Critical Issues Facing Georgia Residents: An Application of the Delphi Technique and Community Capitals Framework

Abstract

The 21st century has brought with it unforeseen challenges and influential trends that will have significant impact of the livelihood and wellbeing of Georgia residents. Extension personnel within Georgia can extend their mandate by identifying issues that represent present and near-present threats and use these issues to inform programming and direct resource allocation. The conceptual basis for this study relied upon the community capitals framework and the consensus-building theory. Data were collected using a three-round Delphi process, with an expert panel comprised of 19 Extension leadership and administrative personnel. Descriptive statistics, including mean importance scores and absolute frequency counts, were computed. A final list of 21 unique issues resulted from the Delphi process and was analyzed thematically using the constant comparative method. Five heuristic themes resulted from this analysis: 1) Investment in Youth and Adults, 2) Agricultural and Rural Economic Development, 3) Agriculture and Food Safety Information, 4) Resource Access and Availability, 5) Social and Personal Economic Concerns. *Comparison with the community capitals framework revealed that multiple capitals interacted within each of the resulting themes. Utilizing the Delphi technique in conjunction with the community capitals framework enables extension professionals to compare community resources and strengths and may allow for greater efficiency in addressing critical issues. The immediate efforts of extension personnel should be directed towards addressing issues within the* Investment in Youth and Adults and Resource Access and Availability *themes. We recommend using the associated community capitals as strategic entry points for further discussion and program development.*

Keywords*:* consensus building; community capitals; critical issues; extension

Introduction

The 21st century has brought with it significant challenges (Abumhadi et al., 2012). Globally, the issues of climate change (Weiskopf et al., 2020), population growth (Vollset et al., 2020), and the COVID-19 pandemic (Chakraborty & Maity, 2020) pose significant threats. Within the United States, farmers are threatened by economic insecurity, disruptions in trade networks, and fluctuations in demand (Gloy & Widmar, 2020; MSF Agriculture, 2020). These global and domestic trends will impact industries and livelihoods across Georgia (Suttles et al., 2018; Cammarano & Tian, 2018; Chin et al., 2020). Therefore, it is imperative for extension professionals and policy makers to identify which issues facing Georgia residents will be most critical.

Issues are matters of concern shared by a broad population and consist of multiple interrelated problems (Penn, n.d.). There are several types of issues, including current, emerging, and potential (Penn, n.d.). For this study, we define a critical issue to be one with current or emerging matters of concern, which, if unresolved, will have widespread, adverse effects on all Georgia residents. The land-grant mission of the University of Georgia is underscored by a federal mandate to use university resources and personnel to benefit the citizens of Georgia (University of Georgia Public Service and Outreach, n.d.). For over a century, the University of Georgia Extension service has provided Georgia residents with academic research, timely information, and novel technologies (University of Georgia Extension, n.d.). Thus, cooperative extension has a unique insight into the lives of Georgia residents (Davis, 2016). One way cooperative extension services can continue their mission and remain relevant to the citizens of the state, both rural and urban, is by identifying critical issues that indicate present and near-present challenges facing

Georgia residents. Once identified, the issues can help to inform future programming and to direct extension resources and efforts.

Extension is well adapted to responding and innovating in response to environmental changes and crises (Davis et al., 2021). As the 21st century progresses, the needs of urban and rural communities continue to evolve in response to changing stimuli (Narine & Meier, 2020). To remain faithful to the mission mandated in the Smith-Lever Act and to meet the needs of a changing world, extension must identify the current and emerging issues facing Georgia residents. The present study utilizes an expert panel of extension professionals to identify these critical issues and generate consensus regarding which issues are most paramount. The results of this study will make significant contributions to the University of Georgia Extension Service by providing a framework to develop programming and policy focus areas and to guide resource allocation. By addressing the critical issues facing Georgia residents, extension will build community resilience and help citizens thrive.

Theoretical Framework

Consensus Building Theory

Generating consensus involves gathering individuals who represent varied interests and engaging these individuals in a dialogue to address an area of shared concern (Innes & Booher, 1999). This practice is a common way to "search for feasible strategies to deal with uncertain, complex, and controversial planning and policy tasks" (Innes & Booher, 1999, p.412). The consequences of effective consensus building include high quality agreements between stakeholders who may otherwise not associate with one another, tangible products such as formal agreements and partnerships, and intangible products including social, intellectual, and political gains (Innes & Booher, 1999). Overall, consensus building is "valuable from a societal perspective because it links the distributed intelligence of many players so they can form a more coherent and responsive planning system" (Innes & Booher, 1999, p.421).

