot with a small subset of the community, and (5) broadscale implementation and evaluation of the impact (McKenzie-Mohr, 2011).

A major part in the CBSM process is the development of a strategy to encourage a behavior change using tools to address a target audience's barriers and benefits (McKenzie-Mohr, 2011). The seven behavior change tools used during the strategy development step include: (1) commitment, (2) social norms, (3) social diffusion, (4) prompts, (5) communication, (6) incentives, and (7) convenience (McKenzie-Mohr, 2011). These tools can be used to directly address barriers identified to impede behavior change. For example, if a lack of knowledge was identified as a barrier, the change tools of communication and social diffusion might be used. Additionally, if lack of motivation was identified as a barrier, commitment, norms and incentives may be useful tools (McKenzie-Mohr, 2011).

CBSM is most commonly seen in studies encouraging positive behaviors that benefit the environment, such as reducing greenhouse gases through household behavior changes (Streimikiene, 2022) and enhancing and supporting environmental regulation (Kennedy, 2010). Additionally, CBSM can be applied in the context of rural communities. For example, in a 200-

home community, researchers went door to door distributing recycling containers, securing commitments to recycle, and increasing knowledge of what, why, how, and when to recycle. Afterwards, researchers examined the uptake of recycling once a recycling program was implemented. It was discovered that the initiative, which followed CBSM principles, had positive effects on the rate of recycling as a result of the distribution of supplies (Haldeman & Turner, 2011).

CBSM has also been used with health-related initiatives such as an awareness campaign with training for lung cancer intervention (Athey et al., 2011). Physical activity was also examined through CBSM in relation to social norms by increasing the visibility of individuals walking to school (Schuster et al., 2016). While there have been instances of CBSM used for health-related behavior change, there is an overall lack of evidence in the literature related to using CBSM within Cooperative Extension specifically for health-related improvements.

Cooperative Extension efforts work to target community-level needs through behavior change and CBSM is relevant for better understanding barriers and benefits to engaging in behaviors to address local needs. The relationships agents have developed within their respective communities can help build trust and rapport across various partners (Qu et al., 2019; Ryan et al., 2023). This concept assists in situations around sensitive topics, interviews, and collecting survey responses which are critical parts of step two, identifying barriers and benefits (McKenzie-Mohr, 2011). Agents are able to foster relationships with community leaders, families and individuals, any of which could be considered gatekeepers for specific parts of the community. The fostered relationship with gatekeepers in the county that the Extension agent may have could open doors that would not open otherwise. The support of gatekeepers is especially important when conducting research with minority groups or vulnerable groups

(Dempsey et al., 2016). CBSM, specifically the concepts of integrating social norms, convenience, and community-based initiatives, are particularly relevant for Extension professionals addressing local needs.

While CBSM has been successful in implementing sustainable behavior change in many communities (Athey et al., 2011; Haldeman & Turner, 2011; Schuster et al., 2016), it has some limitations as well. It is often criticized for the time-consuming steps necessary to produce a sustained behavior change. Throughout the literature, CBSM depends heavily on input from the community and a community-based approach (McKenzie-Mohr, 2011). Often times, this method can be seen as overly time consuming, challenging and often unsuccessful as a result of lack of sustained participation from the same individuals overtime which is consistent with other community change theories (Auspos & Fulbright-Anderson, 2006; McKenzie-Mohr, 2011).

While CBSM has been used many times throughout environmental education, there is a gap in the literature with regard to its use in Extension programming. This study aims to increase the literature base on CBSM in two main areas – Cooperative Extension programming and health-related behavior change through community coalitions. This novel contribution to the literature can provide Extension educators and community program leaders with a new approach including detailed steps and change tools to be utilized for planning and conducting local level interventions. The methods also offer a unique lens for data collection and analysis specific to focus group interviews and secondary data.

Purpose and Research Questions

Addressing obesity requires multilevel interventions that address knowledge and clinical care, as well as social, political, and environmental structures (Huang et al., 2009; Lee et al., 2017; Lyn et al., 2013; Trickett & Beehler, 2013). For people to live healthier lives, they need

access to affordable, healthy food, safe and convenient places to be physically active and policies to support engagement in these behaviors – all part of the social determinants of health (Braveman & Gottlieb, 2014) and goals of the Healthier Together Stewart project. The purpose of this study was to examine existing data sets from the HT project in Stewart County, Georgia through a community-based social marketing lens to better understand what tools may be utilized for sustained behavior change and increased engagement within rural communities. This study was guided by the following three research questions:

1. What barriers and benefits exist within the community?
2. Which CBSM behavior change tools (commitment, social norms, incentives, convenience, social diffusion, prompts, and communication) are present within the data sets?
3. How can CBSM behavior change tools identified within the data be used to address barriers?

Methods and Procedures

The methods for this study include analyzing data which were previously collected for a separate study (defined below) related to the Healthier Together Stewart project.

Project and Setting

The Healthier Together (HT) initiative aimed to enhance access to healthy food and opportunities for physical activity by implementing interventions focusing on policy, systems, and environmental (PSE) changes. Guided by the social-ecological model (Emery & Trist, 1972; Stokols, 1996), the project sought to influence individual food and physical activity behavior, ultimately preventing obesity by making healthy food more accessible and enhancing infrastructure and spaces that encourage active transport and leisure. The social-ecological model

encompasses four levels—individual, relationship, community, and societal—that interact to impact health. Among PSE strategies, community gardens emerged as crucial, holding the potential to improve individual access to healthy foods, boost physical activity, foster community relationships, and enhance social capital (Berg et al., 2024; Borron et al., 2023; Teig et al., 2009).

As indicated in Berg et al. (2024) and Borron et al. (2023), in the project's initial phase, Extension staff orchestrated the formation of community-based coalitions, adhering to CDC best practices for coalition-building (CDC Division of Community Health, 2013). Local Extension faculty and staff invited key community leaders—both natural and appointed, including local government officials, faith-based leaders, community resource coordinators, and school staff—whose involvement was deemed critical for the success and sustainability of the initiative (CDC Division of Community Health, 2013). Initial meetings, local data assessments, visioning sessions, and project prioritization were hosted by local Cooperative Extension agents and staff for coordination of project goals between the time period of 2020 and 2023 (Berg et. al, 2024; Borron et al 2023).

Primary Study

The primary study utilized qualitative methods (individual and focus group interviews) to gather data from Healthier Together Stewart coalition members to gain insight into the project evaluation (Berg et. al, 2024; Borron et. al 2023). The invited participants were members of the Healthier Together coalition who had involvement in the community initiatives outlined for the community. While the degree of participation varied, each person had participated in the coalition in some form.

The questions for the individual and focus group interviews were collaboratively developed by a committee of social scientists, including two professors specializing in

agricultural communication and program evaluation, one professor in family and consumer sciences focusing on nutrition and health, and a graduate student in science communication and program evaluation (Sanders et al., 2022). Interview questions were developed through the lens of appreciative inquiry. An appreciate inquiry approach is one that capitalizes on strengths with a positive approach to organizational change and leadership development (Ludema et al., 2017). This evaluation approach focuses on understanding the best of what a program has to offer or its successes in generating positive development and sustainability for the program. Interviews were conducted by an evaluation team consisting of graduate students, an Associate Professor in the Department of Agricultural Leadership Education and Communication, and an Associate Professor in the College of Family and Consumer Sciences at the University of Georgia (Sanders et al., 2022).

Individual telephone interviews were conducted between April and June of 2020, while focus groups interviews took place in 2021 and 2022. Individual and focus group interviews were recorded and then transcribed by an independent transcriptionist. Following the transcription, transcripts were analyzed for patterns or dominant themes. Themes and direct quotes were used to develop a codebook which was analyzed by a team member who had not conducted the individual or focus group interviews (Dobbins et al., 2020).

For the telephone interviews conducted in 2020, coalition members were contacted up to four times, with each invitation requesting their participation in an approximately 45-minute interview (Borron et al., 2023). The interview guide explored coalition members' personal role in the coalition, the impact of COVID-19 on the project, physical activity, nutrition policy, and healthy food changes within the community as well as community acceptance and future

visioning and support (Dobbins et al., 2020). Six individual interviews were conducted with coalition members and demographic data are listed in Table 3.1.

Focus group interviews occurred during regularly-scheduled coalition meetings in March and April of 2021 and 2022. The moderator guides were crafted to investigate the influence of coalition members on physical activity, nutrition policy, and the promotion of healthy food practices within the community. It also aimed to gauge community receptiveness and future planning (Sanders et al., 2022). The focus group held in 2021 was conducted via Zoom with three participants. A second focus group was conducted in 2022 at the Richland garden site. A total of eight coalition members participated in the focus group. The demographic data are listed in Table 3.1 for each of the data sets.

Table 3.1
Demographics for qualitative participants

Year	Method	Race and/or Ethnicity	Gender	Occupation
2020	One on one phone interview	White	Male	Retired Community Member
2020	One on one phone interview	White	Male	County Government
2020	One on one phone interview	White	Female	Retired Community Member
2020	One on one phone interview	Black	Male	City Government
2020	One on one phone interview	White	Male	Civic Group Leader
2020	One on one phone interview	White	Female	City Government
2021	Zoom Focus Group	Black	Female	School System/Parent
2021	Zoom Focus Group	White	Male	Retired Community Member/Architect
2021	Zoom Focus Group	White	Female	Civic Group Leader
2022	In-Person Focus Group	Black	Female	Community Leader
2022	In-Person Focus Group	White	Male	Retired Community Member/Architect
2022	In-Person Focus Group	White	Female	Retired Community Member
2022	In-Person Focus Group	White	Female	Health Services

2022	In-Person Focus Group	Black	Female	Health Services
2022	In-Person Focus Group	White	Female	Student/Lifelong resident
2022	In-Person Focus Group	Black	Female	Secretary
2022	In-Person Focus Group	White	Female	Organization Leader

Secondary Study Methods

The present study was a secondary analysis of the data collected through the primary study methods described above. The primary study revealed themes related to food access (community gardens and grab and go coolers) and physical activity (walking trail plans, wayfinding signs, and park additions) (Dobbins et al., 2020; Sanders et al., 2022; Sanders et al., 2022). The data revealed themes of togetherness, increased walking, and community acceptance. However, data sets also revealed areas of obstacles including limited success working with stores, difficulty of recruiting volunteers and separation between communities. During the future visioning questions, participants expressed a need to diversify coalition membership, bring the community together, and create a healthier community (Dobbins et al., 2020; Sanders et al., 2022; Sanders et al., 2022). Specific recommendations from the evaluation reports indicated a need to enhance communication, recruitment, and capitalizing on the strengths of the community (Dobbins et al., 2020; Sanders et al., 2022; Sanders et al., 2022).

Based on the recommendations from project evaluation reports and the need for additional information to enhance the probability of sustainable behavior change within the community, the data were analyzed using community-based social marketing as a guiding framework. The primary analysis method was deductive thematic analysis which used CBSM behavior change tools as predetermined codes based on the study's research questions. Thematic analysis is a widely used method of qualitative analysis (Braun & Clarke, 2006) used to detect,

examine, and present patterns (themes) within a dataset. It provides a comprehensive and detailed organization and description of the data and offers flexibility for the researcher while providing the potential to organize rich and detailed information (Braun & Clarke, 2006). When conducting thematic analysis, researchers can employ either inductive or deductive methods to identify themes or patterns within the data. The six-step thematic analysis framework provided by Braun and Clarke (2006) (Table 3.2) was used in this study.

Table 3.2
Phases of thematic analysis as described by Braun and Clarke (2006).

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collecting data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Community-based social marketing theory (2011) was used as an a *priori* coding manual. Within the steps of CBSM, seven behavior change tools are recognized as ways to combat barriers to behavior change. The seven tools include: barriers, commitment, social norms, prompts, communication, convenience and incentives. The method was used to identify themes across the data sets – individual interviews (2020), focus group interviews via Zoom (2021), and face-to-face focus group interviews (2022).

The interviews were transcribed by a third-party software and coded by the county Extension agent (the lead researcher for the present study) in Stewart County through MAXQDA data software. The researcher initially read through the transcripts to familiarize herself with the data (Braun & Clarke, 2006) and made notes detailing her initial interpretations of the focus group data. Once data sets were coded, overall codes were printed and reviewed for consistency by the researcher and peer reviewer which are documented in Appendix G (Lincoln & Guba, 1985). This audit trail and peer debrief resource further enhance trustworthiness of the data (Lincoln & Guba, 1985). After consistency was checked, a concise outline with preliminary findings and code book were shared with participants from the data sets. This conversation and interaction with participants assisted with member checking to establish credibility (Lincoln & Guba, 1985).

Subjectivity Statement

The researcher's position during this study was serving as the Stewart County Extension Agent and County Extension Coordinator. The role of an agent is to provide education and outreach programs in the areas of food, home, health, money, and family. The researcher's responsibilities include coordinating adult and youth programs, educational program development in areas of financial and housing education, children, youth and family development, health and nutrition, food safety, grant program management, fundraising, and needs assessment for Family and Consumer Sciences programming. Aside from these outlined responsibilities, work towards building community through increased partnerships and research development are also included. The role in the community allowed the researcher to serve as a participant observer in the research process which aided learning about the participants'

experiences from an emic perspective (Creswell & Poth, 2018). Additionally, trust is built with community members which allowed access to observe and engage in the research process.

Results/Findings

Community-based social marketing (CBSM) is a behavior-focused approach to traditional knowledge-intensive programs that applies commercial marketing strategies to produce desired behavior change for the wellbeing of individuals and the whole community (McKenzie-Mohr, 2011). Themes included the seven behavior change tools outlined in CBSM (commitment, social norms, social diffusion, prompts, communication, incentives and convenience). Additionally, barriers, benefits/opportunities, perceptions and county demographic information provided during the data collection were coded to provide additional insight into community members' abilities or desires to participate in the behavior change. The data were examined through the lens of CBSM to provide additional insight into improvements Extension staff could make to advance the impact of the Healthier Together project based on recommendations from the evaluation reports (Dobbins et al., 2020; Sanders et al., 2022) as well as enhancing communication and integration of community gardens within the communities (Berg et al., 2023). CBSM was specifically used to examine the data to identify perceptions and present behaviors relevant to the ability to adopt HT behavior changes (Mckenzie-Mohr, 2011). In the results section, pseudonyms were used to protect the confidentiality of participants (Creswell & Poth, 2018). Table 3.3 below provides an overview to themes, descriptions, and a representative quote.

Table 3.3

Overview of themes, descriptions, and a representative quote

Theme	Definition/Description	Representative Quote
History and Demographics of Stewart County	Events, people or activities that have happened in the past	"Stewart County was founded in 1827 with the purpose of being a farming community, and more to the point, a cotton farming community." (Carl)
Barriers	May be internal or external; circumstances inhibiting behavior change	"getting anything done was always like pulling teeth." (Emily)
Opportunities/Benefits	Circumstances that may initiate/reinforce a behavior change	"And we're very happy to have that as a resource here, and to help have the CDC and UGA back us in our efforts" (Sid).
Behavior Change Tool – *Commitment*	Refers to how dedicated the group or individuals leading the effort are to achieving the desired change. Without a dedication to a sustained effort over time, progress will be slow or nonexistent	"He's pretty good at helping us, but he's also one that will help us with anything that needs to be done in the office or around the building or anything like that, too. He not only helps with the garden, but he helps with anything in the office that needs to be moved as well." (Michael)
Behavior Change Tool - *Prompt*	A prompt is a visual or auditory aid which reminds us to carry out an activity that we might otherwise forget.	"The signs from post to post that tell you how far to go" (Carl)
Behavior Change Tool – *Social norms*	The way people behave or actions that are perceived as average within the community. Can involve the things people are familiar with (i.e. cultural, recipes, activities)	"We never grew spinach. She brought spinach, chard and kale. Everybody turned around and looked at each other and said, "What is chard and kale? How do you eat chard and kale?" (Emily)
Behavior Change Tool – *Communication*	Channels for providing feedback, information, or updates regarding the projects	"I even have people that see me and know that I work with Extension and that we have the community garden… they'll see me, "Hey, are any vegetables growing? Are they are ready to harvest?" And I'm like, "Give it another week. (Darin)

Behavior Change Tool – *Incentives*	Creating a benefit to ensure benefits outweigh barriers	"But yeah, overall, having access to fresh vegetables... They taste different. They taste better. You can taste the difference from buying it in the grocery store versus out of the garden" (Michael).
Behavior Change Tool – *Convenience*	Indication of how easy or simple a task is to complete or obtain – the action takes minimal effort	"And I'll pick peppers or whatever. And on my way back to the house in the evenings, I make stops, and dropping off peppers, or tomatoes, or whatever we might have for the residents that can't even get out of the house that day" (Darin)
Behavior Change Tool – *Social diffusion*	How an idea spreads throughout the community	"I got my mom and dad into gardening at home" (Michael).

County Demographics and History

The individuals participating in the individual and focus group interviews described their roles within the coalition as well as community during the data collection process. These participant roles included working for the Stewart County school system, county government, city government, health services, local civic group leaders, retirees, community members, parents and an architect. Many participants expressed that they had lived in the county for more than ten years with a few comments such as "I have lived in Stewart County my whole life" (Michael) or "we moved back about 30 years ago…" (Emily).

The participants described their love and familiarity of Stewart County with statements like "everyone knows everybody," (Amanda) and "we basically know our community so we pretty well keep in touch with each other, we know what's going on. And that's what you love about a small community" (Amanda). Participants described the close knit feeling of the community, "so we're really, really close linked" (Dan). Within the history, participants

described many of the resources that used to be present in the community but are no longer such as “two full time doctors,” (Amanda) “car dealers,” (Darin) “seven grocery stores,” (Amanda) “two banks,” (Darin), and even a “great hotel” (Amanda).

Participants recounted the history as it pertains to the current demographic and economic downfall of the county with stories of the cotton industry. Carl shared, “Stewart County was founded in 1827 with the purpose of being a farming community, and more to the point, a cotton farming community.” The stories continued with the introduction of the cotton gin and discussion of slavery in southwest Georgia. “With the large population of people coming here to be farmers, cotton farmers, they came with them, a lot of slaves” (Carl). Participants described the stories of Stewart County thriving in cotton production with an influx in population. Carl stated, “…which made Stewart County one of the largest counties population-wise in the state.” Shortly after though, “…farmers kept getting poorer and the populations continued to move away.” As the agricultural industry changed, the community did as well and “what has evolved over time is just chronic poverty” (Carl). Sid described the struggles within their community as well:

> There’s not a lot of good healthcare locally, there’s a lot of poverty, there’s still a lot of hold over in terms of a very segregated community, not well integrated and all that has an effect on people’s health and their lifestyle. And so all those things factor into the overall makeup of the community.

Many described a lack of activities going on with statements such as “there’s really nothing to offer young people to stay here as far as raising a family” (Amanda). Repeatedly participants made statements in the effect of the overall resources available and the economic

presence of their community with statements like, "…we're a poor community. We don't have too many resources" (Darin).

Uncovering Barriers and Opportunities

Within CBSM, focus groups are often used to explore in-depth attitudes and behaviors of community members (Mckenzie-Mohr, 2011). The data sets also serve as an essential step in enhancing Extension professionals' or community leaders' knowledge and understanding of the behavior. The barriers and opportunities will provide the groundwork to the strategies that will be developed using the behavior change tools to promote the behavior change within the community (Mckenzie-Mohr, 2011).

Barriers and Opportunities/Benefits

Throughout the data sets, mentions of barriers and opportunities were evident. Often times the two were paired together in a sense of a barrier followed by an opportunity or benefit. For example, Amanda expressed "…we don't have the funds, we don't have the means." Others (Dan, Erin, and Juan) said funds are the most challenging barrier.

The participants highlighted many positive opportunities throughout the data sets with statements such as "it's (HT) really brought the community even closer in my opinion (Amanda), "we want better for the kids, well, I guess for us" (Ashley) and "we all love our community" (Darin). The participants expressed support of HT initiatives from multiple parties such as "we've been able to get help from the county and the city" (Erin) and "It did bring people from town small towns together, briefly, when we were working together. That's always a good thing in the same county, very competitive little town" (Emily). Participants also exclaimed the opportunities available with UGA and other organizations with comments such as "And we're very happy to have that as a resource here, and to help have the CDC and UGA back us in our

efforts" (Sid). Many participants noted the opportunities within the projects and one participant even mentioned "everyone that I've spoken with has been grateful for the changes and providing some activities for their kids and their selves…" (Darin).

While the participants identified many highlights of living and working in rural Stewart County and several positive outcomes related to the HT project, there were several challenges left to work through. One participant expressed "No one has changed their habits" (Emily) in reference to seeing more individuals using the garden or exercising. Juan stated "…that hurt. That has hindered the community a lot" when discussing the ability to provide labor needed for various projects. This part of the conversation was in reference to the inability of the grant to pay for labor costs. The labor had to come from local funds aside from the grant. Emily expressed hardship with recruiting volunteers and mentioned "getting anything done was always like pulling teeth." Additionally, funding was described as a barrier throughout many of the data sets. Funding locally and equipment was mentioned through several comments such as "no flexibility in their budget" (Sid) at the county level where funds were extremely limited or nonexistence.

