State Administrators' Perceptions of the Environmental Challenges of Cooperative Extension and the 4-H Program and Their Resulting Adaptive Leadership Behaviors

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ABSTRACT

Society has changed since Cooperative Extension and the 4-H youth program began. Over time the purpose for Extension has been challenged. Yet, there has been little empirical literature published on the administrators' role and perspectives of the organizational environment or on the resulting leadership behaviors. A qualitative study was conducted to develop a baseline. State Extension Directors (n=7) and State 4-H Program Leaders (n=13) from 15 regionally-representative states were interviewed. Participants were asked to conduct a SWOT Analysis on both the Extension system and the 4-H program in their state and their leadership behaviors were explored. Extension administrators emphasized the organization's relevance to society and that the mission would remain focused on agriculture, although with an expanded focus on agriculture as more than production. Administrators did recognize many specific environmental shifts, including a changing funding model; challenges and importance of serving a diversifying population; the tension between urbanizing populations and shrinking rural communities; and, the changing role of technology for programming. Administrators described that they were experiencing shifting focus friction from historic audiences that were afraid of losing services due to the aforementioned environmental factors. Administrators' leadership behaviors were reflective of the Adaptive Leadership behavior construct introduced by Heifetz (1994). Communication was the key behavior that is required to lead effectively. In order to successfully implement a strategy, trust with stakeholders needed to be established. Diversity in feedback was important for the administrators to feel confident in their ability to understand the changes in the organizational environment.

State Administrators’ perceptions of Cooperative Extension’s and the 4-H program’s environmental challenges and adaptive leadership behaviors

Jeremy Elliott-Engel

GENERAL AUDIENCE ABSTRACT

Extension and 4-H are educational organizations affiliated with Land-Grant Universities to provide research-based information to the citizens of all U.S. states and territories. Established in 1862, the purpose and need for Extension has been challenged overtime. There has been little empirical literature published on the administrators’ role and perspectives of the organizational environment, these leaders being the individuals who are creating and implementing organizational direction. Twenty administrators (7 State Extension Directors and 13 State 4-H Program Leaders) which were representative of 15 regionally-representative states were interviewed. Participants were asked to conduct the Strengths, Weaknesses, Opportunities, and Threats analysis for both the State 4-H program and Cooperative Extension organization. Extension administrators emphasized the organization’s relevance to society and that the mission will remain focused on agriculture -food and health. Administrators did recognize many specific environmental factors they were responding to, including: changes in the funding model; challenges and importance of serving a diversifying population; tension between urbanizing populations and shrinking rural communities; increasing service competition; and, the changing role of technology in program delivery. Administrators described friction with historic audiences who fear the loss of services due to organization adaptation in response to the aforementioned changes. Communication was the key behavior that was embedded in all other leadership characteristics. Trust with stakeholders needed to be established to successfully implement strategy. Diversity in feedback was important for the administrators’ confidence in their ability to understand the changes in the organizational environment.

Dedication

Dedicated to Laura Elliott-Engel, my loving mother.

Her faith and enduring love for learning catalyzed my efforts each and every day: not only of Ph.D. school but of my career with Extension and 4-H. A city girl, and she learned about a local 4-H club and helped me join as a teen. Later, she did chores and served as banker for my livestock projects. As a 4-H agent she served as my professional colleague, confidant, and mentor. While she is not here in her physical body to see this accomplishment, her fingerprints are all over it.

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Chapter One: Introduction to Extension and 4-H

Cooperative Extension, also commonly known as Extension, is a nationwide educational system implemented through a partnership between the United States Department of Agriculture (USDA) and Land-Grant Universities (LGUs) as well as with local partners (i.e., state and county governments). Funding for Extension is delivered through the federal Morrill and Smith-Lever Acts, as well as through state and local governments (USDA, 2017). Congress stated the objective of the LGUs at their inception in 1862 was “to aid in diffusing among the people of the U.S. useful and practical information on subjects related to agriculture and home economics, and to encourage the application of the same” (Rasmussen, 2002, p. 7). In 1914, to enhance the extension of knowledge to communities all over the United States, Congress passed the Smith-Lever Act, formalizing the Extension system. More than 100 years later, the USDA describes the Extension mission is to “bring vital, practical information to agricultural producers, small business owners, consumers, families, and young people” from LGUs (USDA-NIFA, n.d.).

Extension’s original mission was to “aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same” (Smith-Lever Act, 1914, p. 1). Today, Extension’s mission is interpreted to mean a focus on agriculture, family and consumer sciences, 4-H youth development, and community development (Conglose, 2000). The youth program of the Extension system, 4-H, experienced its genesis at the turn of the 20th century with the emergence of the technical educational movement (Braun, 1997; Reck, 1951). Youth clubs emerged as informal competition groups to engage youth with new agricultural techniques. Once formalized, 4-H youth club work continued to engage youth in hands-on, nonformal learning. It has progressed to serve not only rural youth, but also all young people in areas of citizenship, STEM, leadership, and healthy living (USDA-NIFA, 2016a; USDA-NIFA, 2016b).

Statement of the Problem

Environmental factors are those outside influences that impact an organization's ability to operate (Lewis, 2006; Nadler & Tushman, 1977, 1980; Scott, 2003; Weick, 1976). Environmental factors together create the environment, a contextual matrix comprised of society's political, historical, geographical, and cultural dimensions that influence an organization's relationships and activities (Lewis, 2006; Weick, 1976). Changes in public financial support, the new information age, and population demographics have affected the organizational environment and therefore pose significant challenges for Extension and 4-H youth development.

Environmental factors affecting Extension are acknowledged by authors in the literature. The environmental factors cited in the literature include the Extension financial crisis (Bull et al., 2004; Graf, 1993; McDowell, 2004; Morse, 2009), changing funding requirements (Franz, 2013, 2015; Kalambokidis, 2004; West, Drake, & Londo, 2009), and significant population demographic shifts (Erbstein, Moncloa, Olagundoye, Diaz-Carrasco, & Hill, 2017; Henning, Buchholz, Steele, & Ramaswamy, 2014; Hoorman, 2002; Krofta & Panshin, 1989; National Urban Extension Leaders [NUEL], 2015; National Urban Extension Task Force, 1996). Each of these factors has contributed to organizational change or to calls for change. Recognizing these contextual shifts is essential for Extension to meet its mission of providing access to educational programming that translates science for practical application, with the aim of allowing people to change their practices, attitudes, behaviors, and thus their lives (Bailey et al., 1909; Bull, Cote, Warner, McKinne, 2004).

Budget constraints contribute to organizational stress, whether a cutback is inflicted suddenly through a drastic reduction in resources or gradually over time through shrinking buying power. Today's Extension administrators face the prospects of both gradual and sudden reductions. The buying power of Extension funding from its three major public sources has declined during recent decades (Morse, 2009). Every 5 to 10 years, with each economic downturn, new budget constraints cause state Extension systems to struggle for financial support (McDowell, 2004; McGrath, et al., 2007). These regular budget constraints are reflected in Extension systems across the country as they seek financial support from county, state, and federal governments (Graf, 1993; McDowell, 2004; McGrath, Conway, & Johnson, 2007; Morse 2009).

The regular ebb and flow of budget instability has been exacerbated by a societal change undergirded by neoliberalism, which is defined by free market capitalistic forces (Giroux, 2004). Neoliberalism is the doctrine that market exchange is an ethic in itself, capable of acting as a guide for all human action (Harvey, 2007). This doctrine has created social forces that have changed the way public institutions, Extension notwithstanding, are supported by government (Franz, 2015; Giroux, 2004; Harvey, 2007). This has required an increase in efforts to prove relevance (McGrath et al., 2007), value (Kalambokidis, 2004, 2014), and public good (Franz, 2013, 2015) in order for Extension and 4-H youth development to be supported by public dollars.

How the citizens of the United States engage with knowledge, as well as the need for knowledge dissemination from Extension, has shifted throughout the history of Extension. The Internet was supposed to eliminate the need for Extension's community-based education, because everyone would have democratic access to unlimited information. The information age has changed how Extension agents interact with their clientele (Radhakrishna & Thomson, 1996) in that Extension has regularly adopted new technology in order to continue to serve its clients (Jones, Doll, & Taylor, 2014; Tennessen, PonTell, Romine, & Motheral, 1997; Risdon, 1994). Today, Extension is responding to a change in citizens' relationship with truth. U.S. society is experiencing a shift in how citizens understand knowledge and truth, with the advent of the "post-truth society," which emphasizes the weakness of "science-based explanations in the face of strong narratives or compelling stories" (Berling & Bueger, 2017, p. 332). This cultural development has ensured Extension's relevancy as a provider of science-based knowledge, even though the same movement may undercut the perceived need from Extension's clientele.

The U.S. demographics are also shifting significantly. The U.S. population is becoming increasingly nonwhite and urban. For example, from 1980 to 2013, the Latino population under 18 years old grew more than 300 percent (Pew Research Center, 2015). The LGUs, which were established in 1862, historically served traditionally white and rural communities (Rosenberg, 2015). A discussion of addressing this growing racial, ethnic, and cultural diversity has emerged (Erbstein et al., 2017; Hoorman, 2002; Vega, Brody, & Cummins, 2016). The tension between changing audiences versus traditional audiences has also encouraged a debate about how Extension should balance serving urban and rural populations (McGrath et al., 2007; Bull et al., 2004; Ilvento, 1997). This debate has developed into a growing call for Extension to reflect a mission that includes serving urban, as well as rural, audiences (Argabright, McGuire, & King, 2012; Bloir & King, 2010; Borich, 2001; Fehlis, 1992; Harriman & Daugherty, 1992; Henning et al., 2014; Krofta & Panshin, 1989; National Urban Extension Leaders [NUEL], 2015; National Urban Extension Task Force, 1996; Panshin, 1992; Ruemenapp, 2017; Webster & Ingram, 2007). The literature is starting to reflect Extension's program level shift toward ensuring

Extension meets its mission of serving all citizens (LaVergne, 2013; National Urban Extension Leaders [NUEL], 2015).

Extension administrators today are facing challenges on how to respond to the United States' societal shift away from funding public organizations, the population's increased access to information, and shifting demographics (Hoag, 2005; Morse, 2009). The aforementioned trends are the environmental factors that are identified by the educational program level staff for Extension. Extension historically has demonstrated staying power in serving and responding to local communities' educational needs (Rogers, 1988). However, Extension's environment is shifting and is becoming more complex to understand and respond to due to these trends.

The academic literature that is theorizing on Extension adaptation has offered three distinct responses to the aforementioned large-scale shifts in organization orientation (Hoag, 2005): The first is that Extension is no longer relevant and will—should—become extinct (West, Drake, & Londo, 2009); others state that a change in mission is causing organizational shortcomings because Extension has moved away from its roots in agriculture and lost support from historically significant supporters (Bull, Cote, Warner & McKinnie, 2004); and third, that Extension has not moved away from a focus on agriculture and a resulting lament that this programmatic movement has not yet occurred (McDowell, 2004).

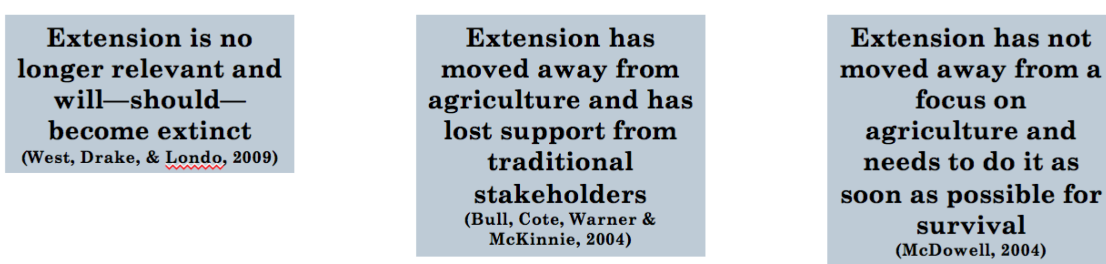

Figure 1.1. Cooperative Extension's Mission Change Suggestions

These three arguments are all significant reorientations for the mission of Extension and LGUs. Extension program staff and administrators at all levels must acknowledge the need for change and select an approach or approaches that reflect the nature of the environmental factors' impact on the organization.

Extension is preponderantly a grassroots organization (Selznik, 2010); however, each state-level administrator provides leadership for the direction of the state organization. The literature contains few investigations on how state-level Extension administrators have conceptualized these challenges nor on how they have or are responding. Ronalds (2010) suggests that leaders are the "single most critical element in . . . organizations effectively responding to the increasing complex and unpredictable challenges they face" (p. 118). Recognizing how Extension administrators perceive changing environmental characteristics will give insight on Extension organizations' current responses to their environmental factors and the direction of the U.S. Cooperative Extension System. The literature on Extension programs suggests that Extension program staff are aware of challenges and are making adaptations toward the environmental factors (e.g., how to deliver content in a new information age, demographic shifts, and changing financial support). Documented responses are wide-ranging, because they are regularly not empirical and are hyper-local interventions. In order for organizations to successfully respond to the environmental factors that they face, the environmental factors need to be assessed (Lewis, 2006; Scott, 2003; Weick, 1976). While the dominant narratives in the academic literature are outlined here, the challenges that Extension systems face have not been empirically assessed for what challenges Extension administrators recognize; how they recognize these challenges; and, finally, how these organizational leaders are responding to the challenges they face.

In order to understand how Extension administrators are making organizational decisions and what their responses are to changing environmental factors, research needs to be conducted to inform responses into the future. The gap in the literature is at the administrative level of the Extension organization and with the type and kind of decisions that are being made in response to environmental factor changes and how those decisions influence program implementation. The responses to these challenges have been shared—for example, a state-level response to a significant budget cut was shared; however, the Minnesota Response (Morse, 2009) focused primarily on conveying the technical aspects of organization change. After the initial technical solution, the next step recommended was for Extension administrators to follow up by communicating the value of Extension in order to secure stability in funding. Either approach does not answer the important questions—why and how Extension administrators are making these decisions, and what factors are influencing their choices at the times of environmental factor change.

Extension programs have been reimagined to meet changing external factors since their inception. Today, the environment has grown so much in its complexity that new calls have been made for reimagining more than programs—even Extension's existence has been questioned. No clear systematic response has been identified. In the absence of clear effective solutions to solve these acknowledged challenges, the words of Robert K. Greenleaf, an organizational theorist, are a call to action. Greenleaf (2002) stated:

> [When] you have exhausted every avenue open to you . . . [and] with the problem still urgently needing a solution, I see no course . . . but to set in motion an inquiry to get a deeper and more comprehensive understanding of the problem, in the hope that out of

> this larger understanding will emerge the clue to a new course of action that . . . [hasn't been] thought of. (p. 200)

Systematically exploring how leaders and the organization as a whole are, or should be, responding to environmental factors will contribute to improving Extension's response into the future. Knowing more about Extension administrators' responses can lead to improved program participation and quality in the future and can shift the conversation toward what systematic adaptation is necessary or is superfluous to ensure that Extension remains relevant.

Project Purpose

The purpose of this study is to describe 1862 LGU Extension administrator perceptions of the environmental factors that Cooperative Extension and the 4-H youth development program are facing; to explore how these challenges are being conceptualized; and to expose the strategies administrators are employing to respond to those challenges. The research questions are:

1. What environmental factors do Extension administrators perceive as being challenges for their Extension organization and the 4-H program?
2. What behaviors have Extension administrators utilized to respond to the organizational challenges that they face?
3. What are recommendations for environmental factor response by Extension and 4-H administrators at the state-system level?

This is a qualitative study. Data were collected from semi-structured interviews with Extension administrators. For this study, Extension administrators are comprised of both 1862 Land-Grant University State Extension directors and state 4-H program leaders.

The results from the study document the contemporary environmental factors that Extension administrators are aware of and are focusing their attention on, nationwide. This study also explores how Extension administrators conceptualize the contemporary environmental factors and whether they recognize these environmental factors as technical or adaptive challenges. In order to understand their specific leadership response, the study exposes Extension administrators' leadership behaviors. From this data, recommendations for Extension administrators emerged.

Conceptual Framework: An Introduction

The conceptual framework of this study is focused on the Extension administrator's perspective. An administrator is both a manager and a leader. A manager controls or administers (Taylor, 1911, 1947), whereas a leader inspires (Northouse, 2016). Adaptive leaders are able to identify the difference between technical and adaptive challenges and are able to engage with followers to move them toward the requisite response. In order to recognize the challenges appropriately, the administrator/leader needs to analyze and collect information about the environment. This process of scanning the environment for organizational influences is constant (Choo, 2001) because Extension is a dynamic system, one that is never static.

The open system view of organizational structure assumes an organization is influenced by the environment (Buckley, 1967; March & Simon, 1958; Simon, 1957). Organizations must adapt to their environment in order to remain viable (Duncan, 1972). The environment is defined as "all factors, including institutions, groups, individuals, events, etc., outside of the boundaries of the organization being analyzed, but having a potential impact on that organization" (Mercer Delta, 2004, p. 3).

Individuals comprise organizations, and only when individuals organize together in an entity does it become an organization (Morgan, 1986; Scott, 2003). Individuals within organizations address challenges posed to them and in turn to the organization using cognitive problem solving. Cognitive problem solving is an individual's engagement with a process and resulting product in the context of the environment (Rhodes, 1961; Jablokow, 2005). A systematic approach to problem solving toward an organization's change is at the root of leadership (Northouse, 2016). An individual's understanding of the problem from cognition and their resulting leadership behaviors, when joined with other individuals within the organization, results in organization strategy (Nadler & Tushman, 1977, 1980). Strategy is the process of determining how the organization's resources are best used within the environment for optimal organizational functioning (Nadler & Tushman, 1977, 1980).

Adaptive leadership is characterized by the leader's approach to a problem (Heifetz, 1994). Problems have three types of solutions: technical, nontechnical solution, or combination of technical and adaptive solutions. Problems that require a nontechnical solution are known as adaptive problems (Heifetz, 1994). Heifetz (1994) delineated behaviors that an adaptive leader uses to evaluate challenges that leaders experience. The adaptive leader is situated within their organization's environment, which is comprised of their organization and society. How this leader identifies the technical or adaptive nature of the problem and approaches the problem defines whether an individual is an adaptive leader. Adaptive leadership starts with the recognition of root challenges and the willingness to address these challenges, as opposed to addressing just the symptoms.

Project Limitations

Rossman and Ralls (2012) said the discussion of limitations is a reminder for the researcher and reader "that no study is perfect; that findings are tentative and conditional; that knowledge is elusive and approximate . . . given the extraordinary complexity of the social world we want to learn more about" (p.135). To that point, this study is limited in its ability to generalize to all

Land-Grant Universities and their respective 4-H programs. This is because the aim of qualitative research is to understand a specific individual, case, or phenomena (Flick, 2006). Therefore, transferability is limited (Creswell, 2014). The responsibility of the researcher is to provide thick descriptions, so that those who seek to transfer the findings to their own site can judge transferability (Lincoln & Guba, 1985). This study is not designed as a comparative case study of organizations; rather, it is to assess individual actors' perspectives on their own similar organizations.

Definition of Terms

4-H (4-H youth development program): This is the youth program of the Extension service. It is a nonformal program with the goals of developing citizenship, leadership, responsibility, and life skills through experiential learning, using a positive youth development approach (USDA-NIFA, 2016a; USDA-NIFA, 2016b).

Environment: A contextual matrix comprised of society's political, historical, geographical, and cultural dimensions that influences an organization's relationships and activities (Lewis, 2006).

Environmental factors: Influences to the organization, including financial and human resources, history, and strategy (Nadler & Tushman, 1977, 1980).

Extension administrator (1862 Land-Grant University administrators): The term refers collectively to a joint group of state 4-H program leaders and state Extension directors.

Extension (Cooperative Extension): A nonformal educational program affiliated with LGUs that is designed to help citizens use research-derived knowledge to improve their lives (Rasmussen, 2002; USDA-NIFA, n.d.).

Land-Grant University (LGU): A college or university chartered by the 1862 Morrill Act to provide education to the citizens of its state through research, teaching, and extension. There are

1890 Land-Grant universities (historically black serving institutions ()) and 1994 Land-Grant universities (native American serving institutions). Land-Grant institutions for this proposal will be referring to institutions with the 1862 designation.

State 4-H program leader: This individual has statewide administrative responsibility for the 4-H program in a specific state.

State Extension director: This individual has statewide administrative responsibility for the 1862 Extension program in a specific state.

Strategy: Strategy is the process of determining how the organization's resources are best used within the environment for optimal organizational functioning (Nadler & Tushman, 1977, 1980).

Chapter Two: Literature Review

The literature presented starts with background information of what is Extension and 4-H and a brief overview of the history of each. The 4-H program is introduced and there is a discussion of the 4-H program delivery models. Once the history and context is introduced, the literature is presented in order of the research questions. Figure 2.1 presents the research questions and what literature is directly relevant.

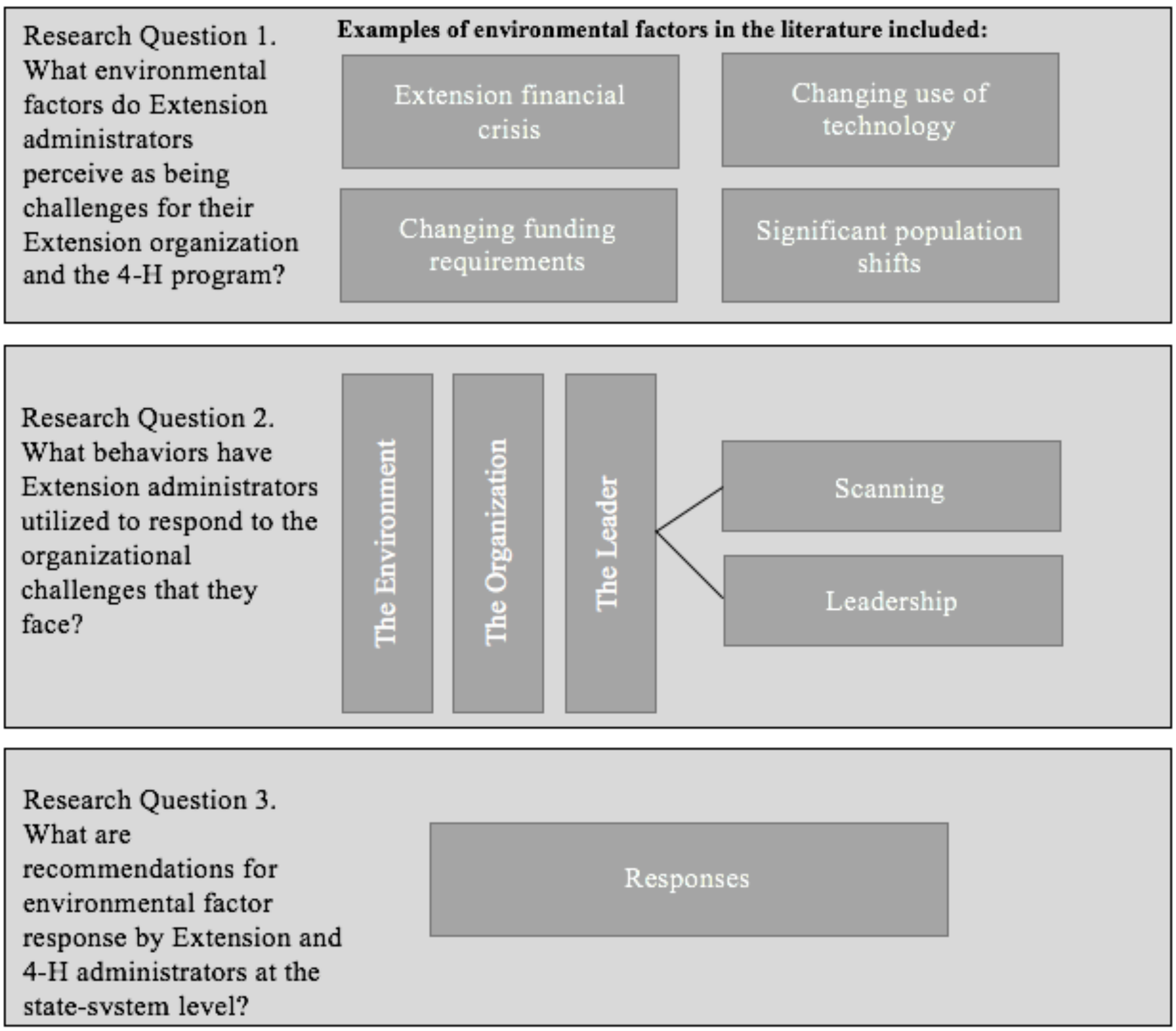

Figure 2.1. Study Research Questions and the Relevant Bodies of Literature

The specific environmental factors that are commonly present in the program development literature are reviewed. Then a discussion of how this leads to the ability for the organization to respond, due to environmental determination. Then there is an introduction to the environment, the organization, the leader, and specific behaviors of individuals in providing leadership in administrative roles.