Within the 1990s, the consensus building framework rose in popularity, replacing the previously favored community organizing approach (Saegert, 2006). Several approaches were associated with consensus building, including the community capitals framework (Flora et al., 2016), capacity building (Chaskin et al., 2001), and asset-based community development (Kretzman & McKnight, 1993). These approaches emphasize facilitating "communication among residents so that they can recognize their own interests, build trust, develop a shared vision of community, and apply their collective assets to its achievement" (Harvey, 2013, p. 258). The results of applying consensus building to community development initiatives are mixed.

Buchecker and Hunziker (2006) found that use of consensus building to determine development of a rural population in Switzerland had a net positive effect. Through this process, participants discovered that their attitudes toward regional development agreed with the attitudes of other regional groups (Buchecker & Hunziker, 2006). The researchers posit that the decrease in perceived differences between attitudes of the participants and the other groups was a key factor in the effectiveness of the consensus building process (Buchecker & Hunziker, 2006). In his work among the Mississippi Delta region, Harvey (2013) found that racial divisions and pre-existing structural conflicts between participants reduced the effectiveness of consensus building. Members of the wealthy business elite group, who were majority white, voiced that while everyone should have the opportunity to give their input, "only those with the requisite education and professional experience should be involved in planning and implementation" (Harvey, 2013, p.266). Among the Black political and non-profit elite, individuals felt that community development was their responsibility and perceived white elites' attempts to be involved as threats (Harvey, 2013). Overall, every community, no matter the underlying obstacles, has the capacity necessary to take an active role in

its transformation (Kretzman & McKnight, 1993), and the consensus building approach represents a valid method for engaging stakeholders in participatory-based community development (Saegert, 2006).

Community Capitals Framework

The community capitals framework has been used extensively in the social sciences discipline to analyze the complex interactions between human, social, political, and environmental systems (Emery & Flora, 2006; Flora & Flora, 2013) and make recommendations for community development initiatives (Anglin, 2015; Jones, 2021). The following section provides definitions of each capital with examples from the southeastern U.S. and Georgia.

Human. Human capital consists of the natural and learned competencies of individuals and how these competencies are leveraged to increase resources in and outside of the community (Borron et al., 2019; Anglin, 2015). Some examples of human capital include educational and technical skills, leadership skills, work ethic, and lifestyle (Flora & Flora, 2013). Georgia is one of the fastest growing states in the U.S., with a projected increase in population of 17.7% by 2030 (Georgia Department of Economic Development, 2021). However, rural populations in Georgia have been declining, with a 4% loss from 2010 to 2020 (Tanner, 2021; Fennessy & Mador, 2021).

Since 1990, the percentage of Georgia citizens with a high school diploma has increased from 71% to 85%, while the percentage of citizens with a four-year degree rose from 19.3% to 28.5% (Georgia Department of Economic Development, 2021). Moreover, the proportion of individuals with less than a high school diploma has decreased in both rural and urban populations (Tanner, 2021; USDA-ERS, 2021). Among urban areas, the rate has decreased from 43.6% in 1980 to 11.6% in 2019 (USDA-ERS, 2021). However, rural populations experienced a much greater decrease with rates falling from 57.7% in 1980 to 18.6% in 2019 (USDA-ERS, 2021). The top five occupations in Georgia during 2020 included 1) Office and Administrative Support, 2) Sales and Related Occupations, 3) Transportation and Material Moving, 4) Food Preparation and Serving Related Occupations, and 5) Production (U.S. Bureau of Labor Statistics, 2021).

Social. Social capital refers to the connections between individuals and organizations in the community that enable collective action and foster change (Flora & Flora, 2013). One of the most crucial units of the social system in the southeastern U.S. is the family unit (Parker et al., 2018; Pittman, 2014). However, in 2021, Georgia ranked 38th in the nation for child and family well-being for the second year in a row (Georgia Family Connection Partnership, 2021). The rate of children living in high poverty areas indicates the resources and opportunities available to children within a community (Georgia Family Connection Partnership, 2021). Prior to the COVID-19 pandemic, the rate of children living in high poverty areas statewide was 9% in 2019 (Georgia Family Connection Partnership, 2021). Due to negative impacts of the pandemic, this proportion has increased dramatically rising to over 30% in some rural counties (Miller, 2021). Furthermore, the overall rate of poverty in both rural and urban populations in Georgia has been declining since the late 1970s (USDA ERS, 2021). However, the rate of poverty in rural Georgia counties is almost 20%, over seven percentage points higher than the rate of poverty in urban counties (USDA ERS, 2021).