Requirements related to grant funding were also described as a barrier as Emily explained a personal encounter with the following statement; "But suddenly we're told it wasn't funded this year. We'll get it funded next year and it's next year and we still haven't got anything." However, many participants also saw it as an opportunity with comments such as "this grant has enabled us to show them that you deserve more" (Erin) and "I believe that this will be a much more effective venture" (Emily).

Other barriers mentioned included transportation, involvement with local retail, lack of access, safety, and unseen changes with statements like, "transportation is not something we have here" (Michael) and "our quick shops didn't want to get involved with it" (Dan). Darin

stated, "…now the access is not there" and "It quite literally is dangerous for somebody to walk. They might get shot, or they might get run over. They need a place" (Carl). Some coalition members even mention that there are some unseen changes, "it hasn't changed a lot" (Emily).

Behavior Change Tools

Commitment

Within CBSM, one of the tools of promoting behavior change and addressing barriers is commitment. Research around CBSM has shown that participants who often make a small commitment in the beginning are *more likely* to participate in a more involved commitment later (McKenzie-Mohr, 2011). Within this study, participants described commitment to health-related initiatives introduced as part of the Healthier Together project. Many recognized that "it's still a little nugget that's really getting going" (Sid) when talking about the newly introduced projects in Stewart County. Others recognized that while the project is new, "there are some who have started to do their own small gardens too" (Amanda).

Participants described many of the issues surrounding community members' willingness to participate. Many challenges included cultural differences with statements like, "we are still a black and white community" (Juan) and transportation with statements like "they don't have a vehicle" (Amanda). Others described challenges with scheduling and availability. One participant recognized that "it's a slow and long process" (Sid). Darin also described:

> I've read some people don't want to commit. That's a conversation I have with a lot of people in the community. They want to come, but they might not be able to come all the time. If you commit to, "Okay, I got to fill out this paperwork and say, I'm going to be there every Saturday." Well, that Saturday I might not be able to get out of bed or I might

> not have transportation up there to work in the garden. So that, and I don't know a way to work around that, but that's something that we need to work on.

Much of the discussion around commitment focused on the need for the interventions introduced by Healthier Together but was followed by description of personal reasons for involvement. Sid expressed “I’ve gotten to know some other people in the county…so for me, it’s helped expand my community and connections within the county.” However, the conversation supported the lack of commitment from community members overall. Several participants recounted times when they struggled to get others involved. Emily said, “People are just from a different mindset, and they don't want to participate” and described the outcomes as disappointing with

> Unfortunately, the coalition is... It's made up mostly of white participants that are the same people that sort of try to keep things going, and it's a relatively small group in the community. There are lots of other people in the community who, I think probably have more social power, perhaps, but really don't get involved in things like this because, it's not going to give them any direct benefit financially, probably. So, there's been, to my eyes, it's been a relatively small and disappointing amount of contribution from the local area in terms of participation of the citizenry.

Despite the slow level of buy-in from the overall community, participants noted the commitment of coalition members to carry out HT project initiatives with comments like “all the volunteers pulled together.” The commitment of some volunteers stood out specifically,

> He's pretty good at helping us, but he's also one that will help us with anything that needs to be done in the office or around the building or anything like that, too. He not only

helps with the garden, but he helps with anything in the office that needs to be moved as well (Michael)

Prompts

CBSM supports that humans need reminders to participate in desired behaviors (McKenzie-Mohr, 2011). "A prompt is a visual or auditory aid which reminds us to carry out an activity that we might otherwise forget" (McKenzie-Mohr, 2011, p. 26). Throughout the data set, there were a few instances of prompts available around the county mentioned. Participants agreed there were not many prompts related to the project despite the need for the interventions as Carl noted, "this kind of project has an immense value in a county like this." In terms of fresh produce, some participants mentioned driving by the garden reminded them to grab some produce for supper or another meal. Participants mentioned increased motivation with "the literature that has gone out" (Amanda) and seeing the wayfinding signs around the community, "the signs from post to post that tell you how far to go" (Carl), but most participants continued to agree that more was needed within the community to keep healthy living at the forefront.

Social norms

Social norms within CBSM should be viewed as the way people behave or actions that are perceived as average within the community (McKenzie-Mohr, 2011). Quotes within the category of social norms were connected with culture and history throughout this theme. Participants recounted the history of the county with statements such as "this was a railroad hub, farming community, and used to be a very vital area because there were a lot of small farmers. And with the consolidation and reduction in number of farms, the community has really lost a lot of that vitality" (Sid). Many participants stated comments related to "rural communities are a hard nut to crack" (Emily) with statements such as "…experienced the culture of a really small

town, and it's different, and it's a lot tighter in terms of families and friends, and a bit harder to break in" (Dan) and "so even that has been impossible to break through just because of, I would call them cultural barriers" (Sid). The reflection of culture brought many points of families who have raised generations in Stewart County with the realization that "there's a large community here that has never been outside the county. They've been here, raised their families here, they have their grandkids here now. This is their home. This is what they know" (Erin). This discussion lead into a disbelief in data they observed elsewhere in which one interview participant could not believe the general community members responses to having everything they needed. Carl described

> I saw some statistic, and I don't remember whether it was the CDC that generated this statistic or some other entity. It was a survey of people in the county and whether or not they felt like they had an adequate access to healthy foods. It was an enormous number of people in the county that said they had access to healthy foods. It's just patently untrue.

Discussion continued on the reality of the situation for many people who "don't know better" (Darin).

Many discussed social norms in the event of towns, people of diverse backgrounds, and cities working together. Some had positive recollections such as "collaboration between the cities and the counties" (Dan) and "you've got to pull them in closer together and work better together" (Michael). While others described situations such as "we got more white help than black help" (Juan). Social norms were also highlighted when discussing specific types of vegetables to be grown in the community gardens. There were several stories of what community members expected to grow verses what was sometimes provided by grant staff helping out from outside of the community. "We never grew spinach. She brought spinach, chard and kale.

Everybody turned around and looked at each other and said, "What is chard and kale? How do you eat chard and kale?" (Emily). “I accidentally pulled the whole plant up. I thought that’s what we did” (Amanda).

Communication

Communication was an involved discussion throughout the data sets. Communication plays a vital role in everyday life but is also an important component of CBSM, specifically with regard to communicating the specific behaviors with which to engage in a clear and consistent manner (McKenzie-Mohr, 2011). Participants overall seemed to be willing to go above and beyond to communicate with community members. Many described instances of communicating items that were ready for picking at the garden through phone calls and texts while others accounted times they “delivered what was available” (Michael) to those who could not drive. Several participants even stated that community members would communicate with them specifically through both phone and face-to face methods regarding HT initiatives,

> I even have people that see me and know that I work with Extension and that we have the community garden… they'll see me, “Hey, are any vegetables growing? Are they are ready to harvest?" And I'm like, "Give it another week.” (Darin)

Others agreed that awareness was a part of communication and stated, “Well, I think more awareness of just what the possibilities are for improving one's health and what opportunities are available in the community to do that. I mean they're not vast, but they're not insignificant either” (Sid). Participants also desired two-way communication by expressing a need for “a positive sort of feedback loop” (Emily) for community members to share their thoughts.

Many ideas of increased communication were shown through comments such as “if we could drop flyers or something in the bags for people as they leave,” (Michael) “spreading news face-to-face,” and even “…going door to door” (Darin). Participants seemed committed to improving communication methods rather than reflecting on past efforts. Dan stated “…most the time it’s talked about, but it’s actually nothing done” when describing efforts that had been communicated with the community. The improvements seemed to follow notices of “not knowing what was going on” (Erin). “There’s a lot of things I didn’t know what’s going on here in the community until I worked here” Ashley recalled in reference to their involvement with the team. Others indicated only communicating with certain groups; “I personally don’t think we’ve reached the population that we need to reach. We may have opened the doors a little bit, but we have not gotten into certain conversations” (Darin). Additionally, there was some discussion on the communication within the gardens and community. One member expressed particular groups of people being excluded from the garden and others “didn’t want the paperwork” (Amanda). Sid contributed to the conversation by stating

> I will say that it's always been African-Americans who stopped by. I haven't had any white people stop by and say, I want to be part of the garden, and I don't know if that's significant or not, but it's just a fact. I've always said, yeah, we're really excited about having new people. We'd love for you to participate. If you work in the garden, you get to, take things from the garden. So, it's been pretty straightforward.”

Others disagreed, saying that the process to become involved in the garden was not straight forward and had been communicated ineffectively. Additional communication limitations were discussed revolving around COVID-19. COVID-19 was mentioned as a hinderance to the communication efforts throughout the establishment of the team with

statements like “I think that part of it is just community and communication. And I think a lot of these things got implemented almost simultaneously with the shutdown from COVID” (Carl). Many described the frustrations of projects coming to a halt due to COVID-19 restrictions.

Incentives

Incentives were some of the least mentioned items by participants. Within CBSM, the most effective incentives will attempt to anticipate how people will attempt to avoid engaging in the desired activity and act accordingly (McKenzie-Mohr, 2011). Most incentives mentioned were things that affected participants personally such as Dan stating “It’s been a little bit of work but it has been beneficial being able to see the citizens that are happy and seeing that there is something that is going forward instead of backwards.” Or statements like “trying to get healthier for our citizens” (Dan). The consideration and concern of others was also described by participants.

Some mentioned improved awareness to avoid long term health complications as incentives to participate. One participant stated “Raising the awareness in the community about obesity and the connection obesity has to disease…The black community has suffered much greater loss than, traditionally, white people. Hispanics have even suffered more as an ethnic group. So, I don't know” (Sid). Emily mentioned little things like “got two cauliflowers and a cabbage” or “more kale than anybody ever would want to eat in their entire life” as fruits of their labor. "But yeah, overall, having access to fresh vegetables... They taste different. They taste better. You can taste the difference from buying it in the grocery store versus out of the garden" (Michael).

While there was not much discussion on incentives offered, conversation continued around the positivity of the projects. Amanda even stated,

> Oh, excitement. I mean absolutely. Very exciting. Something's going on in a small community. A lot of good things don't happen in our small communities, we don't have the funds, we don't have the means. So, this is something that's very exciting to all of us

in reference to the project being in Stewart County.

Convenience

Overall, convenience seemed to be a challenging topic within the rural community. CBSM explains that "if a behavior is inconvenient, unpleasant, costly or time consuming, for example, no matter how well you address internal barriers your CBSM strategy will be unsuccessful" (McKenzie-Mohr, 2011, p. 58). One participant described a personal experience daily with a safe place to walk with their children or grandchildren. Emily described

> If I want to go walk and I have my grandchild with me, I can't just lead out and take a walk out. The area I stay in is a rural area and I'm right off the highway. So if I want to take a walk, it's either going to have to be right in the yard. Or we can't just get out and walk where she can ride her tricycle or her bike because we're too close to the highway.

Other conversation described the lack of convenient places for children to play or shop for vegetables with quotes such as,

> your children should have a safe place to play on a playground. You should be able to walk in your town without worrying about things. You should be able to go to a grocery store or somewhere that has fresh produce (Erin).

A portion of the conversation was regarding newly established park areas in which participants exclaimed "there was so many kids out there playing basketball. There was probably more kids that were on the court then there were supposed to be on teams, but they were having fun" (Michael). Another positive was highlighted with a cooler in city hall as Dan described

where “citizens can come in and purchase the produce or fruits.” On the other hand, participants described the challenges of trying to work with the local grocery store and convenience stores to increase access to healthier options and increase convenience for local people. Participants described the stores as being unwilling to “put more healthy foods in” and “nobody was interested. Dollar General wouldn’t do it” (Carl).

Other community members expressed their increased involvement due to the location of the garden or activity. Sid expressed “I live right across the street from the site. My studio is on the other side of the community garden, so it's almost part of the environment. So, I have a little bit of a... It's kind of in my territory, so I like to try and help with it and do whatever I can to make it as good as we can make it.” Another described their retired lifestyle as convenient to have time to work on the project. In some instances, coalition members worked to make getting fresh produce more convenient for others,

> And I'll pick peppers or whatever. And on my way back to the house in the evenings, I make stops, and dropping off peppers, or tomatoes, or whatever we might have for the residents that can't even get out of the house that day (Darin).

Social diffusion

Social diffusion is another important tool for promoting sustained behavior change. Social diffusion includes how an idea spreads throughout the community (McKenzie-Mohr, 2011). Changes in behavior often happen as a result of involvement of friends, family members, colleagues introducing or inviting them (McKenzie-Mohr, 2011). Participants described many situations in which word of mouth is still the best way to spread information with statements like “...instead of sitting on the phone, they can spread the community news face-to-face” (Darin). Many also mentioned youth within the community or a family involvement in the project. Some

recalled positive instances such as “we are introducing the babies. They come to the teaching garden and play in the dirt…” (Darin) and “I got my mom and dad into gardening at home” (Michael). Others expressed the lack of involvement from younger individuals within the coalition.

Some described a lack of movement within the project in the community. One participant expressed “things get done because I know him and I like him...” (Sid). Other participants agreed. Furthermore, the participants discussed the challenges of social structures and community members reluctant nature to be a part of something new.

While some participants agreed they were seeing changes within the community or at least increased awareness with statement like “…level of just awareness that there’s maybe some caring and support for the community. I think that’s a really important and positive thing” (Michael). However, not all participants agreed. Sid expressed,

> I don't see too many people being very active, not many healthy food choices around. I'm sure there are some people who do eat more healthy, but it's probably far and few between. I mean, the culture of the area, you can't go into a restaurant and find many healthy choices around here, for even the few restaurants that are around there. There's a lot of barbecue culture going on, and that kind of thing.

Conclusions, Implications, and Recommendations

The purpose of this study was to examine existing data sets from the HT project in Stewart County, Georgia through a community-based social marketing lens to better understand what tools may be utilized for sustained behavior change and increased engagement within rural communities. The secondary study was developed to examine program efforts related to HT in Stewart County to increase involvement, reach, and expansion of the project with attention to the

components of CBSM. The qualitive data from this study support the findings of Borron et al. (2023) with discussion around history, commitment, and culture by recognizing that "…no invention exists within a static environment nor is it the central focus of every resident" (p.66S).

Limitations of the Study

While efforts were made during the onset of the HT project to recruit a community coalition representative of the residents of Stewart County, it is not a perfect representation with regard to demographic characteristics. Because of this, it must be acknowledged that perspectives may not have been fully representative of the views of the overall county. Despite the demonstrated value of qualitative data collected through individual and focus group interviews, the study comes with some limitations specific to data collection methods of the primary study. Additionally, some coalition members held influential positions within the community which may affect participant responses within focus groups.

Furthermore, the impact of COVID-19 restrictions limited outreach efforts beyond coalition members, primary interviewees, and focus group participants. The restrictions also resulted in the 2021 focus group being conducted via Zoom. With limited internet access within the rural community, this could have affected coalition members' ability to participate in the data collection. Another limitation to the data in the secondary study is the development of interview guides that were not based on CBSM principles. However, because of the small, rural nature of the community with limited possible participants, the researcher felt as though additional focus group interviews would result in decreased trust, survey fatigue, and misuse of the community members' time (Porter et al., 2004; Steeh, 1981), especially considering this small community coalition group is already asked to participate in research and evaluation processes annually. For example, in the last three years, HT Stewart coalition members have been asked to participate in

six focus group or listening session events from Extension alone. Because of the small size of the community, many coalition members also serve on other boards within the community, such as Family Connection, that also ask for participation in survey and interview research. Despite limitations, insights from coalition members remain valuable due to their pivotal role in strengthening program infrastructure through collaborative partnerships, resources, and connections to continue moving the community forward.

Implications for Practice

Most participants had personal anecdotes as their reason for involvement in the project, which strengthened their desire of commitment to the project initiatives. Whether growing up in the community and having family members raised there through generations (Anton, 2014), or just moving into the area and becoming involved, coalition members exhibited a higher level of commitment. Those same participants acknowledged the challenges of getting others involved which aligns with CBSM. Within commitment as a behavior tool, participants may commit to a project on different levels (i.e. commitment conditions) or decline participation (McKenzie-Mohr, 2011). The data reiterate that people are busy in their everyday lives and commitment to something new can be unfamiliar. CBSM emphasizes the need for behavior changes to be convenient and a part of everyday life as well as social norms (McKenzie-Mohr, 2011) to minimize the negative impact of participation. The findings in this study are consistent with research surrounding the challenge of commitment and follow through when implementing behavior change for individuals, especially around health-related initiatives (Kelly & Barker, 2016).

Previous studies within Extension have recognized the importance of social marketing to reduce perceived barriers in relation to behavior change (Sanders et al., 2023; Seevers, 2012;

Warner, 2015). Participants in this study mentioned many barriers that may not be able to be eliminated but strategies could be used to ease the burden of those barriers. While this can be a time-consuming task and often add weeks to the development of strategies within CBSM, it is worth the effort to learn and engage in barriers versus implementing a failing project (McKenzie-Mohr, 2011). Identifying barriers can also be a form of conducting needs assessments within Extension which is vital to overall programming and can assist in ensuring programs fit the needs of the community (Sanders et al., 2023).

Culture and history were common threads throughout both social diffusion and social norms themes. The influences of generational poverty as well as equity and access among community groups were acknowledge previously within the HT project as it influenced a shift within the evaluation of the project to be "focused more on measures of engagement with diverse community groups and individuals" (Sanders et al., 2022, p. 222). Moreover, both of these sections, social diffusion and norms, recounted time spent in the county with visual history and the ever-changing landscape of the county and held levels of emotion and memories that did not show up in other sections. Participants shared accounts of slavery and the division still felt in the community which has had a negative influence on the social diffusion of the project between racial groups (McKenzie-Mohr, 2011). As noted in CBSM, people are more likely to participate in a behavior if their friends or family members are a part of the change as well (McKenzie-Mohr, 2011). These data can provide critical insight for Extension leaders who serve diverse communities by informing the delivery of programming.

While some participants felt communication methods were appropriate, others acknowledged that they had no idea of happenings in their small town. Most conversation recognized different methods of communication such as word of mouth or newspapers as

effective methods. Communication affected the overall success of implementing health related programs and assisted in determining their success. As other studies have suggested, marketing plays a key role in projects of this nature (Berg et al., 2024). Additionally, the lack of communication from internal partners to the broader community (Dobbins et al., 2020) affected various aspects of the projects and multiple parts of CBSM which each contribute to the success of improving the community through health-related behavior change (McKenzie-Mohr, 2011).

Prompts, incentives, and convenience were all connected and intertwined throughout the data. Participants agreed that if something, such as a local community garden, was on their way home from work (convenience), it would remind them to perform the action (prompt). This sense of accomplishment from completing tasks, such as working in the community garden, eating healthier meals, supporting the coalition team, participating in an initiative for the betterment of the community, and/or collecting the bounty from successful harvests, which would make them feel better (incentive). While participants did not mention many prompts or incentives outside of ones personally established, such as personal gratification, those still help support behavior change. Prompts and incentives both are part of the CBSM behavior change tools in that if participants are not seeing or being reminded of the change, the behavior is less likely to become a habit (McKenzie-Mohr, 2011).

Recommendations for Practice

CBSM states that the seven behavior change tools used during the strategy development step (commitment, social norms, social diffusion, prompts, communication, incentives, and convenience) can be paired with specific barriers identified to impede behavior change to help communities overcome those barriers (McKenzie-Mohr, 2011). In the case of Healthier Together Stewart, identified barriers included issues with lack of transportation, absence of buy-in from

local businesses, difficulty recruiting volunteers, and the division between white and black community groups (Dobbins et al., 2020; Sanders et al., 2022). Many coalition members also identified the need for diversifying coalition membership specifically in regard to adding younger members and more people of color (Sanders et al., 2022). With this, it is recommended for Extension leaders to consider what assets may exist within their communities, or specific community coalitions, which may be used as one of the seven CBSM behavior change tools to combat local barriers.

Commitment is challenging in any situation but in relation to health, it can be especially challenging and overwhelming for new participants (Arlinghaus & Johnston, 2018). The present analysis suggests that smaller commitments, as suggested by CBSM behavior change tools (McKenzie-Mohr, 2011), at the onset of a project may lead to greater commitment to a community initiative over time. Therefore, rather than trying to encourage community members to commit to the full range of activities in a project, Extension agents should consider encouraging smaller commitments to begin. As participants grow and learn, Extension leaders should encourage new commitments until the desirable situation is reached.

Even though coalitions have been successful in driving Extension initiatives (Berg et al., 2023; Borron et al., 2023; Jones et al., 2021; Sanders et al., 2022) another strategy used within CBSM is to lean on block leaders. “A block leader is a community resident who already engages in the behavior that is being promoted” (McKenzie-Mohr, 2011, p. 22). Often times within Extension we focus on participants who need the programming or assistance we are providing. CBSM suggests employing those that already perform the desirable behaviors to serve as leaders within the initiative to encourage others (McKenzie-Mohr, 2011). In the instance of social diffusion, this can be a helpful tool.