In the mid-1800s the United States' cultural context changed with urban industrialization. As the United States expanded across the North American continent, rural communities lagged behind in adopting the amenities offered in more densely populated East Coast communities, such as advances in education, sanitation, and electrification (Rosenberg, 2015; Wessel & Wessel, 1982). The educated urban elite became concerned with the *degeneration* of the rural population (Cooke, 1998; Reck, 1951; Tickamyer & Duncan, 1990; Wessel & Wessel, 1982). A common narrative espoused by the urban East Coast aristocrats was that rural populations were awash in immoral behavior—not limited to laziness and poverty (Cooke, 1998; Rosenberg, 2015). It was assumed that it was important to address the rural cultural society because rural populations were important for producing enough workers, food, and natural resources for the country's industrial development (Rasmussen, 2002; Rosenberg, 2015; Wessel & Wessel, 1982). This narrative led the federal government to seek strategies to develop rural communities in the United States. Politicians proposed improving agricultural production through newly emerging scientific agriculture and employing business strategies to improve the lives of rural populations in order to prevent youth flight from rural communities to industrialized urban centers (Rogers, 1988; Wessel & Wessel, 1982). Improving agricultural education was used to create changes that would improve rural U.S. populations and economics by improving agriculture production (Pangborn, 2007); there was also a general education goal of improving literacy (Reck, 1951;

Rosenberg, 2015). Legislators hoped that improved conditions would keep youth productive in rural communities even though more economic opportunities existed in urban communities (Pangborn, 2007; Rosenberg, 2015; Rogers, 1988). Improved education was viewed as a strategy to improve agriculture production (Pangborn, 2007; Wessel & Wessel, 1982) and to change rural community morals (Rosenberg, 2015). The political and social concerns for rural America in the mid-19th century led to the development of the Land-Grant universities, Cooperative Extension (Extension), and the 4-H Youth Development program (4-H program) (Rasmussen, 2002; Rosenberg, 2015; Rogers, 1988).

Introduction to Extension

On July 2, 1862, President Abraham Lincoln signed the Morrill Land-Grant College Act (Morrill Act), legislation that was sponsored by Vermont Senator Justin Smith Morrill, forming the LGU system. Passage of this legislation was not expected because President James Buchanan had previously vetoed a version of the Morrill Act in June 1860. President Buchanan vetoed the June 1860 version of the Morrill Act due to Southern state representatives' criticisms that granting Western territorial land was an imprudent use of resources. This vetoed version had granted just 2,000 acres for a university's setup. The subsequent successful Morrill Act granted 30,000 acres of Western territorial land as an endowment to establish at least one college per state and territory (Wessel & Wessel, 1982). The Morrill Act of was successfully passed in 1862 largely because Southern states representatives were absent in Congress at the time of the vote due to the Civil War (Lee, 1963).

The established purpose of the LGU institutions is to make liberal and practical education available to all citizens of the nation, particularly the working class (Duemer, 2007; Depauw & McNamee, 2006; Lee, 1963; Simon, 1963). To achieve the mission of liberal and practical education, the Morrill Act and its successors were deliberately designed not simply to encourage, but to force the states to significantly increase their efforts on behalf of higher education. The federal government, having promoted the establishment of new colleges, made it incumbent upon the states to supply the means of future development and expansion (Lee, 1963, p. 27).

The LGUs married both the humanistic idea of the renaissance university (liberal education) and the German university (practical education) (Bonnen, 1998). The combination of liberal and practical education in one institution was designed to democratize education and provide educational opportunities for all citizens. The LGUs evolved into entities with a three-pronged mission of research, teaching, and outreach (Simon, 1963).

The three current missions of research, teaching, and outreach were achieved through continued legislation. The 1887 Hatch Experiment Station Act (Hatch Act) established the State Agricultural Experiment Station (SAES) to improve agricultural production through applied agriculture research and to provide educational opportunities through the LGUs (Knoblauch, Law, & Meyer, 1962). Joining the locally responsive research from the SAES with the LGUs expanded the capacity for classroom education and provided the opportunity to share knowledge onsite at research stations across the state. However, in order to extend the positive benefits of knowledge farther afield, more efforts were needed.

In 1890 a second Morrill Act was passed. This act prohibited the distribution of money to states that made admission decisions to their state's 1862 LGU institution based on race (Lee & Keys, 2013). Each state had to demonstrate that race was not an admission criteria to the land-grant university. If it was, then an establishment of a separate land-grant institution was established for persons of color (Comer, Campbell, Edwards, & Hillison, 2006). This resulted in the establishment of 19 public colleges serving African Americas (Allen & Jewell, 2002;

Provasnik, Shafer, & Snyder, 2004; Redd, 1998; Roebuck & Murty, 1993). These 19 "1890" institutions were awarded cash in lieu of land, however they retain the designation of "land-grant" due to the legislation. In 1994, the Equity in Educational Land-Grant Status Act established 29 tribal colleges and universities as "1994" tribal land-grant institutions. These institutions have a mission to provide federal government resources to improve the lives of Native students through higher education (USDA-NIFA, 2015a).

Cooperative Extension began when President Woodrow Wilson signed the Smith-Lever Act into law on May 8, 1914. The purpose of Extension was stated as an effort "to aid in diffusing among the people of the U.S. useful and practical information on subjects related to agriculture and home economics, and to encourage the application of the same" (Rasmussen, 1994, p. 7). The Smith-Lever Act did not specifically state that Extension services should only work with farm people (Ilvento, 1997; Rogers, 1988). Extension was designed to take the research-based knowledge generated at the LGUs and the SAES to U.S. citizens through a partnership between LGUs and the USDA. The implementation of this organizational system had significant and profound effects on adult education in the United States. Liberty Hyde Bailey, a renowned botanist and Cornell faculty member, was instrumental in the formation of the Extension service and 4-H; he argued that Extension could not address agricultural production issues without also addressing the social and human issues facing rural communities (Ilvento, 1997; Rosenberg, 2015). At the time, he lost the argument to Seaman Knapp, a president of Iowa Agricultural College, who laid the foundation of the Agricultural Experiment stations as an employee of the USDA. Knapp argued the role of Extension was solely to educate reluctant farmers on new technology (Ilvento, 1997; Peters, 1996). Because of Knapp's influence, the purpose of Extension started out as instruction and practical demonstration concerning agriculture and home economics for individuals in communities across the state who would otherwise not have access to information. The focus of Extension work has evolved from primarily relaying technical innovation to also providing leadership for cultural and community change (ECOP, 1994; Stephenson, 2011) by partnering with communities to identify solutions to challenges in partnership with professionals (Vines, 2017). This adaption reflects a move toward Bailey's perspective, that community programming cannot provide technical knowledge without first supporting the individual and social needs of the participants. Extension, because of the nature of the organization, has always been engaged with communities as its professionals have sought to respond to society and community needs, whether that was in response to supporting a reduction of rural community poverty (Rogers, 1988; Selznick, 2011) or helping the nation survive World War I, the Great Depression, and World War II (Rasmussen, 1994) by ensuring sustainability of food sources. The mission of Extension has expanded from a focus on agriculture, family, and consumer sciences to areas of health, community, and business development and from solely rural audiences to rural, suburban, and urban communities (Morse, 2009; Depauw & McNamee, 2006).

The name Cooperative Extension emerged from the early form of cost sharing, which required matching funds from state and local sources. Currently, federal partners supply approximately 30 percent of the system's financial resources, while state and local (e.g., county) funds make up the remaining portion of the budget (Rasmussen, 2002). A growing share of Extension budgets is comprised of grants and contracts (Jackson & Johnson, 1999).

Introduction to 4-H Youth Development Program

The Boys' Corn Club and Girls' Canning Club model, the precursor to 4-H, expanded rapidly and organically across the country during the early 20th century (Ilvento, 1997; Pangborn, 2007).

President Theodore Roosevelt's 1909 Country Life Commission Report called for lifting rural cultural standards. Youth became the target audience in an effort to avoid the difficulties encountered when trying to introduce new ideas to the "stubborn adult male"" (Rosenberg, 2015)—the patriarch (Reck, 1951). Since, generally speaking, youth are more open to new information than adults, it was expected that when youth are targeted, there would be greater rates of scientific innovation adoption, which would lead to cultural change (Pangborn, 2007; Rosenberg, 2016; Rosenberg, 2015). Leaders at the USDA employed this policy shift as an opportunity to provide some guidance and organizational structure to build the 4-H movement (Rosenberg, 2015). In 1907, the first government-sponsored Boys' Club was launched under the Holmes County, Mississippi, superintendent of schools, William Hall Smith, who followed the lead of many nongovernmental affiliated individuals in using corn contests for boys and homemaking contests (e.g., cake baking, canning) for girls to engage the rural youth.

The 4-H program was not developed as a social institution (Tricky, 1983). It was first and foremost an education organization that promoters hoped would help rural America adopt emerging scientific agricultural practices (Ilvento, 1997; Reck, 1951; Rosenberg, 2015). It developed as an integral part of a broader push toward "mechanized, industry-backed agriculture and the politics of progressive agricultural reform" (Rosenberg, 2015, p. 6), which was intended to liberate rural youth, socially and economically.

Today the 4-H program has moved away from the programming traditions of simply delivering content as it did with the corn and homemaking clubs. Instead, 4-H has adopted Bailey's philosophy by focusing on the human and social needs of the community rather than just specific technical skills (Braun, 1997; Rogers, 1988). It no longer emphasizes the simple innovation adoption that was the hallmark of the original organization. The organization emphasizes the acquisition of life skills and the personal development of youth and society (Arnold, 2018).

Since the 1970s, the 4-H program has identified three core areas to address human and societal issues: health and nutrition (Downey, Peterson, LeMenstrel, Leatherman, & Lang, 2014; USDA-NIFA, 2016a; Rogers, 1988); civic engagement and leadership (Pangborn, 2012); and science (Riley & Butler, 2012).

Health and nutrition. The 4-H program area of health and nutrition has changed in format and structure over time. However, its objectives have remained the same, that is, a desire for participants to achieve optimal physical, social, and emotional well-being (Downey et al., 2014; Hill, McGuire, Parker & Sage, 2009). The objective of the Expanded Food and Nutrition Education Program (EFNEP) was to improve the nutritional status of poor families (Rogers, 1988). It was launched during the 1960s' War on Poverty (Rogers, 1988). Today EFNEP targets the entire family, including low-income youth (USDA-NIFA, 2015b). EFNEP's focus is not singularly on nutrition, but also on clients' problems as they arise, including issues such as child discipline or family budget management (Rogers, 1988; USDA-NIFA, 2015b). In the 1990s, the Welfare Reform initiative tasked Extension with addressing poverty in rural and urban communities (Braun, 1997).

Civic engagement and leadership. Starting in the 1980s and 1990s, as part of the need for developing responsible citizens and career knowledge, the Extension Service administration decided to address the long-existing gap in leadership opportunities between boys and girls (Pangborn, 2007). Extension worked to accomplish this goal by targeting teenage pregnancy, educating girls about the dangers of domestic abuse, and building leadership opportunities for girls. In 1982, 55 percent of 4-H members were girls, and they needed to feel that they belonged and had a role in 4-H leadership (Hoyt, 1981; Pangborn, 2012). The 4-H program has created forums and environments for children to focus on communication on many levels, including speech, drama, and leadership competitions (Pangborn, 2012). It has refocused on teaching leadership skills in terms of the business world, which has led to instituting entrepreneurship programs (Venture, 2005). The 4-H program integrated civic engagement expectations within the program model to increase the likelihood that all 4-Hers participated in citizenship activities (USDA-NIFA, 2016b).

Science. Youth in 4-H have been asked to engage with science, technology, engineering, and math since the program's inception (Rosenberg, 2015). Since the 1980s, there has been a call by government and society for youth preparation in science and math as important career skills (Sallee & Peek, 2014). Emphasis on technology and engineering was added in the 1990s as the National Science Education Standards and the National Council of Teachers of Mathematics sought ways to supply U.S. educators' classrooms with standards and guidelines that shaped their curriculum to better prepare K-12 students in science, technology, engineering, and math, generating the acronym STEM (Horton & Hutchinson, 1997). The 4-H program responded to the national call to prepare youth for STEM fields by developing and expanding 4-H projects, such as Robotics and Rocketry (Sallee & Peek, 2014). The 4-H program used the experiential learning model, delivered by county staff and community volunteers, that had been successfully utilized in other project work to facilitate STEM literacy in youth, not only in rural communities, but also in urban communities (Horton & Hutchinson, 1997; Sallee & Peek, 2014).

In creating space for developing youth, 4-H is a powerful tool for transformational education. Youth development can provide measurable benefits for individual youths as well as for the communities where they live and contribute (Lerner & Lerner, 2013). Transformational education fosters a learner who reflects society or who shapes society (Fenwick, 2003). It is essential to recognize the purposes, influences, objectives, and ideals of the broader organization (Cervero & Wilson, 2006; Fenwick, 2003), individual educators, and other stakeholders (e.g. sponsors) when understanding the implementation of Extension programs like 4-H.

Changes in the Organizational Environment

Extension is at the crossroads of differing societal contexts. There are shifts in how citizens understand their society, and there are shifts in how society is organized. Three significant environmental factors emerge from the literature on Extension in regard to how individuals understand society: 1) the impact of a neoliberal worldview, 2) the resulting erosion of public dollar support (Kalambokidis, 2004), and 3) the ways that citizens engage with information and knowledge (King & Boehlje, 2000; Vines, 2017). Shifts related to how society is organized that are present in the literature include racial and ethnicity shifts in populations, the growth of nonwhite Hispanic and immigrant populations (Vera et al., 2016), and the need to serve urban population centers (National Urban Extension Leaders [NUEL], 2015; National Urban Extension Task Force, 1996).

The influence of a neoliberal frame has resulted in an erosion in public support for education (Saunders, 2010). This steady reduction in public dollars in conjunction with variability in public budget support has caused a shrinking and more volatile funding situation, resulting in an increased need for nonpublic dollars (e.g., grants, gifts, and contracts), while a shift in access to information in the information age has changed the context for Extension and added complexity to the delivery model (King & Boehlje, 2000; Vines, 2017). These forces are influencing how Extension is able to operate at the same time that the “who and where” of clientele is shifting. Each of these factors has proven existential in nature for Extension.

Neoliberalism is commonly referred to as an economic theory. Yet, it is comprised of values, ideologies, and practices that work as a "cultural field." Giroux (2004) makes the argument that neoliberalism's cultural dimensions erode public participation, which is the very nature of democratic life. Under neoliberal policies, the symbolic, educational, and economic capital necessary for engaged citizenship is being increasingly undercut (Giroux, 2004). Neoliberalism additionally has an impact on the language of democracy, race, education, and the media. These impacts have an effect on democratic institutions (Giroux, 2004). Extension authors have recognized the changing frame of public funding (Franz, 2015; Kalambokidis, 2004, 2014; Lawrence & Mandal, 2016; McDowell, 2004; McGrath et al., 2007; Ilvento, 1997). Franz (2015) acknowledged that "in contemporary United States culture, society demands proof of Extension and LGUs as valuable public goods" (p. 13). Kalambokidis (2004) went further, arguing that communication of value is important because an increasing number of policy decision makers believe public funding for Extension is only justified when the free market fails. Extension is facing the result of an American societal change that has removed the contract of public support for public goods, while also responding to consistent, albeit not predictable, budget-cut cycles. A conceptualization change has occurred, altering the role of government in funding organizations, which has reflected the strengthening of neoliberalism in the political discourse in the United States.

The Internet, social media, and the effect of today's "post-truth" society, which emphasizes the weakness of "science-based explanations in the face of strong narratives or compelling story" (Berling & Bueger, 2017, p. 332), have shifted how citizens of the United States engage with knowledge and the perceived need for knowledge dissemination from Extension. The Internet age was supposed to make Extension irrelevant, because free access to information would eliminate the need for in-person knowledge dissemination (King & Boehlje, 2000). The fear that clientele would no longer need to call the Extension office to learn about specific facts has come to fruition. There are calls for new modes of Extension, moving it away from a fact-delivery organization to one of complex problem solving (Vines, 2017). Adoption of technology is regularly supported in order to engage with clients (Jones, Doll, & Taylor, 2014; Risdon, 1994; Tennessen, PonTell, Romine, & Motheral, 1997). The change in media has changed how Extension agents interact with their clientele (Radhakrishna & Thomson, 1996). Extension has assimilated the use of technology into their organization's mission efforts, perhaps expanding their ability and reach, adding additional complexities to the work, by becoming global knowledge sources (Collins, 2012).

Another shift in American society is that demographic changes are occurring. The U.S. populations are increasingly nonwhite and urban. For example, from 1980 to 2013, the Latino population under 18 years old grew more than 300 percent (Pew Research Center, 2015). Eighty percent of the nation's population lived in metropolitan areas, and the Census Bureau's population forecasts indicate this trend is likely to continue (U.S. Census Bureau, 2017). Both of these trends are contrary to traditional Extension audiences, which have skewed white and rural (Koles & Muench, 2002; LaVergne, 2013). Although there has been an ongoing debate about whether Extension should be serving urban populations, in recent years, there have been increased calls for Extension to reflect a mission that must include serving urban as well as rural audiences (Argabright et al., 2012; Bloir & King, 2010; Erbstein et al., 2017; Henning et al., 2014; National Urban Extension Leaders [NUEL], 2015; Ruemenapp, 2017; Vega et al., 2016; Webster & Ingram, 2007). These environmental factors are challenges that the organization continues to respond to and that contribute to organizational uncertainty.

Strategies Toward Stability

West and colleagues (2009) identified six areas for Extension to focus on in order to survive into the future: 1) address the public good, 2) identify the competitive advantage, 3) develop strategy to respond to the pressure of privatization, 4) achieve long-run sustainability, 5) implement business practices, and 6) work toward changing the narrative in the political economy. Only Sobrero (2004) has called for anticipatory preparation by Extension administrators to ensure future excellence in the face of expected financial challenges that will result from the many other challenges facing Extension. In response to changing financial resources, whether from the long-term trend away from public financial support or from acute budget cuts reflecting that shift, the argument is consistently made that Extension must better communicate its value. A myth exists in the literature; the narrative suggests that if Extension did a better job of documenting and communicating the impact and relevance of Extension education programs to funders, then more appropriate financial resources would follow (Cummings & Boleman, 2006; Davis, 2012; Franz, 2013; Kalambokidis, 2011; Stup, 2003; Zotz, 2004). In order to build support for Extension, "public value stories and statements" (Chazdon & Paine, 2014; Franz, 2013) or "public good" (Franz, 2015) are terminologies that have been used in place of the word "impact." To measure indicators associated with impacts, an emphasis has been placed on evaluation (Boleman & Cummings, 2005; Cummings & Boleman, 2006; Franz, et al., 2014). This is not a movement solely in Extension—it is also occurring across the public and not-for-profit sectors.

Extension has turned to a Social Return on Investment (SROI) model to demonstrate its program impacts, which is the process for understanding, measuring, and reporting the social, economic, and environmental values created by an intervention, program, policy, or organization (Banke-Thomas, Madaj, Charles, & van den Broek, 2015; Scholten, Nicholls, Olsen, & Galmidi, 2006). SROI evaluation is in line with cost-effectiveness analysis, cost-utility analysis, or cost-benefit analysis because the SROI framework is a holistic method supporting an exploration of the connection between funding and program outcomes. SROI is an indicator utilized when Extension is responding to the unsubstantiated claim that financial stability will result from communicating the value of Extension effectively. It is a tool to measure the social, economic, and environmental value of the Extension system that then can be used to communicate its value to stakeholders. The use of SROI is not itself a solution to budget instability. Rather, it is one strategy that administrators may use to inform their efforts.

Extension has also adopted the use of strategic planning as a means to ensure relevancy of programming in their communities (Fetsch & Bolen, 1989; Franz & Townson, 2008; Graf, 1993). This is an important management strategy to help Extension administrators and the complex organizations they oversee in each state provide programming effectively to their constituents. Andersen (2000) has argued that strategic plans exist in the organizational environments, meaning such planning reflects organizational performance, while actions of actors in the organizational environment influences performance. Poister and Streib (1999) have contended that strategic planning is action oriented and only provides a guide to the implementation and actions that are taken by the organizations to reach the desired performance results (Andersen, 2000).

Proponents of strategic planning argue that planning is required to guide new initiatives and coordinate strategic action. Andersen (2000) argues that reliance on centralized strategic planning processes is insufficient because “a significant number of investment decisions emerge and are approved by lower level managers” (p. 188). During the period of implementation, a significant number of decisions concerning investment occur, and these decisions ultimately significantly shape implementation. Thus, it is suggested that the strategy implementation process relies on social learning and situated learning theory (Andersen, 2000; Lave & Wenger, 1991). The continuous interactions between organizational actors and the number of decisions that occur imply that strategy results from shared cognition (Anderson, 2001; Lave & Wenger, 1991). Anderson (2001) highlights that program implementation occurs throughout an organization. In the case of Extension, implementation is imperative because the organization has geographically dispersed county office locations. The expansive distribution of Extension offices is a highly valuable feature of an Extension program's strategic implementation. Program staff experience large amounts of autonomy in the field to make decisions and implement the strategic plan as they see fit because of this organizational structure. Administrators have focused on strategic planning and other leadership actions. It is true that Extension administrators' decisions influence strategic decisions; however, that strategy is translated by field faculty through independent decision making. It is important to identify the decision-making processes and connect them to program outcomes because decision making at the administrative level will affect the organization for years to come.