Cultural. Cultural capital is defined as what constitutes knowledge, how this knowledge is to be achieved, and how it is to be validated through the existing community power hierarchy (Flora & Flora, 2013; Anglin, 2015). Culture in the southeastern United States has been characterized by southern hospitality (Megehee & Spake, 2007), rootedness (Schwarz, 1997), and sense of community (Coffman & BeLue, 2009). Religion, particularly evangelical Christianity, is a dominant cultural value across the southeastern U.S. (Hitchner et al., 2021), an area often referred to as the ‘Bible Belt’ (Carter, 2007).

Political. Political capital represents a community's capacity to transform societal norms, practices, and values into rules that govern distribution of community resources (Lamm, Borron et al., 2021). For example, Hogler et al. (2015) found that southern culture impacted how residents regard collective action and argue that the traditional social structures of the south negatively impact contemporary levels of union membership. Additionally, within political elections, single-party control and a long history of gerrymandering can decrease political power among the minority party and underrepresented populations (Armstrong et al., 2021).

Regarding political ideology, the majority of Georgia residents identify as conservative (Pew Research Center, n.d.). Historically, conservative Democrats dominated Georgia's political history, a trend spanning from the Reconstruction Era to the end of Jimmy Carter's presidency (Lerer & Fausset, 2020; Wiegel, 2020). In more recent years, conservative Republican coalitions have become the dominant political party in Georgia (Wiegel, 2020). However, new data suggests this trend may be changing. For example, Georgia's capital and its surrounding metro communities have become a hub for progressive political ideologies (Wiegel, 2020). Additionally, Georgia's electoral college votes went to Joe Biden in the 2020 presidential election, while Democratic candidates defeated Republican incumbents in the 2020 Senate runoff (NBC News, 2021). With regards to urban and rural differences, urban populations in Georgia tend to identify as progressive, while rural populations generally identify as conservative (Wiegel, 2020).

Natural. Natural capital refers to the "concentration of all environmental resources – renewable and non-renewable – within a community" (Lamm, Borron et al., 2021, p.289). Such resources include forestry, water, air and soil quality, weather, geography, and topography (Emery & Flora, 2006; Flora et al., 2016). Within the southeastern United States, there is a wealth of natural capital. Specifically, within Georgia there are almost eight million acres of farmland with the "soil quality, growing season, and moisture supply necessary to produce sustained yields of crops" (Georgia DNR, n.d., para. 2). Additionally, Georgia has the most commercial forest land of any state, which contributes to almost 75% of the U.S. pine supply (Georgia DNR, n.d.). Water is a vital resource in the southeastern United States and rights to use of the Apalachicola-Chattahoochee-Flint River basin have embroiled the tri-state area in conflict since the 1990s (Southern Environmental Law Center, n.d.).

Built-financial. Built capital consists of the infrastructure necessary to support the maintenance and development of community activities, including production, transportation, and power (Anglin, 2015; Flora & Flora, 2013). Financial capital refers to the economic resources accessible to a community for the development and support of wealth accumulation (Lamm, Borron et al., 2021). While not exclusively monetary, the resources in financial capital can all be translated to monetary instruments or converted into other forms of capital (Anglin, 2015). Previous factor analysis confirmed that these capitals can be combined into a singular construct (Lamm, Borron et al., 2021).

Aging infrastructure represents a significant threat to built capital resources in Georgia (Carpenter, 2014). A report by the Georgia Municipal Association (n.d.) analyzed and projected the infrastructure needs of Georgia cities and counties during 2020-2024. The highest reported needs were in the areas of transportation, water, and sewer (Georgia Municipal Association, n.d.). In terms of financial resources, the median household income for Georgia residents in 2019 was $58,700, which was lower than the national median household income of $62,843 (United States Census Bureau, n.d.). However, the median household income for Black and Hispanic residents in Georgia was lower than the median household income for White and Asian residents (Shrider et al., 2021). The reported poverty rate was 13.3% in 2019 for the state of Georgia, which was nearly two points higher than the national poverty rate (U.S. Census Bureau, n.d.)

Purpose and Research Objectives

The purpose of this study is to identify and generate consensus regarding the critical issues facing Georgia residents. The study was driven by the following research objectives:

1. Creative a comprehensive list of potential critical issues facing the citizens of Georgia.
2. Generate consensus on the most critical issues facing the citizens of Georgia.
3. Develop a heuristic thematic grouping of critical issues facing the citizens of Georgia.