Within the opportunities and benefits section of this study, coalition members mentioned the support of county and city government and resources. Extension professionals are encouraged to lean on this support and encourage leaders, formal and non-formal, within the community to engage in the project or behavior. CBSM supports the use of leaders to encourage behaviors but Extension professionals should use caution in this area as CBSM also indicates "Commitment will not work if the person feels pressured to commit" (McKenzie-Mohr, 2011, p. 22). Nonetheless, leadership setting a positive example could assistant in reining support. Consider making these commitments public through written or verbal communication (McKenzie-Mohr, 2011).

Failed or underperforming projects is one of the unfortunate outcomes of limited information before implementing a new project or encouraging a new behavior (McKenzie-Mohr, 2011). Within Stewart County at the onset of the HT project, a community garden was placed to increase access to fresh vegetables (Dobbins et al., 2020). While the garden was successful in producing produce, the coalition struggled to garner volunteers and have active participation in the garden (Dobbins et al., 2020). Analyzing the data while considering the behavior change tools (social norms, communication, prompts, social diffusion, etc.) within CBSM identified several areas of potential improvement that could be utilized by Extension professionals to enhance the reach of the community garden or inform the expansion of the project in other areas. The analysis should include understanding the culture and history of communities before implementing changes or suggestions to assist with troubleshooting potential issues within the strategies.

For example, a recent study showed that "Rural garden implementation was difficult due to the long distances between community gardens, housing and/or produce distribution sites.

Lack of transportation also restricted residents' ability to engage with gardens" (Berg, et al., 2023, p. 105s). Understanding the elements of the community (predominately white and predominantly black areas within the community) and the current behaviors of the community members through CBSM, could assist in reducing some of these barriers by selecting different locations or implementing several smaller gardens to reduce the need to travel. Extension agents should take time to listen and learn from community members in addition to researching history as this could influence the behavior change tools and barriers (McKenzie-Mohr, 2011).

Communication between community members was evident within the data sets but less communication was noted from the Extension services specifically. Similar communication challenges within community garden initiatives were noted in Berg et al. (2023) with statements such as "Coalition members noted challenges in communicating garden activity and produce availability to all residents" (p.105s). Based on the results of this study, Extension agents should increase overall communication through a variety of communication channels such as social media, newspaper outlets, as well as continuing to encourage word of mouth and flyer distribution. The increased communication can serve as prompts for community members as well as increase the likelihood of engaging in Extension/HT initiatives and implementing healthier habits.

Prompts, incentives, and convenience were some of the least mentioned themes within the data. Extension agents should revisit each of these areas to create items in each area that work best for their community. Understanding that motivation comes in many forms, this element will not be a one size fits all approach (Smalkoski et al., 2016).

Recommendations for Research

This study suggests CBSM may be an effective tool to expand or enhance project objectives related to behavior changes. Additional research should be conducted by applying CBSM at the onset of a project during a case study. Research could also be used to support further efforts in implementing project objectives related to CBSM to build a more sustainable program. While this study suggests CBSM is an effective framework for encouraging behavior change in a community, simply incorporating the tools into programming efforts will not ensure success with every project. Additional research could support the combination of CBSM with other frameworks to encompass a more robust, quantifiable Extension programming model.

An additional recommendation for research is to explore prompts and incentives within communities utilizing community coalitions. It may be interesting to explore what locations and communication channels within a community work well for prompts (i.e., have a greater return on investment) encouraging behavior change. Additionally, since coalition members are hoping to diversify the coalition with the addition of younger residents and people of color, a study utilizing audience segmentation and preferred communication channels similar to Carroll et al., (2022) may be helpful.

Conclusion

The multifaceted challenges faced by rural communities necessitate innovative approaches for sustainable change and improved health outcomes. Despite the unique characteristics of each community, shared strengths and obstacles are evident, particularly in the areas of health disparities, economic stagnation, and limited access to healthcare. Collaborative efforts, such as those facilitated by Extension and community coalitions, play pivotal roles in addressing these challenges and fostering positive transformation. The Healthier Together (HT)

initiative in Stewart County exemplifies the potential impact of community-based strategies aimed at enhancing well-being. By leveraging the social-ecological model and engaging diverse stakeholders, HT endeavors to promote increased physical activity, access to healthy food options, and the establishment of policies conducive to lifelong healthy habits. However, ongoing evaluation through this study reveals persistent obstacles, including limited business buy-in and racial divides within the community. To overcome these challenges and achieve sustained behavior change, it is suggested to incorporate evidence-based approaches like community-based social marketing (CBSM). By applying CBSM principles, initiatives like HT can enhance effectiveness, broaden community engagement, and foster long-term positive outcomes.

This study underscores the importance of continual evaluation, adaptation, and collaboration in community improvement efforts. By exploring strategies for sustained behavior change within rural contexts and the role of Extension, this research contributes valuable insights to inform future initiatives and advance the collective goal of improving health outcomes in rural communities. Through shared knowledge, commitment, and innovative approaches, a healthier, more resilient community can be built for generations to come.

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CHAPTER 4

PROPOSING A MODEL FOR EXTENSION COMMUNITY DEVELOPMENT: THE INTEGRATED COMMUNITY ENHANCEMENT (ICE) MODEL[3]

[3] Garner, Christina. To be submitted to the *Journal of Extension.*

Abstract

Cooperative Extension was established to extend the outreach component of land-grant universities to disseminate research-based agricultural knowledge across the nation. Over the years, Extension has expanded to provide needed programming in the areas of agricultural and natural resources, family and consumer sciences, youth development and overall community development. In Georgia, UGA Extension exists in all 159 counties where county agents and specialists collaborate to address community needs. Extension serves an important role in fostering relationships, conducting needs assessments, and contributing to the development of healthier and more productive communities. This article introduces a new model for Extension professionals to more closely align community development needs related to community capitals with programming efforts focused on behavior change. The Integrated Community Enhancement (ICE) Model integrates the community capitals framework and community-based social marketing theory to create a comprehensive model to develop programming based on county specific needs alongside invested community stakeholders. While the usefulness and application of the model have not been tested, the article presents a proposed scenario regarding community development through behavior change which suggests it could be an effective tool in enhancing community vitality through Extension programming.

Introduction

The Smith-Lever Act was passed in 1914 creating the Cooperative Extension Service (Wang, 2014), which added a community outreach component to the traditional teaching and research elements that were occurring at land grant universities (National Institute of Food and Agriculture, n.d.; National Research Council, 1996) Extension's history includes over 100 years of providing unbiased, research-based information from land grant universities across the nation

(Wang, 2014). In Georgia, UGA Extension delivers research-based information related to community needs through program area specialists and county agents throughout all 159 counties in the state (Powell, 2022). This service is made possible through diversified funding in partnership with county governments. Community relations and adequate financial capacity both play fundamental roles in a strong Extension program focusing on community development (Terry & Osborne, 2015).

Extension Programming

The role of an Extension agent is complex - depending on the county, program area, and the unique needs of the community they serve (Benge et al., 2021; Lakai et al., 2012). There are three program areas of UGA Extension: Family and Consumer Sciences (FACS), 4-H youth development, and Agricultural and Natural Resources (ANR) (UGA Extension, n.d.). Each program area offers distinct training and resources but works collectively to improve lives and create a healthier, more productive Georgia (UGA Extension, n.d.). Due to the meaningful local presence and breadth and depth of its programs, Extension is well placed to support community development efforts beyond just knowledge exchange in each of the three program areas (Majee et al., 2014).

Throughout the years, Extension programming has flexed with the changes of hot topics such as climate change, precision agriculture, mental health, backyard gardening, and commercial agriculture, among many others (UGA Extension, n.d.). Additionally, the availability of grants and partnerships have supported programming to help address specific community needs. One specific example of this is regarding obesity, one of the current major public health problems in the United States (Murriel et al., 2020). The High-Obesity Program (HOP) is a collaborative grant funded program between the Centers for Disease Control and

Prevention (CDC) and land grant universities, including Extension, working to implement evidence-based strategies for food and nutrition security, safe and accessible physical activity, family healthy weight programs, and early care in education settings (CDC, 2023).

Extension is positioned in communities to build relationships, perform needs assessments, and work toward creating a healthier, more productive community through education and collaboration (Jones et al., 2021; Majee et al., 2014; Meendering et al., 2023). Cohesive community support systems made up of local stakeholders are a fundamental element of Extension's ability to reach clients based on their needs (Terry & Osborne, 2015). While most Extension programs aim to increase knowledge for participants, a more compelling goal is to develop programs that create and sustain behavior changes, which lead to broader community development (Adedokun, 2023; Pratt & Bowman, 2008).

However, behavior change is complicated, complex and often difficult to maintain (Bouton, 2014; Kelly & Barker, 2016). "Many of the behaviors encouraged through Extension programming are complex changes that are not adopted immediately" (Warner et al., 2014, p. 1), so these changes take time. While behavior change can be challenging, existing behavior theories such as the theory of planned behavior (Ajzen, 1991), diffusion of innovations (Rogers, 2003) and even community-based social marketing theory (McKenzie-Mohr, 2011) provide foundational frameworks and suggestions to increase the likelihood of a behavior change to occur. Several models or theories, such as transtheoretical model of change (Warner et al., 2014), social cognitive theory (Natker et al., 2015), and social ecological model (Fitzgerald & Spaccarotella, 2009) have been used within Extension specifically to better understand or implement behavior change.

Extension, as an organization, prides itself on sharing relevant and timely research-based information, but the ever-changing needs within local communities pose two critical needs for agents. First is the need for continuous training in order to gain necessary content area expertise, and second, is the ability to carry out robust, informed needs assessment within the communities they serve to ensure resources are being appropriately operationalized to maximize impact (Garst & McCawley, 2015; Lakai et al., 2012). This is also noted in the values of University of Georgia Cooperative Extension (n.d.) Intranet, "excellence in programming with continuous improvement through technology, communication, and training."

The University of Georgia Cooperative Extension Philosophy includes "hiring top quality employees, offering continual training, providing necessary operating and managerial support, and rewarding good work" (n.d.). The variety of training methods used by Extension in Georgia and throughout the nation have been developed to keep county-based faculty up to date and delivering relevant, timely information (Benge et al., 2021; Benge et al., 2011; Lakai et al., 2012). In Georgia, content area and skill development trainings take place at the district and state levels (Trainings, n.d).

Needs Assessment and Program Development

To fulfill the mission of Extension and help local communities solve problems (USDA NIFA, 2019), it is imperative for Extension personnel to conduct needs assessments within their communities (Benge & Warner, 2019). Needs assessments, which include identifying and prioritizing a community's needs (Creekmore, 2024), consist of a variety of data sources – both primary and secondary. Primary data, data from a direct source, could include interviews, personal communication, advisory committees, or surveys (Donaldson & Franck, 2016). Secondary data such as census reports (economic, diseases, education, employment, health,

housing, poverty/income, etc.), health indicators, or data from the state's department of agriculture regarding crops and plants, demographics, livestock, and research trials among other things (Creekmore, 2024; Donaldson & Franck, 2016). Some Extension services also refer to this process as community situational analysis which is examining internal and external factors that affect a community (Donaldson & Franck, 2016). One key component of needs assessment that is sometimes overlooked is the involvement of community members. An Extension district director describes the importance of involving community members by stating (2022):

> Community members are the key to local needs assessment. They help Extension agents pinpoint what is most important to the viability of a community, its economic growth, its health needs, its community development challenges, etc. The community members provide volunteers and the social capital to make Extension work relatable and sustainable.

The most robust needs assessment includes primary and secondary data for a comprehensive assessment (Borden, 2004; Creekmore, 2019). Often times, needs assessments are focused on the need in a frame of a deficiency or unmet problem but the assessment can also identify underused resources within the community that could be used for programming (Donaldson & Franck, 2016). Once the data are collected and reviewed or analyzed, Extension agents should set priorities based on the needs that were derived from the data and communicate those results back to the community and/or stakeholders (Donaldson & Franck, 2016). This process will then result in program planning and development to meet the needs of the community (Donaldson & Franck, 2016). Ensuring the program development process is based on needs assessment data, which were collected through partnership with local experts and community members,

strengthens trust and relationships between Extension personnel and local stakeholders (Martin, 2012).

Relationships and Trust

While it is common to think of educational programming related to one of the program areas when thinking of Extension work at the local level, county agents also play a significant role in conducting and supporting research (Lien et al., 2021; Robertson et al., 2021; Smith et al., 2011). Science, in general, is built upon a foundation of trust and honesty (Macrina, 2014), and the same should be said for the relationship between Extension personnel and community members. Extension agents are heavily involved in their communities, and the relationships agents have with leaders and members within the communities they serve can help build trust and rapport. These relationships can be helpful in situations where research and programming are being conducted regarding sensitive topics, interviews, and collecting survey responses, among other things for the purpose of achieving behavior change (Dempsey et al., 2016).

In fact, the relationships established can assist in involving community members in influencing programs, especially in reference to health-related initiatives. “It is critical that health researchers work closely with community members and organizations to learn about the health inequities that need to be addressed” (McKee et al., 2013, p. 2177). Not only should researchers and Extension professionals work closely with the community members, they should “establish a presence in the community, including at important cultural events and relevant organizations, to earn trust and credibility” (McKee et al., 2013, p. 2173).

Because of shared trust that extends beyond subject matter (Martin, 2021), agents are able to foster relationships with leadership officials, families and individuals, any of which could be considered gatekeepers for specific parts of the community (Taylor & Bhasme, 2018). The

Extension agent's fostered relationship with gatekeepers in the county could open doors that would not open otherwise. The support of gatekeepers is especially important when conducting research or programming with minority groups or vulnerable groups (Dempsey et al., 2016).

The Combination of Research and Practice for Community Development

Overall, Extension plays a unique role in research within communities. Extension is positioned to build relationships, perform needs assessments, and work toward creating a healthier, more productive community (Majee et al., 2014; Meendering et al., 2023). More times than not, the community is not given the opportunity to provide insight into interventions or research projects – in these cases most interventions fail (Syme & Ritterman, 2009). This leads to a waste of time and resources and can affect the overall reputation of organizations working to implement change.

While there are individual models for needs assessment, program delivery, and program evaluation (Kirkpatrick & Kirkpatrick, 2006) available for Extension personnel to draw on, there is a notable gap in the literature regarding a community-based approach to obtaining sustainable behavior change through targeted program development based on overall community enhancement. The community capitals framework (2006) and community-based social marketing theory (2011), which focus on overall community vitality and behavior change respectively, have independently offered insights and tools Extension personnel have used (Jones et al., 2021; Ryan et al., 2023; Sanders et al., 2024, Schuster et al., 2016). But, combined, offer a more comprehensive model for community assessment and program development that could lead to more sustainable behavior change and enhanced community capital as outlined in the following sections.

Community Capitals Framework

The Sustainable Livelihoods Approach (SLA) heavily influenced the community capitals framework (CCF). This approach emerged as a way of thinking about the conditions in which poor or vulnerable populations live their day-to-day lives (Flora et al., 2016). Beginning in the 1980s, the approach assisted in understanding the management of poverty as well as plans to reduce poverty (Gutierrez-Montes et al., 2009). As the approach evolved, it broadened to include elements of household structures financial plans to cover day to day expenses by blending incomes and assess development (Gutierrez-Montes et al., 2009). Initially, the four key aspects were economic, social, environmental, and productive. Later, the aspects expanded to five which were human, social, natural, physical, and financial. The approach focused on "improvement in food security, nutrition and health, increased sources and levels of income, greater resilience to stress and shocks, general improvement of household and community well-being, and sustainable natural resource management" (Gutierrez-Montes et al., 2009, p.108). Examples of topics most commonly associated with CCF include food security, overall improvement in household and community well-being, and sustainable management practices (Flora et al., 2016).

Based on research up until this point combined with fieldwork, the community capitals framework (Flora & Flora, 2004) was developed with seven resources, or capitals, defined: (1) natural, (2) human, (3) cultural, (4) social, (5) financial, (6) built, and (7) political. The addition of cultural and political capital allowed for examination of power or access to power in addition to understanding the local knowledge and traditions that were not included in SLA (Gutierrez-Montes et al., 2009). The community capitals framework was created to provide a tool to map strategies and highlight capitals that contribute to a community's well-being. Within the framework, capital is defined as "the resources people and/or communities possess" (Gutierrez-

Montes et al., 2009, p.109). Resources vary within type and can be leveraged to create additional resources as a contribution to a long-term community development process. From this viewpoint, the process can be empowering as communities focus on what they currently have versus what they are lacking. Whether a community is ranked as one of the poorest or most established, CCF allows for communities to identify resources. When communities use these resources correctly, they are able to prosper and grow through a synergistic approach (Emery & Flora, 2006).

CCF is built on the belief that communities have the ability to build capital and promote positive change by investing in already existing assets (Flora et al., 2016). The CCF approach allows for various elements, resources, and relationships to play a role in the contribution to the overall functioning of a community. The capitals are categorized into two main groups: human and material (Emery & Flora, 2006; Flora & Flora, 2004). Human refers to social, human, cultural, and political capitals. Material houses the natural, financial and built capitals (Emery & Flora, 2006). Examples and descriptions of each of the capitals are outlined below.

Human capital refers to the attributes of community residents, including knowledge obtained through education and training (formal and informal), skills, and abilities. It can also include the mental health and self-esteem of community members as well as the potential of those members. (Schultz, 1961; Becker, 1962). Human Capital also encompasses the quality of group or organizational leaders and their capacity for positive facilitation.

Social capital involves the trust among community members and the belief in a joint or shared future (Flora & Flora, 2004). The social capital encompasses a shared vision of community by way of engaged and organized community groups working for changes that benefit all residents (Brown & Ashman, 1996; Turner, 1999). Additionally, it includes networks, norms, and trust that fosters cooperation and coordinated activities while promoting the

established shared goals and ideas. Other areas that are involved in the social capital are civic engagement, social trust, acceptance of reciprocity norms, and efficient collective action.

Cultural capital involves an appreciation for the customs, language, and traditions associated within culture. It can determine both group agency and personal agency within the existing community structure (Dutta, 2011). Cultural Capital ultimately determines whose voices are heard, which voices have influence, and how creativity, innovation, and influence emerge and are nurtured (Emery & Flora, 2006). The cultural capital can be heavily influenced by history or societal norms.

Political capital is most similar to the social capital revolving around relationships and influence. Political capital can increase communities' productive capacity by providing additional resources that would not be available otherwise. It involves the influence of governmental and leadership structures and their ability to relate to community members. Political capital often shines when there is a difference in status, political, or power influence. Political capital results from the integration of social and financial capital, aligning community development strategies and programs with private sector assets and government resources (Turner, 1999).

Natural capital encompasses all environmental resources, whether renewable or non-renewable, within a community (Baral & Stern, 2011). Local climate, forests, topography, air quality, soil condition, geography, water resources, weather, and physical amenities all make up a community's natural assets (Emery & Flora, 2006). While presenting opportunities, natural resources can also impede certain activities and constrain growth, influencing and being influenced by community events (Flint, 2010).

Financial capital refers to tangible economic resources such as donations, assets, tax revenues, community savings, fees, and more that a community and its residents can access for wealth accumulation (Emery and Flora, 2006). The capital includes investments in natural capital conservation, educational opportunities, and built capital or infrastructure supporting all of the capital activities. Since it can be easily quantifiable in research and there are a variety of accessible data points, financial capital is one of the most common capitals cited for determining the impact of programmatic efforts (Flint, 2010).

Constructed infrastructure such as bridges, factories, roads, and railroads are all considered built capital (Emery & Flora, 2006; Flint, 2010). While generally seen as positively influencing community development, built capital can have negative consequences when its relationship to other capitals is not considered. For instance, its impact on natural resources must be considered. Controversial projects may reduce social capital if conflicts between built capital needs and natural resource conservation exist (Flora et al., 2016). Built capital is closely linked to natural resources, influencing the design, construction, and availability of community infrastructure, with local geography impacting accessibility, especially in more isolated rural communities (Bosworth & Turner, 2018).

Interdependence, interaction, and synergy within the capitals creates a model in which one capital can affect one or more capitals, positively or negatively. In addition, if one or more capitals is severely affected or non-existent, the sustainability of the community can be affected resulting in a domino effect (Gutierrez-Montes, 2005). Furthermore, an effort to create balance among capitals has shown to be important since all capitals are needed. While in the community. Extension professionals are responsible for delivering programming to communities based on needs assessments and fitting the audience's needs (Warner et al., 2021). Extension professionals

can use this information regarding community capitals to inform their community-based programming.