The Call for Reimagining Extension

In the 25 years of literature since Graf (1993) asked if Extension would survive the 1990s, the same themes have emerged; however, the call for improved communication of results has not resulted in financial stability for Extension. Solely focusing on improving communication about Extension's value has not proven to increase financial security because it has not returned stable financial investment from county, state, or federal funding entities. Extension administrators at the same time have applied organizational management techniques and have found that strategic planning is helpful for changes in the organization. Strategic plans may provide comfort to administrators and guidance for organizational efforts but are only guides. Strategic plans are far easier to follow in times of fiscal comfort, therefore they are a less effective tool for organization administrators' response and decision making in times of change. Strategic plans remain integral for organization implementation as a goal to achieve whether the organization is stable or experiencing stress (Allison & Kaye, 2011; Martin, 2014). Both the external and internal look into the organization by administrators requires the use of administrator judgment, analysis, and decision making. These processes are influenced by the organizational environmental factors and the feedback that administrators receive. In order to understand how Extension administrators are making organizational decisions and what their responses to changing environmental factors are, research needs to be conducted to inform these responses into the future. A gap exists in the literature on Extension administrators and the type and kind of decisions that they are making in response to environmental factor changes and how those decisions influence program implementation.

Extension's Responses to Environmental Factor Changes

Among the challenges that today's Extension systems confront are the increasingly complex and changing social (Stephenson, 2003), environmental (Stephenson, 2003, 2011), and economic conditions (Wang, 2014). These conditions impact Extension's capacity to carry out their mission and alter the environment in which they operate. Financial instability from budget cuts and the change in funding sources away from stable federal and state budgets to soft-money sources of grants and contracts are growing sources of insecurity for Extension, which threatens the ability to remain committed to the mission of public education.

In the literature, there is very limited investigation on how Extension administrators have responded to environmental factor changes and why they make the decisions that they do, even as calls for reinvention of Extension programs continue to appear (Boehlje & King, 1998; Bull, Cote, Warner, & McKinnie, 2004; Hoag, 2005; McDowell, 2004; West, Drake, & Londo, 2009). The dominant narrative communicated in the literature is that in order to improve Extension's public support, Extension needs to measure impacts and more effectively communicate value to stakeholders.

Communicating value. There has been a consistent call for improving the communication of value in the literature (Franz, 2015; Kalambokidis, 2011; West et al., 2009). This can be accomplished by having improved evaluation results that support public value and impact statement narrative. Authors in the literature do discuss the need to evaluate and measure the value of programmatic outcomes (Stup, 2003). The narrative over the last 30 years has been that Extension needs to communicate positive outcomes to legislators more effectively, in order to increase public funding (Conone, 1991; Cummings & Boleman, 2006; Fetsch & Bolen, 1989; Graf, 1993; Franz, 2013). Improving the communication of Extension's value to stakeholders, improving the measures of impacts, and engaging in organizational planning/strategizing as other public sector and not-for-profit organizations are expected to do as they compete in a modern funding climate are technical responses to the dominant neoliberal arguments. The financial results for Extension or 4-H from improved communication of programmatic value has not been documented in the literature.

Which direction for Extension? The aforementioned broader dynamics and challenges may not be within the control of Extension or the administrators at the helm of its organizations, but smart responses are nevertheless necessary to prevent further exacerbating these challenges. Hoag (2005) found in the literature that Extension had three distinct responses to large-scale shifts in environmental factor changes. First, authors claim that Extension is no longer relevant and will—should—become extinct. Second was the argument that Extension had experienced mission drift, because Extension had moved away from its roots in agriculture and therefore had lost the support from historically significant supporters (Bull et al., 2004). The third argument is that Extension needs to expand beyond agriculture, because Extension has been limited by serving traditional audiences (McDowell, 2004).

These arguments reflect Durand's (2006) perspectives on organizational adaption. The argument that Extension is going to become extinct in the face of technological disruption follows the "evolution" approach, which is that only the most efficient and relevant organizations will survive. The other two arguments represent a "life-cycle" approach, where an organization develops and matures in response to the many environmental inputs. The difference between the second and third strategy is a difference between the best ways to identify strategies in order to respond to the environmental opportunities. It remains that there have not been empirical studies conducted to assess the results of these strategies.

One of the most well documented examples of an Extension organization's reaction to organizational challenges is how the University of Minnesota's Extension program responded to a critical budget crisis. In 2004, the University of Minnesota Extension faced a 13 percent budget cut, the largest budget reduction that it had ever experienced. In the face of this significant challenge, the University of Minnesota Extension leaders chose to make changes to the organization's mission and structure in order to continue serving communities, providing effective programs, and sustaining staffing levels. The key significant change adopted by University of Minnesota Extension was to create what has become known as the Minnesota regional/county model. The model ensured program area coverage while requiring a lower level of funding because it shifted the job and geographic responsibilities of employees (Morse, 2006; 2009).

Organizational Perspective

The open-system approach to organizations contributed to the development of multiple theories built on economic, psychological, and sociological backgrounds (Simon, 1957; March & Simon, 1958). Organizational open systems are based on the notion that neither rational nor natural perspectives consider the environmental influences around the organization. Buckley (1967) expanded the definition of the open-system approach to recognize that it is not just the organization's interaction with the environment; rather it is that the exchange is a fundamental essential factor underlying the system's operational viability.

Organizations in a rational system are "collectives that exhibit a relatively high degree of formalization" (Scott, 2007, p. 29) and include individuals with the sole interest of reaching common goals (Scott, 2007). Rational system organizations are generally organized in a manner that would appear "rational" when contrasting its structure to its purpose. The rational view focuses on the organization's structure and its purpose, not on its moral intent. It is the purpose that draws its participants, and it is the well-defined structure that makes the organization rational.

Organizations, as outcroppings of the combination of individuals, have behaviors. These behaviors are connected to the organization as the organization is linked to the environment. The environment is the ecosystem in which the organization exists, and there are three levels of analysis of the environment (Weick, 1976). The scale of analysis for this discussion is the ecological level. Each of these levels of the environment influence organizations, and organizations influence their environment through their continued presence. This paper explores what environmental factors would allow an organization to intentionally alter their environment.

Situating the Leader in the Organization

In an open-system organization, comprised of many individuals, behaviors, actors, and factors internal and external to the organization, the problem-solving process becomes more complicated and nuanced (Scott, 2007). In this complexity, there are numerous organizational models to help describe the nature of organizations. Each varies on how they express the many internal and external forces that affect the activity of the organization (Lewis, 2006). Leavitt (1965) developed a diamond-shaped organizational systems model that helped later scholars think about organizations as interdependent multivariate systems. Leavitt's (1965) diamond model was anchored by four organizational facets: 1) structure (e.g., decision-making authority or work flow), 2) task (e.g., the organization's purpose), 3) people (e.g., those who carry out the tasks), and 4) technology (e.g., tools used in the work). This model was primarily descriptive, although Leavitt did acknowledge that as these components changed, other aspects of the organization would also change (Burke, 2014). The interdependent multivariate systems acknowledge that organizations are open systems and that there are constant inputs and outputs (Burke, 2014).

Because Leavitt's (1965) model lacked a recognition of inputs and outputs, other models were developed with an open-system approach—open system meaning any human organization, "because of its dependency on and continual interaction with the environment in which it resides" (Burke, 2002, p. 43). The Nadler-Tushman Congruence Model is a tool to understand organizational adaptation. It is shared here to position the Extension administrator within the larger context of the organization and the environment.

The Nadler-Tushman Congruence Model for Diagnosing Organizational Behavior

This model views an organization as an open system and therefore is influenced by inputs, but also that it shapes its environment (Burke, 2014). In this model, the inputs are viewed as relatively fixed (Burke, 2014). The inputs help influence how the people in the organization behave by serving as constraints or opportunities for action (Burke, 2014). The four inputs that Nadler and Tushman (1977, 1980) identified are the environment, resources, history, and strategy (Figure 2.2).

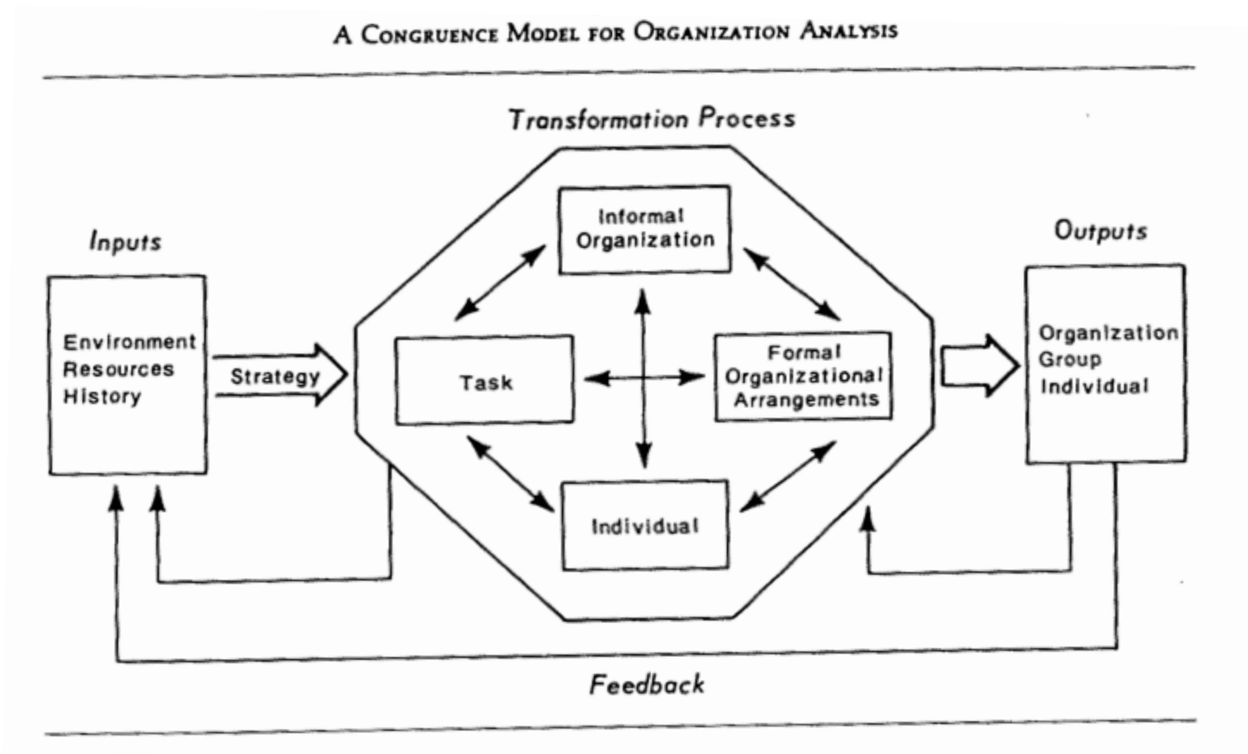

Figure 2.2 The Nadler-Tushman Congruence Model. From “A Diagnostic Model for Organization Behavior,” by D. A. Nadler and M. L. Tushman, 1977, in J. R. Hackman, E. E. Lawner III, and L. W. Porter (Eds.), *Perspectives on Behavior in Organizations* (New York: McGraw-Hill), pp. 85–100.

Environment. The stability of an organization is determined by the extent to which the environment is relatively stable or if it is dynamic (Burns & Stalker, 2006; Lawrence & Lorsch, 1967). The environment's stability or instability significantly affects the internal operations, structures, and policies of the organization (Burke, 2014). Part of the environment would be the parent system. In the case of Cooperative Extension, this would be the university, but also the larger system of the many government entities.

Resources. Nadler and Tushman (1977, 1980) identify resources as the assets of the organization, such as the capital, people, technology, and raw materials. Other intangibles are also considered resources, including a logo, company name, or brand because these may bring public regard or value to the organization (Burke, 2014).

History. An organization's history determines patterns of employee behavior, policy, and the types of people that an organization attracts as employees and as clients (Burke, 2014). Most important for this context, history influences how organizations respond to crises (Nadler & Tushman, 1977). Burke (2014) stressed that history is an important variable in understanding an organization.

Strategy. Strategy is the "process of determining how the organization's resources are best used within the environment for optimal organizational functioning" (Burke, 2014, p. 210). Strategy is categorized as an input in the Nadler and Tushman (1977, 1980) model, because it influences organization behavior. Strategy is the act of identifying and addressing opportunities in the environment and determining how the organization's resources are adequate to capitalize on the opportunities. History, too, plays a role in this process. History may be a subtle influence, but it is significant (Burke, 2014).

Strategy is needed in the face of change. According to theorists of organizational evolution, the organization must adapt to the changing environment or risk going extinct (Durand, 2006). There are different ways to think about this change, either evolutionary or as a life cycle. The evolutionary approach views that successful organizations can emerge from an aggregate of entities. The life-cycle approach views change as constructive and that the organization can incrementally, or radically, adapt to the changing environment (Van de Ven & Poole, 1995). Durand (2006, p. 17) identified four key questions from Van de Ven and Poole (1995) that an organization can use to define the evolution process that they might need to face.

1. Does the evolution apply to a single entity or to multiple entities ("who")?
2. Does the evolution entail an alteration of the involved entity(ies) ("what")?
3. Does the evolution contain a teleological determination (namely, a pre-specified orientation, an announced goal, or predefined ending) ("why")?
4. Does the evolution imply relationships between entities, or not ("how")?

An organization's strategic approach to a transformational process does not have to be well planned and explicit; rather, some organizations simply react to the opportunities in their environment (Burke, 2014; Scott, 2007). However, intentionality can enhance the success of the organization change process.

Transformational process. In the Nadler and Tushman (1977, 1980) model, the components represented as part of the transformational process are the aspects that most people would recognized as an organization—the people, the various tasks and jobs, the organizational chart, and the many relationships among the individuals, groups, and subsystems contained within the organization (Burke, 2014). The task component is comprised of the inherent characteristics of the work itself. It is demonstrated by the jobs that need to be done. The individual component is the sum of the differences and similarities among employees, particularly demographic data, skill and professional levels, and the personality-attitudinal variables (Burke, 2014). Organizational arrangements are comprised of the managerial and operational structure of the organization. Other components of this component are workflow and design, reward system, and management information systems (Burke, 2014). The informal organizational component is the social structure within the organization, including the organization's internal politics and the "informal authority–information structure" (Burke, 2014, p. 212).

Outputs. Nadler and Tushman (1977) identified four key overall outputs that could be used for diagnostic purposes. These four key categories are 1) system functioning, 2) group behavior, 3) intergroup relations, and 4) individual behavior. Burke (2014, p. 211) developed three guiding questions that would help elicit the necessary information.

1. How well is the organization attaining its desired goals of production, service, return on investment, and so on?
2. How well is the organization using its resources?
3. How well is the organization coping with changes in its environment over time?

These three questions address identifying how well the system is functioning. The organization also needs to analyze how well the groups in the organization resolve differences and collaborate when necessary. This includes how well individuals behave, such as individual job performance, but also addresses issues such as turnover and absenteeism.

Organization Change in Response to the Environment

Overlaying environmental complexity with organizational scanning (learning) and the resulting outcome of organization interaction with the environment, organization adaptation provides a conceptual framework for how organizational and environmental factors alter the environment that an organization exists in and how change occurs. This framework provides a context for how a leader is able to come to understand the environmental factor changes facing the organization. Additionally, it illuminates the ability for an organization leader to be able to develop successful strategy that allows an organization to survive and thrive.

Environment Complexity

Duncan (1972) conducted a study of three different police departments to understand the process of organizational change in response to environmental shifts, such as changing community demographics, which at the time was causing a need for change in policing strategy. This quantitative study exposed that environmental complexity and environmental change were two separate indicators that framed the way that organizations assessed the environment's uncertainty. Environmental change is the degree to which factors in the environment change and how quickly those indicators occur (Slagter, 2010), while environmental complexity is the number of factors that shape the environment that influences the organization's habitat. Duncan's (1972) model is a four quadrant model with environmental change (stable vs instable) on the other axis is environmental complexity (simple vs complex). Environmental change and complexity is relative to the organization's purpose. For example, an organization that has a complex environment and is experiencing stable environmental change has low-moderate environmental uncertainty (Duncan, 1972). This low-moderate uncertainty means that an organization may be unable to understand all of the environmental factors that influence the organization, but because the environment is stable, the need to recognize all of the factors is reduced.

The environmental uncertainty dictates how and why organizations are shaped and managed and how they respond to environmental factor changes. Additionally, environmental uncertainty can shift and change (Duncan, 1972). Disruption of a sector or industry may radically shift an organization type into a new category of environmental uncertainty and, with that, an alteration of organization strategy (Tushman & Nadler, 1977, 1980).

Environmental Scanning

Environmental scanning is the “acquisition and use of information about events trends and relationships in an organization’s external environment” (Choo, 2001, p. 1). The information retrieved from this process is knowledge utilized by management in strategy development to support organizational survival. The first step in the strategy development process is for the organization to make sense of its environment “to create new knowledge and to make decisions” (Choo, 2001, p. 10).

Four modes of scanning can be conducted, depending on the organization’s beliefs about environmental analyzability. The modes are defined by how intrusive organizations are into their environments during the scanning process. The types are 1) undirected viewing, 2) conditioned viewing, 3) enacting, and 4) searching. The amount of environmental intrusiveness an organization adopts is due to the degree of conflict between the organization and its environment (Daft & Weick, 1984). A challenging environment causes scanning efforts to increase because of the need to identify new opportunities and niches (Choo, 2001).

Choo (2001) assessed how organizational intrusiveness and the level of environmental analyzability intersect to inform an organization’s ability to scan the environment. Choo (2001) has incorporated internal strategic characteristics: decision making, knowledge creation, and sense making. Decision making by administrators and knowledge creation by the organization contributes to sense making (Choo, 2001). Sense making (Daft & Weick, 1984; Weick, Sutcliffe,

& Obstfeld, 2005) has been incorporated by Choo (2001) into the approach of the scanning process because it informs the organization's construction of their conception of the environment.

Undirected viewing (Unanalyzable Environmental Analyzability and Passive Organizational Intrusiveness) is when the organization does not conceive the environment as analyzable (Aguilar, 1967; Choo, 2001). Conditioned viewing (Analyzable Environmental Analyzability and Passive Organizational Intrusiveness) is when the organization does conceive the environment as analyzable (Aguilar, 1967; Choo, 2001). Enacting (Unanalyzable Environmental Analyzability and Active Organizational Intrusiveness) is when organizations create features in the environment that result from learning by doing in an anarchic process (Choo, 2001). Searching (Analyzable Environmental Analyzability and Active Organizational Intrusiveness) is when an organization is trying to achieve an objective reality of the environment by using hard data, which results from process (Choo, 2001).

A tool for organization administrators to assess where the organization sits in their environment is the SWOT Analysis. SWOT stands for strength, weakness, opportunity, and threat. This analysis is designed to allow for an analysis of where an organization and its products fit within the environment (Pickton & Wright, 1998). This analysis allows for the administrator to expose the factors and issues they are facing by scanning for the many aspects of the organization in the context of the environment.

Organization Adaptation

Organization adaptations are the changes that result from an organization's scanning and assessment. Hrebiniak and Joyce (1985) state that the characteristics of the environment inform how an organization approaches strategy. They introduced the concept that choice, also referred to as strategy, and determinism are independent variables that when placed on intersecting axes become a typology of organizational adaptation. Hrebiniak and Joyce (1985's) model depicts the interactions of these factors, which result in four main types: 1) natural selection, with minimum choice and adaptation or selection out; 2) differentiation, with high choice and high environmental change determinism and adaptation within constraints; 3) strategic choice, with maximum choice and adaptation by design; and 4) undifferentiated choice, with incremental choice and adaptation by chance. These types influence the number and forms of strategic options of organizations, the decisional emphasis on means or ends, political behavior and conflict, and the search activities of the organization in its environment.

While each quadrant has unique characteristics that encourages or limits organizational adaptation, organizations with high strategic choice and low environmental determinism, while in the greatest position to make significant organization change, have fewer incentives to adapt- Quadrant IV (High strategic choice & low environmental determinism). Thus, the choice to change is determined by individual organization administrators. On the other extreme, when there is low strategic choice and high environmental determinism, the leader's role is limited in the determination of organization survival.

Quadrant III provides the most likely set of characteristics that allow an organization to take strategic action to adapt, having both the ability to have individual leader choice to adapt – low environmental determinism- and the incentive from an environment that is pressuring the organization (Hrebiniak & Joyce, 1985). Quadrant II is defined by high strategic choice and high environmental determinism means the organization is able to adapt within constraints and results in differentiation. Quadrant I is low-strategic choice and high environmental determinism which results in natural selection because of the limited effect of strategy.

The catalyst for the need for adaptation is the high environmental complexity and in turn high environmental determinism, which makes the environment unanalyzable. High strategic choice influenced by individual control is the confluence of the best conditions for an organization to formulate efforts to shift the environment. Because the environment is stable while also being complex, it spurs the need for organizations to be active to find solutions and enactive of the changes (Hrebiniak & Joyce, 1985).

Enabling Factors for Environmental Change by Organizations

Environmental scanning (Choo, 2001), assessment (Duncan, 1972), and organizational adaptation (Hrebiniak & Joyce, 1985) are each conceptualizations of how organizations are able to respond to the environment due to the characteristics of the environment, together they show characteristics of environmental determination. Each of these models assume that the strategy arrow is pointing into the organization. While it is recognized that the organization's resulting product does alter the environment, it is viewed as a side effect (Tushman & Nadler, 1977, 1980) of mission-driven activity that contributes to the organization's mission. Figure 5 shows the environmental characteristics of an organization's environment. These organizational environmental characteristics have an impact on how an organization's administrators understand the environment and in turn an organization's ability to intentionally adapt to the environment or alter the environment.

Each of the aforementioned models are aligned so that they could be overlaid into one model. Each model has four quadrants, defined by oppositional points, for example, low and high environmental stability. The quadrant orientations are matched together to put environmental stability, determination, and the resulting analyzability on one plane, while, on the intersecting plane, the model's corresponding intersecting oppositional points, which were environmental stability, intrusiveness, and strategic choice. Environmental stability is the underlining factor that results in an organization's ability to be intrusive in the data collection process and in turn strategic choice. A graphic of these six binary characteristics is shown in Figure 2.3.

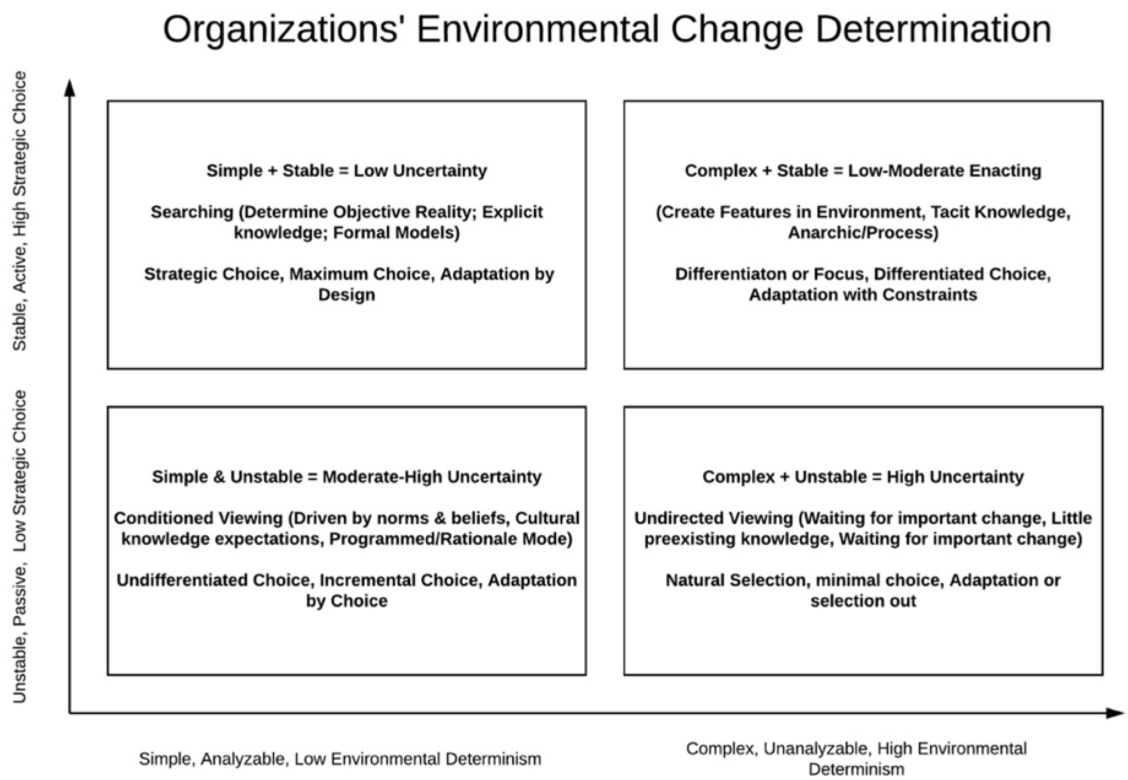

Figure 2.3. Organizations' Environmental Change Determination.