Methods

Delphi Technique

The methodology for this study included the Delphi technique and the constant comparative method. The Delphi technique was initially developed and used by Rand Corporation in the 1950s to control for interpersonal variables in decision making (Goodman, 1987). In the past 70 years, this technique has evolved into a widespread, systematic method that enables experts to discuss complex issues and "convert diverse views… [into a] communal notion" (Allen et al., 2019, p.1309). The basics of conducting an iterative Delphi process are as follows: 1) determine meaning of "expert" in study context and compose a panel of experts; 2) administer initial questionnaire round where panelists generate responses; 3) conduct consecutive rounds where experts review previous group responses and generate consensus (Allen et al., 2019; Habibi et al., 2014). Generally, consensus is achieved within two to four rounds (Allen et al., 2019).

One advantage of using the Delphi technique is that this method is flexible and adaptable to specific study contexts (Vernon, 2009). Within the literature, there is precedence for tailoring the Delphi technique for application to issues facing food safety industry (Lamm, Randall, & Diez-Gonzalez, 2021), environmental education (Ruppert & Duncan, 2017), and sustainable farming practices (Ranjan et al., 2014). Additionally, the Delphi technique enables researchers to access a wide range of professionals who may not otherwise be able to generate consensus together (Vernon, 2009). Based on these factors, the Delphi technique was selected to establish consensus among extension professionals regarding critical issues facing Georgians.

While there are numerous benefits to the Delphi, there are several criticisms that must be taken into consideration when employing this method. First, the entire Delphi technique is based on the composition of the expert panel (Vernon, 2009). If individuals on the expert panel are not selected rigorously, and indeed are not "experts", this can result in invalid results. Relatedly, even if consensus is generated, this does not always imply that the "right" answers have been found. Since Delphi results rely heavily on the validity, knowledge, and competence of expert panelists, it is imperative that measures have been taken to ensure a rigorous selection of competent and knowledgeable panel members. Even with measures taken to strengthen validity and credibility of expert panelists, the results of Delphi studies should be interpreted cautiously (Vernon, 2009).

For the current study, the panel was comprised of 19 individuals from the Georgia Extension leadership team, which included the Dean of Extension, associate deans, district extension directors, program development coordinators, and other administrative leaders. Extension in the state of Georgia has a county delivery model with a presence in 159 counties across the state. The administrative structure includes four geographic regions with administrative personnel representing each, as well as a main location at the University of Georgia.

Approval was obtained from the University of Georgia Institutional Review Board (IRB: STUDY00006418). Data were collected from August to September 2018. Three rounds of the Delphi process were administered online via the survey platform Qualtrics. The response rate for all three rounds

was 100%. During the first round, panelists were asked to provide up to five responses, either a word or short phrase, to the following question: "In your opinion, what are the most critical issues facing the citizens of Georgia?" Items generated during round one were analyzed and duplicates were consolidated into single items. The resulting list of 63 unique issues were presented to panelists in round two.

During the second round, panelists were presented with the list of items generated during the first round of the Delphi process. Panelists were then asked to indicate the level of importance for each item using a five-point, Likert-type scale. Possible responses ranged from "1 – Not at all important" to "5 – Very important". Following the second round, a mean level of importance was computed for each issue. A threshold value of 3.55 was determined *a posteriori* (Keeney et al., 2011). Items with a mean level of importance lower than this threshold were not retained for further analysis. The resulting list consisted of 41 unique issues.

During round three, panelists were presented with the list of 41 issues retained from round two. Panelists were asked to indicate the level of consensus they associated with each issue by determining whether each issue should be retained. Panelists indicated whether an issue should be retained by using a dichotomous scale with possible responses "Yes" or "No". Percentage scores were calculated to indicate the composite level of consensus associated with each item. A threshold value of 80% was determined *a posteriori* according to recommendations in the Delphi literature (Keeney et al., 2011). Items with a composite level of consensus lower than 80% were not retained for further analysis. Twenty-one issues were retained following round three of the Delphi process.

Constant Comparative Method

The constant comparative method is a qualitative analytic technique which enables researchers to systematically generate theories that are integrated, consistent, and close to the data through explicit coding and analytic procedures (Glaser, 1965). There are four stages to this method: "1) comparing incidents applicable to each category, 2) integrating categories and their properties, 3) delimiting the theory, and 4) writing the theory" (Glaser, 1965, p.439). In general terms, the researcher begins by first assigning a code to each data point, which may be a short phrase or word. The researcher reviews these initial codes, comparing them to one another and thereby generating new codes or categories of codes. This iterative processed is repeated until the initial codes have been transformed into heuristic themes. Reviewing the resulting themes and codes enables the researcher to form theories about the data (Glaser, 1965).