While CCF illustrates the interconnection of the capitals, as well as a broad picture of the community, the theory has limited specific tools to begin working toward building or understanding how to use the capitals once their levels have been assessed. Recognizing this, there have been several suggestions cited such as asset mapping or ripple effect mapping within communities (Mattos, 2015). There is less literature published regarding the understanding of how the interaction of capitals can be utilized by community residents directly (Mattos, 2015). Additionally, while social capital has been earmarked as an entry point for community change (Emery & Flora, 2006), it is also recognized that each community is unique and may require different investments within the capitals (Beaulieu, 2014). It can be overwhelming for communities to focus on all seven capitals, but without a strong understanding of the available capitals within the community, the decision of which capital to focus on, could also be overwhelming and/or inaccurate (Beaulieu, 2014).

Nevertheless, the framework provides a great launching point for consideration and conversations around capital within communities that can be leveraged for community enhancement. The framework has been notably used as a method for collecting, organizing, and evaluating community capitals (Emery & Flora, 2006). Without specific direction or guidance, this effort could be impractical or unintentionally damaging to the community. The interconnectedness between the capitals can serve as an opportunity to create a spiraling up process, where positive change in one capital can positively affect another capital. Alternatively, the connection can have a negative impact of spiraling down through the same process (Emery &

Flora, 2006). In fact, the theory cautions over investment into one or two capitals as it may unintentionally harm another capital (Flora, 2016).

Newly developed instruments have been designed to understand a community's existing assets and resources through the lens of community and personal agency (Borron et al., 2020; Lamm et al., 2021) based on CCF. With distinct scales for measuring community members' perceptions of community capitals as well as their own personal agency within their community, the Community Diagnostics and Social Impact (CD+SI) Toolkit allows community change agents to collect a baseline set of data to use when considering program design, implementation, and evaluation (Borron et al., 2019; Lamm et al., 2020). This instrument offers promise to Extension and other community development professionals seeking entry points into a community for program design (Lamm et al., 2021).

Community-Based Social Marketing Theory

Community-based social marketing (CBSM) represents a behavior focused method that diverges from traditional knowledge-intensive programs. It integrates commercial marketing techniques to prompt desired behavioral changes for the well-being of both individuals and the community as a whole (McKenzie-Mohr, 2011). Collaboration between change agents, such as county Extension agents, and community stakeholders is thereby critical for promoting sustainable behavior change according to the theory. This approach leverages a specific set of behavior change tools recognized for their effectiveness in fostering such transformations, placing a strong emphasis on a community-based strategy that highlights the effectiveness of direct engagement (McKenzie-Mohr, 2011). The CBSM process comprises five key steps: (1) identification of target behaviors, (2) recognition of barriers and benefits, (3) development of strategies, (4) program implementation, and (5) the widespread implementation and evaluation.

Central to the CBSM process is the pivotal stage of developing a strategy aimed at motivating behavioral changes. This involves utilizing various behavior change tools to address the specific barriers and benefits relevant to the target audience (McKenzie-Mohr, 2011).

The first step of CBSM is to identify literature relevant to the selected behavior in addition to collecting qualitative data through observations and interviews for an in-depth look at the community (McKenzie-Mohr, 2011). Step two of the overall CBSM process is a four-step approach to identifying barriers and opportunities which includes conducting a literature review, observations, focus groups, and a survey of a sample of the population). Barriers to a sustainable behavior may be internal to an individual, such as one's lack of knowledge, non-supportive attitudes or an absence of motivation. On the other hand, barriers may reside outside the individual, as in changes that need to be made in order for the behavior to be more convenient or affordable. Multiple barriers and benefits may exist for any behavior. It is also important to classify external barriers, ones that may not have the ability to be overcome with programming or implementation of strategies.

Opportunities could be places of excess or growth. As a result, community-based social marketers begin the development of their marketing plan by identifying these barriers and benefits. The knowledge gained at this point is critical to developing strategies, and although it is time consuming, it should not be skipped (McKenzie-Mohr, 2011).

The data collected throughout the above process will also inform step three of CBSM which is the development of strategies. In addition to the information collected, a variety of strategy tools have been proven effective in creating sustainable behavior change. The tools and definitions as outlined by McKenzie-Mohr (2011) are (1) convenience: removing external barriers to make the behavior more convenient, (2) commitment: encouraging people to make

public commitments related to the behavior, (3) social norms: making the behavior ‘normal’, (4) social diffusion: using examples and social situations to spread the adoption of the behavior, (5) prompts: visual or auditory aids to remind people to perform the behavior, (6) communication: effective messages tailored to specific audiences, and (7) incentives: providing monetary or non-monetary benefits to encourage the behavior. Each of these areas assist in fostering a sustainable behavior change and are intended to be used at the community level as most strategy tools work best with personal connection or interaction (McKenzie-Mohr (2011).

Development of strategies is followed by piloting and evaluation. The pilot should involve a small portion of the project (strategy) or a smaller audience than the total targeted population. This process will allow for a test run of the initiatives and the opportunity to obtain feedback before further implementation for the broader population. Based on feedback and the overall success of the project at the pilot level, modifications can be done before continuing on. Once the project has been refined or deemed successful, the final step of CBSM is to move to broadscale implementation and evaluation. Evaluation can include observation of behavior changes, self-reporting of changes in habits, or other methods.

By using the individual steps outlined in CBSM, change agents gain access to information and tools that can assist in creating sustainable behavior change within a community. While CBSM is a popular framework for practitioners, there is limited detailed information published regarding who used it, the level at which it was applied and specifically the success of program outcomes (Fries et al., 2020). Part of the difficulty in determining success stems from the lack of consistent forms of evaluation for the CBSM strategies and programs (Fries et al., 2020). Lynes et al. (2014) developed 21 benchmarks to assess the key components of CBSM and the level to which those components are used within community programs. However, these

benchmarks have “not been widely adopted by practitioners or academics for assessing community programs” (Fries et al., 2020). Seemingly so, parts of the tools of behavior change from CBSM have been used in areas of Extension such as social norms (Chaudhary & Warner, 2015), prompts (Sanagorski, 2014), and commitment (Martin & Warner, 2015) but all steps of CBSM have been rarely cited in the literature together. Furthermore, applying CBSM in a community is a major investment and commitment due to the amount of time, research, and efforts required for each of the five steps. This is especially true for the initial steps when gathering data and input from the community for identifying barriers and benefits (McKenzie-Mohr (2011). The author specifically states that change agents hoping to carry out behavior change initiatives should consider hiring or enlisting the help of trained professional to be able to carry out certain portions of the process (McKenzie-Mohr, 2011). Ultimately, without proper training and an established way to quantify success, CBSM becomes challenging for Extension professionals to use in communities.

McKenzie-Mohr (2011) argues that social marketing campaigns should have a narrow focus on an intended audience rather than broad issues. Additionally, it is suggested to use up to five or six tools per CBSM campaign in addition to emphasizing the need to identify both individual barriers and benefits for each of the selected behaviors and competing behaviors (McKenzie-Mohr et al., 2012). Within barriers and benefits, differentiation must also be made between internal to the individual, such as lack of knowledge or absence of motivation, or external to the individual, such as lack of access or affordability. This differentiation includes the consideration of perceived versus actual (Lynes et al., 2014). While CBSM emphasizes the importance of this step (McKenzie-Mohr, 2011), there is a lack of implementable tools for

community professionals to use to achieve this level of differentiation between the levels of individual and the broader community.

The Need for an Integrated Model

As stated, understanding the current state of assets and challenges within a community is a critical part of the initial community development process (Flora et al., 2004). Furthermore, having a structured framework on which to develop community-based strategies and programs is vital (McKenzie-Mohr, 2011) for Extension personnel. A model based on the combination of the community capitals framework (CCF) and community-based social marketing (CBSM) theory may be highly beneficial within Cooperative Extension in several ways as outlined in the subsequent sections.

First, is the opportunity for comprehensive community assessment as defined by CCF (2004). This allows for a holistic assessment of community resources and needs (Flora et al., 2004), aligning with Cooperative Extension's mission to understand and address local issues effectively (Garst & McCawley, 2015). Additionally, the use of the CD+SI instrument allows for a dual view of the community from an inside-out perspective through individuals' perceptions of their community as well as their own personal agency regarding community capitals (Borron et al., 2020; Lamm et al., 2021). Secondly, a model based on the combination of frameworks allows for more targeted design of interventions. By integrating the CCF's focus on multiple forms of community capital (e.g., social, human, natural) with CBSM's behavior change strategies, Extension professionals can design targeted interventions that leverage community level (Lamm et al., 2021) and individual (Borron et al., 2020) strengths and promote sustainable behavior change in individuals (Flora et al., 2004) that can help lead to broader community development. Finally, this combination depends on enhanced stakeholder engagement. The

model emphasizes building relationships and trust which are essential components in Cooperative Extension's collaborative approach (Clark et al., 2017). It encourages active participation and buy-in from community members, which may lead to more successful program implementation and outcomes than with each framework independently.

The Integrated Community Enhancement (ICE) Model

The Integrated Community Enhancement (ICE) Model is a model developed through the combination of CCF and CBSM. The model employs CCF to assist in identifying barriers and benefits within CBSM by demonstrating the presence of community capitals within a given community. The identified community capitals become the leveraging point to work toward a behavior change that was identified through a CBSM-framed approach. The proposed Integrated Community Enhancement Model, seen in Figure 4.1, focuses on one or more selected community capitals to be improved with a community-based approach spanning from beginning (behavior identification) to end (broad scale implementation). The proposed model was designed to serve as a program development model to assist community-based leaders, such as Extension agents, in developing communities through behavior changes informed and supported by community capitals. The model has the ability to address more through the combination of frameworks than CBSM and CCF independently in the context of community-based programming. Specifically, the model would be most useful to community leaders interested in implementing behavior change that improve one or more community capitals through community-based programming.

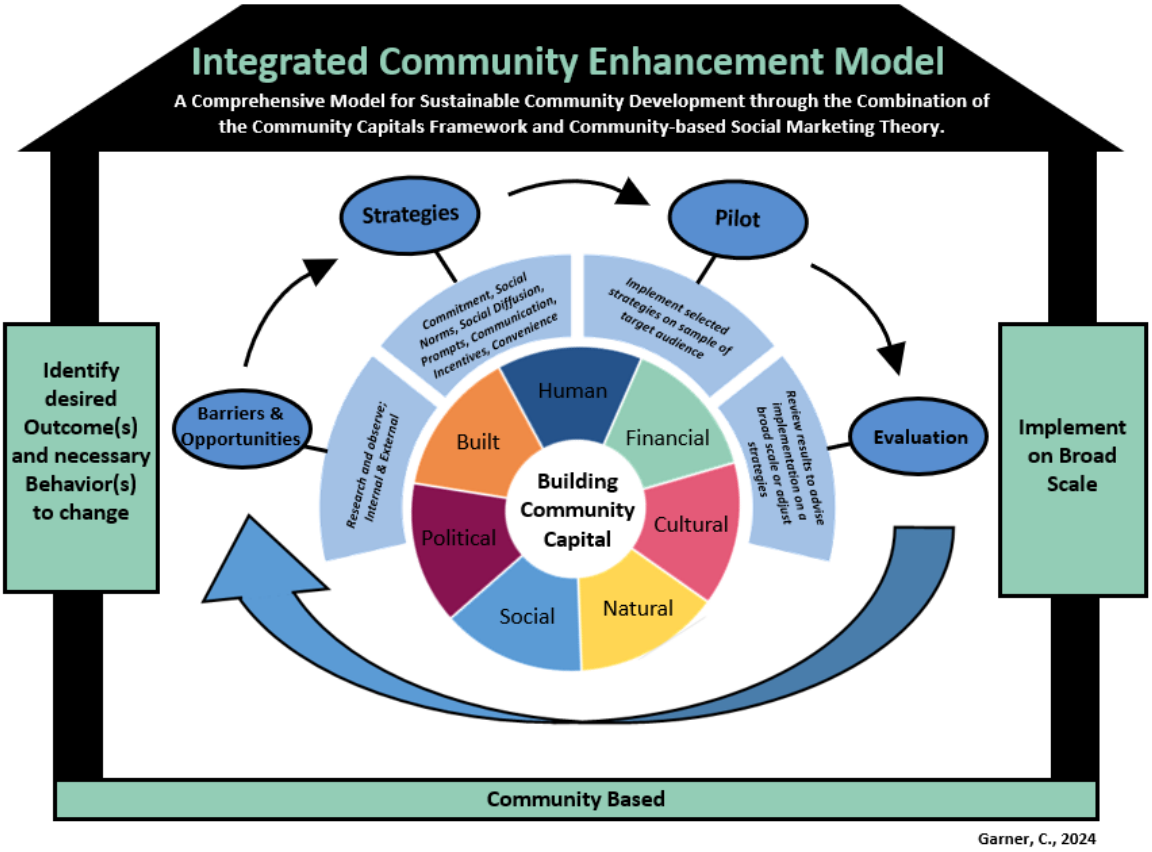

Figure 4.1. Integrated Community Enhancement (ICE) Model.

The Integrated Community Enhancement (ICE) Model uses a community-based approach that can be employed to improve communities through attention to community capitals and specific behaviors. The approach encourages participants to take a small step or action with the aspiration that they will commit to something bigger (Mckenzie-Mohr, 2011) which could lead to benefits in the broader community (Flora et al., 2004). Because of Extension's unique position within communities as a source of trustworthy information, Extension professionals can increase the likelihood of these changes within target audiences (Warner et al., 2015). These social marketing-based strategies are beneficial to Extension as most focus on behavior outcomes (Warner et al., 2015). Thus, by incorporating these tactics into programming, Extension

professionals may realize an increased opportunity to promote sustainable change which is paramount to Extension as an organization. Additionally, the approach is rooted within the community, demonstrated by the foundation of "community based" across the bottom of the model's visualization.

Model Overview

Community capitals are placed at the core of the model as use of the model begins with a community assessment of community capitals using the CD+SI instrument (Lamm et al., 2020) to create a baseline profile. Once the levels of community capital and personal agency among community members have been established, practitioners would move to the left side of the model to identify the (1) desired outcome(s) and (2) necessary behavior(s) to change (McKenzie-Mohr, 2011) to reach the desired outcome(s). At the onset of the project, desired outcomes should be two-fold: (1) changing an individual's behavior to improve their life, and (2) enhanced community capital(s) due to collective behavior change and project implementation. Following the clockwise direction of the model, practitioners would advance to the barriers and opportunities step, which should be informed through the use of both CCF and CBSM strategies. These include comparing the data collected from the CD+SI instrument (Lamm et al., 2020) with secondary data and observations to triangulate the findings. This step should be used to identify both internal and external barriers and opportunities for the identified behavior change.

The next step, strategies, includes sharing primary and secondary data back with community members. During this step, the community knowledge is combined with the collected data to develop strategies with a focus on the seven behavior change tools: commitment, social norms, social diffusion, prompts, communication, incentives, and convenience as defined in CBSM (McKenzie-Mohr, 2011).

The cycle then moves into a pilot test of the identified strategies with a select sample of the target population, followed by an evaluation of the pilot. If desirable results are achieved, broad scale implementation can follow. If results did not meet the expectations/address specific needs identified for the pilot, the cycle can be repeated with changes - either beginning at identifying the behavior, barriers and opportunities, or strategies steps depending on pilot outcomes. The cycle can be repeated as many times as necessary or revisited to improve other community capitals. Throughout the process, ownership is shared among stakeholders/community members and with buy-in, we hypothesize this will enhance likelihood of sustainable behavior change. The usefulness and application of the model have not been tested. The following proposed scenario suggests the ICE model could be an effective tool in enhancing behavior change initiatives while also improving community vitality through Extension programming.

Example Project Setting for Use with ICE

Stewart County is a rural, agricultural based community that is home to 4,674 people (U.S. Census Bureau, 2023) and is divided into four towns: Richland, Lumpkin, Omaha, and Louvale. Despite the agricultural presence within the county, it is classified as a food desert, as defined by the United States Department of Agriculture. Additionally, Stewart County has one of the highest obesity rates (44%) in the state with 37.9% of the population living in poverty (U.S. Census Bureau, 2022; USDA ERS, 2019). The county is composed of residents who are 47.9% African American, 44.3% White, 4.2% Asian and 3.0% of two or more races (U.S. Census Bureau, 2022).

Because of its high obesity rate, Stewart County was selected to join the second round of funding for the High Obesity Program (HOP) grant in Georgia in 2018. Beginning in 2014, the

Centers for Disease Control and Prevention (CDC) awarded funding to land grant universities as a part of HOP to combat high obesity rates (Murriel et al., 2020). Georgia received its first funding cycle in 2016 (Funding Opportunity Number: CDC-RFA-DP16-1613) to work with two rural counties, Taliaferro and Calhoun (CDC, 2016). A second round of funding was awarded in 2018 with the addition of three more counties: Clay, Dooly, and Stewart. HOP is a collaborative project between the CDC and Cooperative Extension (Jones et al., 2021). In Georgia, this CDC HOP program is called Healthier Together (Borron et al., 2023). "The program intended to increase health and wellness education, healthy food availability and consumption, and physical activity in five rural Georgia counties where obesity affects more than 40% of the local population" (Sanders et al., 2023, p. 225).

Step One: Assessing Community Capital

Understanding Step One of the Model

The first step in putting the ICE model into practice is based on the community capitals framework. Because the ability to accomplish behavior change is impacted by circumstances beyond just the individual, as outlined by the social-ecological model which is used as a basis within the HOP project (Berg et al., 2023; Emery & Trist, 1972; Stokols, 1996), it is critical to conduct an assessment of external factors, like community capitals, present within the community as they affect individuals within the community (Flora et al., 2004). Additionally, considering the model is focused on encouraging behavior change, it is important to also quantify assets on the individual level for community members. To conduct an assessment of the capitals at the community level and perceived personal agency of community members, practitioners should utilize the Community Diagnostics and Social Impact (CD+SI) Toolkit (Lamm et al., 2020) which contains both community level and personal level scales. Lamm et al.

(2020) introduced the CD+SI Toolkit to assess community capital stocks, evaluating these assets based on community perceptions. Two scales were developed to collect two points of view: the individual's perceived personal agency within a community and the perception of community (Borron et al., 2019; Borron et al., 2021; Lamm et al., 2020). This information is important for Extension professionals and community program developers because the combined perspectives provide a comprehensive view of the community in which strengths, opportunities, consistencies, and gaps can be examined (Borron et al., 2021; Lamm et al., 2020). CCF data can be used as a baseline for any specific area – community, town, or county, and using the tool can enhance overall community development and vitality through distinct program areas within Extension (Borron et al., 2019).

The CD+SI Toolkit (Lamm et al., 2020) should be administered using a survey. As consistent with Dillman et al.'s (2014) techniques to increase response rate and reduce survey error, practitioners should utilize mixed modes (electronic and hard copies) of survey distribution. By using multiple modes of distribution, researchers can leverage the strengths of each mode to mitigate the weaknesses of others, aiming to reduce survey errors while considering community access via both internet and face-to-face methods. It is recommended to distribute the survey as widely as possible throughout the population of the community in which the ICE model is being implemented. Although it can be challenging and time consuming, leaders should aim to have all portions of the population represented in the collected survey data to make the findings as representative of the population as possible. To help with this, Extension leaders can work with formal and non-formal community leaders who represent different geographical parts of the community and different social and cultural groups to increase survey

response from community members who may not be directly connected with the Extension leader.

Once data are collected, they can be analyzed to create a community baseline. Practitioners should examine the respondents' perceptions of the community and personal agency in relation to each of the community capitals. Cronbach's alpha can be used to establish each scale's level of internal consistency (Tavakol & Dennick, 2011) with a score of 0.7 or higher deemed acceptable. Descriptive statistics, one-way analysis of variance, and Pearson correlations should be used. Analysis of variance can examine the potential for significant differences among mean community capital construct scores and the communities with which respondents reside within the county (if surveying multiple towns/communities within a county). Pearson correlations can test for significant relationships among community capitals. These data will provide insight into community and individual strengths which may be utilized to support the behavior change. Data collected through the use of the toolkit is helpful in creating comprehensive community profiles, pinpointing specific areas for program design, steering policy formulation and implementation, and ultimately assessing the outcomes of community development programs and policies (Lamm et al., 2021). By employing this tool during this stage, it equips Extension professionals with insight into the presence of community capitals and gives them the opportunity to gather the perception of the capitals from the community members assisting in accomplishing the subsequent steps in the ICE model.

Putting Step One into Practice Using the Stewart County Example

Subsequent example sections of this article are based on data collected in Dissertation Chapters two (Unveiling Community Capitals: A Comprehensive Assessment of Resources and Needs in Stewart County, Georgia) and three (Enlisting Behavior Change Tools: Addressing Challenges

and Fostering Health in Stewart County, Georgia Through a Community-Based Social Marketing Analysis). While the data included in the present article are based on actual studies which took place in the county, each step of the model has not been tested within the county. The example exists as a way to help readers interpret the steps of the model through a real-world application scenario (Garner, Ch. 2, Forthcoming).