When these three models are aligned it is found that factors for change are most suited for an organization that has a stable environment, which results in high analyzability and an ability to be active in scanning while also having high individual choice and strategic choice. Because the organization's environment is comfortable and requires limited adaptation, even if the organization could change to be more efficient, effective, or prepare for the future, homeostasis non-stimulus prevents change. Inertia is an overpowering force and limits the possibility for change. Therefore, only when environmental forces provide pressures on the organization will it cause organizations to act. In order for an organization to be able to change their environment, the environment must be relatively stable and simple, allowing for an active intrusion and analysis, which contributes to high strategic choice. In this quadrant, leadership is able to engage strategy toward altering the environment, which leads to improvements in conducting the organization's mission. Because the environment is simple enough, the organization can identify environmental factors to alter their environment.

At the inception of the Extension system, the environment was fairly simple and stable—that is, there were three funding sources, which resulted in low uncertainty for the organization, which resulted in adaptation by design. Also, at the beginning, Extension focused on key organizational missions, that is, agriculture and rural life. Over time, the organization has experienced an increasingly complex environment that interacts with an expanded mission and purpose (agriculture, healthy, community development, and youth development). The environmental complexity results from neoliberal ideology, which has changed how the organization has been funded, in addition to other societal shifts like changing technology, population demographics, and a move away from agrarian society. These environmental shifts have caused Extension to need to be more responsive to environmental factor changes. Extension has moved from an environment that is stable to one that can be considered unstable, causing many more calls for organizational change (e.g., Boehlje & King, 1998; Bull et al., 2004; Graf, 1993; Hoag, 2005; McDowell, 2004; West et al., 2009). Leader recognition of this complexity determines whether the organization is able to adapt intentionally or if the organization responds without vision and risks falling victim to natural selection.

A Conceptual Architecture for Adaptation

Baard, Rench, and Kozlowski (2014) developed a conceptual multilevel architecture for adaptation at both the micro-individual behavior and macro-organizational behavior level changes. The architecture has three dimensions: 1) changes in task features (that may be driven by environmental shifts) that represent different dimensions of task complexity, 2) one or more focal levels of analysis that are relevant to the nature of the adaptation phenomenon, and 3) adaptation process mechanisms that underlie adjustments to the change (Baard et al., 2014, p. 90). For each of the three critical dimensions there are also three foci.

Task complexity changes define what requires adaptation (Baard et al., 2014). Baard et al. (2014) posit that there are three ways that task complexity can be captured. Component complexity results from the number of discrete cues and actions that compose tasks. Coordinative complexity results from the linkages between cues, their actions, and the required sequencing. Dynamic complexity results from the degree of flux that is inherent in "component and coordinative complexity" (Baard et al., 2014, p. 90). Each of these components represents different types of adaptation because of the added complexity that results from coordinating change over time (Baard et al., 2014).

Focal level is the level of organization that is focused on the adaptation phenomena. This dimension is determined by the analysis level. A specific environmental factor change may cause an adaptation phenomenon at all three levels; however, the focal level is where the analysis is occurring, either at the individual-behavior level, the team level, or the organization level. Individuals remain the "focal unit of adaptation" because their performance influences their team and in turn the organization (Baard et al., 2014). When investigating the team or unit focal levels, the phenomenon of interest matters. If the phenomenon of interest focuses on human capabilities then the focal levels are linked from the individual through to the unit (Snow & Snell, 2012). If the phenomenon is focused on characteristics—for example, strategy and environment—then the connection is from the unit to the individual (Baard et al., 2014; Miles et al., 1978).

Adaptive process mechanisms are human actions that underlie adaptive performance. Baard and colleagues (2014) characterize the primary mechanisms as cognitive, motivational-affective, and behavioral. Cognitive mechanisms represent basic processes at the individual level, including attention, learning, knowledge, and decision making/problem solving, and creativity. Motivational-affective mechanisms represent factors such as goal orientation, self-efficacy, and anxiety. Behavioral mechanisms represent skilled action to accomplish specific acts driven by knowledge, skills, and abilities (Baard et al., 2014).

Baard and colleagues (2014) suggest this conception of adaptive performance as an architecture in order to structure future research. It is designed to characterize a wide range of adaptive phenomena. The architecture provides specificity and transparency in language that allows for the advancement of adaptive performance research. The authors encourage the contextualization of behavior and leadership research within this architecture. Yukl and Mahsud (2010) had previously recognized the need for more research on individual behaviors contextualized within a phenomenon.

Administrator Response to Adaptation

Administrators make decisions daily about how to develop strategies that moderate the impacts of environmental factor changes to the organization. How administrators approach organization decisions result in programmatic shifts that have long-term impacts on the organization's ability to rebound and/or continue to thrive (Nadler & Tushman, 1977, 1980). Both the external and internal look into the organization by administrators requires the use of administrator judgment, analysis, and decision making. These processes are influenced by the organizational environmental factors and the feedback that administrators receive.

Social constructivism. Similar to that of a learner, the leader's perspective on the problem is informed by their epistemological and ontological points of view (Berger & Luckmann, 1967). Berger and Luckmann describe the relationship that humans have with their environment and how they construct understanding with the environment as "world openness" (p. 47). This results in the ability for humans to shape and respond to the environment. Humans are unique in the animal kingdom by being able to learn about the environment and then shape the environment, however imperfectly. In the process, learners are influenced by both features of affect and effect (Kirton, 1987). The Nadler and Tushman Congruence Model (1977, 1980) integrates previous experiences—for example, strategy and outputs, history, resources, and other environment influences—that lead to the development of organizational responses by the leader. The leader is being influenced by their own personal experiences, in addition to their experiences within their organizational leadership role.

Teleology. Teleology refers to a type of development where the forces conclude in goal setting and goals are enacted (Durand, 2006). It is the confluence of the ethical considerations of purpose, the end goal, and function (Woodfield, 2010). Teleological theory informs the morality that derives duty or moral obligation from what is good or desirable as an end to be achieved. For the administrator, their behaviors, decisions, and strategies that result from the confluence of their moral and ethical considerations, desire, and objective of the organization, strategy, and the achieved outcomes is their teleology. These behaviors and the underlying ethical and moral considerations are the actions that inform whether behaviors are simple acts or behaviors that are conceived of as leadership (Johnson, 2005).

Adaptive Leadership

The leadership literature previous to Burns (1978) focused primarily on *transactional leadership*, or the exchange of actions by the leader to achieve strategic actions from followers. Examples of transactional leadership could be a leader giving a worker a bonus for good work performance or a politician promising a tax break. Yet, not all social interactions are transactional or based on intersections of social capital and intrinsic motivations (Downton, 1973). Transformational leadership is social leadership, which is the engagement between persons to create a connection that increases the motivation and morality of the leader and the follower—both individuals at the same time (Burns, 1978; Bass, 1999). Transformational leadership is the opposite of transactional leadership, requiring both intrinsic motivation and optimism on part of the leader and the follower for success and progress toward the intended goal.

Adaptive leadership was first defined by Heifetz (1994). Adaptive leadership is an approach to assist organizations and individuals in dealing with consequential changes in uncertain times, when no clear answers are forthcoming. It is an approach predominantly concerned with how leaders can encourage people to adapt to and face changes, problems, and challenges. According to Heifetz (1994), leaders need to engage in activities that mobilize, motivate, organize, orient, and focus the attention of others. The behaviors of the leader and the actions they take encourage others to address changes that are central to their lives.

Heifetz (1994) identified three different types of situational challenges. Those problems are purely technical, or purely adaptive, or a combination of both technical and adaptive. Technical challenges are defined as those problems in the "workplace or community that are clearly defined with known solutions that can be implemented through existing organizational rules and procedures" (Northouse, 2016, p. 261). Adaptive challenges do not have known solutions, and they cannot be solved with a singular individual leader's expertise and knowledge (Heifetz, 1994). This does not mean that an answer cannot be known elsewhere; rather, it is to suggest that the organization or individual has not encountered this problem before, and the solution has not previously been identified for this particular challenge. In reality, the majority of problems are a combination of both technical and adaptive challenges. Adaptive leadership is pertinent when there are adaptive challenges present in the problem (Yukl & Mahsud, 2010).

The process of adaptive leadership is comprised of four different viewpoints: the systems, biological, service-oriented, and psychotherapy perspectives (Heifetz, 1994). The systems perspective recognizes many problems individuals are confronted with are a part of a complicated interactive system, where multiple perspectives and changing and evolving dynamics are involved. The biological perspective acknowledges that individuals do respond to both internal and external cues, influences, and environments. There is an assumption that a leader will have a service-oriented perspective, and that they will use their expertise and knowledge to diagnose and prescribe solutions to the problem. Northouse (2016) described this approach much like a physician who would analyze the symptoms through their lens of knowledge and give a prescription. Adaptive leadership also incorporates a psychotherapy perspective. This perspective within adaptive leadership is used to explain how and why people accomplish the adaptive work. In order to accomplish the objective, people need a supportive, safe, and constructive environment.

In response to adaptive challenges, adaptive leadership has six leader behaviors that encourage followers to engage in adaptive work. These behaviors do not have to be conducted in order. They are not steps that must be conducted in a sequence. They are tools that can be utilized by a leader when they are needed. The six leader behaviors are:

1. *Get on the balcony*. The leader removes themselves from the fray of the process and gains perspective on what work needs to happen to ensure forward motion toward challenge resolution (Heifetz & Laurie, 1997). This may be about task orientation for an individual or about large-scale efforts by the organization.

2. *Identify the adaptive challenge*. The leader must analyze and diagnose the problems they have identified and differentiate them as being technical or adaptive challenges (Heifetz, 1994).

3. *Regulate distress*. Change is essential in addressing adaptive challenges, and that can cause stress. Creating a *holding environment* is a strategy to help the leader receive feedback to assess the stress level in followers. It is up to the leader to manage how fast change is implemented to ensure distress does not become an adoption impediment (Heifetz, 1994).

4. *Maintain disciplined attention*. The leader helps followers to focus on the hard work that needs to be accomplished, keeping people focused on the effort, rather than avoiding or disengaging with the challenge (Heifetz, 1994).

5. *Give the work back to the people*. When the leader provides the right level of guidance and structure to the work that needs to be done, people feel secure in what they are doing. If too much is given, it disempowers people and reduces their confidence in decision making. Too little guidance and a lack of support generate stress, and chaos ensues (Heifetz, 1994).

6. *Protect leadership voices from below*. A leader needs to listen to all voices, including those voices from the socially outcast and the dissenters. It can be challenging for the leader to do this, because listening to nonconforming voices may disturb the social equilibrium (Heifetz, 1994; Northouse, 2016).

Comparisons between Transformational and Adaptive Leadership

Both transformational and adaptive leadership are concerned with the changes that occur within and for an organization. Morality plays an important role in creating a reason to attempt and direct change. Additionally, both of these approaches to leadership are concerned with the consideration of followers, which has set them apart from many other leadership theories. With these frames, the approaches cover similar ground but with distinctly different approaches.

Change. Both transformational and adaptive leaderships emphasize a response to change and a leader's ability to seeing the direction of the change. Transformational leadership's approach is making a change based on the moral compass and vision of the leader on behalf of the organization (Burns, 1978), whereas, the approach by adaptive leadership is making a change in response to challenges that have occurred to the organization and to the followers (Heifetz, 1994). Both approaches place significance on the morals and values of leaders because the morals and values change the solutions and vision that they advocate.

Morality. Both Burns (1978) and Heifetz (1994) have emphasized the importance of morality in their approach to leadership. Within the adaptive leadership framework, it is implied that the evolution toward a common good for the organization would impact the morals of individuals within the organization. Yet, it does not speak to how that process would occur or if doing adaptive work will automatically lead to socially relevant/important outcomes. It is explicit in the theoretical assumption that promoting the values of social justice, equality, and community is important and is moral (Heifetz, 1994). While transformative leadership is fundamentally rooted in the promotion and development of moral values, the transformational leader should be developing and growing the values and morality within themselves and their followers, otherwise their actions would not even be viewed as leadership by definition (Avolio, 1999).

Followers. The language of followership is an important difference between the two leadership theories. In adaptive leadership, the word "follower" is not regularly used because it denotes submissiveness to the role of the leader (Northouse, 2016). In transformative leadership there is explicit emphasis on followership.

Transformational leadership has a strong emphasis on followers' needs, values, and morals. The transformational leader attempts to move followers to a higher standard of moral responsibility, to move past self-interest to act for the larger, common good (Howell & Avolio, 1993; Shamier et al., 1993). It moves beyond the transactional leadership approach of simple exchanges and rewards between a leader and follower and instead focuses on the needs and growth of the followers (Bass, 1985). This change and growth is accomplished through a partnership between the follower and the leader.

Adaptive leadership is "follower"-centered (Northouse, 2016). It is concerned with mobilizing people to engage in adaptive work. This emphasis cannot be achieved without fundamentally including and working with other people and being concerned with the growth and capacity of those people in the context of change and adaption (Heifetz, 1994). Both of these theories are concerned with activating people. Transformational leadership is concerned with personal improvement (Burns, 1978), while adaptive leadership is concerned with getting people to grow their capacity in order to work toward solving adaptive problems (Heifetz, 1994).

Leaders. Adaptive leadership is in almost stark opposition to transformational leadership in that it does not view the leader as the "savior," who can solve the problems for the organization (Burns, 1978). Rather, adaptive leadership recognizes the leader as the facilitator who helps others tackle tough problems (Heifetz, 1994). Both of these theories rely on leader skills and abilities. Transformative leadership is concerned with how the behaviors of the leaders influence the followers; however, it emphasizes the charismatic attributes of the leader as the reason for the adoption of change (Bryman, 1992). Adaptive leadership is concerned with how followers change and adjust to new circumstances (Heifetz, 1994). The focus is on the behaviors of the leader rather than on the position or characteristics of the leader (Heifetz & Sinder, 1988).

Even though the approach to leadership is quite different between adaptive and transformational leadership—with the role of the leader being on opposite ends of the spectrum and with quite different views on the role of followers—the approach to power is similar. Heifetz and Sinder (1988) emphasized that there was a distinction in adaptive leadership between leadership and authority. Leadership is demonstrated by accomplishing and achieving the work, and anyone who can do the work should do the work (Heifetz et al., 2009). A person's position has little importance. While authority revolves around the power that is formally and informally granted to leaders by followers, when a leader is conferred authority, this power allows the leader to act in a way that engenders trust in the leader and a sense of security among the followers. Continued appropriate behaviors by the leader will continue to re-enforce the authority in the leader and the protection followers feel they have been provided (Heifetz, 1994).

Transformational leadership relies on charisma to engage followers with the leader. The characteristics and behaviors that are demonstrated by the leader develop trust and respect. This trust and respect that is held within the followers for the leader leads to a relationship that is developed between the follower and leader. This is the causal mechanism that leads to the connection between the follower and the leader, which transfers authority and power from the follower to the leader, no matter the role of the leader in the organization (Conger, 1999; Shamir et al, 1993; Burns, 1978).

Perspective. Adaptive leadership requests that leaders "get on the balcony"—this is the task of reflecting on and observing the entire organization to assess the value and power conflicts that are occurring within the organization. In organizational leadership, the external process of gaining perspective is called *scanning* (Choo, 2001; Daft & Weick, 1984). Heifetz (1994) recognizes that the leader needs to be seeking the challenges to the organization, both internally and externally. For example, a leader may be monitoring for followers who are avoiding work because they have views that conflict with the organizational vision (Heifetz & Laurie, 1997). Adaptive leadership's "get on the balcony" is the prescriptive approach for how a leader should be able to identify where the challenges are or might be. The leader's ability to scan the environment and recognize the challenges they face influences their ability to react and how they react when they do recognize those challenges (Yukl & Mahsud, 2010).

Ecology. Adaptive leadership attends to defining and understanding the ecology of the organization. Adaptive leadership has a unique term, called the *holding environment* (Heifetz, 1994). It is the safe space created by the leader for everyone involved in the adaptation process to be in while they are addressing difficult issues. This environment is an atmosphere of constructive dialogue and feedback. Additionally, beyond creating safe spaces for conversations, adaptive leaders look outward from their organization to recognize the environment that they are existing within. Leaders need to ask themselves if there are threats, concerns, or opportunities that the organization needs to be responding to (Segil, 2002). The adaptive leader receives perspective by taking the opportunity to have this external view.

Conflicting values. Adaptive leadership addresses how to deal with conflicting values (Northouse, 2016). Adaptive leadership's purpose is to help followers adjust their personal values, both those that they hold personally and those held in conjunction with their work in the organization, in order to allow for change and adaptation to occur. This emphasis on change and adaption is essential for participants within an organization because values may be constantly changing, and shifts will occur (Heifetz, 1994). Transformational leadership relies on the leader to provide the vision and consistency of moral certitude to help build the followers' morals and values for positive change (Bass, 1999). However, it does not attend to what happens when differing values and visions arise out of the transformation. Adaptive leadership expects the leader to provide opportunities for followers to grow and expand into new understandings of moral efforts (Heifetz & Linsky, 2017).

Philosophy versus process. Fundamentally, the philosophies of these two leadership approaches are very different. Transformational leadership is a leadership philosophy. Adaptive leadership is a process, complete with six prescriptive action steps that were previously introduced. Transformational leadership provides a way of thinking about leadership that emphasizes ideals, inspiration, innovations, and individual concerns (Bass & Avolio, 1993). The transformational leadership approach requires reflexivity, or self-awareness, on how a leader's own behaviors relates to the needs of their followers and the organization's changing dynamics. Like a philosophy, this reflective and analytical approach can be taught (Bass & Avolio, 1993).

Recommended Approach for Complex Problems

Leadership theory provides guidance to leaders and practitioners of organizational change. There are leadership theories that are prescriptive, philosophical, or descriptive (Northouse, 2016). Transformational leadership is an example of a philosophical approach and adaptive leadership is a prescriptive approach. These two approaches work together. They each provide an approach that is different and can be complimentary.

A leader with a vision of a more perfect organization can use transformational leadership to help change its social architecture. The leader can use their charisma to gather support and buy in from collective engagement with followers and move the focal point of the organization. This new vision can excite and energize the organization and provide a clear road map for future success.

Transformational leadership doesn't have a process to identify problems; instead, it relies on the leader to organize the vision with input from their own values and input from followers. However, adaptive leadership provides behavior guidance to leaders to assess both existential (macro) problems as well as the inter-relational (micro) challenges. When the leader "gets on the balcony," they take time to remove themselves from the din of the day-to-day work to analyze both external threats and internal challenges. They are observing the big picture and identifying where work needs to be done. This action is congruent with the transformational leadership process because it is not a first or last step, but rather a continuing process. Transformation is not as smooth a process as is advocated in transformational leadership (Burns, 1978). The transformational leader will need to get on the balcony continually to see if the changes that are occurring are adaptive or technical in nature.

Adaptive leadership naturally leads the leader to identifying adaptive challenges (Heifetz, 1994). Technical challenges can be addressed directly by the leader of the organization. Technical problems are "low hanging fruit" for the manager (Heifetz & Linsky, 2017). Addressing the technical problems may cause adaptive challenges. Of course, not all problems are either/or—most problems are a combination of both technical and adaptive challenges

(Heifetz, 1994). For example, a transformational leader's desire to create a fundamentally more inclusive organization is an adaptive challenge for the organization. If the vision is espoused but not implemented by the organization, then that becomes another adaptive challenge that needs to be addressed.

Here, transformational leadership provides insight for the leader. Once the landscape has been scanned and the problems assessed, action needs to occur. Leaders need to show and demonstrate their commitment to their values, morals, and vision (Bass, 1999). When they are role models, idealized influence develops deep trust between leaders and followers. This trust in and sense of security from the leader allows followers to be willing to change and adapt (Shelton, 2012). Modeling the expectations and behaviors of adaption as well as keeping up their consistent commitment will help the adaptive leader develop people to adopt and focus on the adaptive work that is required (Heifetz, Grashow, & Linsky, 2009).

More than just leader behavior is required as the leader and the people within the organization get into the work. Leaders need to work with the people in their organization to make the adaptive work occur (Heifetz, 1994). Both transformational leadership and adaptive leadership provide insight on engaging with followers to accomplish the work. Transformational leadership approaches this through inspirational motivation and intellectual stimulation (Bass & Riggio, 2006). This is achieved by communicating high expectations and using emotional appeals to focus the group's efforts (Bass & Avolio, 1993). While adaptive leadership talks about *giving the work back to the people* this is accomplished by giving the appropriate amount of direction and freedom to the people in the organization (Heifetz, 1994). These adaptive leadership behaviors mirror the idea of transformational leadership's intellectual stimulation (Bass & Riggio, 2006), which states that the leader should encourage and support followers to be creative and innovative. Together, the philosophical and prescriptive approaches give the leader a stronger approach to working with followers.

Engagement with followers is not just about getting people to start the work; rather it is about continuing the work, building ownership, and growing the capacity of the leader (Heifetz et al., 2009). Both adaptive and transformational leadership approaches have an emphasis on this aspect. Transformational leadership emphasizes individualized consideration of the work (Bass, 1999; do Nascimento, Porto, Kwantes, 2018), while adaptive leadership provides behaviors like "regulate distress," "protect leadership voices from below," and "maintain discipline attention" (Heifetz, 1994). The individualized consideration from transformational leadership gives the philosophical approach—that the leader should think of themselves as a coach, and in order to do that, they need to create a supportive environment and listen to their followers (Burns, 1978). Adaptive leadership provides some additional behaviors for the leader to utilize. Distress can occur from unclear direction, unsafe environments, and unclear vision/orientation to the problem or challenge as well as from personal conflict or an uncertainty about new normative behaviors (Heifetz, 1994). The leader can help alleviate these challenges by establishing an environment in which people feel safe to act (Heifetz & Laurie, 2001). This can be accomplished by creating a culture of openness, a common language, or even a physical space where thoughts, ideas, and perspectives are shared. While encouraging all voices, the leader needs to "protect leadership voices from below" (Heifetz & Linsky, 2017). This is not easy in practice. Including dissenting voices changes the normative power dynamics and may cause disequilibrium within the people in the organization. The leader needs to fight the urge to limit dissent, listen only to voices that confirm their approach, or not model support for dissenting voices (Heifetz, 1994).