Within this study, the final list generated from the Delphi process was reviewed by the researcher. Each issue on the list was given an initial code. These initial codes were reviewed and compared repeatedly, generating categories and eventually themes. The coding was initially completed by hand, using a manual, color-coded process, but was eventually converted to a digital format using a spreadsheet software. The themes resulting from the constant comparative analysis were examined to develop theories regarding the data and make appropriate recommendations.

Results

The first round of the Delphi technique resulted in 63 unique responses related to critical issues facing Georgia residents. Table 1 displays the mean level of importance as well as the individual frequency counts for each issue. The two issues with the highest mean importance scores were "access to rural healthcare" and "rural job growth and availability".

Table 1

*Delphi Round Two Results: Level of Importance Associated with Critical Issues (*n = *63)*

Items	*n*	1	2	3	4	5	*M*
Access to rural healthcare	19	0	0	1	6	12	4.58
Rural job growth and availability	19	0	0	1	7	11	4.53
Agricultural prosperity	19	0	0	2	7	10	4.42
Economic development in rural Georgia	19	0	0	1	11	7	4.32
Economic viability in rural communities	19	0	0	3	7	9	4.32
Education (all)	19	0	0	4	5	10	4.32
Access to resources in rural areas	19	0	0	2	10	7	4.26
Limited access to broadband in rural areas	19	0	0	2	10	7	4.26
Career readiness and workforce preparation	19	0	0	5	5	9	4.21
Obesity	19	0	0	4	7	8	4.21
Rural poverty	19	0	0	2	11	6	4.21
Lack of qualified workforce	19	0	1	4	5	9	4.16
Chronic disease	19	0	0	4	8	7	4.16
Health	19	0	0	5	7	7	4.11
Lack of workforce soft skills	19	0	1	5	5	8	4.05
Youth education	19	0	0	4	10	5	4.05
Poor health status due to preventable causes	19	0	0	5	8	6	4.05
Water quantity	19	0	1	2	11	5	4.05
Youth leadership development	19	0	0	6	7	6	4.00
Graduation rate	19	0	1	5	6	7	4.00
Youth development	19	0	0	6	8	5	3.95
Limited access to healthy food choices	19	0	2	2	10	5	3.95
State revenue	19	0	1	6	5	7	3.95
Water quality	19	0	1	3	11	4	3.95
Limited understanding of the importance of agriculture and where food comes from	19	0	1	5	7	6	3.95
Limited access to fresh food choices	19	0	2	2	10	5	3.95
Low performing schools	19	0	1	4	10	4	3.89
Urban poverty	19	0	1	6	6	6	3.89
Rural flight to urban centers	19	0	2	6	3	8	3.89
Literacy	19	0	0	7	7	5	3.89
Financial wellbeing and income	19	0	0	7	7	5	3.89
Family stability	19	0	1	4	10	4	3.89
Aging population	19	0	2	6	4	7	3.84
Lack of values	19	0	3	1	12	3	3.79
Financial literacy and management	19	0	0	8	7	4	3.74
False information (i.e., GMO understanding) leads to incorrect food choices	19	0	2	6	6	5	3.74
Economics	19	0	1	7	7	4	3.74
Impacts of urban migration	19	0	4	2	8	5	3.74
New technology for crop production	19	0	3	5	6	5	3.68
Crime and violence	19	0	3	5	6	5	3.68
Low pay for schoolteachers	19	0	3	6	4	6	3.68
Drug abuse and addiction including the opioid crisis	19	0	2	5	9	3	3.68
Generational poverty	19	0	1	8	6	4	3.68

Children that do not have appropriate role models	19	0	1	10	3	5	3.63
Lack of civic and community leadership capacity at all stages of the life cycle	19	0	2	9	3	5	3.58
Aging infrastructure	19	0	2	8	6	3	3.53
Exercise for youth and adults	19	0	3	5	9	2	3.53
Food quantity	19	0	2	9	5	3	3.47
Limited access to critical expertise to work with them in solving community-based concerns	19	0	4	7	4	4	3.42
Automobile traffic congestion	19	0	3	7	9	0	3.32
Teen pregnancy	19	0	3	10	4	2	3.26
Lack of affordable transportation	19	0	4	8	5	2	3.26
Inability to balance time, energy, and resources	19	1	5	6	3	4	3.21
Unplanned metro growth and urban sprawl	19	0	6	6	5	2	3.16
Urban job growth and availability	19	0	4	9	6	0	3.11
Population growth diminishing the quality of life	19	0	5	11	2	1	2.95
Limited bringing people together	18	1	7	4	6	0	2.83
Student loan repayment	19	3	5	7	3	1	2.68
Lack of teen jobs	19	0	9	8	2	0	2.63

Note. 1 = Not at all important; 5 = Very important

Table 2 displays the composite level of consensus associated with each issue. Three items obtained a unanimous level of consensus: 1) youth development, 2) youth leadership development, 3) career readiness and workforce preparedness.