To evaluate the current state of community capitals within Stewart County, Georgia and identify community members' levels of personal agency to establish a community profile based on local perceptions that could be used to inform the ICE model, Extension leaders utilized the CD+SI instrument (Lamm et al., 2020). The targeted population of respondents to the instrument included those who lived or worked within Stewart County. The instrument contained items to collect community members perceptions of the varied levels of community capitals in Stewart County, their perceived personal agency regarding the capitals, their overall perception of the community as well as demographic items including race, ethnicity, gender, age, level of education, county residency (specifically zip code), employment location within the county, and income (Garner, Ch. 2, Forthcoming).

Mixed modes for survey distribution and frequent reminders through social media and face-to-face Extension meetings were utilized to increase response rate (Garner, Ch. 2, Forthcoming). In total, 94 useable survey responses were obtained. Data were then analyzed in SPSS (descriptive statistics, ANOVA, Pearson correlations) to establish a community baseline. Based on the findings, respondents ranked the capitals from most present to least present within the broader community (Stewart County) as social, natural, political, cultural, human and built-financial (Garner, Ch. 2, Forthcoming). For the individual level, perceived personal agency, respondents ranked the capitals from most present to least present as: social, cultural, political,

human, natural, and built-financial. Results also identified statistically significant differences between the smaller towns within the county. Additionally, at the community level, all capitals were highly associated with one another according to Davis's (1971) convention. At the individual level, all capitals had substantial (.50 - .69) or very strong association (.70 or higher) with one another. These ranged from .59 (natural and cultural) within the personal agency construct, to .90 (human and built-financial) within the community capital construct. The one exception was .27 (political and social) within the personal agency construct indicating low association (Garner, Ch. 2, Forthcoming).

Because the capitals are highly associated, one capital can positively (or negatively) affect another capital (Emery & Flora, 2006). For this reason, one capital is not completely singled out in the use of the ICE model. Based on these data, Stewart County's use of the ICE model would place built-financial at the core of the model as this was the lowest ranked capital within the county. Note: the built-financial construct is a combined construct within this tool as these capitals both have assets that are closely interconnected (Flora & Bregendahl, 2012). Additionally, an exploratory factor analysis indicated that the items represented one latent variable so the capitals were combined to form the combined construct (Borron et al., 2020).

Built-financial is placed at the core of the model with the intention of building the capital. Built-financial also demonstrated a significant correlation with a very strong or substantial association with the other capitals, indicating they are highly related (Garner, Ch. 2, Forthcoming). The political and social capitals are placed on the outer ring of the core as seen in Figure 4.2. These capitals are placed here as they were similarly ranked at the top of the presence. These capitals will be used to build the capital ranked at the bottom of the list. These also indicated a significant correlation with very strong or substantial association with most of

the other capitals. Interconnectedness between the capitals can serve as an opportunity to create a spiraling up process, where positive change in one capital can positively affect another capital (Emery & Flora, 2006).

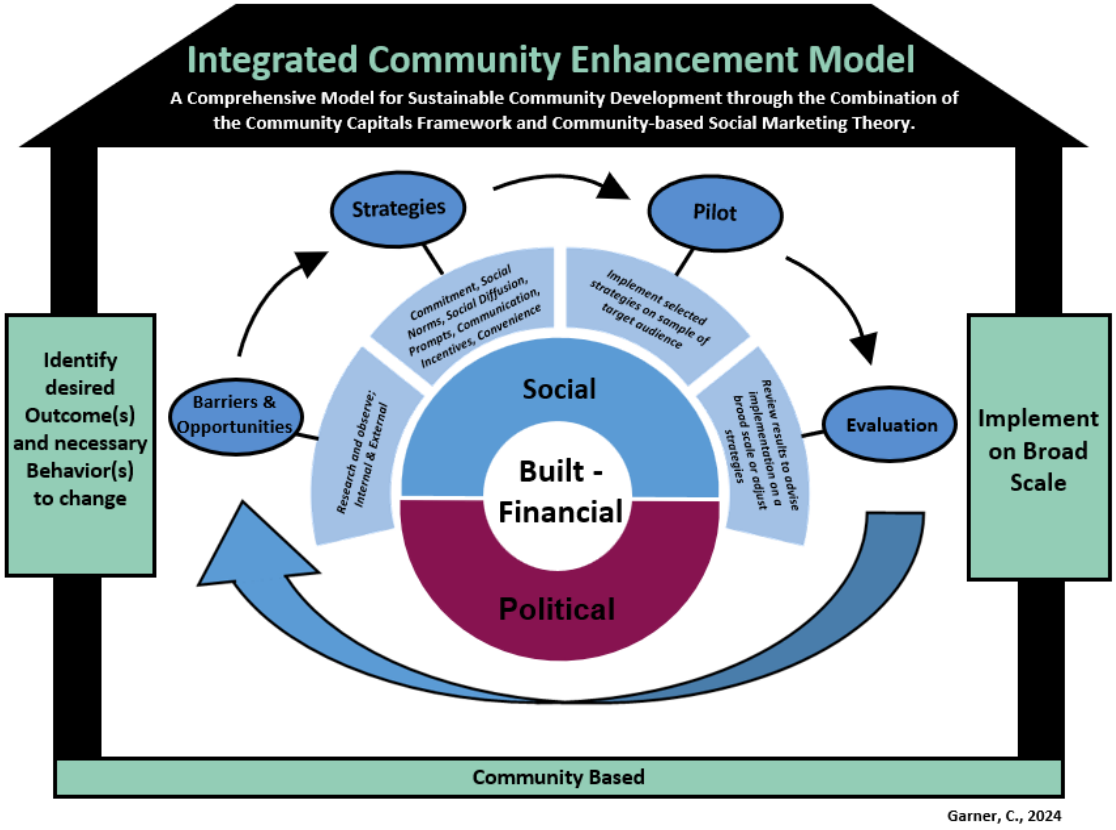

Figure 4.2. Integrated Community Enhancement (ICE) Model: Stewart County Example

Step Two: Behavior Selection

Understanding Step Two of the Model

The second step of the ICE Model is also the first step of CBSM, behavior selection (Mckenzie-Mohr, 2011). Once a community baseline has been established by assessing community capitals in step one, practitioners can move to the left side of the model to identify the (1) desired outcome(s) and (2) necessary behavior(s) to change (McKenzie-Mohr, 2011) in order to reach the desired outcome(s). Regardless of the intended outcome of utilizing the ICE model, a variety of behaviors may be relevant for focus. Because of this, McKenzie-Mohr (2011)

emphasizes the need for the identified behavior to be specific. To achieve this, Extension professionals should work to develop a list of behaviors related to the desired outcome and sort the behaviors by level of influence in regard to the impact on the desired outcome. Unless the professional utilizing the model is an expert in the area, this can be difficult to do without utilizing additional data. Depending on the focus area of the desired outcome, assessments to initiate this step could include health indicators, census data, county comprehensive plans, and agriculture statistics, among others. Without conducting additional research at this step, it may be difficult to know which behaviors may be most impactful in reaching the desired outcome (McKenzie-Mohr, 2011).

Additionally, the final behavior selected should not be divisible (able to be divided further into additional behaviors) and should be end-state (actually produces the desired outcome) (McKenzie-Mohr, 2011). An example of a not divisible, end-state behavior for a community looking to improve overall health, may be "eating at least one serving of vegetables per day" rather than "making healthier choices" or "purchasing vegetables." Making healthier choices can be divided into categories including both diet and exercise. Additionally, just purchasing vegetables may not lead directly to the outcome if community members do not eat them once purchased. Furthermore, it's important to ensure none of the identified behaviors are written as strategies (e.g. encouraging community members to eat vegetables) because forming the behavior as a strategy skips the consideration of barriers and benefits, step three (McKenzie-Mohr, 2011).

When pairing the ICE model with specific initiatives or grant funding (as described in the example below), the behavior may already be defined or determined by a team of experts, organization leadership, grant funder, or county influence. While this is an acceptable practice

when pairing the model with a specific grant or initiative, even if the community Extension leader was not involved in the step, the process of selecting outcomes and behaviors should still include the gathering of additional, supportive data as recommended by CBSM (McKenzie-Mohr, 2011). Skipping these parts of step two can lead to a waste of time and resources in subsequent steps of the model (McKenzie-Mohr, 2011). Each community's process will be unique and driven by the needs and circumstances within that community.

Putting Step Two into Practice Using the Stewart County Example

Once community capitals had been assessed through use of the CD+SI Toolkit (Lamm et al., 2020), Extension leaders used a variety of resources to determine the desired outcome and selected behavior. As mentioned, Stewart County is part of a larger Healthier Together (HT) program, which is supported by CDC HOP funding. The CDC HOP aims to prevent obesity through increased access to healthy foods and safe and accessible physical activity. Thus, the desired outcome overall is "reduced obesity." HOP aims to address healthy food and safe physical activity access in select communities as one strategy to achieve the outcome but does not target individual behavior directly. CBSM can be used to narrow to a specific desired individual behavior change in the context of the HOP project. As eating and physical activity behavior impact obesity, eating behavior may be the target. However, eating behavior is broad and needs to be narrowed for use in the CBSM.

To narrow to a specific behavior that was not divisible and end-state, Extension leaders utilized secondary and primary data points, specifically health indicators, census data, and information from HT coalition members (Garner, Ch. 2, Forthcoming; Garner, Ch. 3, Forthcoming). This secondary data showed that Stewart county residents report consuming fewer vegetables per day than do Georgia residents and Stewart county has less access to fresh fruits

and vegetables (County Health Rankings, 2024). Stewart county HT coalition members were presented with this data to determine the strategy they would like to employ to address the food and physical activity environment, which should ultimately influence behavior. Within CBSM at this step, the target audience also needs to be identified (Mckenzie-Mohr, 2011). Since this was an Extension based project guided by HT programming efforts, the intended audience was Stewart County residents. Once the behavior and audience are selected, the community moves into the next stage: Barriers and Opportunities.

Step Three: Barriers and Opportunities

Understanding Step Three of the Model

Once the behavior has been selected, those using the ICE model should move to step three to identify the barriers and opportunities within the community which is mirrored after step two of CBSM (Mckenzie-Mohr, 2011). This step also includes identifying which barriers may be internal or external to the individuals within the target audience (Mckenzie-Mohr, 2011). Lack of knowledge, motivation and negative attitudes are all examples of internal barriers (Stern & Oskamp as cited in (Mckenzie-Mohr, 2011). External barriers may include lack of physical access or affordability. CBSM suggests using a literature review, focus groups, or surveys to accomplish this step.

Many barriers can exist for any behavior, and barriers differ between sectors within the target audience (Mckenzie-Mohr, 2011). Because of this, CCF comes as a handy tool to assist in identifying barriers that may exist within smaller sectors of a larger community. Specifically, data collected through the CD+SI Toolkit (Lamm et al., 2020) in step one of the ICE model allows for the differentiation between groups. Specific barriers (and limitations within capitals) can be identified through examining responses to demographic questions included in the

instrument. ANOVA and t-test are useful tools to determine how different sectors within the broader target audience may have different barriers and opportunities. For example, the resources available in one town may differ from those in another town even though they are located in the same rural county. This could impact one sector of the target audience's ability to perform the behavior change differently than another.

To conduct a thorough assessment of barriers and opportunities, those utilizing the ICE model should use the method of data triangulation which includes using several methods of data collection to allow the strengths of some methods to address the weaknesses of others (Mckenzie-Mohr, 2011). While CBSM encourages the use of a literature review, observations, focus groups and surveys all at this step, the theory does not offer ready-made tools such as interview guides or surveys to be employed. Those using the ICE model are encouraged to use the primary and secondary data sources mentioned above to triangulate the findings from the CD+SI instrument (Lamm et al., 2020) data collected in step one. By having access to data at the community and individual levels based on the community capitals framework, practitioners have a starting point for more in-depth research though secondary data points. This source could be observational data from the community, or qualitative data from advisory or community groups.

An example includes Extension professionals or community leaders looking at data assessments, locations of parks, safety of community, or hosting community input sessions to begin gathering information related to barriers and opportunities. The combination of these data will provide insight into the perceived barriers and opportunities and assist with highlighting other strengths or needs of the community. Once the Extension professional feels as though they have gathered sufficient data, the data should be organized in a way appropriate for the community audience. The findings should be shared back with the community for review.

Putting Step Three into Practice Using the Stewart County Example

Within the proposed scenario in this article, data from dissertation chapter 2, Unveiling Community Capitals: A Comprehensive Assessment of Resources and Needs in Stewart County, Georgia, was used to create a community profile to use as the foundation of the ICE model. Within this article, the data collected from the CD+SI instrument (Garner, Ch. 2, Forthcoming; Lamm et al., 2020) was combined with secondary data from various sources including the U.S. Census Bureau, River Valley Regional Commission, Stewart County Comprehensive Plan, and Georgia Department of Public Health to create a more comprehensive community profile regarding community capitals within Stewart County. Overall, secondary community data supported the survey data collected from community members.

Furthermore, this data can be used to support narrowing the target audience. For example, up until this point, the target audience was Stewart County as a whole. However, one-way analysis of variance indicated several statistically significant differences in the perception data collected between towns (Lumpkin, Richland and Louvale) within Stewart County. CD+SI Toolkit (Lamm et al., 2020) data identified statistically significant differences between the towns of Richland and Louvale for the overall perception of community scale within the instrument (which included items like: “I can get what I need in this community” and “This community helps me fulfill my needs.”) Additionally, regarding the community capitals, there were significant differences between Richland and Louvale at the community level for all capitals (built-financial, cultural, human, social, political, and natural) (Flora et al., 2008; Garner, Ch. 2, Forthcoming). Therefore, different barriers could be identified for different sectors within the intended target audience. Following this discovery, specific research was conducted to identify differences between these towns which may be contributing to the difference in responses.

Secondary data identified the lack of infrastructure and resources within the town of Louvale. While the town of Richland has access to a grocery store, doctors office, established city council, better home town board, a park and some businesses, Louvale lacks all of these resources (Garner, Ch. 2, Forthcoming). Recognizing these barriers and opportunities specific to smaller sectors within the target audience allows for more specific strategies to be identified to address those barriers and capitalize on the opportunities.

Information from each of these capitals, from the survey and secondary data, can be added to the list of barriers and opportunities. A list based on the data from the Stewart County example can be found in Table 4.1 (Garner, Ch. 2, Forthcoming; Garner, Ch. 3, Forthcoming).

Table 4.1

Example presentation of barriers and opportunities from Stewart County

Barriers	Opportunities
Lacking access to necessary communication needs	Access to county owned buildings
Unsafe areas for exercise	Associate with their neighbor
Only one grocery store in entire county	Culturally diverse
Strong historical divide	Apply for grants for community projects
Rural community mindset – lack of resources	Feel a part of solving the problem
Actions do not help create local jobs	Trust of local leadership
Lack of diverse employers within the county	Feel a part of the community
Lacking access to transportation	Organizations that preserve history
No Farmer's Market	Practice my cultural beliefs
	Grant funding for support
	Access to city/county land

As consistent with CBSM, the identification of barriers and opportunities is an essential step in the model, and although pressures regarding time, staffing, and budgets can make this step challenging, not carrying it out completely can lead to a program that has diminished impact (Mckenzie-Mohr, 2011).

As previously stated, community engagement is the driving force throughout the ICE model. Now that the barriers and opportunities have been outlined and specified by sectors

within the overall intended audience, the information is taken back to the community through coalition or community group meetings to discuss the findings. The involvement of the community is important during this step, but it becomes critical during the next step: developing strategies.

Step Four: Strategies

Understanding Step Four of the Model

Community members are a foundational component to step four of the ICE model, developing strategies. It is key to keep the community engaged in this portion of program development to ensure they have buy-in into the behavior changes and they are involved in the development of strategies to limit barriers and encourage behavior change. At this stage, community knowledge is combined with the data (CD+SI Toolkit (Lamm et al., 2020), health indicators, county statistics, etc.) to develop strategies with an emphasis on the key areas outlined in CBSM which are considered behavior change tools.

The tools and definitions as outlined by McKenzie-Mohr (2011) in the strategy development stage are (1) convenience: removing external barriers to make the behavior more convenient, (2) commitment: encouraging people to make public commitments related to the behavior, (3) social norms: making the behavior ‘normal’, (4) social diffusion: using examples and social situations to spread the adoption of the behavior, (5) prompts: visual or auditory aids to remind people to perform the behavior, (6) communication: effective messages tailored to specific audiences, and (7) incentives: providing monetary or non-monetary benefits to encourage the behavior. Understanding the definition of each of these behavior change tools is an important part of community members and Extension leaders having the ability to put them to use within the community.

Again, attention should be given to the capital strengths showcased in the middle of the model that were highlighted from the CD+SI instrument (Lamm et al., 2020). For example, if a community perceives a strong presence of social capital, that can be developed into a strategy to strengthen the approach. The idea is to pair a behavior change tool directly with a barrier to help increase the likelihood of the behavior. Remembering that the capitals are interconnected can help bolster use of the capitals and improvement of the capitals through behavior change. According to CBSM, the more attention and detail given to this step, the better the outcome.

Putting Step Four into Practice Using the Stewart County Example

Within CBSM, it is suggested to use five or six tools (commitment, social norms, social diffusion, prompts, communication, incentives, and convenience) in addition to emphasizing the need to identify both individual barriers and benefits for each of the selected behaviors and competing behaviors (McKenzie-Mohr et al., 2012). With the example of Stewart County, community members within the HT coalition worked through data from the CD+SI instrument (Lamm et al., 2020) and secondary data with the Extension agent serving in a facilitative role. Following the identification of barriers and opportunities, the coalition members decided introducing community gardens into the county would be a great way to increase the likelihood of community members eating vegetables. Introducing community gardens addresses several of the barriers mentioned within the secondary or CD+SI instrument (Lamm et al., 2020) data such as only one grocery store, no farmers market, lack of access to transportation, and the rural community mindset (lack of resources).

Additionally, the coalition utilized the opportunities identified to develop the strategy. These tangible opportunities included access to city/county land as potential locations for community gardens and CDC grant funding tied to the HT project to support purchasing garden

equipment and supplies. More internal opportunities identified by the CCF data collected in step one specifically included positive results related to “feeling a part of solving the problem,” “feeling a part of the community,” and “trusting local leadership.” While introducing community gardens does not directly address the behavior of eating vegetables, it addresses existing barriers while capitalizing on several assets within the community, which would hopefully lead to increased consumption of vegetables. It is recognized that this is not completely in line with CBSM but it also considers the individuality of communities presented by CCF; it is challenging to encourage eating vegetables when limited vegetables are available in the county.

The team, Extension or community leader and the community members, work together to focus on the developing strategies that incorporate the tools of behavior change which can be seen in Table 4.2 (McKenzie-Mohr et al., 2012). This step also includes reflecting on the community capital strengths of Stewart County at the community level, political and social (Garner, Ch. 2, Forthcoming). The team planned to use these as a strength of the social capital by advertising harvest celebrations at the gardens to build personal networks and bonding within the community (Beaulieu, 2014). The political capital, through partnership with trusted city officials, was used for the allocation of city owned land for the gardens to be grown. Involvement from these individuals can increase the political capital within the community as they hold the power to influence decisions within the community (Beaulieu, 2014).

Table 4.2

Example incorporating behavior change tools (McKenzie-Mohr et al., 2012) in Stewart County

Behavior Change Tool (McKenzie-Mohr et al., 2012)	**Example for Incorporating**
Commitment	Encourage participation with statements such as "Can we count on you to volunteer?"
	Encourage public commitment of community members and local leaders during social and political gatherings
Social Norms	Highlight the large number of people who are involved in the garden through face to face conversations and media outlets (newspaper and social media)
	Incorporate vegetables harvested from community gardens into local festivals and cultural events
	Use mostly with audiences low in motivation
Social Diffusion	Enlist the help of local respected community members as garden leaders
	Encourage friend groups to be involved in the garden
	Use church groups or already established organizations to create a volunteer basis for the garden
Prompts	Use noticeable, self-explanatory signs at the garden or located at frequently visited places around town to remind community members to visit the garden
	Utilize media outlets (newspaper, social media) to let community members know when produce is ready to be harvested
Communication	Use mixed modes of communication - don't rely solely on email or social media use
	Promote bi weekly garden gatherings and coalition meetings with attractive flyers/advertisements
Incentives	Free use of garden tools when volunteering
	Volunteers get first dibs on produce as it becomes available
Convenience	Select locations within the community that are in high traffic areas
	Smaller gardens located in various locations

Step Five: Pilot

Understanding Step Five of the Model

Step five involves pilot testing the strategies developed at the previous stage. Pilot tests are often used to provide an initial test to a program, product or survey to make sure everything

is working as it is intended (Fisher et al., 2001). It could be a test of one portion of the change or it could be the delivery of an intervention or enhancement in one selected area within the overall community. At this step, Extension leaders should use their expertise to assist in defining what the pilot test looks like within the community, but this should be done in partnership with community members. The guidance should be driven by the community but overseen by the Extension professional to maintain validity.