While all of these behaviors are occurring, the leader needs to "maintain disciplined attention" (Heifetz, 1994). The leader models a commitment to the tough work that is important to solving the adaptive (transformational) work. If they are modeling the way, then the followers will also be encouraged to stay focused on the tough work at hand. This long-term commitment to the work is the objective of adaptive leadership. While the end goal of transformational leadership is the accomplishment of the work, the individuals doing the work have grown in their moral capacity and their abilities to make change.

The leader is required to respond to the feedback from the environment. This continual flow of feedback is omnipresent. There are, however, times that the system is shocked, whether by a budget cut or a technological disruption (e.g., the Internet) that causes a significant need for an organization to respond or perish. Adaptive leadership provides a conception of leadership that frames how Extension administrators have approached challenges. How Extension administrators conceptualize the problem will result in different strategies toward solving the problem.

Researching Adaptive Leadership

Yukl and Mahsud (2010) did a systematic review of flexible and adaptive leadership research. They identified seven areas of theory and research in regards to adaptive leadership. They are 1) contingency theories about situational variables that moderate the effects of leadership behavior; 2) comparative studies of essential roles and behaviors for different types of leadership positions; 3) studies of managers who make successful or unsuccessful transitions to different positions; 4) research on the response of managers to immediate disruptions and crises; 5) research on emerging threats and opportunities in the external environment that require adaptive strategic leadership; 6) research on the conditions that make adaptive leadership more difficult, such as competing values and stakeholder conflicts; and 7) research on traits and skills that facilitate flexible and adaptive leadership (p. 82).

Yukl and Mahsud (2010) also identified weaknesses and limitations in the research that had been conducted prior to their review, such as weak methodology in previous studies. Both Yukl and Mahsud (2010) and Baard et al. (2014) identified that the use of cross-sectional survey studies with convenience samples, with no attempt to measure situational variables, means that there has not been research done that takes into consideration respondent biases and attributions. So far, the research has focused primarily on leader behavior and has exposed behaviors that may or may not be relevant. Yukl and Mahsud (2010) were concerned with use of simple survey instruments because they measured how often a behavior was used, rather than the effects and the timing of the behavior or even how the behavior was used. It was also identified that the research focusing on behaviors also measured linear relationships for individual behaviors. Worse yet, some studies looked at behaviors independently of each other, without the recognition that "some types of leadership behavior have facilitative or inhibiting effects when used together in the same situation" (Yukl & Mahsud, 2010, p. 89). This same systematic review of the literature exposed some considerations for researchers who are interested in studying adaptive leadership (Yukl & Mahsud, 2010). The author's recognized that the skills and traits utilized by the leader, e.g. how well a leader identifies changes in the situation, how they understand the appropriate responses, and then how they match the type of appropriate leadership that is required are areas of research that is needed to expose specific behaviors (Yukl & Mahsud, 2010). Yukl and Mahsud (2010) showed that there is a mismatch between subordinate priorities and their bosses' concerns. Yet, these lower-level managers are often in better positions to see the first signs of serious problems.

Summation

For Cooperative Extension, the environment has shifted from a stable environment that is simple and easy to assess to an environment that is ever-more unstable, complex, and more difficult to assess. This environment instability has occurred with the rise of technology, demographic shifts, and a societal change for public-funding support. Extension has been grappling with each of these components as individual challenges and has been developing strategies for the organization to respond. While these are the significant environmental factors that are found in the literature, it is unclear what other environmental factors are influencing Extension. For the administrators who provide state-level leadership to Extension, recognizing that these environmental factors have shifted raises their awareness about how they need to develop adaptation strategies.

The conceptualization of the problem an organization and leader faces defines how the leader responds. Adaptive leadership provides a conceptual framework for how leaders approach problems. Adaptive leadership is required when the problems faced are not purely technical (Heifetz, 1994). According to Heifetz (1994) the approaches to technical or adaptive problems differ for the leader. Adaptive leadership is specifically about making changes that enable the organization's ability to thrive (Heifetz et al., 2009).

The leader approaches organization challenge identification and the development of strategy through their epistemological and ontological lenses (Berger & Luckmann, 1967)—that is, their ability to identify, recognize, and approach the environment through a lens that is influenced by their and others' known experiences (Lave & Wenger, 1998). Their conceptions of the problem, as the organizational scanning literature underscores, are only as good as the information being considered. The leader's lens is not one that can be removed and needs to be considered when seeking to understand how and why responses to environmental factors are being acknowledged and undertaken.

How leaders conceptualize challenges affects the way they approach the problem and whether the challenge will be successfully mitigated. Learning how administrators conceptualize the challenges that Extension faces and what the influences on these individuals' conceptualization of the challenges are essential to understanding how or if Extension will be able to survive successfully into the 21st century.

Chapter Three: Methods

This study was conducted using a descriptive qualitative methodology (Corbin & Strauss, 2008; Flick, 2006). The study describes 1862 LGU Extension administrators' perceptions of the types of challenges the LGU system is facing and how those challenges are conceptualized by those administrators. Limited previous literature is available on Extension administrators' responses to the crisis and the environmental influences that are guiding leadership actions. In order to investigate the research questions, interviews were conducted with Extension administrators, both state directors of Extension and state 4-H program leaders, in each of the four APLU administrative regions of Extension systems.

Project Purpose

The purpose of this study is to describe 1862 LGU Extension administrator perceptions of the contemporary challenges Cooperative Extension and the 4-H youth development program are facing, to find out how these challenges are conceptualized, and to expose the strategies they are employing to respond to those challenges. The research questions are:

1. What environmental factors do Extension administrators perceive as being challenges for their Extension organization and the 4-H program?
2. What behaviors have Extension administrators utilized to respond to the organizational challenges that they face?
3. What are recommendations for environmental factor response by Extension and 4-H administrators at the state-system level?

Researcher's Perspective

What knowledge is and the ways of discovering it are subjective. The subjectivity of an individual's viewpoint is constructed from a person's philosophical assumptions that can be categorized as axiology, ontology, epistemology, and methodology (Mertens & Wilson, 2012). Paradigms are used to combine these four categories of assumptions into a functional language for researchers and consumers of produced research. Scotland (2012) defined paradigms as a combination of ontology, epistemology, methodology, and methods. Mertens and Wilson (2012) suggested that methodology and methods are outcroppings of the researcher's paradigm and the question being asked of the research problem. Together, Mertens and Wilson (2012) and Scotland (2012) contend that methodology is integrally connected to the researcher's philosophical assumptions and experiences.

"All research necessarily starts from a person's view of the world, which itself is shaped by the experience one brings to the research process" (Grix, 2002, p. 179). Researchers' ontology and epistemology underlie the research, the process, and the result. Laying out the three research paradigms of (post) positivist, interpretive, and critical, it was noted that the philosophical assumptions of each altered the utilization of methods, methodology, and purpose (Mertens & Wilson, 2012). The research process starts at the ontology of the researcher when they ask, "What's out there to know?" (Grix, 2002, p. 180). It continues with the researcher's epistemology, which dictates how they approach the question, "What and how can we know it?" (Grix, 2002, p. 180). Both the ontology and epistemology of the researcher influences the approach to the methodology when they ask, "How can we go about acquiring that knowledge?" (Grix, 2002, p. 180). The methods are dictated when deciding, "Which precise procedures can we use to acquire it?" (Grix, 2002, p. 180). The question "Which data can we collect?" (Grix, 2002, p.180) then illuminates the source of data collected.

Methods are often regarded by researchers as being free of ontological and epistemological assumptions (Grix, 2002). The choice of method should be guided by the research question (Mertens & Wilson, 2012). However, certain methods are inextricably bound to certain ontological and epistemological assumptions. It is the researcher's approach to and use of a specific method that brings a particular set of ontological assumptions to the method. "It is not the method that approaches scholarship with pre-existing baggage, but rather the researcher" (Grix, 2002, p. 180–181). It is impossible to engage in any form of research without committing, often quite implicitly, to ontological and epistemological positions (Scotland, 2012).

Humans performing research have history and experiences, and they cannot remove themselves from that. Acknowledging their approach to reality (ontology) and knowledge (epistemology) allows the research to be informed by the knowledge creation process, as well as the created knowledge. Differing starting points of research result in different research strategies. This approach distinctly shapes the research design, the methodology, and the methods utilized. Even if a postpositivist utilizes a qualitative approach, their aims for the research question might still be quite deductive. An interpretivist may use a quantitative approach to understand the correlation of two variables, while acknowledging that they have discovered only one aspect of the problem. Finally, a critical paradigm researcher may approach both quantitative or qualitative methods with a sensitivity that the methodology and the researchers can limit power or can be emancipatory and take care to design the process to support that endeavor.

Researcher's Ontology

An individual's ontological position is their answer to the question: What is the nature of the social and political reality to be investigated? (Hay, 2002). I view the world as a multiplicity of personal experiences that have been formed in the context of society, and I believe that a person has motivations and desires that react and interact with society and experiences—both lived and observed. This is a relativist view of ontology. Relativism is the doctrine that knowledge, truth, and morality exist in relation to culture, society, or historical context and is not absolute (Bloor, 2011).

My ontology is rooted in constructivism, which is the ontological position that asserts that social phenomena and their meanings are continually being accomplished by social actors (Blaikie, 2000). It implies that social phenomena and categories are not only produced through social interaction but that they are in a constant state of revision (Bryman, 2001). Packer and Goicoechea (2000) connected the fundamental epistemological and ontological assumptions of constructivism to the sociocultural perspective. They articulated that the ontological assumptions that underpin both are: "(a) the person is constructed, (b) in a social context, (c) formed through practical activity, (d) and formed in relationships of desire and recognition, (e) that can split the person, and (f) motivating the search for identity" (Packer & Goicoechea, 2000, p. 228). This is the framework for my own ontology.

Researcher's Epistemology

I am a social constructivist. My epistemology, an expression of my relativist ontology, is squarely in the interpretivist paradigm and can overlap into the critical paradigm. Interpretivism is predicated upon the view that a strategy is required that respects the differences between people and the objects of the natural sciences and therefore "requires the social scientist to grasp the subjective meaning of social action" (Bryman as cited in Grix, 2004, p. 64). This epistemology is internally constructed, which is demonstrable of subjectivism. I, however, do not subscribe to a critical perspective as I do not feel that all research can, will, or should change or alter society or challenge power structures.

A social constructivist seeks to understand the world in which they live. They develop subjective meanings from the experiences that they have and these meanings are directed toward objects or things. I believe that institutional structures and governance matter for the existence, maintenance, and creation of social capital. I also believe that social capital is the transaction between individuals and their society, which influences how they understand the world. Additionally, I believe that not all social phenomena are observable; there are structures in existence that cannot be observed. Additionally, those observable structures may not actually present the social and political world as it actually is (Gill, 1993; Grix, 2002).

For a social constructivist, individual experience plays an essential role in the perception of reality and knowledge. My own personal experience influences the way that I see the world. I recognize that in some instances there are knowable Truths, but I also recognize that most truths are held in the eye of the beholder. My truth, my reality, is not the same truth as anyone else. Additionally, I do not believe that perspective is bound by belonging to a group; rather the experiences that society affords that group influences the perspective of the members. Even within a group there is a pluralistic construction of experience and perspective. I believe this recognition of heterogeneity within groups prevents me from subscribing to a fully critical paradigm, because I can't act on the behest of any given group, because it may not benefit the whole group.

Reflexivity

I am a passionate believer in the potential transformative power of the Extension system and the 4-H Youth Development program in particular. This passion is informed by a life-long relationship with Cooperative Extension and 4-H. I am an alumni of the New York 4-H program. I joined 4-H as a preteen because I was completely obsessed with farm animals and 4-H was an organization for youth who were also excited about working with livestock. However, my involvement with 4-H was wide-ranging. My many experiences and the relationships that the organization fostered were formative to the type and kind of person that I am today. I attribute my own personal development to this organization, after being an active member from ages 12 to 18.

Additionally, I was employed by University of Missouri Extension for six years as a Regional 4-H Youth Development Specialist and County Program Director. During my tenure, I was challenged with the results of the 2008 national economic crisis, which put pressure on the county commissioners to reduce the county budget. After elections and a new set of commissioners, I experienced a firmly neoliberal frame that said: We see what you do, we value what Extension does, and you need to find new sources of funding to continue to provide the services we and your community value; and if the community does value this public good, they will support you. This resulted in stagnate county budgets, and in actuality a budget decrease because the office lost subsidized office space at the same time. This process was formative in my own leadership and management skills. Yet, it also framed my interest in understanding how organizations should respond to these types of technical and adaptive challenges.

I understand that the Extension system is not perfect and is not always as effective as it can or should be. I recognize that in its best form it is able to support transformative education that has had and can have profound impacts on communities. During my time in Missouri, I experienced several instances where I realized Extension was not always effectively meeting its mission and presented systematic barriers for new audiences. I proposed starting an in-school 4-H Club with an area alternative school, which was for youth that were at risk of not graduating from high school. These were the individuals who desperately need 4-H programming to help them engage with the world in positive and constructive ways. I had staff reporting to me who were afraid of these students. Comments were made regarding these youth, saying they were not "good 4-H kids," rather that they were "troublemakers." I heard similar comments from individuals at the county level of the organization that supported this sentiment. At the same time, I heard praise from administrators for doing this type of work. I felt that Extension staff need to do the work to reflect whom they want to be serving.

My life has been framed by Cooperative Extension. I was shaped by it. I have dedicated blood, sweat, and tears—figuratively and literally—to Extension. I believe that it is essential for the 21st century. I also recognize that it is an organization that has room to grow and expand so that it stays relevant. I want to be a part of that change process. In order to address that change process we need to understand the challenges we face and how administrators are conceptualizing these challenges.

The researcher is the human instrument, therefore researchers are encouraged to be self-critical of their analytical process (Lincoln & Guba, 1985). In order to account for the biases and influencing experiences, both the internal and external dialogue (Tobin & Begley, 2004), I reflected on my analysis and labeled my biases within my data analysis process. Lincoln and Guba (1985) suggested the use of a reflexivity journal to record the researcher's personal reflections on their values and insights about their self. I used regular memo's and notes in the research journal. I returned to the data's meaning, when I found myself inserting my personal experience which was exposed through this reflective process.

Qualitative Inquiry

Qualitative methods rely on text and image data, using specific data analysis steps and systematic strategies to make meaning (Creswell, 2014). The researcher is the key analysis instrument (Corbin & Strauss, 2008). Multiple forms of data, such as observations, interviews, documents, and audiovisual information are used to inform researchers' sense making (Creswell, 2014). Researchers sort data that cut across all of the sources into categories, also known as themes (Creswell, 2014; Flick, 2006). Qualitative researchers build their patterns, categories, and themes from the bottom up by organizing the data into increasingly more abstract units of information (Charmaz, 2014). Throughout this iterative and deductive process, the qualitative researcher keeps the focus on learning the participant's intended meaning as it pertains to the phenomena at the root of the research question (Creswell, 2014).

The qualitative research process by definition is emergent (Flick, 2006). The initial plan for research cannot be tightly prescribed, and processes may shift or change once the qualitative researcher begins the data-collection process. The important component for the investigator is to keep the research objective in mind, which is to learn about the participants' understanding of the phenomena (Charmaz, 2014; Creswell, 2014). Because the researcher is the analysis instrument in qualitative research, it is important to recognize that their own personal background, culture, and experiences may shape their interpretations; this process of consciousness and reflection is called *reflexivity* (Creswell, 2014). Having a clear research plan as well as approaching the study reflexively contributes to qualitative validity, which is accuracy between the study's findings and the participant's meaning (Creswell, 2014).

Internal Review Board (IRB)

An application for the Virginia Tech Internal Review Board (IRB) was prepared and submitted by the researcher. Approval from IRB was received before any data collection commenced. All participants were asked for informed consent to participate in this research. Consent was sought from participants by collecting a participant's signature on a scanned consent form that was approved by the IRB review committee. The researcher provided the consent form with the first and subsequent recruitment contact e-mails, as well as with the confirmation of an interview, if the participant had not previously provided a signed consent. Finally, the consent form was reviewed before beginning the semi-standardized interviews and before recording the interview. The researcher offered no compensation for participation in the study.

Population

The 1862 LGU directors of Extension, which includes state Extension directors and 4-H program leaders, are the study's population. A purposeful population, also known as a theoretical sample as defined by Corbin and Strauss (2008), is a sample selected based on "persons, sites, or events where he or she purposefully can gather data related to categories, their properties, and dimensions" (p. 153). The 1862 LGU directors of Extension have been included because they are providing leadership to their entire organizations. The 1862 LGU 4-H program leaders were selected to provide insight on the leadership approach for Extension from the program administration level, as well as to provide triangulation to the state director perspective of organization adaptation. The 4-H program is the most recognized emblem and component of the Cooperative Extension system (Astroth, 2009). Additionally, the 4-H program comes with core program elements that were established from its inception, such as traditional 4-H clubs, but has adapted not only content but also delivery models. Participation in the 4-H youth development program can be passed from generation to generation, meaning that there can be a propensity for members to be children of alumni (Norrell-Aitch, 2015). The experiences of legacy youth members and first-generation youth are different, and the lack of organizational support can influence those two groups of members' experiences (Norrell-Aitch, 2015). Therefore, the decisions today by administrators that affect who is served may influence the organization long into the future. The 4-H Youth Development program's continuity, adaptation, and generational influence make this Extension program area interesting for exploration.

The individuals who serve as the directors of 1862 LGU Extension programs have a wide range of titles, holding many different academic roles within their respective universities. In function, they have similar programmatic responsibilities: providing leadership to the state Extension program. State Extension directors are the individuals who are concerned with the overall vision, mission, and organizational direction. Responsibilities include responding to financial cuts, liaising with legislators and other stakeholders, and making human resource decisions (Beattie, 1983). Of the five program areas in the core Extension mission, 4-H program is the most uniform across the country, having consistent program delivery models and nationally directed mission mandates—civic engagement, STEM, and healthy living (USDA-NIFA, n.d.). Additionally, 4-H has a unique and significant place in Extension, as it is the most visible program brand (Astroth, 2007). These 4-H program leaders provide a lens for the researcher to illuminate how systematic decisions have programmatic implications that inform leader conceptualization of the problems. For example, are Extension leaders at the apex of the organization recognizing the same problems; and if not, how are there mismatches? Yukl and Mahson (2010) identified that managers at different levels have different perspectives, values, and considerations in the problem identification process. Including state Extension directors and state 4-H program leaders in this study provides trustworthiness in understanding Extension administrator's organizational strategy, while also exposing the differences in considerations by individuals at the differing organizational levels.

Recruitment

State Extension programs are designated into four administrative regions: North Central, Northeast, Southern, and Western. The researcher aimed to recruit four individuals—both Extension directors and 4-H program leaders—from each region to ensure geographically diverse representation in the participants. Additionally, the researcher aimed to include two state directors and two 4-H program leaders per region, with a preference for matching both Extension director and 4-H program leader from the same state. Recruiting from all four regions was done in an effort to ensure organizational structure diversity was incorporated among the interviewees because multiple states are represented. This allowed for regional context to be included in the study. The four Association of Public and Land-Grant Universities (APLU) Administrative Regions regions and the respective 1862 LGU members are members are shared in Table 3.1.

Table 3.1

Association of Public and Land-Grant Universities Administrative Region Members

Region	States	Institutions
North Central	Illinois	University of Illinois
	Indiana	Purdue University
	Iowa	Iowa State University
	Kansas	Kansas State University
	Michigan*	Michigan State University
	Minnesota	University of Minnesota
	Missouri	University of Missouri
	North Dakota	North Dakota State University
	Nebraska	University of Nebraska
	Ohio	The Ohio State University
	South Dakota	South Dakota State University
	Wisconsin	University of Wisconsin
Northeast	Connecticut	University of Connecticut
	District of Columbia (D.C.)	University of District of Columbia
	Massachusetts	University of Massachusetts
	Maryland	University of Maryland
	Maine	The University of Maine
	New Hampshire	University of New Hampshire
	New Jersey	Rutgers, The State University of New Jersey
	New York	Cornell University
	Pennsylvania	The Pennsylvania State University
	Rhode Island	The University of Rhode Island
	Vermont	The University of Vermont
	West Virginia	West Virginia State University

Table 3.1 (continued)

Southern	Alabama	Auburn University
	Arkansas	University of Arkansas
	Florida	University of Florida
	Georgia	The University of Georgia
	Kentucky	University of Kentucky
	Louisiana	Louisiana State University
	Mississippi	Mississippi State University
	North Carolina	North Carolina State University
	Oklahoma	Oklahoma State University
	Puerto Rico#	University of Puerto Rico
	South Carolina	Clemson University
	Tennessee	The University of Tennessee
	Texas	Texas A&M University
	Virginia	Virginia Tech
	Virgin Islands#	University of the Virgin Islands
Western	Alaska*	University of Alaska- Fairbanks
	American Samoa#	American Samoa Community College
	Arizona*	University of Arizona
	California	University of California
	Colorado	Colorado State University
	Micronesia, The Federated States of#	College of Micronesia
	Guam#	University of Guam
	Hawaii	University of Hawaii
	Idaho	University of Idaho
	Northern Mariana Islands, Commonwealth of the#	Northern Marianas College
	Montana	Montana State University
	New Mexico	New Mexico State University
	Nevada	University of Nevada
	Oregon	Oregon State University
	Utah	Utah State University
	Washington	Washington State University
	Wyoming	University of Wyoming

* Denotes a state that had a vacancy posted for their State 4-H Program Leader at the time of study recruitment.
# Denotes territories and institutions that were not included in the recruitment process for this study.

An IRB-approved recruitment e-mail was sent to all of the 1862 Extension administrators (N=51) and state 4-H program leaders (N=48). The number of state 4-H program leaders is reduced because there were three vacancies identified (see Table 3.1). The communication that both 1862 Extension administrators and 4-H program leaders received requested that both individuals in a state volunteer to participate in the study (Appendix B). The both the original recruitment e-mail and the follow-up scheduling e-mail included the IRB-approved consent form. The follow-up scheduling e-mail requested participants to complete a SWOT analysis worksheet (Appendix C).

Participants were asked to respond directly to the researcher in order to express their interest in participating in the study. The recruitment e-mail contained an explanation that coordination between the two roles (State Extension Directors and State 4-H Program Leaders) was not required. The e-mail also shared that participation in the study was on a first-come, first-served basis.

All individuals who volunteered were included in the study. Once a prospective study participant responded that they were willing to participate in the study, they were asked to schedule an interview time. Once the time was scheduled, a Zoom invite was sent directly to the participant.

In order to ensure demographic diversity in the participants, the researcher sent a second recruitment e-mail to the identified populations in regions that did not have representative participation. The researcher made recruitment phone calls when the two e-mail recruitment outreach was not enough. The researcher called administrators in alphabetical order by state name. Every effort was made to gain participation from each of the regions and levels of leadership. After both recruitment e-mails and phone calls, the use of snowball sampling was used— that is, the researcher asked current participants if they were able to encourage someone in their own region to participate.

All individuals who expressed interest in the study and scheduled an interview were included in the study; no participants who stated their willingness to participate were excluded. As an interesting note, the researcher did receive seven communications from individuals apologizing that they would not be participating due to their busy schedules. Four individuals offered to participate in the study and then did not provide a signed informed-consent form nor responded to requests to schedule interviews.

Participants

The study is designed to have a minimum of 16 administrators participate in the study. Table 3.2 outlines the different sources of data and the number of participants from each group that the researcher projected.