Table 2

*Delphi Round Three Results: Level of Consensus Associated with Critical Issues (*n *= 41)*

Item	Consensus %
Youth development	100.00
Youth leadership development	100.00
Career readiness and workforce preparedness	100.00
False information of food issues (i.e., GMO understanding) leads to incorrect food choices	94.12
Agricultural prosperity	94.12
New technology for crop production	94.12
Limited understanding of the importance of agriculture and where food comes from	94.12
Water quality	94.12
Limited access to healthy food choices	94.12
Limited access to fresh food choices	94.12
Youth education	94.12
Access to resources in rural areas	93.75
Lack of civic and community leadership capacity at all stages of the life cycle	88.89
Water quantity	88.89
Financial wellbeing and income	88.24
Financial literacy and management	88.24
Economic development in rural Georgia	88.24
Lack of workforce soft skills	87.50

Family stability	82.35
Aging population	82.35
Fair water distribution for agriculture	82.35
Children that do not have appropriate role models	76.47
Education (all)	76.47
Access to rural healthcare	76.47
Lack of qualified workforce	75.00
Rural poverty	73.33
Lack of values	68.75
Literacy	64.71
Urban poverty	64.71
Rural job growth and availability	64.71
Economic viability in rural communities	64.71
Graduation rate	62.50
Impacts of urban migration	56.25
Limited access to broadband in rural areas	52.94
Low performing schools	50.00
Economics	50.00
State revenue	37.50
Crime and violence	35.29
Rural flight to urban centers	35.29
Low pay for schoolteachers	31.25

After the Delphi process was completed, the resulting list of 21 issues were thematically analyzed using the constant comparative method (Glaser, 1965). Following this analysis, five categories emerged. These themes and the individual issues associated with them are presented in Table 3.

Table 3

*Constant Comparative Method Thematic Analysis Results (*n = *21)*

Themes	Number of Issues Overall	Number of Issues with 90-100% Agreement
Investment in Youth and Adults	5	4
Youth development		
Youth leadership development		
Career readiness and workforce preparedness		
Youth education		
Lack of workforce soft skills		
Agricultural and Rural Economic Development	3	2
Agricultural prosperity		
New technology for crop production		
Economic development in rural Georgia		
Agriculture and Food System Information	2	2
False information of food issues (i.e., GMO understanding) leads to incorrect food choices		
Limited understanding of the importance of agriculture and where food comes from		
Resource Access and Availability	6	4
Water quality		

Limited access to healthy food choices		
Limited access to fresh food choices		
Access to resources in rural areas		
Water quantity		
Fair water distribution for agriculture		
Social and Personal Economic Concerns	5	0
Lack of civic and community leadership capacity at all stages of the life cycle		
Financial wellbeing and income		
Financial literacy and management		
Family stability		
Aging population		