When designing the pilot, it is important to consider specifics like who the intended audience is, the length of time, location and what objectives should be met to consider it a success. “In evaluating the effectiveness of a pilot, focus on behavior change rather than measures of awareness or attitude change” (Mckenzie-Mohr, 2011, p. 19) Evaluation measures should be determined before the onset of the pilot.

Putting Step Five into Practice Using the Stewart County Example

From the example of implementing community gardens as a strategy to encourage eating at least one serving of vegetables per day, the HT coalition in Stewart County decided to place one community garden in the county as a pilot before starting several throughout the county. The garden location was selected based on community interest and visibility. Within this example, the pilot was driven by the available city land and current involved members (Garner, Ch. 3, Forthcoming). For this example, community members outlined the following tools:

- Commitment - employ those seen as leaders within the community to directly contact others about involvement; encourage public commitment to the garden work and eating vegetables
- Social Norms - make the behavior “normal” by highlighting the number of people involved in the community gardens

- Social Diffusion - building/placing the garden in a location where several residents are already apart of the programming efforts
- Prompts - use recognizable, consistently designed signs to point people to the gardens
- Communication - design a contact list with phone numbers for a phone tree or group text
- Incentives - advertise the availability of free garden tools and gloves to those who volunteer in the garden; fresh produce for those who volunteer with extra produce to all community members
- Convenience - Located on a main street within a housing district (walkable)

Within the pilot, the community group decides the garden will operate for one growing season and be evaluated based on the number of people visiting the garden, pounds of produce produced, and indication of increased vegetable consumption through self-reporting. To collect this data, a visitors log and vegetable scale were kept at the garden location. Additionally, garden volunteers were trained on best practices of capturing pilot data.

Step Six: Evaluation

Understanding Step Six of the Model

Evaluation follows the pilot test. At this stage in the ICE model, evaluation should include feedback from the community and could ask questions such as, “Was there an increase in the number of people performing the select behavior?” “Did some or all parts of the pilot meet predetermined objectives?” “What improvements should be made before continuing on a larger scale?” If the strategies did not work to accomplish the objectives as intended, it is also appropriate at this stage to discontinue strategies and develop a new plan of action. Not meeting

objectives could be caused by a number of factors. Although it is not the preferred outcome, it provides valuable insight and information to practitioners. This is the value of a pilot test.

If the feedback and changes suggested during the evaluation stage are minor, those changes can be implemented and the project moved to broad scale implementation. Depending on the level of changes that need to be made to the identified strategy, the project leaders can revisit step four of the model, strategies, to see where things may not have gone as planned (Mckenzie-Mohr, 2011). Community members and Extension leaders may work through the process of the model several times to work toward achieving the behavior change by accomplishing smaller objectives each time. There may also be multiple behaviors selected happening simultaneously throughout the process. Once the pilot test has been deemed acceptable, the project can move to broadscale implementation for the total target audience.

Putting Step Six into Practice Using the Stewart County Example

To determine the pilot test's effectiveness in reaching the predetermined objectives, in partnership with HT coalition members, the Extension agent would collect evaluation data by calculating the total pounds of produce produced, examining the visitor log at the garden to determine the number of unique visitors, and surveying the involved members on healthier eating habits regarding vegetables. Following the evaluation, the team may discover that the community garden was in fact increasing access to fresh vegetables based on the number of vegetables produced in the growing season. This would be consistent with Evaluation reports from published HT data also indicating community garden participants eating healthier food than the previous year (Sanders et al., 2022). This would be a critical piece of making the behavior change possible because of the data collected while assessing community capitals at step one.

Additionally, evaluation of the pilot may discover that community members are enjoying the garden and inviting more of their family and friends to be involved, especially at events like the harvest celebration. Even with several successes, there may also be a few areas highlighted for improvement. HT coalition members and garden volunteers may identify specific strategies, such as communication and prompt efforts, as ineffective indicated by the lack of new members and lack of visibility. Despite the great buy-in from within the coalition group, there still may be many people in the broader community who do not know about the garden. So, from the pilot, the project team could determine community gardens are a great tool to work toward the identified behavior, but there are some opportunities for improvement within other areas of CBSM. In this instance, the team may determine that the strategy is ready for broadscale implementation with a few changes to address concerns with communication and prompts.

Step Seven: Broad Scale Implementation

Understanding Step Seven of the Model

The final step of the Integrated Community Enhancement Model, broadscale implementation, should look different from project to project and community to community. In some communities, it might be replicating the pilot test project in additional areas within the community. In other areas, it could be expanding the action plan into other projects with additional components. As with the pilot step of the model, it is important to have an evaluation plan for broadscale implementation to know if/when the identified behavior change has occurred and if desired outcomes have been reached. A clear evaluation plan should be determined at the onset of broadscale implementation with the target audience. This evaluation plan should include a timeline and benchmarks for determining success - including both short term and long-term

assessments. As with other steps in the model, the evaluation plan should be determined through partnership between the Extension professional and community members involved in the project.

Because the ICE model is built on the integration of the community capitals framework and community based social marketing, assessment of the community capitals should also be included in the project evaluation at the long-term assessment point. At the onset of the project, desired outcomes were two-fold: (1) changing an individual's behavior to improve their life, and (2) enhanced community capitals due to collective behavior change and project implementation. To determine if both of the desired outcomes were met (beyond just behavior change), Extension leaders should collect data regarding both to determine if there was a change in community capitals and personal agency within the community using the CD+SI instrument (Lamm et al., 2020) and relevant secondary data regarding the individual improvement.

Putting Step Seven into Practice Using the Stewart County Example

In the Stewart County example of a community garden to encourage eating vegetables, the HT team determined that the strategy was ready for broadscale implementation with a few changes to address concerns with communication and prompts. Specifically, it was determined that expanding the gardens to additional locations would be the most effective way to implement the strategy on a broad scale within the community. This also allowed the team to address the barrier of lack of transportation within the community which was identified in step one with the CD+SI instrument (Lamm et al., 2020). Additionally, since the pilot was successful, data were shared back with the project funder to justify use of additional funding to be used for more permanent structures to maintain the intervention at multiple sites in the county long term.

As mentioned, at the onset of the Stewart County project, desired outcomes were two-fold: (1) changing an individual's behavior (eating at least one serving of vegetables per day) to

reduce obesity, and (2) enhanced community capitals (built-financial) due to collective behavior change and project implementation. Specifically, the growth in the infrastructure or resources in the county through community gardens (built capital) and over time, a reduction in obesity which could lead to reduced health care costs (financial capital). The Extension agent continued the evaluation plan set forth for the pilot to measure the pounds of produce produced at each of the garden sites, number of visitors and volunteers involved at each garden and the increase in consumption of vegetables.

Additionally, a long-term assessment of community capitals could potentially identify an increase in several of the items on all of the capital scales for the community level including: has organizations that invest in the community (built-financial), has leaders (elected and non-elected officials) who work to affect change (political), and has individuals who feel they can be part of a project to solve problems (social) (Garner, Ch. 2, Forthcoming). Furthermore, several items on the personal agency scale could receive increases including: having the ability to apply for grants to support a community project (built-financial), be part of a group that works to affect change and communicate with local government leaders (political), learn about techniques and tools that can be used for community-based decision making and collaborate to impact community change (human), and help develop a conversation around important issues (social) (Garner, Ch. 2, Forthcoming). These evaluation data should be shared back with community members, local leaders, the grant funder and other Extension professionals through published evaluation reports and invited presentations.

The Practitioner's Role

Community leaders have been shown to be an effective instrument in guiding, supporting and enabling community development and change (Kirk & Shutte, 2004). Each community is

different with a unique set of challenges. Therefore, design, delivery, and evaluation of community-based programming must account for the uniqueness of each community. Extension professionals, an extension of land-grant university systems, live and work alongside community members providing educational knowledge in the areas of agricultural and natural resources, youth development, family, nutrition, and community development in order to address pertinent issues and challenges within communities (UGA Extension, n.d.). Extension professionals can serve as change agents by communicating desired change from an inside out perspective. Extension professionals are involved in their respective communities with knowledge of resources, specific needs and challenges, placing Extension in a position to serve as a catalyst for community transformation (Buys & Rennekamp, 2020).

Within the Integrated Community Enhancement Model, the community and Extension become a powerful change tool. While many Extension programs seek to demonstrate knowledge gained (Arnold et al., 2016; Shaw et al., 2015), an alternative goal, especially in the area of health, is to "create and sustain a desired set of health and personal behaviors, such as physical activity, healthy eating, effective parenting practices, or positive family communication patterns" (Pratt & Bowman, 2008, p. 2). In the case of the model, the Extension professional's role will flex throughout. Extension professionals primarily serve as the facilitator and researcher throughout the implementation of the ICE model. The Extension agent should be a trained individual who conducts the data collection regarding community capitals at the onset of the model. Following data collection and analysis, the professional must organize and present data in a comprehensible way for the community members to use it for project implementation. The Extension professional then becomes a facilitator while guiding the community through the processes included in the ICE model. Finally, the Extension leader should play an active role in

the evaluation of the pilot and overall implementation plans. Evaluation results, regarding both behavior change and change in community capitals, should be shared back with the local community stakeholders as well as the broader Extension network to identify lessons learned.

Training Needs for Model Implementation

Extension professionals utilize a diverse array of tools and training methods to effectively address the needs of their communities (Benge et al., 2021). While models for professional development within Extension vary from state to state or between program areas, there is an across the board consensus on the necessity of Extension professional development for agents to meet the needs of communities (Benge et al., 2021). Each year, the UGA Extension's Office of Learning and Organizational Development (OLOD), in partnership with specialists, offers hundreds of training sessions for Extension faculty and staff (UGA Extension, 2021). To support the implementation of the ICE model within local communities and equip agents with the necessary skills to employ the model, a training would be incorporated into the Extension training system led by experts on the model and the areas of facilitation, community research and development, and evaluation. This could include Extension specialists and county level agents who have applied the model within their communities.

The ICE model will require time, effort, and training for and from the county Extension professional in order to implement. Additionally, the time to work through the model will be substantial and more involved than base level program development efforts. ICE takes the planning and implementation of programming a step further by incorporating the element of community development through CCF. Therefore, before an agent engages in the training and use of the model, they should have a clear understanding of the commitment level required to implement the model.

Due to the nature of the model, the training would be best suited in a face-to-face setting. The training would begin with an overview and background of the model - including details for both the community capitals framework (Flora et al., 2004) and community based social marketing theory (McKenzie-Mohr, 2011). Training would include hands-on components in which agents have the opportunity to work through necessary skills and specific steps of the model including handouts and worksheets for organizing information.

Agents would also be encouraged to take the survey portion of the CD+SI instrument (Lamm et al., 2020) to familiarize themselves with what they would be asking their community members to complete. Discussion and worksheets would guide agents to think about their individual community and specific instruments, including what demographic questions, should look like. For instance, when thinking through survey distribution, the methods developed should fit the needs of the community. If internet connection is easily accessible within the community, online surveys may be a great way to gather data. Agents would be encouraged to brainstorm different listservs, social media outlets, etc. to spread the survey. This can also help agents decide what distribution modes fit their community. Alternatively, if internet connectivity is a concern, conversation can include face-to-face methods for distribution of physical copies of the instrument.

The next step of the training would help connect agents to potential areas for secondary data that already exists or the agent already has access to. This would be followed by identifying missing pieces of data, understanding that the survey portion of the CD+SI instrument (Lamm et al., 2020) is based on perception data which comes with some limitations. From here, the training will move into the behavior selection, barriers and opportunities, and strategies. This portion would be hands-on and simulate what the process could look like in the community

through use of scenarios. This is a critical portion of the training as it would allow agents to learn about and practice the skill of facilitation which considers the educator as more of a guide through the learning experience, rather than just a content area expert providing one-way instruction (Rogers, 1983). Because the model depends heavily on an agent's ability to serve as a facilitator and be well-versed in their community, other Extension programs, such as the UGA Extension Facilitation program or Extension Academy, may serve as recommended prerequisites to the ICE model training.

Usefulness of the Model

As stated previously, it is imperative for Extension personnel to conduct needs assessments within their communities (Benge & Warner, 2019). Needs assessments can consist of a variety of methods including the collection of secondary data in the form of Census reports, health indicators, prevalence of diseases, agriculture and natural resources related topics, and/or youth in the county (Creekmore, 2024; Donaldson & Franck, 2016). There are many tools also used by Extension to carry out needs assessments and organize community-based programming and interventions such as plans of work based on logic models focused on addressing local issue areas (Taylor-Powell et al., 2003; UW Extension, 2003).

County Extension offices in Georgia are expected to establish Extension Leadership Teams, and each program area (ANR, FACS, 4-H) enlists a Program Development Team to assist in collecting community needs and input (Trainings, n.d). These advisory groups, composed of representatives within different parts of the community, are called upon for their perceptions of current community needs. These individuals are ideal members of project coalitions and focus group members for determining barriers, opportunities and strategies within the ICE model.

Oftentimes, these recommendations arise from issues, struggles, or data indicators that are seen in the community. Sometimes, it is difficult to know which pieces are interlocked or where to begin. It can also be challenging to get an accurate picture of the community as advisory groups, Program Development Teams or Extension Leadership Teams, are typically invitation only. While they should be representative of the community in terms of a variety of demographics, it is challenging to have all parts of the community represented by such a small group of individuals. When certain demographics or social groups are absent from advisory groups, important perspectives on community needs can be missed. This is one specific area the model can address through the use of the perception data collected from the broader community at the onset of the model. By integrating the CD+SI instrument (Lamm et al., 2020) into the ICE model, this enables agents to use the perception data as a foundation to implementing behavior changes.

The proposed Integrated Community Enhancement Model presents practitioners with the opportunity to work with community members or coalitions to select behaviors that are meaningful to communities. The behavior in focus could be individual or for the improvement of the community at large. The focus on capitals on the forefront places emphasis on areas of resources, prompting support for intervention (Flora et al., 2016). Combining these efforts with the desires of the community members, instills a more sustainable model for lasting impact. By working through the behavior strategies defined in CBSM, the individuals within the community should move away from the less desirable behavior into the desired behavior (McKenzie-Mohr, 2011).

“The health impact of social factors is supported by the strong and widely observed associations between a wide range of health indicators and measures of individuals’

socioeconomic resources or social position" (Bravemen & Gottlieb, 2014, p.129). Often, these include level of education attained, income, or occupational rank. This work is also a foundational component of the Extension Framework for Health Equity and Well-being in Georgia. By combining CBSM and CCF through the proposed ICE model, we work toward many of the recommendations suggested in the framework. These include utilizing community assessment processes, investing in the success and visibility of Extension, utilizing a community development approach, and establishing partnerships (Burton et al., 2021) while working toward behavior change, supported by CBSM. Additionally, studies utilizing CCF and community capitals cannot solely identify solutions for declining communities but can assist in identification of entry points (Borron et al., 2019). However, the proposed combination of the CBSM and CCF models through the ICE model instills a community-based approach to systematic improvements within a community. The frame combines the groundwork of CBSM to build a thriving, strong community as defined within the CCF by leveraging the strengths of the community.

Ultimately, the combination of CBSM and CCF has the potential to improve the economic viability of the community through the use of community capitals by implementing health-related interventions, as defined by the CDC, with a community-based approach, which enhances the possibility of behavior change. Much like the example within this article, community gardens start the foundation of working toward improving food access to improve eating habits. By working through this process, the model provides the steps necessary to reach the recommendations laid out by the Cooperative Extension Framework for Health Equity and Well-being (2021).

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CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Synopsis of Findings

This dissertation contributes further empirical evidence on how Extension professionals can use the community capitals framework (CCF) to assess the current state of the communities they serve. Furthermore, this dissertation offers insight into the integration of CCF with community-based social marketing (CBSM). With the combination, Extension professionals can formulate actionable strategies to enhance the communities in which they work. Article one of the dissertation assesses the levels of the seven community capitals and builds an understanding of community members' perspectives on their personal agency within their communities. The perspectives are combined with the elements of community-based social marketing to establish baseline data and strategies for programming efforts. This process proves valuable in conducting community needs assessments for strategic planning, program development, identifying community partners, and establishing goals for improvement. The dissertation sheds light on challenges faced by rural communities and proposes a practical model for designing effective Extension programs.

Chapter 2 (Article 1): UNVEILING COMMUNITY CAPITALS: A COMPREHENSIVE ASSESSMENT OF RESOURCES AND NEEDS IN STEWART COUNTY, GEORGIA

This article used the Community Diagnostics and Social Impact (CD+SI) Toolkit as a quantitative instrument to assess the presence of community capitals in a rural South Georgia county. Aligned with the community capitals framework, the CD+SI aids Extension

professionals in gauging the levels of different capitals within a community. The study examined the existing capitals in the community and utilized secondary data to develop a comprehensive community profile.

The findings revealed that respondents ranked social capital highest in both perception of community and perceived personal agency. Natural capital, while ranking second in perception of community, was the lowest in perceived personal agency. Political and cultural capitals fell in the middle for both community and individual levels. Human capital ranked low at the community level but in the middle at the individual level. Built-financial capital was the lowest for perception of community and toward the bottom in perceived personal agency. The findings suggest a need for optimizing natural resources, enhancing historical celebrations, addressing employment challenges, improving transportation, and supporting economic diversity. Despite disparities, a common thread of community belonging and influence emerged, indicating a shared sense of community and mutual support.

Pearson correlations tested for significant relationships among community capitals. Very strong associations (.70 or higher) between all community capitals were found within the perception of community constructs. Very strong (.70 or higher) and substantial (.50 to .69) associations were also found between community capitals within the personal agency constructs. This indicates these capitals are highly interconnected with the exception of political and social (.27) in regard to personal agency. Additional findings through one-way analysis of variance between zip codes (towns) based on perceptions of community and perceived personal agency revealed significant differences between the towns in regards to the presence of capitals.

Chapter 3 (Article 2): ENLISTING BEHAVIOR CHANGE TOOLS: ADDRESSING CHALLENGES AND FOSTERING HEALTH IN STEWART COUNTY, GEORGIA THROUGH A COMMUNITY-BASED SOCIAL MARKETING ANALYSIS

Extension professionals, with their established community relationships, are well-placed to contribute significantly to the design and implementation of sustainable community-based interventions. This article examined existing data sets from the Healthier Together (HT) project in Stewart County, Georgia through a community-based social marketing lens to better understand what tools may be utilized for sustained behavior change and increased engagement within rural communities. The study emphasized the effectiveness of inside-out developmental approaches, involving active community participation, and change efforts, as more advantageous than relying solely on external resources. Notably, the article advocates for a focus on communication and social diffusion among the seven behavior change tools identified within community-based social marketing. The results of the study emphasize the role of community involvement for lasting impact in health-related initiatives.

This study explored the challenges individuals face in health-related initiatives, commitment in particular. Participants often cited personal stories as their motivation for project involvement but acknowledged difficulties in encouraging others. The data emphasized the fast-moving pace of individuals' lives, making commitment to something new daunting. The significance of culture and history prominently influenced social diffusion and norms, with participants sharing emotionally charged accounts of the county's past - including slavery and lingering divisions between towns within the county. The effectiveness of communication methods varied, with some participants feeling well-informed while others remained unaware of local events. Overall, the effectiveness of communication methods seemed to have a major

impact on the success of health-related programs initiated in the community. Furthermore, prompts, incentives, and convenience were all interconnected, with participants highlighting the effectiveness of personalized prompts and incentives linked to convenience for encouraging desired actions with current methods of programming. Overall, the study emphasized the importance of continual evaluation, adaptation, and collaboration in community development efforts, especially within rural contexts and with the involvement of Extension services. It contributes valuable insights for future initiatives aimed at improving health outcomes in rural communities through shared knowledge, commitment, and innovative approaches.

Chapter 4 (Article 3): PROPOSING A MODEL FOR EXTENSION COMMUNITY DEVELOPMENT: THE INTEGRATED COMMUNITY ENHANCEMENT (ICE) MODEL

Evolving over time, Extension has expanded its programming to meet diverse needs across the nation. Extension has always been a crucial element of sustainable community change in a variety of areas (Davis, 2016). In Georgia, UGA Extension operates in all 159 counties where county agents and specialists collaborate to address community needs. Extension plays a unique role in building relationships, conducting needs assessments, and contributing to the development of healthier and more productive communities. This article introduced the Integrated Community Enhancement (ICE) Model which uses a community-based approach that can be employed by Extension professionals to improve communities through attention to community capitals and specific behaviors. By integrating the community capitals framework and community-based social marketing theory, this model offers a comprehensive approach to tailoring programming to community-specific needs. The proposed model presents practitioners

with the opportunity to work with community members or coalitions to select behaviors that are meaningful to communities and can lead to improved lives and strengthened communities.