Table 3. 2

Proposed Study Data Sources

	Interviews (N=16)
State Extension Directors	Minimum n=8
4-H Program Leaders	Minimum n=8

While the study was designed to have equal participation, participation is voluntary and therefore reflects self-selection into the study. Table 3.3 shows the actual sources of data for this study.

Table 3.3

Actual Study Data Sources

	Interviews (N=20)
State Extension Directors	Actual n=7
4-H Program Leaders	Actual n=13

Table 3.4 conveys the overall participation in the study. Participants represent all four of the APLU regions. Five of the 15 states had both the state Extension director and the state 4-H program leader participate.

Table 3.4

Study Participants by APLU Region and Administrative Role

APLU Region	Administrative Role	Number
North Central	State Extension Directors	2
	State 4-H Program Leaders	3
Northeast	State Extension Directors	0
	State 4-H Program Leaders	4
Southern	State Extension Directors	3
	State 4-H Program Leaders	3
Western	State Extension Directors	2
	State 4-H Program Leaders	3
Totals	State Extension Directors	7
	State 4-H Program Leaders	13

Table 3.5 relays the demographic information of the study participants. In order to allow for anonymity in this small population, this information is relayed collectively rather than by region.

Table 3.5

Participating Extension Administrator Demographic Information

Category	Options*	State Extension Director	State 4-H Program Leader	Total
Gender	Male	5	6	11
	Female	2	7	9
Age	18-29	0	0	0
	30-49	0	5	5
	50-64	5	7	12
	65+	2	1	3

Table 3.5 (continued)

Race/Ethnicity	White & Non-Hispanic	7	12	19
	Hispanic	0	0	0
	Black	0	1	1
Years of Extension Employment	0-10	1	2	2
	11-20	2	7	9
	21-30	2	3	5
	31+	2	2	4
Highest Degree Level Earned	Bachelors	0	0	0
	Masters	0	1	1
	Doctorate	7	12	19
University Title Level#	Director	2	11	13
	Department Head	0	1	1
	Dean	4	1	5
	Chancellor	1	0	1

*The demographics survey was all open-ended; the options relayed in this table represent the qualitative responses that they provided.
Demographic survey results were coded into these respective categories. Assistant, Associate, or Vice prefixes were all coded into the broad categories of the role's title.

Interviews

Semi-standardized interviews were used as the data collection technique for this study. Scheele and Groeben (1988), as relayed by Flick (2006), suggest a specific elaboration of the semis-structured interview to reconstruct subjective theories. The term "subjective theory" refers to the fact that the interviewees have a complex stock of knowledge about the topic under study (Flick, 2006). In order for actors—study participants—to articulate their subjective theories, comprised of implicit assumptions, different methodological aids can be applied. Semi-structured interviews were selected as the method of inquiry by the researcher. The semi-structured interview is an inquiry method that combines predetermined set of open questions—questions that prompt discussion—with the opportunity for the interviewer to explore a particular response further (Charmaz, 2014). In addition to the interviewer being able to explore emergent themes during the interviews, the interview protocols can be adapted based on the open-coding process in order to explore emerging themes, to gain clarity of arising questions, to expose unique perspectives, and to seek saturation (Charmaz, 2014).

The researcher conducted a review of the literature that resulted in the development of an *a priori* table for this study (Appendix A). An a priori table is a visual representation of the rational intuitions and insights that a researcher has on the research (Charmaz, 2014; Creswell, 2014). From reviewing the literature, the researcher connected concepts and research questions together to ensure the questions and concepts were rationally situated in the literature. Semi-structured interview questions were developed from the research questions. The interview protocol was revised throughout data collection and analysis to explore emergent themes from the data (Rossman & Rallis, 2012). The final interview protocol is included in Appendix B.

Due to the distance to the Extension administrators, interviews needed to be conducted via virtual video conference interview. Virtual video conference interviews were audio recorded. Interviews were conducted by using Zoom video teleconferences. The interviews were designed to last approximately 60 to 75 minutes. Interviews actually ranged in length from 44 to 114 minutes. Average interview length was 83 minutes. Analytical memos were drafted after each interview. Analytical memos are used for the researcher to reflect on the interview in its entirety and is one of the first steps in the researcher's meaning-making process (Charmaz, 2014).

Data Preparation

All audio recordings were transcribed verbatim. The researcher utilized an electronic transcription service, Temi.com, to complete the initial transcription. The researcher reviewed and corrected the initial transcript while listening to the audio recording to ensure accuracy of the transcript. Once the transcript's accuracy was confirmed by the researcher, the transcript of the semi-structured interview was returned to the study participants for member checking (Creswell, 2014; Flick, 2006). Member checking is a reliability strategy in qualitative research (Creswell & Poth, 2017).

The researcher prepared all transcripts for data analysis. All documents were blinded, meaning that identifying information was removed to protect the study participants. Pseudonyms were assigned by the researcher to protect participant identity. State names were removed from all published transcripts. People mentioned in the interview who are not the participants were blinded with their position title.

To ensure confidentiality, data were stored on the researcher's password-protected laptop, saved in a password-protected Virginia Tech Google Drive folder, and in ATLAS.ti on the researcher's computer. The blinded data was reviewed by the researcher and the dissertation committee, as they required. Upon the completion of data analysis and publication, all un-masked materials will be destroyed.

Data Analysis

To answer research question one, "What environmental factors do Extension administrators perceive as being challenges for their Extension organization and the 4-H program?*"* is best exposed using a qualitative descriptive methodology (Lambert & Lambert, 2012). This data was analyzed using open codes. Open coding is a systematic process of labeling concepts and defining and developing categories based on their properties and dimensions without predefinition (Charmaz, 2014). The data were open-coded using the qualitative data analysis software ATLAS.ti, allowing for adaptation and clarification of code definitions. The researcher developed a code book in ATLAS.ti from the open-coding process. To ensure that code meanings did not alter without clear documentation the researcher created definitions as the codes were written. Additionally, analytical memos were written throughout the coding process to inform the thematic development process (Corbin & Strauss, 2008). Upon completing open coding of the interviews, themes were developed by the researcher.

The answers to research question two, “What behaviors have Extension administrators utilized to respond to the organizational challenges that they face?,” and research question three, “What are recommendations for environmental factor response by Extension and 4-H administrators at the state-system level?,” are best exposed using the early-stage components from the grounded-theory approach to data analysis (Charmaz, 2014). Grounded theory, while a methodology, is also a systematic method for qualitative research. The researcher modeled the data-analysis process for questions two and three from the initial steps in the grounded-theory method. Charmaz (2014) expects that the researcher is grounded in the literature well enough to be able to give boundaries to the phenomena that the researcher seeks to explore. The researcher therefore conducted initial open coding for these two research questions informed by the literature and targeted codes around the literature. All data were open-coded. Initial memos were then used to raise codes to tentative categories (Charmaz, 2014). Advanced memos were used to refine conceptual categories into themes and categories. All themes were reviewed by an experienced researcher, providing an audit of the meaning making process (Koch, 1994).

Validity

Ary et al. (2010) defines validity as the extent to which a measure actually taps the underlying concept that it purports to measure. Validity is a terminology rooted in quantitative research, and this study uses a qualitative approach. Reliability, trustworthiness, and rigor are more relevant terminology for this study. In order to achieve reliability, defined as dependability and objectivity as conformability, Stake (1995) urges a triangulation approach in order to strengthen this qualitative measure. Triangulation is when multiple sources and perspectives of data all provide a perspective on the same phenomena (Corbin & Strauss, 2008; Stake, 1995).

The systematic data collection in this research design provides for reliability in this study (Yin, 2003; Stake, 1995). The use of member checking with the transcript and developed themes supports reliability and trustworthiness of the study's results (Creswell & Poth, 2017). The multiple lenses and approaches to the question allow for a fuller picture of the phenomena to be illuminated (Yin, 2003). Multiple perspectives in the data from two different populations, Extension directors and 4-H program leaders, provide triangulation (Corbin & Strauss, 2008). A panel of experts and in-depth review of the literature was used to refine the semi-structured interview questions (Ary et al., 2010; Stake, 1995). Additionally, member checking, clarification (Flick, 2006) and continual refinement of the questions, and outside review by an experienced researcher (Koch, 1994) improves the trustworthiness of study.

Limitations

This research project is limited because the change process is temporal and the research process is static (Corbin & Strauss, 2008). Research is only able to illuminate one moment in time or construct the past occurrences through the lens of the experiences of the actors up to that moment (Stake, 1995; Yin, 2003). This study is not designed as a comparative case study of organizations; rather, it is to assess individual actors' perspectives on their own similar organizations.

Reader's should be aware that each APLU administrative region had different levels of study participation, despite efforts to recruit equally. While there was balanced participation across three regions, there was no State Extension Director participation in the Eastern region thus responses cannot portray concerns in all four regions representatively. As with all qualitative research, the reader needs to assess the results and recognize how this data can be relayed and transferred to other cases.

Chapter Four: Results

Twenty administrators shared their perspectives on the Extension system. In this chapter the results are presented by research question. Quotes are relayed using the following pseudonyms. As mentioned in Chapter three, the individuals have been disconnected from other identifying characteristics because of the sensitive nature of the questions and the small number of individuals in the population. Table 6 relays the pseudonym and the region the person is from.

Table 4.1

Participant Pseudonyms

Role in the Organization	Pseudonym	Region
State Extension Directors	Nancy	North Central
	Joseph	North Central
	Carolyn	Southern
	Brian	Southern
	Timothy	Southern
	William	Western
	Sam	Western
4-H Program Leaders	Rhonda	North Central
	Elizabeth	North Central
	Sarah	North Central
	Curt	Northeast
	Callie	Northeast
	Ryan	Northeast
	David	Northeast
	Alfred	Southern

Table 4.1 (continued)

	James	Southern
	Mary	Southern
	Susan	Western
	Karen	Western
	Robert	Western

These twenty administrators from across the country shared the challenges of both Cooperative Extension and the 4-H program.

Within this chapter the results are relayed by research question (Figure 4.1) starting with specific environmental factors that administrators identified. The challenges that administrators have identified reflect long- standing environmental factor changes.

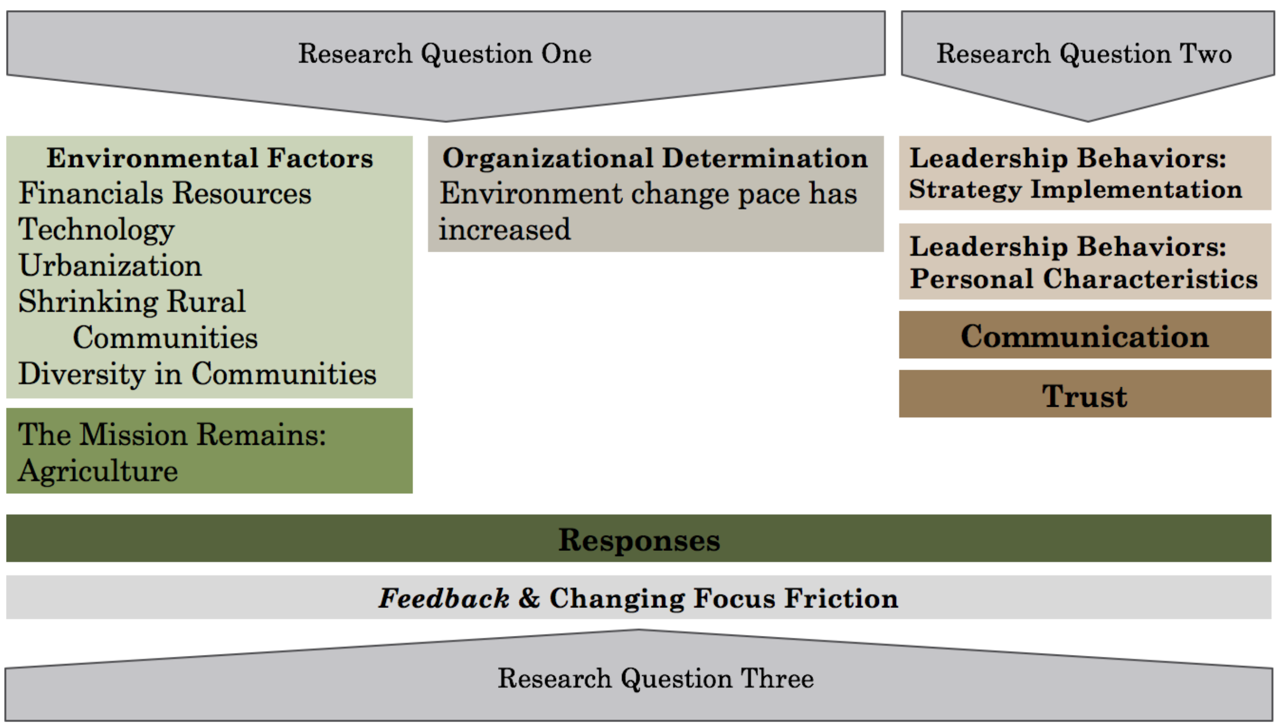

Figure 4.1. Study Results Overview with Research Question

While relaying those specific environmental factors the current response, desired approaches, and needs are relayed. The results for research question three are embedded within the discussion of specific environmental factors. Research question two in regard to administrator leadership behaviors are relayed at the end of the chapter. These characteristics could be broken into two categories: behaviors and characteristics. Each of these were underpinned by trust and communication. Communication and trust stood out as important elements.

Environmental Factors

Administrators recognized key challenges: the nature of financial resources at the federal, state, and local levels; figuring out the appropriate use of technology in conducting Extension work; and the impact that urbanization and then the resulting shrinking rural communities pose for Extension. Additionally, administrators recognize the challenges faced by the increasing diversity in both rural and urban communities. Throughout the discussion of the challenges by administrators, they consistently-to a person, saw the importance to remain focused on delivering agricultural education; however, there was a reframing of agriculture as focusing on not only production but also food, and then in turn health. Administrators recognized diversity and increased competition as challenges that are causing a the 4-H delivery model to be assessed.

Financial Resources. Money is the primary enabling resource for the system. Nancy shared:

> ...People realize that research costs money, you have to have labs and [you] need to have students and you know it costs money. People just think that Extension just happens, that people just go out there and do [it]. [University] administrators don't quite know how to fund it because they can't see how you do that. They just think a person goes out and does an educational event.

Participants in this study identified a reduction of financial support as the most significant crisis for the Extension system. The reduction in financial resources to the system was the number one factor identified as a crisis, being the open code with greatest number of data associated with it. Additionally, a reduction of resources was identified as inevitable and cyclical. Carolyn, an Extension director from a state that is currently in a strong financial position, stated, "I'm sure that if I stay in this job long enough, I'll be in a position of [dealing with] a negative budget situation." This statement was made in recognition of the ebb and flow of finances as well as a deep appreciation for her organization's current level of resources.

William put it succinctly when discussing how decisions are made about how dollars are spent: "We only have so many dollars." Administrators relayed their concerns about reduced dollars in the system because this reduction directly affects the services and programming provided by Extension. Reductions challenge the delivery of already existing programs, and further reductions of financial support would prevent administrators from being able to actively engage new programming.

Practically speaking, downward pressure on funding has and continues to reduce the number of people to do the work. Extension is based on people delivering direct education. Thus, the reduction in people because of the budget funding limits the ability to continue to deliver this local programming. A recognition of financial reduction as a crisis was relayed at all levels: federal, state, and county. Each level of financial support—federal, state, county—was influenced by different trends, impacts, and responses for administrators.

Federal. Federal contributions to the budget come from legislatively granted and competitively awarded funding streams. The Smith-Lever Act Capacity Grant (Smith-Lever), which in the administrators' vernacular was often referred to as "capacity funding," is legislatively granted. As examples of federal competitively awarded funding, administrators offered up the Children, Youth, and Families at Risk (CYFAR) Sustainable Community Projects and the Tribal Extension Grant Program. Administrators identified capacity federal funding as the foundation for the funding partnership. Of the federal dollars available, Smith-Lever funding is considered to be most valuable. As Joseph stated,

> I think the ultimate crisis for Extension in this country, not just here [in this state], will be the moment when the federal funds, if there was decision at that level, [are] not invested in Extension with Smith-Lever. I think if that were to ever happen, that would be a critical moment.

It would be a critical moment because Smith-Lever funds, even at flat funding levels, which translates to shrinking levels due to inflation, provides flexible base support that allows for matching funding from state, county, and grants.

Administrators relayed that Smith-Lever funds have been at flat funding levels. The consensus of administrators supported what Sam mused, “I don’t see any huge influx of new dollars.” Due to the essential nature of this funding source, William emphatically stated that “we need to be focused on developing capacity funding. That’s the message everyone should be having.” While administrators did not see the possibility of positive upward movement in Smith-Lever funds, it was the area that they most wished would increase.

While the flat level of capacity funding was front and center for administrators, a couple of other trends stood out. Numerous administrators talked about the expanded opportunities to find federal funding partners across the government. There was mixed feedback about the availability of competitive grant dollars. Several talked about the “vast” opportunities for federal grant funding, and others lamented the shrinking availability of competitive dollars. This disparity was related to how they perceived their potential grant pool—those who thought more broadly of federal partners saw the opportunities wide open, while those who were looking for historic grants within USDA-NIFA saw shrinking possibilities.

State. It will come as no surprise that administrators' perspective on their respective state was based on the unique state's economy, politics, and culture. For example, Sam relayed the context of his state by saying,

> Basically, we're an oil and gas state, and the oil prices . . . are starting to climb back up [but] nobody has that magic ball and [can] look at what's going to be in the next five to six years. But most of the indicators [are] looking like we've been through the worst of the recession for [our state]; it'll probably be steadier, slightly increased over the next number of years, based on the oil and gas revenue for the state.

In addition to the societal aspects of the state, every state's model of funding is unique, as Callie said: Extension "[is] a hundred variations on a theme." Each state's funding expectations between state and county legislators are unique.

At the state level, relationships of administrators to their state legislature are recognized as being incredibly important because of the significant financial contributions of the legislature. "We engage [with] our legislature a lot because 42 percent of our funding comes from the legislature; [it's] the way we fund our program," stated Nancy. Sam said, "The state legislature certainly has influence. Eighty percent of our budget comes from the [state legislature] in the [state], so [if] they have concerns or certain needs, that is something that we need to take very seriously." The fear of losing financial support from the state was ever present. As noted by Sam, the legislature is also invested in Extension's programming efforts and therefore the relationships are important to communicate what the Extension program is doing.

Sam recognized that the conversation goes in both directions. It is important to communicate outcomes but also to learn what the state legislature is interested in. Regular contact with the legislature was viewed as a way to help monitor concerns and to attempt to grow financial support. Timothy shared:

> I worry about . . . the trajectory of [state funding,] and part of what I'm trying to focus on is how we can have an impact on how our legislature thinks and how we can drum up support.

He is relaying that he is strategically working with the legislature to increase funding. Carolyn said that in order to be successful in receiving money from the state legislature,

> Hopefully I will be smart enough to not go to the state legislature and ask them for a type of position that they would never dream of funding. I need to be politically savvy enough to, you know . . . make a list of what I want the state legislature to fund.

Clearly communicating the outcomes of Extension and matching that with an understanding of the concerns of the state legislature was viewed as a successful strategy.

Most administrators shared that they had heard about the challenges that "other" states had experienced of budget cuts resulting from the state's legislature slashing budgets. Yet one Extension Director was currently experiencing a budget cut. William is in an energy-dependent state, and the state organization experienced a significant financial reduction from the state legislature. He shared that, even with relationships, the state budget was cut:

> [The State Legislature] just cut; you know, it's a straight cut [across all agencies]. If you try to engage our state legislators in funding the program of Extension, in my case, they will automatically tell you that . . . "we give the University, we give the board of regents

> plenty of money. It's up to them to allocate it." So . . . I can line up a thousand of our clientele to testify on our behalf, but the answer will always come back . . . the same.

Even for currently well-resourced states, this was a problem they would like to avoid. One such Extension director, Timothy, shared this:

> I'm trying to focus on how we can have an impact on how our legislature thinks and how we can drum up support . . . to be able to have a stronger future. A part of this involves the whole idea of capacity money versus competitive money. And, I think, on the research, you know, we've got obviously a lot of opportunities to bring in competitive money, but what people sometimes forget, especially on the ag side, is that capacity money, whether it's coming from the state or the federal government, is what's funding the faculty. It's funding those faculty positions. The competitive money allows you to bring in the graduate students and the postdocs and to be able to actually do all the extra things.

Timothy highlights the important role that the legislature has on the future of Extension. Relationships are important for gaining support. Additionally, Timothy underscores the importance of federal funding to state funding and of both to the organization as a whole.

As is noted by the quotes above, the budget composition ranges. It was noteworthy that the states that have a version of legislation that requires county input or allows for direct tax levy are the most well-resourced, meaning that the administrators talked less or very little about being limited in their ability to fund programming or to provide programming. All of the state-specific funding legislation has been in place for many decades, meaning that all of the administrators inherited organizations that had responded to this model.

County. Administrators recognized the constant shifting status of financial support from counties. As with states, each county has its own economy, culture, and politics—multiply that by the number of counties in each state, and therefore, relationships with county officials were noted as important.

Administrators emphasized that retaining funding at the county level was a constant battle. One state that has recently experienced a state-level financial decrease has reorganized their county-level field staff to have a person who is responsible for developing relationships with the county elected officials. Joseph spoke of the goal and the reasoning behind it, when he said this:

> I see an opportunity to get more funds from the counties. Right now, the counties put in about $6 to $7 million a year. I truly believe that number could get to $15 to $20 million a year if we do it right, because they'll see a need to . . . be more invested in what we do.

The administrator in this case is relying on relationships to expand the grassroots input to the budget.

In this state, the administrator saw an opportunity at the county level. Other administrators had mixed perspectives on county funding. Some recognized that Extension is a significant portion of county government budgets in rural counties. Others see successes that have occurred in receiving funding from urban communities because Extension is a small expenditure. Carolyn relayed both thoughts when she said, "In a small, rural county, Extension might be 15 percent of their budget. Whereas if you look at [an] urban county, it's not even 1 percent." The difference in capacity contributes to the constantly shifting financial status of each county and the challenge that county funding provides for the system.

Change in public value. Throughout the discussions about funding from the federal, state, and county level administrators, it was revealed that there is a change in how public services are valued. The administrators have experienced the downward shift of resources; and in many ways, they have accepted that the downward shift will continue. In response to this reduction of public financial support, they have turned toward a wide array of other funding streams: competitive grants and contracts, fundraising, and fees.

Administrators recognized a societal shift in how the public values Extension through the downward pressure on public funding. The pressure on funding has coincided with multidecade reduction in public support for higher education. Joseph recognized the shift as “the shaking [up] of state budgets, the public’s questioning of the value of higher education in many sectors of the country, has put pressure on the way we do things.” The use of “public” in the administrator’s comments refers to the state’s legislature’s language, so it’s a political discourse that has had real pressure on the reduction of budgets. Timothy framed it existentially when he said this:

> There’s just a lot of conversation about what the future’s going to hold and whether or not we’re going to have all the opportunities that we have now, going forward 10 or 20 or 50 or 100 years. And I think that’s the biggest piece I worry about. I think that within our organizations we’ve got great people. We can make a lot of great decisions. We can move forward, but we heavily rely on the public to fund these institutions.

Timothy recognized the importance of public dollars, that they are shrinking, and that even organizational strategy may not be enough to respond to that trend.