Conclusions, Recommendations, and Limitations

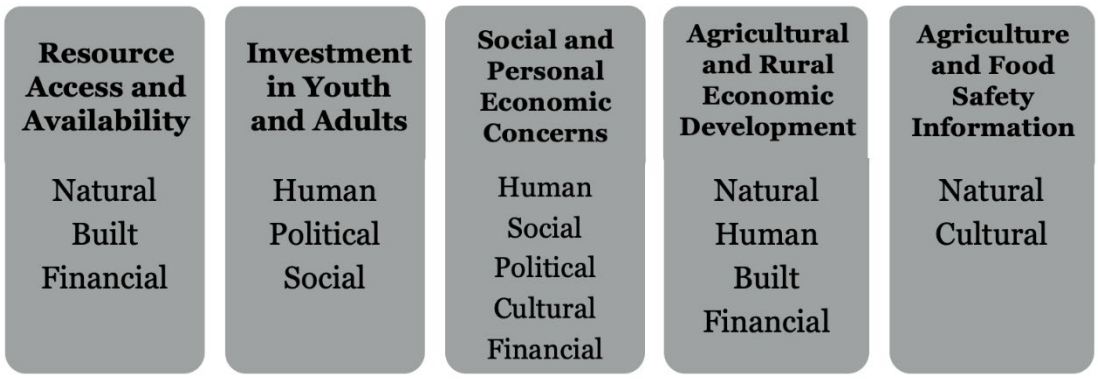
Thematic analysis of the 21 issues from the Delphi technique resulted in the identification of five major themes encompassing the critical issues facing Georgia residents. These heuristic categories offer enhanced insight into expert feedback from extension professionals and provide a starting point for action. The dimensions of the *Investment in Youth and Adults* theme highlight the need for increased education, workforce preparation, and leadership development. Within the *Agricultural and Rural Economic Development* theme, the associated issues underscore the importance of agriculture in Georgia's economy and future economic development. The issues identified in the *Agriculture and Food Safety Information* theme highlight the need for increased awareness regarding new agricultural innovations and the value of Georgia's agricultural industries. *Resource Access and Availability* relate to the threats facing water use in Georgia and the implications of food insecurity. Finally, *Social and Personal Economic Concerns* delineate gaps in general financial knowledge, lack of societal role models, and the impacts of changing demographic characteristics.

Community Capitals Framework and Thematic Analysis

The community capitals framework is a useful lens to provide a more heuristic classification of the issues identified during the consensus building process. Analysis through the lens of community capitals enables us to determine how the critical issues identified in this study relate to the perceptions of capital stock within Georgia communities. This framework provides a holistic view of the human and material resources available to Georgia communities, enabling extension practitioners to direct resources more efficiently and develop programming that addresses the most pressing community needs. Each of the themes resulting from CCM analysis and their associated issues corresponded to multiple community capitals. Figure 1 displays the five themes and corresponding community capitals.

Figure 1

CCM Themes and Corresponding Community Capitals



Investment in Youth and Adults

The interaction between human and political capitals is apparent within *Investment in Youth and Adults*. Much of Georgia's economic growth has been hemorrhaged by "low workforce participation and lack of access to opportunities in high-growth sectors" (Coe et al., 2019, para. 3). While Georgia's vocational programs lead the nation, there is a need to direct qualified candidates into training programs that teach employer-demanded skills (Coe et al., 2019). Doing so could reskill 19,000 unemployed workers and increase Georgia's workforce by 400,000 individuals (Coe et al., 2019). Additionally, Extension-sponsored youth leadership development programs, such as 4-H, enables adolescent to smoothly transition into adulthood by empowering them with independence, critical thinking skills, self-confidence, and responsibility for others (Kelsey, 2020). Involving youth in extracurricular programs may also stimulate desired political and civic behavior during adulthood (Rasmussen et al., 2009; Smith, 1999).

Resource Access and Availability

Natural, political, built, and financial capitals overlap within *Resource Access and Availability*. To provide clean water to its residents, Georgia relies heavily on groundwater supplies (EPA, 2013). However, occasional droughts, a growing population, and demand from neighboring states have strained Georgia's existing water supply (Smolen et al., 2017; EPA, 2013). Therefore, the development of sustainable water resource management plans and water use policies accounting for fair distribution to agricultural industries and neighboring states are necessary to ensure the protection of this valuable resource (Gaffney, 2019; Georgia Conservancy, n.d.). Another resource inequality issue is apparent regarding food security and fresh food accessibility in Georgia. Over 20% of Georgia residents live in urban areas of the state that are more than one mile from a grocery store, or in rural areas that are more than ten miles away from a grocery store (Prabhu, 2021). Physical or financial inability to access fresh foods can result in negative health and community impacts (Prabhu, 2021; Capelouto, 2021; Aglanta, 2021). Increase of infrastructure such as neighborhood markets, expansion of transportation services, and development of policies (i.e., the Double Up Food Bucks program) are necessary to stimulate community capitals that combat food insecurity (Aglanta, 2021).

Agricultural and Rural Economic Development

Regarding *Agricultural and Rural Economic Development*, the identified issues underscore the relationships between financial, built, human, and natural capitals. As mentioned previously, the

development of Georgia's rural economy can be stimulated through vocational training programs that teach highly demanded skills (Coe et al., 2019). Furthermore, increasing agricultural prosperity is possible through technological innovations that enable efficient nutrient application (Michaux, 2019; Davoodi et al., 2018) and increased crop resiliency (Floyd, 2021; Melancon, n.d.).