In essence, the incorporation of CBSM and CCF into one useable model holds the potential to enhance the economic viability of the community through programming and interventions, specifically within Extension. The model emphasizes using community-based approaches with strategies built from within the community, rather than outside. This includes recognizing and considering the community members' perceptions which is crucial for understanding the underlying reasons for specific behaviors, social norms, and cultures, and offering a strategic approach guided by the community members themselves to encourage positive changes.

Discussion

It is crucial for Extension personnel to conduct thorough needs assessments within their communities, drawing on diverse sources such as Census reports, health indicators, disease prevalence, agriculture, natural resources, and youth-related data in the county. Additionally, community members play a pivotal role in these assessments, providing essential insights for Extension agents to address various aspects critical to community viability, economic growth, health needs, and community development challenges. Needs assessments involve engaging with local officials, such as school principals, county commissioners, board of education members, senior centers, and other stakeholders within the community. Extension offices are expected to establish Extension Leadership Teams, and each program area enlists a Program Development Team, comprising individuals representing different parts of the community, to collect community needs and input. The data collected allows Extension professionals to capture a snapshot of the community and its needs. With this information, Extension employs various

tools, including logic models and plans of work, to organize needs assessments for community-based programming.

While these methods provide valuable insights, there are challenges in accurately representing the entire community, especially when advisory groups and teams are typically invitation-only and may lack representation from certain demographics or social groups. The Integrated Community Enhancement (ICE) Model has the potential to address this issue by tailoring Extension's approach to specific demographics, allowing for targeted intervention based on the needs of the community. Part of the model relies on the collection of perception data which play a crucial role in understanding the current state of the community through the eyes of community members. The ICE model creates actionable steps for community leaders to focusing on community capitals to highlights weaker resource areas, prompting necessary interventions. This approach, combined with community desires, establishes a sustainable model for lasting impact. Additionally, by applying behavior change strategies from CBSM within the ICE model, community members gradually shift from less desirable behaviors to desired ones, contributing to foundational and sustainable change over time. These behavior changes at the individual level have the potential to positively impact community capitals overtime.

Limitations

Along with its popular use among Extension and community development initiatives, the CCF has also received many criticisms and limitations. The CD+SI Toolkit, built on CCF, predominantly gathers perception data which is known for its subjectivity and variability among individuals (Blevins et al., 2020). Although tailored to each community, acquiring perception data can be difficult due to its subjective nature, introducing challenges related to access and comprehension (Lamm et al., 2020).

Furthermore, this dissertation employed convenience sampling, a commonly used but limited method that complicates generalizing the findings to the broader population. The primary limitation regarding the third article which introduced the ICE Model is its limited application. While the data included in the article are based on actual studies which took place in the county, each step of the model has not been fully tested. Despite these constraints, the three articles within the dissertation offer a meaningful contribution to the literature and will provide valuable data for Extension practitioners and community development professionals.

Conclusions

Within this dissertation, two studies were conducted to assess the community resources and initiatives in Stewart County, Georgia. The first study utilized a quantitative instrument based on the community capitals framework (CCF) and secondary data to establish a baseline for profile of community resources available. Participants ranked community capitals based on perception within social, cultural, natural, political, human, and built-financial capitals. The study emphasized the interconnectedness of these capitals and used secondary data to support survey findings, providing a baseline community profile.

The second study was developed to examine program efforts related to HT in Stewart County to increase involvement, reach, and expansion of the project with attention the components of CBSM. It revealed challenges in commitment for individuals and a lack of engagement from the community. The study brought forth many past experiences with expressions ranging from joy to anger depending on experience. The alignment of the data from the first and second article allowed for the design and building of programming efforts from the Extension office. The combined data sets provide promising insight into creating sustainable

change within the community. The changes have been initiated from the community members' themselves creating a positive atmosphere around the health-related initiatives.

Recommendations and Implications for Practice

This study underscores the challenges individuals face in committing to health-related initiatives, emphasizing the importance of personal anecdotes in motivating participants. Cultural and historical aspects prominently influence social diffusion and norms which highlights the need for Extension agents to grasp community culture and history before suggesting changes or implementing programming. Communication emerged throughout the data as a crucial factor affecting the success of health-related programs, with participants favoring diverse communication channels, including social media, newspapers, and word of mouth consistent with Borron et al. (2019). It is recommended that Extension professionals seek support from community leaders, prioritize understanding community culture, enhance communication through various channels, tailor prompts, incentives, and convenience strategies to each community's unique needs, and encourage smaller commitments initially.

The dissertation utilized the CD+SI Toolkit to identify and quantify community capitals which emphasized community strengths rather than deficits. Recommendation include administering such instruments within additional communities to inform interventions in community programming and capacity building. For instance, in Stewart County, social capital was perceived as the highest present capital which emphasized the value of community association. Extension professionals who utilize the CD+SI Toolkit can tailor program strategies and approaches to incorporate elements of the most prevalent capitals to enhance lower ranked capitals within the communities they serve. Additionally, understanding the social norms and networks within a rural community is foundational to understanding the community (Read et al.,

2020). Each article within this dissertation encourages Extension professionals to work collaboratively with communities to strengthen various capitals, emphasizing that even small efforts informed by needs assessment can contribute to community development. Change involves collaborative efforts to empower communities, improve infrastructure, and create sustainable solutions to address local needs and aspirations (Kretzmann & McKnight, 1993) so while Extension is a vital component of community development, additional partnerships are needed to work towards desired change. Additionally, the CD+SI Toolkit enables Extension professionals to examine the differences that may exist between towns within their assigned county. This serves as a reminder that not all areas within the assigned area, even in a rural county, have the same resources available.

Extension personnel are urged to conduct comprehensive needs assessments, utilizing both secondary data sources and community members' input to understand and address local challenges effectively. The ICE Model is proposed as a useful tool offering actionable steps for targeted interventions. The ICE model considers perceptions alongside other data sets to enhance the understanding of community needs. With local funding accounting for 1/3 to 1/2 of Extension employee salaries (A. Scarrow, personal communication, November 6, 2022), it becomes crucial that Extension continues to be as in tune with county and local needs as possible. The model emphasizes the importance of capitalizing on community strengths to address weaker areas of resources by facilitating behavior change. The model integrates CBSM strategies to guide communities toward desired behaviors, particularly in health-related initiatives. As the community moves through the model, members begin to adopt new behaviors while relinquishing old ones much like McKenzie-Mohr et al. (2012) describes.

Recommendations and Implications for Future Research

Future research in Extension efforts should focus on understanding differences between community groups and demographically categorized sectors. This would enable Extension professionals to align their efforts more closely with specific community needs. Additional research efforts could involve a more in-depth investigation of the gathered information within the constructs, and data could be analyzed independently using inferential statistics to explore differences based on demographics.

Deeper exploration of the applicability and effectiveness of the ICE model is recommended. Given the acceptable reliability of the instrument's constructs (CD+SI Toolkit) used in article one, it is advisable to continue using the scales for additional research within the ICE model in additional communities. The testing of the model will provide perspective for Extension practitioners in their respective communities while also providing empirical evidence regarding the effectiveness of the model. These data will provide valuable insights to determine potential revisions to the model. Furthermore, it is recommended to provide professional development sessions for agents looking to utilize the CD+SI Toolkit and/or employ the ICE model within their communities.

Additionally, a longitudinal study in the same community, following targeted community development strategies as recommended in the ICE model, could assess improvements in community members' perceptions of capitals over time. The application within the community could also expand into other areas beyond FACS and health-related initiatives. To further integrate CBSM within Extension, research expansion into other Extension program areas like Agriculture and Natural Resources and 4-H is recommended. This research could support

ongoing efforts in implementing CBSM-related project objectives to develop a more sustainable program focused on behavior change.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD DETERMINATION FOR ARTICLE 1

Tucker Hall, Room 212
310 E. Campus Rd.
Athens, Georgia 30602
TEL 706-542-3199 | FAX 706-542-5638
IRB@uga.edu
http://research.uga.edu/hso/irb/

Human Research Protection Program

EXEMPT DETERMINATION

November 10, 2023

Dear Nicholas Fuhrman:

On 11/10/2023, the Human Subjects Office reviewed the following submission:

Title of Study:	Unveiling Community Capitals: An Assessment of Resources and Needs in Stewart County, Georgia
Investigator:	Nicholas Fuhrman
Co-Investigator:	Christina Garner
IRB ID:	PROJECT00008473
Funding:	None
Review Category:	Exempt 2ii

We have determined that the proposed research is Exempt. The research activities may begin 11/10/2023.

Since this study was determined to be exempt, please be aware that not all future modifications will require review by the IRB. For more information please see Appendix C of the Exempt Research Policy (https://research.uga.edu/docs/policies/compliance/hso/HRP-033-ExemptResearch.pdf). As noted in Section C.2., you can simply notify us of modifications that will not require review via the "Add Public Comment" activity.

The PI is responsible for ensuring that all activities and materials are compliant with the following policies: Participant Incentive and Compensation, Participant Selection and Recruitment, Internet Research. Also, the consent process must include the elements in Appendix B of the Exempt Research policy.

A progress report will be requested prior to 11/10/2028. Before or within 30 days of the progress report due date, please submit a progress report or study closure request. Submit a progress report by navigating to the active study and selecting Progress Report. The study

APPENDIX B

SURVEY INSTRUMENT FOR ARTICLE 1

Community Development & Vitality Survey

Please read this consent statement carefully before you decide to participate in this research study. You are being asked to participate in a research study conducted by County Extension Agent, Christina Garner of the University of Georgia, Department of Agricultural Leadership, Education and Communication and guided by Dr. Nicholas Fuhrman. The purpose of this study is to better understand individuals' perceptions regarding their community's sustainability and wellbeing over time. The findings from this project may provide information for future community-based program planning, development, and assessment in Georgia.

Your participation will involve taking an online survey and should take no more than 25 minutes. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. If you decide to withdraw from the study, the information that can be identified as yours will be kept as part of the study and may continue to be analyzed, unless you make a written request to remove, return, or destroy the information.

All answers are confidential to the extent provided by law. There are no known risks associated with this study. **Those who complete the survey and return it to the Stewart County Extension Office will be entered into a drawing for a gift card.** This research involves the transmission of data over the Internet. Every reasonable effort has been taken to ensure the effective use of available technology; however, confidentiality during online communication cannot be guaranteed. If you have questions about the research you may contact Christina Garner at christina.garner25@uga.edu or faculty advisor, Dr. Nicholas Fuhrman at fuhrman@uga.edu. If you have questions about your rights as a research participant, contact the University of Georgia Institutional Review Board at (706) 542-3199 or irb@uga.edu.

By circling "I agree" below you are agreeing to participate in this research. Thank you for your consideration!

Sincerely,
Christina Garner

Please circle one of the following options:

- **I agree** to participate in this research survey
- **I do not agree** to participate in this research survey

WHEN COMPLETED, PLEASE RETURN THIS SURVEY TO:

STEWART COUNTY EXTENSION OFFICE
7062 Green Grove Highway
Lumpkin, GA 31815
Or
Call 229-838-4908 for pick-up

Please circle or bubble in your answer to each of the following questions:

Do you currently LIVE in Stewart County?

- ○ no
- ○ yes

If yes, how long have you lived in this county?

- ○ Less than 1 year
- ○ 1-4 years
- ○ 5-9 years
- ○ 10-14 years
- ○ 15-19 years
- ○ 20+ years

In which zip code do you live?

- ○ 31814 - Louvale
- ○ 31815 - Lumpkin
- ○ 31821 - Omaha
- ○ 31825 - Richland
- ○ Other: Please list below:

_____

Do you currently WORK in Stewart County?

- ○ no
- ○ yes

If yes, where do you work in Stewart County?

- ○ County Government
- ○ City Government
- ○ School System
- ○ Core Civic
- ○ Retired
- ○ Other: Please list below:

_____

If yes, how long have you WORKED in this county?

- ○ Less than 1 year
- ○ 1-4 years
- ○ 5-9 years
- ○ 10-14 years
- ○ 15-19 years
- ○ 20+ years

For the purposes of this survey: "Community" is defined as a system made up of diverse individuals, agencies, organizations, and services within the same geographical location. In this case, the geographical location should be considered the county in which you live.

The following statements address a variety of community characteristics. Please complete each statement based on how you view your community TODAY. Please indicate your agreement or disagreement with the following statements by placing an 'X" in the column that best represents you.

Today, I believe my community...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Has many types of employers.					
Has stable employment.					
Seeks opportunities to bring in new businesses.					
Has charitable organizations that invest in the community.					
Has access to necessary transportation services.					
Has access to necessary communication services (Internet, cable, cell service, etc.).					
Has a vision for the future					

Today, I believe my community...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Reflects the potentially diverse values held by individuals in the community.					
Hosts events that recognize the community's heritage.					
Has organizations that preserve the community's history.					
Has local retail shops that offer culturally-relevant products.					
Is culturally diverse.					

Today, I believe my community...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Has meaningful employment to attract young people.					
Has access to strong educational opportunities from Kindergarten through 12th grade.					
Has access to strong higher education opportunities.					
Offers residents access to a wide range of healthcare.					
Offers residents access to professional development opportunities.					
Offers residents access to personal development opportunities.					
Community diversity is represented in the community leaders.					

Today, I believe my community is made up of individuals who...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Value the concerns that other community members have.					
Associate with their neighbors.					
Trust their neighbors.					
Associate with their local leaders.					
Trust their local leaders.					
Feel they can voice their concerns.					
Feel they can be part of a project to solve problems.					

Today, I believe my community...

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Has public leaders (non-elected officials) who work to affect change.					
Has public leaders (non-elected officials) who listen to community groups.					
Has political leaders who work to affect change.					
Has political leaders who listen to community groups.					
Has community groups that have the ability to mobilize resources for community change.					

Today, I believe my community...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Has valuable natural resources.					
Takes advantage of natural resources for community development.					
Takes advantage of natural resources for job creation.					
Has parks accessible to the public.					
Works to preserve valuable natural resources.					

The following statements address how you feel about your individual ability within the community. Please indicate your agreement or disagreement with the following statements by placing an 'X" in the column that best represents you.

If I choose to, I have the ability to...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Live out my moral beliefs.					
Live out my ethical values.					
Practice cultural traditions.					
Participate in one or more important social movements.					
Access culturally-relevant products.					
Develop a personal connection to the place I live.					

If I choose to, I have the ability to...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Contribute to the local economy.					
Help create local jobs.					
Help save local jobs.					
Apply for grants to support a community project.					
Apply for grants to support business development.					
Inform the development of information-sharing tools (i.e., websites or phone apps).					

If I choose to, I have the ability to...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Be a leader in my community.					
Manage differences among community members and groups.					
Learn about techniques and tools that can be used for community-based decision making.					
Take action related to the challenges that affect my community.					
Collaborate to impact community change.					
Make my community better.					
Access resources for personal needs.					

If I choose to, I have the ability to...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Listen to the concerns of community members.					
Join others to support community efforts.					
Join others to support local change efforts.					
Voice my concerns.					
Help develop a conversation around important issues.					
Feel part of the community.					

If I choose to, I have the ability to...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Be part of a group that works to affect change.					
Communicate with local government leaders.					
Communicate with county state government leaders.					
Communicate with federal government leaders.					
Join work groups that address local issues.					
Develop work groups that address local issues.					
Mobilize resources for community change.					

If I choose to, I have the ability to...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Develop projects that support my community's natural resources.					
Access parks in my community.					
Access quality water.					
Voice my opinion on the use of our natural resources.					
Voice my opinion on land development issues.					

We would like you to complete the following general demographic questions.

What year were you born?

Please circle your gender.

- ○ Female
- ○ Male
- ○ Prefer not to say
- ○ Other

In 2022, what was your total income from all sources, before taxes?

- ○ Less than $14,999
- ○ $15,000 to $24,999
- ○ $25,000 to $49,999
- ○ $50,000 to $74,999
- ○ $75,000 to $149,999
- ○ $150,000 to $249,999
- ○ $250,000 or more

Please specify your race and/or ethnicity. (Circle all that apply)

- ☐ White
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or Pacific Islander
- ☐ Other

What is the highest level of education you have completed?

- ○ Less than 12th grade (did not graduate high school)
- ○ High school graduate (includes GED)
- ○ Some college, no degree
- ○ 2-year college degree (Associates, Technical, etc.)
- ○ 4-year college degree (Bachelor's, etc.)
- ○ Graduate or Professional degree (Master's, Ph.D., M.B.A., etc.)

Please indicate your agreement or disagreement with the following statements by placing an 'X" in the column that best represents you.

	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I can get what I need in this community.					
This community helps me fulfill my needs.					
I feel like a member of this community.					
I belong in this community.					
I have a say about what goes on in my community.					
People in this community are good at influencing each another.					
I feel connected to this community.					
I have a good bond with others in this community.					

PLEASE RETURN THIS SURVEY TO:

STEWART COUNTY EXTENSION OFFICE

7062 Green Grove Highway
Lumpkin, GA 31815
Or
Call 229-838-4908 for pick-up

THIS SECTION IS OPTIONAL: Only complete this section if you would like to be entered into a drawing for a $25 Gift card. All information completed in this section will be kept anonymous. If you do not wish to be entered into the drawing, you may leave this section blank.

What is your name:

_____

What is phone number:

_____

What is your email address:

_____

Thank you for your time! We greatly appreciate your responses.

APPENDIX C

INSTITUTIONAL REVIEW BOARD DETERMINATION FOR ARTICLE 2

Tucker Hall, Room 212
310 E. Campus Rd.
Athens, Georgia 30602
TEL. 706-542-3199 | FAX 706-542-5638
IRB@uga.edu
http://research.uga.edu/hso/irb/

Human Research Protection Program

NOT HUMAN RESEARCH DETERMINATION

October 3, 2019

Dear Marsha Davis:

On 10/3/2019, the Human Subjects Office reviewed the following submission:

Title of Study:	Policy, Systems, and Environmental Change for High Obesity Areas in Georgia
Investigator:	Marsha Davis
Co-Investigator:	Hannah Southall
IRB ID:	PROJECT00001060
Funding:	Center for Disease Control
Grant ID:	FP00014822

We have determined that the proposed activity is not research involving human subjects as defined by DHHS and FDA regulations. The project is to implement and evaluate programming related to obesity prevention in several Georgia counties.

University of Georgia (UGA) IRB review and approval is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities are research involving human subjects, please submit a new request to the IRB for a determination.

Sincerely,

Kimberly Fowler, Director
Human Subjects Office, University of Georgia

APPENDIX D

INTERVIEW PROTOCOL FOR ARTICLE 2

INTERVIEW PROTOCOL (2020)

Healthier Together
Interview Guide and Questioning Route

Interviewer reads: Hello, and thank you for participating in this interview today. My name is _____ and I am an _____ at the University of Georgia. I am part of the team that received funding from the CDC to assist your coalitions in reaching your goals. Specifically, the goal of this interview is to learn more about what you've done so far, how you feel the project has helped you and your community, and how we might be able to help your community in the future.

CDSI Information
We do have a quick survey for you to take at the end of our time together today. Could you please provide an e-mail address I can use to send you the survey? It should take no more than 10 minutes of your time when we are done and will really help us understand your community.

Before we begin, let me share some things to help our talk today. There are no right or wrong answers to any of my questions. I would love to hear your stories, thoughts and concerns so please feel free to expand on anything we are discussing. I am audio recording the interview because I don't want to miss any of your comments. While I will use your name during our call, I want you to know there will not be any names attached to your comments and you can be assured of confidentiality.

I'll be asking around 20 questions and I expect our interview to last an hour or less. Once again, thank you for your time.

To get started, please tell me your name and your role in your community (what you do).

How did you become a part of the community coalition?

Community and Coalition History

In your own words, please describe what you know about the history of your community.

How does that history play a role in the daily activities of community members?

- How does the history of the community affect the work of the coalition?
- In what ways does the coalition differ from that history or tradition?

- *Probe*: How is what your coalition is doing now different than what your community has done in the past?

Can you please describe the work the coalition has engaged in over the past year?

Personal Identity and Role in the Coalition
How have you been involved in the work the coalition has done and continues doing in the community?

In what ways has working with the coalition changed or confirmed what you believe to be true about your community?

- How has working with the coalition impacted you personally?

What do you believe is the greatest thing that has come from creating a Healthier Together community coalition in _____ County?

Impact of COVID-19
Obviously COVID19 has impacted everyone – the way we work, the way we connect and certainly the way we think about our communities.

How do you believe Covid-19 (Coronavirus) has affected your community?

How has it impacted the work of your community coalition?

- How have things changed?
- How do you think it will impact the work of the coalition in the future?

Physical Activity
Despite the challenges we are currently facing I would really like to talk about the Healthier Together project and what you have been working on this past year as a coalition member.

Have you seen any changes in people being physically active since the start of the healthier together project? If so, could you describe those changes?

- Kids playing on playgrounds – Number?
- People walking more frequently – Number?

What role do you believe the coalition has played in this/these change(s)?

Nutrition Policy
Now we are going to discuss nutrition changes.