Importance of evidence of Extension benefit. In recognition of the changing contract between legislatures and public service organizations through the shrinking number of public dollars available, it has always been thought that there is a need to communicate research impacts better. Nancy recognized the need for evaluation and for putting resources behind that initiative:

> We invested a number of years ago in program evaluators to really evaluate the work that

> we're doing and so that we can talk about . . . [how] our work makes a difference. This is what's happening from our work. And I think that it's not enough just to tell people that, you know, a million [state residents] went to our programs—big deal. More people went to the state fair last year. So, what does that mean? So, you can't just say millions of people, but what were the outcomes [for] those millions of people. [We also want to make] sure that our supporters are good advocates. . . Your advocates have to be able to say why is it important—this time more likely to graduate from high school [or] two times as likely to pick a science career and go to college. Those are issues legislators want to hear. [Also] 4-Hers are twice as likely to actually come back to [state] [or] are more likely to stay in [state] . . . because they feel this sense of belonging and being part of the economy. And so, you have to really be able to talk about that. Tell that story, tell it yourself—you know, the legislators want to hear it from me, but they also want to hear from other people. So, I think you have to do a lot of those kinds of things to be able to . . . to avert a crisis.

Nancy elaborates that when they were able to communicate specific impacts and outcomes, then the legislature can be responsive. What she also highlights are that the outcomes need to be communicated widely to stakeholders so that those messages are being communicated from multiple directions.

James talked about some 4-H specific measures that he saw as being important to support 4-H program messaging. He shared his approach:

> In the last two years . . . I've worked with our specialists to do some large-scale research projects on [the impact of] Camp, the impact of volunteers, the impact of being a 4-H alumni. Some of those are in progress…[and] those are helping agents to get the bigger

> picture that …having evidence-based information about the impact of our programs is important.

The implications of a young person attending a 4-H camping experience or an adult serving as a 4-H volunteer for 30 years are not simple interpretations. Each of these programs is complex. Curt acknowledged this when he said this:

> The reality [is] you may not see the outcomes of our children's presence and engagement in our program for two or three decades. So, we do draw on common measures as examples. We have a research and evaluation focused group that I've put together [to focus on] demonstrating . . . short-term outputs that then we're able to demonstrate by [using] logic models [of] how that leads theoretically into longer term outcomes and then . . . to the impacts. And so, I believe [in] being very deliberate. Too often we say, "Oh my gosh, we may not know that for 20 years. Well, we have to start now and try to track some of those young people over the course of a 10- to 20-year trajectory. So, you just have to start.

The need for evaluation is emphasized due to its connection to financial strings. Because Extension is a research-based program, those financial strings are causing researchers to focus on the bigger research questions of program outputs, as shown by these quotes.

Greater emphasis on grants and contracts. In order for administrators to locate additional resources other than public support, they have relied heavily on the use of grants and contracts, often referred to as soft dollars. Administrators recognized the use of soft dollars as the new normal and as necessary. The use of grants is recognized as a challenge to remain focused on the organization's mission. Unfortunately, grants are term-limited, creating a discontinuity of service in communities.

Mary shared a common sentiment that “the grant money [is] out there; there are . . . always opportunities to apply for more grants.” David shared that the use of grants is “something that’s going be necessary. We have to have capacity within our programs for looking at competitive funds. No question.” Grants are viewed as an imperfect but almost sure way to increase the financial resources of the organization at both the state-administrative and county-programmatic levels.

However, administrators did not view grants as without fault. Rhonda had an insight into that:

> Competitive funding tends to be very individually focused. Someone has to serve as a principal investigator; you know, that someone is usually a faculty member who is currently evaluated based on their personal portfolio and not necessarily [on] their ability to work with others.

In addition to what Rhonda shared about collaborative teamwork, she also communicated that the evaluation is not based on the final grant outputs and the size of the grant versus the purpose of the work or the effectiveness of the work. Sam shared an anecdote about an on-campus 100-percent appointment Extension specialist in his state who had a multimillion-dollar grant conducting research on an animal that did not live in the state. Even as administrators discussed the emphasis of grant funding, they were sincere in their desire to only seek funding opportunities that would help support the mission. However, they recognized that even when the money was directed toward the mission, there were still shortcomings with grant funding.

Grants by definition are term-limited, in force for a specific amount of time. The use of grants creates challenges to delivering long-term community responsive programming. Curt shared that, because the funding for the state 4-H program is level due to how the state public funding is organized:

> [At] this university, you cannot have permanent positions that are on soft dollars, so the only way for us to grow is by drawing on grants and gifts and those types of things. But regrettably, [that] doesn't create a sustained position for people to feel like they have a career trajectory. They therefore come in, they'll build something up and are very successful, and within 12 months they leave because they're going to a job that has permanent funding and some benefits with it.

In this case, the use of grants is not the only limiting factor, as the university policy of not allowing permanent positions to be funded by soft dollars also hinders the effectiveness of the grant funding. However, in this example, the overarching argument is that the short-term nature of the funding source contributes to inconsistency in staffing and in turn programming. David shared another example about a grant serving at-risk youth in rural and urban communities:

> The challenge on that one is the funding has now been reduced significantly for 4-H . . . across the country . . . creating a lot of anxiety and stress and disappointment. Despite the funding reduction, we are working on capturing the impact of what's been going on so that we can reposition it to other funding sources.

The termination of the grant causes the work to either terminate or change—either way, the service to the end user is interrupted. The change in work in this case was the shift toward evaluation and fund development. David also emphasized the stress that it causes to have to keep finding new and different forms of funding to keep a project going. If the project is not able to be funded, despite the "impact" that the program is able to deliver, it will no longer continue and staff will move on to the next project.

Fees for service. In addition to utilizing soft money, the reduction in public dollars has required administrators to seek yet other strategies to provide programming. The use of fees for programming has been an active strategy, one that has generated financial support for program implementation. Particularly 4-H memberships have served as a model for the use of fees. Elizabeth relayed that in her state:

> A base . . . model is they provide the salary and then we're expected to generate income. So, I [the state 4-H program leader] put an overhead cost on all the programs that we deliver here at the state level, and it gives us excess money to provide for the administrative assistants to do some of the initiatives that we want to do.

Elizabeth's comment relays the logic that fees allow for budget capacity to be able to do the programmatic work.

Despite the ability of fees to generate additional resources, administrators discussed their practical limitations. Susan explained that:

> Historically . . . counties provided facilities [e.g.] space, counties provided the admin[istrative assistant] and the staff member that sat in the county. Over time that has eroded in 4-H. The majority of the staff are funded through [the] program fees that we charge 4-H members in the community program. There are state lines and the division is trying to pull the program staff off the state lines and move them all onto program fees. But I'm telling [the state director's team] that the budget can't sustain and support that. It costs $54 dollars to enroll in 4-H this year and the projections for staff merits and benefits will [make it] go up to $62 dollars over the next eight years.

Susan further explained that because 4-H was able to generate dollars there has been a financial shift of resources slowly and gradually away from 4-H to underwrite other Extension programs.

The ability to generate resources ensured resources for the program holistically. However, it was cautioned that the increase of fees may serve to be a barrier to membership or long-term program sustainability.

Technology. When asked about what trends have you experienced in your career that relate to how clients engage with information, Elizabeth shared a vivid answer that captured many of the thoughts by administrators: While technology is present in the work, technology does not have the same effect as personal education, but it is a delivery mode that should be explored:

> I think technology has always been around. It's been different technology. So . . . I think Extension has a public opportunity and public responsibility to make sure that clients and population stay abreast of . . . our educational programming. We have been trying to test online learning as it relates to 4-H learning opportunities. So as part of a research agenda, I believe that we have an obligation to try new treatments out there and engage people. Technology is always changing. I've been around a long time and so I watched when the first computer come out and thought, "Oh, what are we going to do with that thing?" Computers have gone from the big machine that sat on my desk back in the mid-eighties to this little thing that sits right here. So, it's being aware of all of those trends and [staying focused] on the value in learning.

Elizabeth also recognized the changing nature of technology and highlighted the need for Extension to be working toward the use of technology whether it is effective today or not, because the way of using technology may be different in the future.

Administrators do not fear using technology to do Extension work and have been investing in the use of technology. Rhonda shared that "we've hired an individual who is focused on helping us utilize new technologies in the development of our educational materials. . . you might think podcasts aren't really new, but they're new for us." To the administrators, the threat is not technology but how technology is used. Administrators, particularly those with several decades working in Extension, discussed how technology has changed Extension work. Particularly, the adoption of the computer and then the advent of the Internet, which, administrators recognized, did change the role of the Extension office away from being the place that people call to get a simple query answered, to a place that is called for complex problems and questions that require analysis. The two concerns that administrators consistently reported were, first, a concern that with reduced budgets that there would be growing pressure to deliver educational materials online. And second, there was a fear that Extension would be forced to deliver more and more content electronically or digitally and that they are not doing enough to be responsive in the "technology space." Administrators also were seeking a path forward with a model that was "high tech and high touch."

Pressure toward technology use in response to shrinking budgets. Joseph relayed that during his traveling to the majority of the state's county offices, he was having many strategic conversations. This is what he heard:

> [What] I found was that people yearn for more high touch. You can hear it. They didn't use those terms. Those are my terms, but they [county citizens] had been in situations where, [when a previous administrator] set this thing up in the 60s, you had almost 500 faculty members on the ground across the state. Today we have—on a good day, a perfect day, and everybody shows up and every position is filled—no more than 230 at the maximum. And so how do you do that coverage now with less people. Well, you got to use technology. What I've found was people are willing to use technology for certain

> things; and then there're some things we've got to offset and say we've still got to be high touch.

Joseph was not the only administrator to experience pressure to use technology to be responsive to decreased funding. Sam also shared, "I know we're experiencing pressure . . . [to do] more distance online type training and those types of things." Joseph described in his quote the changing financial situation of the state, which mirrors all of the states interviewed. Over time, the number of on-the-ground staff that the budget is able to support has shrunk at the county level. In response to this change, the need to use more technology in the educational programming model was identified. It was also recognized that education delivered through technology was not the same as face-to-face; many contents require more engagement between the learner and the educator.

Is Extension Falling Short on the Use of Technology? Alfred stated that "while we have embraced technology in many ways, I think there's a lot more we can do to enhance the use of technology to improve our delivery methods. . . [Another] weakness is we don't have enough money to do what we want to do." While Extension administrators are considering how to utilize technology enough, the barrier to do more has often come from limited financial resources.

High tech and high touch. As Joseph relayed in the quote above, there is a mixture of educational strategy that is desired by citizens and that will achieve effective learning. Administrators shared varying perspectives. Sam emphasized that:

> I still think for Extension to work, it's based on relationships, and I still think we need to be sure that we value those one-on-one type of relationships that are built through Cooperative Extension Service, particularly for youth education program. So, I think there's going to need to be a balance there.

Relationship-based means having an in-person relationship or connection between the Extension staff and the learner. Sam reiterates what Elizabeth and Joseph were conveying that in-person relationships are imperative to Extension work because virtual education is not the same.

Alfred shared a description of a virtual education project that he is currently implementing for internal employees:

> We have a program right now that we call "policies, procedures, and protocol," which is about a six-hour training that every new employee has to go through. For the last several years [we've been] trying to figure out how we put those in modules online. The online delivery will be positive, but one of the drawbacks [of] doing it online is that when you're in a classroom with people and a question is asked or clarification [is sought], then you have a richer discussion. [This would be] a place, a setting [where] people begin to understand how to resolve problems and issues particularly, like discipline issues with children, [and] you know, malfeasances with financial management and all those counts. So that interaction is important. With technology you lose some [of those] things. And so how do you come to a balance to make your trainings [are] more successful as you move to [using] more technology?

The lack of the personal reflection and processing for the learner is identified as a limitation in the virtual educational platform. However, even as the virtual education strategy is perceived as less effective, it is being adopted to try and keep pace with cultural changes.

Ryan was considering the other dynamics of access and use by constituents on the ground:

> If we're talking about our agricultural base, our farmers, and some of them are still using flip phones . . . the thought of [them] going online and signing up for a course and then

watching that course is way beyond them. And then youth are more comfortable with technology, but if you're designing a program to go in and see the inner city and talk about YouTube with social economic issues, there's no guarantee they have a computer, there's no guarantee they have a cell phone, there's no guarantee they have Internet access, and it's probably not safe for them to go to a location in the evening to have access to those things. So how do we integrate technology and Extension and make sure both remain relevant and . . . effective . . . and not take this approach that technology can replace everything?

The strongest case for the need for relationships in local community and with local citizens is the ability to deliver content in the mode that citizens will be able to access it. Ryan points out that even if the virtual educational materials are present and developed, it is the point of access that matters for the client. However, the recognition that clients may have limited access is not a call to avoid the use of technology. It emphasizes the need to utilize staff who can have both an understanding of the local context on the ground and technology for others.

Urbanization. Rural communities are shrinking and urban populations continue to increase and concentrate. Brian laid out this quickly shifting trend: "Our demographics now include a big urban population in [state] when we [used to] just deal with mainly rural clientele." Joseph provided the call to action, stating that "I think the declining number of people living in rural areas and increasing number of urban areas are both relevant for both . . . Extension [and] for 4-H." Carolyn added more context about the urbanization that her state is experiencing, explaining that:

> [We have] 80-something counties that are losing population, [and] we have about 8 counties that [have] population growth . . . [which] is attributed to . . . basically the metro

> counties, the [metropolitan area name] counties and [city name], you know, so that's where the population is. So that's also a threat because as you pack more and more people in there, how do we serve more and more people in those areas?

Urbanization is a recognized threat for Extension administrators across the country from the most rural Western states to the most urbanized East Coast states. Urbanization challenges Extension on many different levels: First, the citizens living in urban areas are disconnected from production agriculture; second, cities are so large that it is hard to make an impact with the level of staffing, and at the same time, there is greater service provider competition. If these challenges weren't enough, the current Extension and employee pipeline may not be prepared to serve these audiences. All of this contributes to a changing political landscape.

Scale. Urban populations are large and hard to penetrate. Carolyn captured the challenges of the scale of urban population:

> You know, our system is really driven by county and a county delivery system, but you know, [Name] county is way too big of an area or [Name] county or one of those counties. They're . . . too big to look at . . . as one big entity. You got to break that down into communities or even neighborhoods sometimes.

In her comment, she recognized the significant scale of serving entire populations within the county boundaries, which is the current organizational structure of Extension. Many other administrators supported this same concern. Susan shared that in her state "we have one 4-H program management person in a county with a ton of people in it; [city name] has more people in it than all of Louisiana." Alfred also expressed the same sentiment, explaining "we don't have enough staff to deliver the school program in the way we do across every sector of the state." Carolyn explained the staffing challenge as this:

> I think our number of employees in urban areas is really a challenge because, you know, if you have one 4-H agent in a county that has 10,000 people versus one 4-H agent in a county that has 100,000 people, that's a really different scenario.

It is no shock that this level of staffing is inadequate to make significant public contributions, and this ineffectiveness was readily viewed as a significant challenge.

Urban centers have more service provider competition. The level of competition from organizations providing a wide range of specialized educational information was characterized by administrators as a potential threat and also as a potential opportunity. However, it was recognized that in urban communities, there was significant competition likely because of their population and geographic scale. Timothy shared of his state:

> [In] urban counties, there's more competition out there, other entities providing services, especially on the youth development and the food and nutrition sides. Maybe in Ag [we are] still the main player, especially in urban counties.

Timothy, interestingly as an Extension director, lifted out that, especially within the youth development arena, there was significant competition in urban areas, and he was uncertain about whether agriculture was the dominant player. Curt also emphasized the level of competition specifically for youth programs:

> So, there're many other youth groups that are competing for similar dollars. I'm often just shell-shocked as I look at . . . some legislation that passes, that gives hundreds of thousands of dollars to a group, and I think, "My God, we're doing that. Why didn't we get that money?" So, there's a lot of dollars that we're competing for.

Not only is the program competing with other organizations, but they are also both targeting an already diminished pool of money. When Curt said, "there are a lot of dollars that we are competing for," it referred to the level of competition, rather than the volume of dollars available. It is also important to acknowledge that the legislature is supplying funding to other organizations while their own state Extension program provides the same or a similar program.

Power shifts. Shifts in population and population needs will inevitably result in changing political alliances and power. With the population shifts, administrators recognized that potential funding and support changes will result from an increase in the number of urban legislators. As potential funding and programming shifts to serve a growing urban population, stress may be placed on the historic relationships with organizations who work to secure support for Extension as well as with the program's historic clients.

Robert framed a power shift of concern, that of the threat of legislature power shifts, when he stated:

> That's also where the threats are . . . as more and more legislators get [redistricted] to those urban areas . . . they seem to [have] a lack of understanding of what services Extension brings to communities.

Robert was considering where Extension will be in the future. While Nancy recognized the current status in her state, she also recognized the potential change in the future. She shared:

> In [state] our rural legislators still have a lot of say in the legislature; they tend to serve there longer. [However,] you know, there's more and more for the [land-grant university in state's name]. What are you doing to serve the urban population? So, we live in a large urban area here. And what are you doing?

The state legislature is a significant source of financial support for Extension and 4-H. These two quotes highlight the need for administrators to have an educational strategy for legislators who may not have experiential knowledge of the Extension program, either as a client or 4-H member. Additionally, it is a call for administrators to be in dialogue with the legislature to be responsive to the needs that they are identifying.

Long-standing organizational relationships. Extension and 4-H have long-standing relationships with agriculture and rural organizations. As Nancy states:

> It's important that the leader of Extension is able to have relationships with the leaders [of the farm organization] in the state of [state]. So, I need to be able to pick up the phone and call the executive director of the pork producers and say this is what's happening right now.

Mary supported that sentiment with "we have a very strong working relationship with Farm Bureau in the state." These relationships are important for political reasons but also as working educational partnerships, with commodity groups relaying feedback about programming. In the context of urbanization, these strong relationships may not consider the needs for changing programming into urban settings. Even if they do consider the need for Extension to expand, they do not want their clientele to lose services. The organizations still have political power and can mobilize their clientele for or against Extension.

Stakeholders are fearful of loss. Stakeholders are fearful of losing opportunities and resources. As David said, "Sometimes when you try to move in new directions, you find opposition from current audiences. And we see some of those things happening right now in Extension and 4-H." Urbanization is a new direction that Extension has realized it needs to move toward, and therefore the current audiences of rural and agricultural organizations are concerned about their status. Sarah captured that Extension's clients are:

> . . . really passionate folks, that really come to the table to rally; they really value Extension and want to make sure that the things they know and love about Extension

[continue]; and again, some of this goes back to 4-H, so they are pretty loud, loud and clear.

These historic audiences are not just agriculture commodity groups, but also 4-H parents, volunteers, and Master Gardeners, and the list of stakeholders goes on. As Sarah captured, their passion for the organization is rooted in what the organization provides them, and they care deeply about the positive benefits that they have experienced or see others receiving. Thus, from that passion, those same stakeholders who will “rally for a budget cut at the state legislature” can be loud when they perceive that the organization is shifting away from their “special interests.”

Urban populations are disconnected from agriculture production. Urban and suburban dwellers are by the nature of their urban context separated from agriculture, a programming content that Extension has emphasized and championed. Administrators recognized a great need for agricultural literacy. Alfred captured the sentiment when he said:

> As an organization, [we] have a responsibility to continue to help everybody understand the need for ag[riculture] because . . . the farther and farther we get away from the farm, the less we understand about where our food and fiber comes from.

Administrators consistently across states and administrative levels saw the growing need for agricultural literacy as a strong opportunity for Extension. With that opportunity comes the dynamics of a changing population and a different environment than the organization has been experiencing.

Timothy brought out most of the themes of the challenges around urbanization for Extension and 4-H when he spoke, saying this:

> So, as you add more urbanized population [to your state,] politics change and then more and more of your legislators [are] from urban areas and fewer from rural areas; [where’s]

the understanding of what you do and how it impacts people? And how do people view [us]. So, for rural communities, it might mean fewer services, including Extension. And that's a [result of a] misunderstanding of the urban people, [not] understanding what's going on in rural [communities]. But on the urban side also, people oftentimes say, "Oh, well, you know what? The Boys' Club and the Girls' Club, they do all kinds of youth stuff, too, [so,] well, you know, what's so special about Extension?" The thing that is interesting is, when the Boys' and Girls' Clubs do programming in a lot of these areas, it's the Extension people going, or they want to . . . copy the Extension after-school programs and youth programs to bring in there; because [while] they want to do all these programs, they don't necessarily have the expertise. And even beyond that, the advantage of the land grants is what we do in public education: we are transferring . . . research-based, evidence-based information out there . . . Visibility becomes an issue for us [Extension], especially in urban areas. Understanding becomes an issue for us.

In this quote Timothy highlights the political change that emerges when a changing legislature may have a majority of urban legislators. He also recognizes the competition to serve communities in the urban context and highlights the importance of well-trained human resources. Additionally, he recognizes the value that Extension has in the urban environment.

Opportunities in the urban landscape. While urbanization is a significant threat with many factors, urban populations are always viewed as "opportunities." Robert also wanted to emphasize that the opportunity to expand into urban communities was not because current programming that focused on rural communities was deficient, but rather it was because quality programming that has been serving rural youth (in this case) should also be serving urban communities. He shared this:

> So, saying that we need to increase that urban presence and look at how we approach those audiences differently is not saying that we're doing things wrong in other aspects. [Urban communities] are really where [the] opportunities are.

Additionally, Curt saw opportunity to bring the historic strength of agricultural education to the urban context. He emphasized that when he said:

> I think there's phenomenal opportunity in this urban interface of folks who are concerned about where their food comes from. They're concerned about the environment, they're concerned about, you know, social issues that relate to food access and so forth and, wholesome food sources and a sustainable food source.

He showcased the need for continued agricultural and environmental literacy, which emphasized Extension's historic strength and matched it with citizens' interest in "food."

It was Brian who discussed how an Extension program in his state was connecting urban audiences with the goal of preparing more citizens with STEM skills and the historic strength of agriculture, when he shared this:

> We started a new program where we are taking our research and education centers across the state and having a focus area to teach people more about agriculture; [this] can be really successful with our urban population. It's more hands-on learning. And so, it was making science come alive.

James shared what the administrators were demonstrating, when he said this:

> I think that . . . my philosophy is [to] capitalize on your strengths . . . and one area that [state] 4-H [does and] no other organization really does, is provide agricultural-based education to youth in middle and elementary schools. FFA can take that challenge on in high school, but even their reach is not as broad as the 4-H range. And I think that, as we

> move toward a more urban and suburban environment, it’s increasingly important to help people understand the farm-to-table, food-to-fiber connections and all of that. And so, I think people want to understand that, and you see that in the rise of urban agriculture, urban farming, urban chickens, whatever it is. So, I think we’re in a position to really bring basic or intermediate agriculture education to everyone, and I think it’s vital that we do that.

James emphasized focusing on the strength of the organization, to highlight the niche that Extension and 4-H have, and that they should embrace that as a part of their mission to serve communities, urban or rural.

In order to serve urban populations, administrators have turned to municipalities to provide funding for staff within their towns. Administrators relayed success with having county administrators fund more paraprofessionals to deliver the content in more communities. This was highlighted as a fairly “easy” sell because an Extension budget request is tiny compared to a large urban budget—as Carolyn said, “under 1 percent.” Additionally, many successful partnerships were communicated in the urban space to gain greater reach across program areas: community development, family consumer sciences, agriculture, and 4-H youth development.