Agriculture and Food Safety Information

Natural and cultural capitals describe the issues associated with *Agricultural and Food Safety Information*. A significant barrier to agricultural and food safety communication is public trust in government agencies and scientists (Pechar et al., 2018; Öz et al., 2018; Settle et al., 2017). One factor is public knowledge or involvement in agriculture (Settle et al., 2017). If an individual is not involved in agriculture-related industries or does not live in an agrarian-based community, their awareness of agricultural issues is likely to be lower (Settle et al., 2017). Additionally, "functional networks are based on trust which, in turn, are based on norms or values that guide social actors' behaviors" (Sseguya et al., 2018, p.119).

Social and Personal Economic Concerns

Issues within the *Social and Economic Concerns* theme highlight the intersection of cultural, political, social, financial, human, and built capitals. For example, community leadership creates social networks at individual and community levels, provide opportunities for human capital growth, and inspire civic engagement (Apaliyah et al., 2017). Financial literacy can increase availability of financial capital through wise investments and debt management, contribute to enhanced wellbeing (Zemtsov & Osipova, 2015), and is mediated by the influence of social networks (Bongomin et al., 2016). Regarding family dynamics, instability in familial relationships can have negative effects on child well-being, scholastic achievement, and career outcomes (Härkönen et al., 2017). Additionally, 20% of Georgia's population are expected to be over the age of 60 by 2030 (Landers et al., 2006). This trend will increase demand for elderly care services (Nolin, 2019) and use of social welfare programs (Georgia Department of Human Services, 2017).

Recommendations, Limitations, and Implications

Since extension possesses finite financial and human resources, we recommend immediate efforts be directed toward issues that generated the most agreement from experts. There were 12 top critical issues identified (i.e., issues with 90-100% agreement in round three of the Delphi technique). Based on this data, primary efforts should be directed toward addressing issues associated with *Resource Access and Availability* (4 issues in top 12) and *Investment in Youth and Adults* (4 issues in top 12) followed by *Agricultural and Rural Economic Development* (2 issues in top 12) and *Agriculture and Food Safety Information* (2 issues in top 12). Although the critical issues in the *Social and Personal Economic Concerns* theme are important, none of these were in the top 12 issues.

One noteworthy finding is the three issues with unanimous agreement from expert panelists are all associated with the *Investment in Youth and Adults* theme. Human capital represents a critical resource within Georgia (Coe et al., 2019). Future economic development in suburban and rural areas depends on the maximization of human resources (Coe et al., 2019). However, the issues identified within the Investment in Youth and Adults theme illustrate an opportunity for development. Although the state of Georgia has potential in the number of individuals able to enter the workforce, there is an opportunity to enhance existing education and career preparation programs (Coe et al., 2019). In particular, youth leadership development and career preparation programs represent two areas with perceived needs. Although 4-H educators are already making contributions to youth leadership development and education, the results of this study underscore the importance of continuing such programs. Additionally, we

recommend extension professionals identify highly demanded technical and soft skills and use these findings to inform the development of extension education and vocational training programs.

Within the Delphi process, there are limitations which may restrict the generalizability of results. For instance, the scope of the identified issues is inherently limited by the insights and perspectives of the expert panelists. Although measures were taken to reduce bias and assemble a heterogenous panel with statewide expertise, the expert panelists' perspectives and personal characteristics may have influenced the results, as might their employment with the Georgia Extension system—which operates within the scope of three program areas (agricultural and natural resources, 4-H youth development, and family and consumer sciences), and does not include a fourth (community and economic development), which is acknowledged formerly by the USDA-NIFA and many institutions across the land-grant system. Additionally, the author and primary coder of the data is from a suburban community in the Southeastern United States and has previously worked with extension and community development initiatives. These personal experiences may have influenced their interpretation of the data. Measures to reduce bias, such as member checking, were employed to reduce bias according to recommendations in the literature (Lincoln & Guba, 1985).

The aim of this article is to facilitate the continued development of the state of Georgia by identifying and generating consensus around the most critical issues facing the state's residents. The results of this study carry significant implications for practice, primarily by providing the Georgia Cooperative Extension Service with a guideline for program development and resource allocation efforts. The use of the Delphi technique in conjunction with the community capitals framework enables valuable comparison with the existing strengths and capitals within Georgia communities. Knowledge of these capitals and their interactions with one another allows for greater efficiency in addressing these issues. While the results of this study may not be directly applicable to all states in the southeastern United States, they should serve as a foundation for strategic entry points within Georgia communities and be used to guide the efforts of Extension services in the near future.

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