Can you describe any formal or informal policy changes in your community over the past year related to healthy eating?

- For example, do you know if any schools or child care centers serve different foods than they did before the project? Has a church changed what they serve during church events?
    - Have these changes led to any new policies on what can be served at group functions in the community or from a certain organization?

What role do you believe the coalition has played in this/these change(s)?

Healthy Food

How has access to healthy food options changed within the community over the past year?

- How many people do you believe are potentially impacted by having greater access to healthier food?

What role do you believe the coalition has played in this/these change(s)?

Community Acceptance

How have these changes been accepted by the community?

- Can you describe any changes in the way people talk about food options in the community resulting from increased access?
- *Probe*:
    - Maybe when someone has shown appreciation for the change?
    - Or when someone didn't appreciate the change?

Future Visioning & Support

Projecting three years from now, what is your ideal vision for what this community coalition has accomplished?

- What story do you want to be able to tell?
- How has being a part of the coalition altered your perspective on the community and its future?

What steps do you believe we need to take now and in the next few years to achieve that vision?

Key Informant Interview Snowball Sampling

Before we finish, can you please help us identify specific individuals who have been most involved in taking action for the Healthier Together project? We will be following up with them to conduct subsequent interviews on the specific part of the project they are involved in. Please tell us their name, one sentence about what they have done and the best way to contact

them. It can be someone in the coalition if you feel that person has something unique to

contribute.

Ripple Mapping

To finish up, I would like you to think beyond your community.

What effect do you believe the work of your coalition has had on other communities or counties?

- *If they name something, ask:* Can you think of someone who was involved that we could speak with to understand what they are doing? Contact information?

Concluding Discussion

1. As we've talked today, have I missed anything or are there any other comments you would like to share?

Interviewer reads: Thank you for taking time today to share your opinions and thoughts. Your participation is greatly appreciated and has provided valuable information.

CDSI Information
As I stated earlier, we do have a quick survey for you to take. I am sending that link to you right now so it should be in your inbox. Again, it should take no more than 10 minutes of your time and will really help us out.

Please feel free to reach out to me or other members of our team if we can be of any help to you or your community. Thank you so much for participating and being willing to share your experiences with this important project.

APPENDIX E

FOCUS GROUP MODERATOR GUIDE (2021)

Healthier Together Focus Group
Moderator Guide and Questioning Route

Moderator reads: Hello and welcome to our session today. Thank you for taking the time to join our discussion about your community coalition. My name is_____and I am a _____ at the University of Georgia. I would also like to introduce _____ and _____ who are assisting today. We are part of the Healthier Together team working to help you make progress in increasing nutrition and physical activity in your community. The goal of the discussion we're about to have is to gain a perspective on your successes so far with the project, how it has impacted your community, how it has impacted each of you, and how we can support you and work together to make even more headway in the future. Thank you all for being willing to participate.

To get started, I have a few requests that will help during the zoom experience – which is a new way for us to get together when we can't be together in person. First, please switch your view to Gallery or Grid view so you can see as many people as possible. We would appreciate you keeping your video on if you can. It is easy to speak over one another in this setting so I will be looking for you to raise your hand on video if you would like to contribute. You can also use the raise hand feature within the Zoom platform if you prefer or are unable to have your video up and running.

Because of this, you will be able to best participate if you are on a desktop or laptop versus your mobile phone so if this is possible, I would suggest you switching now. Either way, we are glad you are here.

Finally, if you could please change your screen name to your first and last name it will assist us in better identifying you during our conversation. If you need to change your name, just click on the participants button on the bottom of your screen. You will see a list of everyone here pop up. To the right of your name there is a More dropdown option where you can change your name onscreen.

Before we begin, let me share some things that will make our discussion easier. There are no right or wrong answers, but rather differing points of view. Please feel free to share your point of view even if it differs from what others have said. Please speak up and only one person should talk at a time. We're audio recording the session because we don't want to miss any of your comments. We'll be on a first name basis, and in our later reports there will not be any names attached to comments. You may be assured of confidentiality.

My role here is to ask questions and listen. I won't be participating in the conversation, but I want you to feel free to talk to one another. I'll be asking around 15 questions, and I'll be moving the discussion from one item to the next. There is a tendency in these discussions for some people to talk a lot and some people not to say much. But it is important for us to hear from

each of you today because you have different experiences. So, if one of you is sharing a lot, I may ask you to let others respond. And if you aren't saying much, I may ask for your opinion.

Our session will last about an hour and a half. If we could go around and introduce ourselves, please give us your name and the role you play in the community. This will be the only time we go around the room and let everyone speak in order.

Community and Coalition History

2. What is the history of your community and how does that history play a role in the daily activities of community members?
    a. How is the history of the community relevant to you as a coalition?
    b. In what ways do you as a coalition diverge from that history?

3. Now, as a group, can you please describe the work this coalition has done over the past year?

4. What do you believe is the greatest thing that has come from creating a Healthier Together community coalition in [County] County?

Physical Activity

5. Please describe anything you have seen regarding members of the community engaging in physical activity.
    a. Kids playing on playgrounds – Number?
    b. People walking more frequently – Number?

6. What role has the coalition played in this/these change(s)?

Nutrition Policy Changes

7. Can you please describe any formal or informal policy changes you are aware of related to nutrition within the community?
    a. For example, has an early childcare center altered their policies regarding what they feed kids at the center? Or has a church adopted a new policy regarding what they serve at group functions?

8. What role has the coalition played in this/these change(s)?

Access to Healthy Food

9. How has access to healthy food options changed within the community?
    a. How many people do you believe are potentially impacted by having greater access to healthier food?

10. What role has the coalition played in this/these change(s)?

Community Acceptance

11. How do you believe these changes have been accepted by the community?
    a. Can you describe any changes in the way people talk about food options in the community resulting from increased access?
    b. Maybe when someone has shown appreciation for the change?
    c. Or when someone didn't appreciate the change?

Future Visioning & Support

12. Projecting three years from now, what is your ideal vision for what this community coalition has accomplished?
    a. What story does your community want to tell about itself?
    b. How has being a part of the coalition altered your perspective on the community and its future?

13. What steps do we need to take now and in the next few years to achieve that vision?

Ripple Mapping

14. What effect has the work of the coalition had on other communities/counties?
    a. Are there other individuals or communities we should speak with and why?

15. Before we finish, can you please help us identify specific individuals who have been most involved in taking action for the project? We will be following up with them to conduct in depth interviews on the specific part of the project they are involved in. Is anyone willing to share a name?

Concluding Discussion

16. As we've talked today, have we missed anything or are there any other comments you would like to share?

I am now going to ask our notetaker to summarize the main points from today's discussion (key messages and big ideas that developed).

- Is this an adequate summary?

Moderator reads: Thank you for taking time today to share your opinions and thoughts. Your participation is greatly appreciated and has provided valuable information. Thank you so much for participating and being willing to share your experiences with this important project.

APPENDIX F

FOCUS GROUP MODERATOR GUIDE (2022)

Healthier Together Focus Group
Moderator Guide and Questioning Route

Moderator reads: Hello and welcome to our session today. Thank you for taking the time to join our discussion about your community coalition. My name is _____and I am a Graduate Assistant at the University of Georgia. I would also like to introduce _____ and _____ who are assisting today. We are part of the Healthier Together team working to help you make progress in increasing nutrition and physical activity in your community. The goal of the discussion we're about to have is to gain a perspective on your successes so far with the project, how it has impacted your community, how it has impacted each of you, and how we can support you and work together to make even more headway in the future. Thank you all for being willing to participate.

Before we begin, let me share some things that will make our discussion easier. There are no right or wrong answers, but rather differing points of view. Please feel free to share your point of view even if it differs from what others have said. Please speak up and only one person should talk at a time. We're audio recording the session because we don't want to miss any of your comments. We'll be on a first name basis, and in our later reports there will not be any names attached to comments. You may be assured of confidentiality.

My role here is to ask questions and listen. I won't be participating in the conversation, but I want you to feel free to talk to one another. I'll be asking around 15 questions, and I'll be moving the discussion from one item to the next. There is a tendency in these discussions for some people to talk a lot and some people not to say much. But it is important for us to hear from each of you today because you have different experiences. So, if one of you is sharing a lot, I may ask you to let others respond. And if you aren't saying much, I may ask for your opinion.

Our session will last about an hour and a half. If we could go around and introduce ourselves, please give us your name, the role you play in the community, and how long you have lived in the community. This will be the only time we go around the room and let everyone speak in order.

Community and Coalition History

17. What is the history of your community and how does that history play a role in the daily activities of community members?
    a. How is the history of the community relevant to you as a coalition?
    b. In what ways do you as a coalition diverge from that history?

18. Now, as a group, can you please describe the work this coalition has done over the past year?

19. What do you believe is the greatest thing that has come from creating a Healthier Together community coalition in [County] County?

Physical Activity

20. Please describe anything you have seen regarding members of the community engaging in physical activity.
    a. Kids playing on playgrounds – Number? Frequency/days out of the week?
    b. People walking more frequently – Number? Frequency/days out of the week?
    c. People using routes to walk or bike to everyday destinations (drugstore, grocery store, library, school)? – Number? Frequency/days out of the week?

21. What role has the coalition played in this/these change(s)?

Nutrition Policy Activities/Opportunities

22. Can you please describe any formal or informal changes you are aware of related to nutrition within the community?
    a. For example, has an early childcare center altered their policies regarding what they feed kids at the center? Or has a church adopted a new policy regarding what they serve at group functions?
    b. Have you seen more healthy food options in places where you purchase or receive food?

23. What role has the coalition played in this/these change(s)?

Access to Healthy Food

24. How has access to healthy food options changed within the community?
    a. At stores? Gardens? Churches? Food pantries and food banks?
    b. How many people do you believe are potentially impacted by having greater access to healthier food?

25. What role has the coalition played in this/these change(s)?

Community Acceptance

26. How do you believe these changes have been accepted by the community?
    a. Can you describe any changes in the way people talk about food options in the community resulting from increased access?
    b. Maybe when someone has shown appreciation for the change?
    c. Or when someone didn't appreciate the change?

27. To what extent do you think Healthier Together [County] connects with the values, beliefs, and lifestyles of community members?
    a. How might Healthier Together [County] connect more deeply with community members' values, beliefs, and lifestyles?

Future Visioning & Support

28. Projecting three years from now, what is your ideal vision for what this community coalition has accomplished?
    a. What story does your community want to tell about itself?
    b. How has being a part of the coalition altered your perspective on the community and its future?

29. What steps do we need to take now and in the next few years to achieve that vision?

Ripple Mapping

30. What effect has the work of the coalition had on other communities/counties?
    a. Are there other individuals or communities we should speak with and why?

31. Before we finish, can you please help us identify specific individuals who have been most involved in taking action for the project? We will be following up with them to conduct in depth interviews on the specific part of the project they are involved in. Is anyone willing to share a name?

Concluding Discussion

32. As we've talked today, have we missed anything or are there any other comments you would like to share?

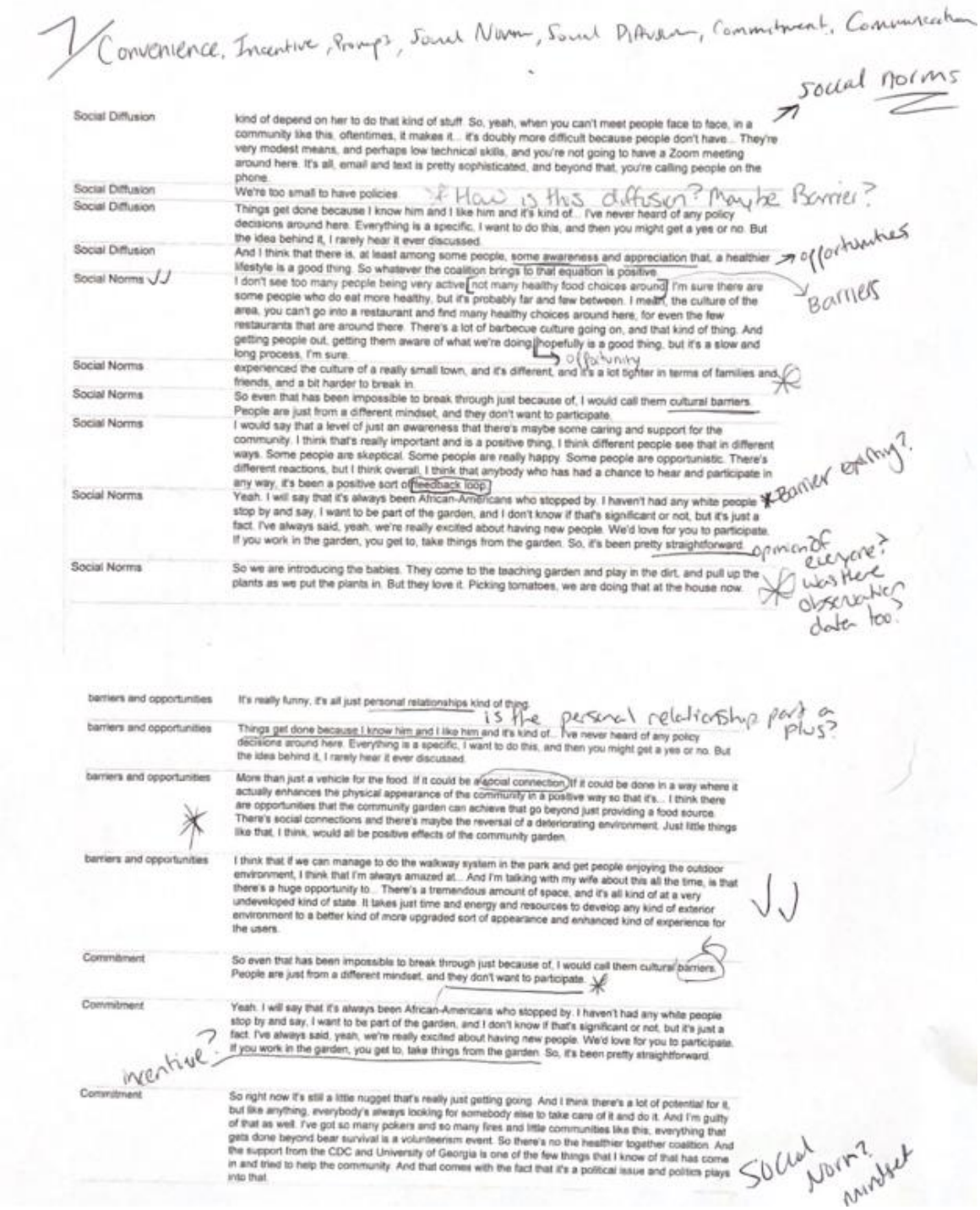
I am now going to ask our notetaker to summarize the main points from today's discussion (key messages and big ideas that developed). **(3-5 MINUTES MAX)**

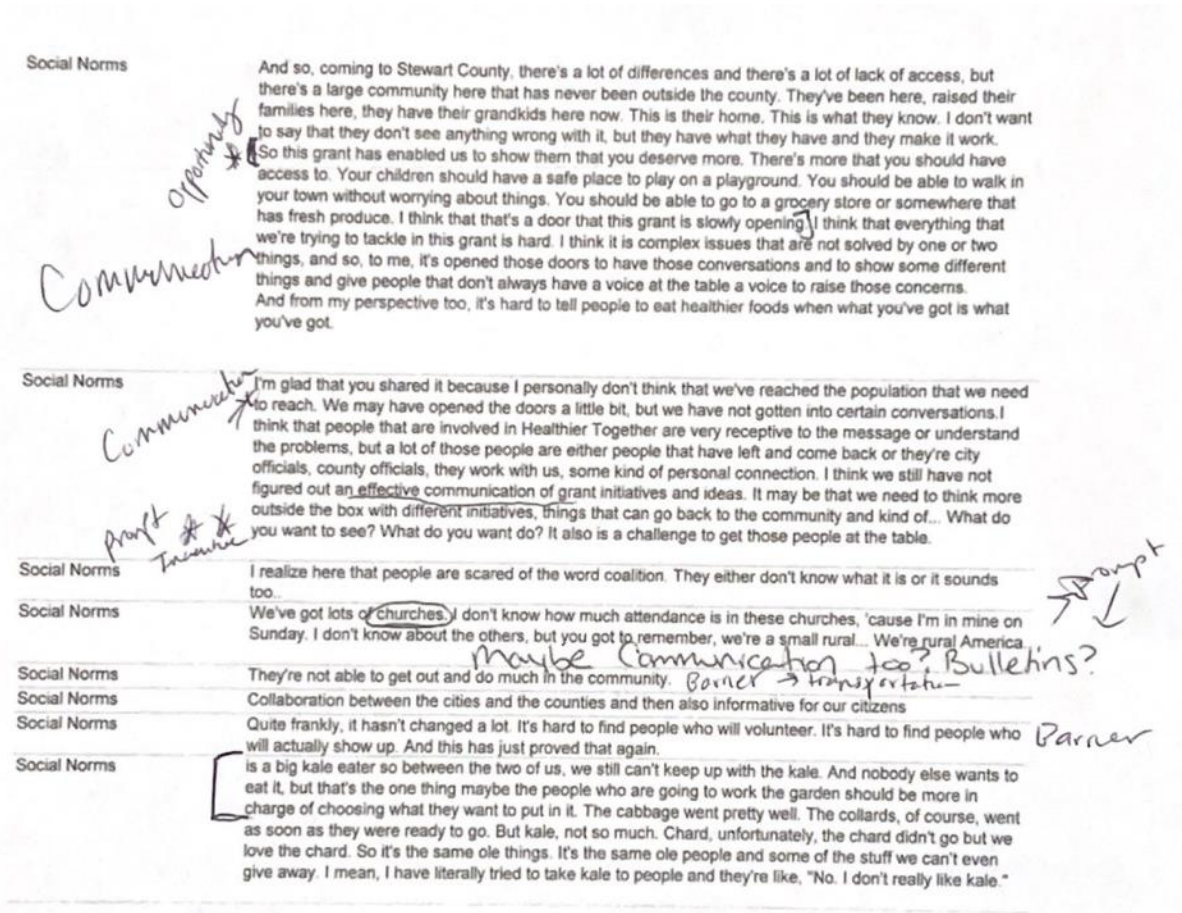
- Is this an adequate summary?

Moderator reads: Thank you for taking time today to share your opinions and thoughts. Your participation is greatly appreciated and has provided valuable information. Thank you so much for participating and being willing to share your experiences with this important project.

APPENDIX G

PEER REVIEW NOTES FOR ARTICLE 2





Social Norms	And so, coming to Stewart County, there's a lot of differences and there's a lot of lack of access, but there's a large community here that has never been outside the county. They've been here, raised their families here, they have their grandkids here now. This is their home. This is what they know. I don't want to say that they don't see anything wrong with it, but they have what they have and they make it work. So this grant has enabled us to show them that you deserve more. There's more that you should have access to. Your children should have a safe place to play on a playground. You should be able to walk in your town without worrying about things. You should be able to go to a grocery store or somewhere that has fresh produce. I think that that's a door that this grant is slowly opening. I think that everything that we're trying to tackle in this grant is hard. I think it is complex issues that are not solved by one or two things, and so, to me, it's opened those doors to have those conversations and to show some different things and give people that don't always have a voice at the table a voice to raise those concerns. And from my perspective too, it's hard to tell people to eat healthier foods when what you've got is what you've got.
Social Norms	I'm glad that you shared it because I personally don't think that we've reached the population that we need to reach. We may have opened the doors a little bit, but we have not gotten into certain conversations.I think that people that are involved in Healthier Together are very receptive to the message or understand the problems, but a lot of those people are either people that have left and come back or they're city officials, county officials, they work with us, some kind of personal connection. I think we still have not figured out an effective communication of grant initiatives and ideas. It may be that we need to think more outside the box with different initiatives, things that can go back to the community and kind of... What do you want to see? What do you want do? It also is a challenge to get those people at the table.
Social Norms	I realize here that people are scared of the word coalition. They either don't know what it is or it sounds too..
Social Norms	We've got lots of churches. I don't know how much attendance is in these churches, 'cause I'm in mine on Sunday. I don't know about the others, but you got to remember, we're a small rural... We're rural America
Social Norms	They're not able to get out and do much in the community.
Social Norms	Collaboration between the cities and the counties and then also informative for our citizens
Social Norms	Quite frankly, it hasn't changed a lot. It's hard to find people who will volunteer. It's hard to find people who will actually show up. And this has just proved that again.
Social Norms	is a big kale eater so between the two of us, we still can't keep up with the kale. And nobody else wants to eat it, but that's the one thing maybe the people who are going to work the garden should be more in charge of choosing what they want to put in it. The cabbage went pretty well. The collards, of course, went as soon as they were ready to go. But kale, not so much. Chard, unfortunately, the chard didn't go but we love the chard. So it's the same ole things. It's the same ole people and some of the stuff we can't even give away. I mean, I have literally tried to take kale to people and they're like, "No. I don't really like kale."