Shrinking Rural Communities. Since Extension was founded as an agricultural improvement organization that has focused on rural community and human capacity development, it is understandable that rural people, spaces, and economies have been its strength. Urbanization has resulted in shrinking rural communities, with a reduction in economic vibrancy and viability as young people have moved away. While at first glance, these certainly are opportunities for Extension, they have also become threats.

At the same time the need for Extension's programming is increasing in rural communities, the ability for rural counties to fund Extension has been decreasing. As previously mentioned, Carolyn shared that "in a small, rural county Extension might be 15 percent of their budget. Whereas if you look at urban county, it's not even one percent, you know." Due to the long-term relationships between county governments and Extension and the 4-H program, in general, administrators were of the impression that counties recognize the value of Extension; however, Extension is pitted in the budgeting process against agencies like the sheriff's office and road maintenance. Carolyn again captured this rural county dynamic when she said:

> I think population demographics and . . . just . . . the nature of our state is really challenging. . . Out of 159 counties, we had 83 counties that lost population last year. We already have some really small counties . . . that have 6,000 people in them. So, they struggle to maintain infrastructure just to pay those mandated things. They have to pay. I mean they struggle keeping schools and prisons and garbage collection going. So how . . . can they afford to fund a third of our program?

As Carolyn questioned here, other administrators noted that Extension often was on the losing end of the funding equation.

The issue of shrinking communities relates to the tax-base reduction in counties. Additionally, it also has meant that, with the brain drain, a challenge has emerged for Extension: how to replace retiring agents in rural communities. Carolyn shared that it has been challenging to find qualified candidates in rural communities. She said "we really struggle to find strong applicant pools for agents in row crop counties, which tend to be the rural areas." In rural communities, the salaries were seen as adequate. The barrier to recruitment was the availability of qualified individuals who would be willing to stay and work in those communities at the available salary.

One factor that was of note for the land-grant university system as a whole: Administrators recognized that as universities seek higher rankings, they have sought more and more competitive applicant pools from out-of-state; and therefore it has become increasingly challenging for rural youth to gain entry to the land-grant university. Because it is harder to get into the state's land-grant university, administrators cited there were fewer qualified individuals who want to "return home" to their rural communities and to work as Extension agents. Carolyn captured this dynamic in her statement:

> I think another crisis is particular for [state] Extension services [is] that [we] were not able to hire our own graduates that come out of the college of agriculture . . . we do hire some, but most of them are coming from out of state because, [it] is so difficult to get into the [state land-grant name] now. I think there's a little bit of a crisis there [as to] how we . . . produce more people that will go into Extension."

Not having qualified individuals to deliver the programming that has consistently been the organization's strength will pose challenges for Extension to continue to be responsive to client needs.

Diversity in Our Communities. Ethnic and racial diversity was recognized as a concern, not as an impending threat. Each administrator expressed the need for Extension to serve the entire public. Joseph shared that:

> [One of the things] I think about every day [is the changing] demographic of urban and rural; I think it's a big one. I think also, you know, there's a tremendous amount more

> English-as-a-second-language folks in this country. And, particularly Latino audiences are continually growing.

In addition to Hispanic/Latino populations and ESL individuals, administrators also expressed considerations for inclusion of African Americans, Asian Americans, Native Americans, refugee populations, and LGBTQ+ youth. While they acknowledged the need and presence of these populations, there was a collective call for their states to do more.

A call to do more. Of the twenty administrators who were interviewed, all of them expressed a need to continue work toward representative parity between state demographics and clientele. Sam candidly shared this about his state:

> When I run the demographics for [my state], we still disproportionately have more Caucasian white, you know, white folks, and… if you compare that to our state demographics and we do very well on the Hispanic, but [this state] is primarily a majority Hispanic population, you would expect that. We are still falling short on [serving] our tribal native American [youth]… I think in the future it is going to again be [important to ask] what do we do to better meet or better fit [those individuals needs]?

What Sam shared about his state's demographic participation was supported time and time again. Several states offered that they had been under review by the USDA for not having representative parity in their traditional 4-H club programs and in their adult programming more broadly. When administrators did talk about their successes, they often gave caveats like Alfred provided, when he shared this:

> We're seeing more and more Hispanic children involved in activities. We've always [had] a high percentage of black children . . . participating in 4-H. We also still [have] a

> lot of Asian children, international kids . . . we have put some resources into . . . Spanish, but I think there's a lot more there that we can do.

Each state is at different levels of response to changing ethnic and racial demographics; however, the consistent response indicated a need to systematize their response and to be intentional. One regularly suggested institutional response was for there to be more diversity in staff.

LGBT youth. Each administrator discussed the need to be inclusive and serve Lesbian, Gay, Bisexual, and Transgender (LGBT) youth in the 4-H program. They recognized that LGBT youth were present in the program, and that, if they are there, that they should be made to feel welcome to the best of the abilities of the program. Ryan said about LGBT youth that:

> They've been part of the program since before it started. They haven't felt as comfortable coming out and saying that they are trans or bisexual, that they can be lesbian [or that] they can be gay. They haven't felt comfortable saying it [but] now . . . people are more comfortable and it's more of a social topic.

Ryan was sharing both the societal shift that LGBT visibility is expanding and therefore that more youth are starting to publicly identify at earlier ages and are being more public about that identity.

Many administrators identified their organization as currently being inclusive. Rhonda shared that "in terms of the whole discussion around LGBTQ . . . I believe we have an open and inclusive organization. I believe we offer a place where young people can feel safe in that space." Even when administrators saw their organizations as being inclusive to LGBT youth, they each continued to call for further work. Karen relayed her thoughts:

> I think, from the point of view of a LGBTQ, that one of the things that is on my radar [is] the work we've been doing . . . on a national level—try[ing] to be [both] proactive and responsive . . . to youth who are already members in our community.

Susan also shared that in her state she was working on efforts to be more intentional about inclusion, saying, “You know we are trying to better serve the LGBTQ community.” However, she continued, “there’s a lot of icky sticky stuff around that in the media and in our counties.” Susan highlights here that efforts to be responsive to and proactive regarding LGBT youth by setting LGBT inclusion policy have not always been welcomed.

“A couple of the states have put out a memo about federal policy and how they view those things and they turned out to be picked up by the press as being very, very negative,” relayed Timothy, of a rollout of LGBT inclusion policy. As he highlighted, LGBT youth inclusion efforts have experienced pushback. This pushback has occurred from external actors, including the conservative media. Pushback was also experienced from internal membership, as Susan shared above. Ryan shared an illustrative anecdote:

> We actually got a letter probably a month and a half ago from a parent whose children were not in 4-H yet. They were Clover Kid ages [ages 5 to 8] and [the parent] said that we’re taking a radical social agenda and pushing it down everyone’s throats. And their kids weren’t going to be members of 4-H because when the adult was in 4-H that wasn’t the case and they don’t feel like it’s right for everyone. . . She actually sent this letter to the president of the university and of course it found its way back down to me to respond. I said 4-H is for everyone . . . we accept everyone, and we can make modifications and adjustments [to] make sure that everyone feels welcome.

This parent was relaying that she felt the organization had changed on her, being upset that 4-H was now supporting LGBT inclusion efforts. The parent was uncomfortable with this effort and was expressing her concerns. As with other issues, it is important to note that the feedback loop is not always direct; instead it often includes other levels of the organization, as in this case, the university administration.

The pushback to the policy has not only been at the local level. Curt shared that:

> In the last month national 4-H headquarters has been censored in regard to work with our vulnerable population groups. they're not allowed to speak to us about this, ECOP [Extension Committee on Organization and Policy] issued a national statement reaffirming the land grant support of working with LGBTQ youth and understanding that. It's just this reality of our federal partner, who I believe is not demonstrating our civil rights statement or mission. We are trying to grow the program and include all children and yet our 4-H headquarters is not allowed to support that.

Curt was not alone in his concern about the response by the federal level- USDA-NIFA and at the local levels. David noted his disappointment when he shared this:

> We see some of those things happening right now in Extension and 4-H in ways that are just very alarming and troubling. So that's where leadership has to be willing to step up and make it clear who we are and what our values are and . . . withstand some of that . . . [knowing that] with change you're going to be criticized. So, I think that's not an easy place to be and we have to [make] some efforts [to] support leadership in those situations so that they can hold their ground a little bit. That would be definitely a project [that] is going to be a priority and a real need.

Despite the internal and external pushback, the administrators remain committed to youth inclusion efforts. As David noted, it takes leadership to remain committed to the goal in face of pushback.

Not all news about LGBT inclusion was negative. Callie shared that in her state's program:

> [We have] a lot of transgender youth, which is awesome. . . With all of our event planning, we've had to shift and change a lot in terms of how we do overnight accommodations and how we [provide] support. Bathrooms is like the easiest [aspect] of it all. It's the overnight pieces where [the individual is] in the process of transitioning you know… It is a demographic shift in [having] different types of sexual orientation [and] also in gender identity [participating]. I think… it's interesting. We've almost placed it higher than like race and ethnicity, which I, I'm kind of excited about.

Even in the face of pushback, it was recognized that the work continues because LGBT youth and families are present in the communities that Extension and the 4-H programs serve. It was emphasized that while the organization had adopted an embrace of serving LGBT individuals it was a response to those youth and families being in the organization, rather than an effort to recruit those individuals. However, the inclusion efforts in turn welcomed and promoted more participation.

A note about nomenclature in this section. I have chosen to leave the nomenclature of the speakers intact the way that they talked about lesbian, gay, bisexual, transgender, queer or questioning, or all other sexual and gender identities to reflect the administrators' discussion. I chose to use LGBT as the heading title because administrators focused on lesbian and gay youth and transgender youth.

Need for a diverse staff pipeline. The need for racial and ethnic diversity in staffing was recognized as a barrier to participation. Benefits associated with diversifying the workforce ranged from improving gatekeeper status, bilingual skills, and cultural competency to creating the potential for individuals to associate and bond with similar others, also known as *homophily*.

Administrators recognized their staff populations as being primarily white. To the extent that their staff was not representative of their state population and in order to serve the individuals in their communities (the numbers are growing), they need staff who are able to be responsive to these concerns. Ryan succinctly stated: “We do not have a diverse staff at all. We only have two people of color . . . out of all of our 80 plus educators.” Many other administrators discussed their staffing limitations, including Rhonda who shared that “we have by [and] large a predominantly Caucasian staff.” Only one administrator, Callie, talked positively about the diversity of their staff. And the imperative to have a diversified workforce was underlined by one state director, Brian, who recognized “there are some parts of this state where a white person is not welcome” and the need to serve those areas, too. The majority of administrators supported the idea that Alfred conveys, when he said:

> I think, also, we could probably do a better job of diversifying the pool of people we hire so that our work more closely matches the demographics of the state. . . Sometimes that’s easier said than done, but I think we need to find better ways to diversify our workforce to match the demographics of the population of our state.

Here, he recognizes both the challenge to achieve the goal and the imperative, which is that having representative populations inside the organization is important to serving citizens outside of the organization. He didn’t communicate this sentiment in these words, but rather he said them in the context of the effort to move the organization to increase nonwhite youth membership in the 4-H club. An administrator did share an approach to specifically identify diverse staff to serve audiences—Elizabeth shared this:

> We started up a relationship with the Somali community that gave us money to hire a Somalia staff person because we didn't know how to program with that audience.

Elizabeth recognized that the current staff do not have the "knowledge" to be able to access the group. This knowledge is about cultural expectations rather than the content-specific knowledge. Rhonda continued her comment about having a predominantly white staff from above by saying this:

> We . . . [have a] Caucasian staff who is comfortable with the audience we serve. And the people who get it are doing a great job with it. But they're a small minority so we are making advances in reaching new audiences; but it is not enough, and it is not fast enough.

Here she is making the argument that some—not all—agents not only don't have the cultural knowledge to access diverse populations, but they also do not want to. Another state shared a similar experience, that in order to be successful in their efforts, the organization had to be intentional to overcome the pushback. Susan shared this:

> So, we actually used an organizational change strategy because we were changing the entire organization and how we were going to talk about diversity . . . [We as the committee asked], how are we ultimately going to meet our end game, which is to get parity with Latino and other underrepresented [audiences] . . . and we were very intentional about strategy because of the stakes involved, [and] because of . . . how much pushback we were going to get.

Both of these examples highlighted the need for intentionality and forces against inclusion, which lead to slow progress when there is a lack of intentionality, which most administrators identified. At the same time, all the administrators saw glimpses of effort toward demographically representative service.

Karen shared a case in her state, where an agent was trying to be responsive to naturally generated interest, saying this:

> I think it's some of [this] takes longer than we might want, but just recently, I [was] in [a region of the state that] might be not as high on somebody's radar even though the [numbers are] there [in regards to the] Hispanic population. The agent had a community member come forward who was interested in starting a club. [The agent] had no means to do it. They had no funds to do it, but they had youth who wanted to be involved, and they had adults, [which is so important, because] unless we can engage those adults . . . to serve those years and to . . . connect with the families, it's really hard to be successful.

Karen captured the sentiment that accessing new communities does take time. She also supports the idea that the system needs to be intentional about the response. In this case, the system was not intentional about providing resources or the infrastructure, which was the reason that the agent was talking to the state 4-H program leader.

Emphasis on intentionality was communicated by several individuals in the context of 4-H. Sarah shared this:

> We [are making] a concerted effort this year to do more outreach and targeted programming that meet different kinds of needs [of] Latino young people. You know, we always just sort of said, yes, we're open to all and all are welcome. And that's really good, but that doesn't really provide a pathway for folks that aren't accustomed to our

> program. So . . . if we . . . have a goal of engaging more young people from, let's say, the Latino population, [we need to address] how do we do that and how do we make it stick and how do we learn from it and how do we resource that and how do we help our staff be successful at that rather than just saying, yeah, they can come. You know, just a lot more intentionality.

She recognized that the state's approach had been unintentional and didn't have a specific strategy for engaging, in this case, with the Hispanic population; therefore, she was putting staff focus—time and energy—and financial resources toward the goal.

Rhonda shared about a more mature effort to understand and engage with the Hispanic population, saying this:

> We were lucky to have a staff person . . . able to translate the primary information pages on our 4-H enrollment site into Spanish, so we have an En Espanol tab. . . . Then we have worked with our communities who have reached out to the Latino community, where we have multiple 4-H clubs that have existed for multiple years; we brought families to campus and had them record testimonials, if you will, that we got on the site, so it is parents talking to parents, talking about why they have their kids engaged in our programs. It is the same thing I would do in a local community when I am trying to recruit a family. But, when I have staff that is bilingual, in a lot of cases it just opened the door and took that barrier out of the way. And we are now providing print materials and recruitment materials that staff can order if they have that need. The other piece is that we have focused our staff development on bringing in speakers, helping us look at what they have done to reach new audiences, [and] trying to take away the fear [from current Extension employees] that it somehow is going to denigrate the rest of the program. I

> think that is what we get into—the clash of [those] who have been a part of the [program] with the new folks who might be entering.

In this statement there are many different strategies presented. The first one is translation, which many other states discussed as an important strategy. Rhonda moved beyond just having documents translated, but also had materials translated and then also had the organizational background support. Using in-organization Hispanic families speak about their experiences allows for a little bit of that support to be done by people who allow the target population to say, "Those individuals look like me, talk like me, and are in my communities." It is powerful to note that Rhonda recognizes this approach has been done historically to serve white rural youth and now needs to be done for all other youth. Also, Rhonda introduced the idea of engaging families in a dialogue to understand how they want to experience 4-H, as a strategy to improve the cultural competence of the current staff, which is linked to training current staff on cultural competence intentionally. Rhonda recognized that current staff fear a *shifting focus.*

The Mission Remains Agriculture

Extension administrators are committed to continuing agricultural educational programming for adult agriculture producers, youth through 4-H, and community members through Master Gardeners, as examples. Alfred discussed the historic strength of Extension in saying this:

> The Cooperative Extension Service has played a large role in the success of America in helping families and farmers improve their productivity, which has allowed so many [of the] rest of us to do other things and not be involved in the actual production of food and fiber… And so, I think that, while we've been very successful with that . . . we have to continue to be a strong player in helping production agriculture.

He covered both the historic strength, but also the strong commitment to Extension's future involvement in agriculture. Rhonda expressed the growing need for all U.S. citizens, no matter what region they live in, to increase their agricultural literacy. She said:

> It used to be that I'd ask folks that lived in urban areas where their food comes from, [including] the kids, and they'd say the supermarket, as you predict; when you go ask rural folks, they'd say, well, the farm and ranch. Now you go out to these rural schools and ask kids where food comes from and you get the same answer there as you do in the urban areas.

Another state 4-H program leader, Callie framed the task for Extension to remain committed to agriculture programming:

> I think it's very important to provide agricultural programming, from the standpoint of healthy living and nutrition, from the standpoint of a community food security, [; [and] from the stand point of agriculture production here in the U. S., I think it really is. It's important that we grow our food locally. So, yeah, I think it's very important because . . . it's also our roots . . . If we deviate from what we are because we're trying to stay relevant and cool and hip, [we may experience mission creep]. Thankfully there's a lot of ways to make agriculture cool and hip nowadays, which is also who we are . . . what we're founded [on], but it can't be the only thing we do. We have to think creatively about how we package it and how we offer it and whom we collaborate with to make all that happen. I think it's very important for us to keep agriculture in our sights.

This commitment is predicated on the idea that agriculture is a primary industry for the states, because it's the organization's historic work in this area, as well as because of an inborn commitment that leaders have to the agriculture industry. Administrators see opportunities to expand agricultural literacy through programs that are framed around food, nutrition, and health, and they see an opportunity to make significant impacts on communities and to make Extension more relevant to the broader society by framing their work as "health" rather than simply agricultural production.

Providing agricultural programming is not in and of itself considered a threat by administrators. Extension administrators believe that their work in agriculture production and the 4-H agriculture programming is of excellent quality, making positive contributions to their state and the people in it. However, each administrator has had to take into consideration how their Extension programs should engage with agriculture due to the many other demographic shifts that have been applying pressure.

Administrators did recognize that there is a growing threat from private companies providing technical assistance to production agriculture. For example, Callie shared this:

> I think that's a threat and . . . if we don't either collaborate with these individuals or . . . figure out what it is that we do that they aren't doing . . . some people will pay money for things that they don't have to simply because they think they're getting a better value. If you don't have a reputation or credibility for, you know, for having said skill set or having support in place or a system, you know, people will pay the money to a private consultant to come in and help them grow bigger fish or help them improve their . . . thinning out of their land for forest restoration. I think a threat [is that] . . . we don't have enough of a competitive edge. . . People [are] turning to privatization or [other] nonprofit support instead of to Extension.

In the urban environment there are increasing numbers of nonprofit organizations supporting local, organic, alternative food, and agriculture literacy efforts. Administrators discounted the value that these other organizations bring because of the added value that Extension programming has due to its relationship with a research university and their purposeful approaches. Administrators also recognized that because other services charged, they were viewed as more “valuable,” thus making marketing more important. Competition was not viewed as an existential threat, rather it was yet one more aspect of managing the program. The aspect of the agriculture discussion that animated administrators was the opportunities.

Administrators recognized a growing cultural dialogue about food and health in the United States, paired with a physical and mental health crisis. The physical health crisis as they saw it was framed around obesity, diabetes, and access to healthy food. And the mental health crisis was around agriculture producer depression and the opioid epidemic. For Extension, these unfortunate challenges fit squarely within the current programming purview—that is, if they have financial resources and staff to be able to act.

Recognizing the historic efforts of Extension in agriculture and the needs in both urban and rural communities around health and nutrition, administrators consistently recognized strong connections between agriculture and food, food and health, agriculture and healthy environments, and agriculture and healthy food. These connections were multifaceted. No one administrator said this exactly, but there was a strong desire to reframe the organization as a “health” organization. There was a focus on how to support healthy production and how to ensure healthy food, which is part of the commitment to ensure healthy people, in mind and body, and all of which they saw as a way to achieve healthy communities. Nancy captured this potential vision shift in a passionate statement, stating this:

> I think there is a lot of Extension opportunity to work on these larger issues around workforce development, especially in our rural areas where they’re finding a lot of

> workforce shortages. So, our work is around: what would make a worker move into your community? And what would keep them there? And why should they be there? And it is much more than just having jobs for people. It's about people being willing to live there—is it livable? And I think Extension can play a big role in this community, so how can we help them do that? You know, what does it mean to have a healthy population? . . . There's lots of talk around that now—food as prevention . . . healthy lifestyles . . . Extension is working with people from youth to seniors; you know, we have really broadened our scope as we look at the culture of health, and [we are asking] what does that mean? How do we really work across those sectors within Extension to help the citizens?

Nancy discussed the importance of serving the entire rural community in order to develop economically viable rural communities. Nancy continued to talk about the broadening nature of the issues that Extension faces by highlighting this:

> Many of the issues facing Extension now are not just our traditional production, but also farmer mental health and what does that mean and how do you work with, say, our medical school to be able to think about solving some of those problems.

She used the specific example that focused on technical production aspects, but also on farmer mental health and economic development. In her previous quote, she also invoked youth development and how to ensure that rural communities were inviting for young people to want to return. This was a focus on addressing the "whole" complex problem and focusing programming around the issue, rather than solving a narrow technical aspect. In order to achieve that level of focus, administrators emphasized the use of interdisciplinary teams of agents from all program areas.

4-H Youth Development's Approach to Agriculture. Administrators relayed a more complicated connection for the 4-H program to agriculture than administrators did for Extension. While the 4-H administrators again were passionate about their commitment to agriculture, particularly due to the strength of the community club 4-H model that is often heavily focused on livestock projects and the county fair- both activities that have strong agricultural ties. Administrators communicated concerns they saw as threats for 4-H in regard to agriculture. Administrators recognized that the strength of the 4-H Clover brand as a quality youth program for "ag kids" also served as a deterrent to nonagricultural youth - primarily urban populations. Administrators communicated challenges from their internal stakeholders who feared the loss of resources and programs when nonagricultural programming was promoted, which linked to a limitation of being able to shift the brand to serve the larger number of youth residing in nonagricultural communities.

Administrators identified a barrier for non-agriculture (rural, suburban, and urban) youth to joining 4-H programs was their perception that 4-H was an agricultural organization, thus providing a significant deterrent to membership expansion. Callie captured that "our [4-H] brand hasn't moved with the times fast enough, and so I think we've lost some youth and families from participating because of that." Contributing to this is the fact that the "strongest community-based programming" is through traditional agriculture-based projects. Joseph shared that "the traditional historical frame of doing great 4-H work is . . . its great livestock programs." Additionally, animal projects are showcased at county fairs, which in rural and suburban communities are large community events that are most significant in raising awareness of the program. Rhonda said:

> Fairs are great opportunities for us. They [are] huge community events and in rural communities in particular, [they are] probably the largest events in the community for the entire year. So, it affords great visibility, but we have to be demonstrating . . . how we're changing our programming moving forward.

These administrators' comments showcase that they are in a tight spot because efforts to move the marketing away from agriculture to be more inclusive, which is recognized as being essential, causes potential backlash from internal stakeholders.

Internal stakeholders, including staff, adult volunteers, youth members, supporting organizations, and alumni, were identified as being incredibly invested and passionate on behalf of the organization. Elizabeth said that the stakeholders in her organization:

> . . . Have a love of [the program]. They have an investment in keeping what they know and they don't know the 4-H program broadly. So, what I have found is that most of them come through the door, trying to keep what they know and what they're comfortable with.

Sarah also relayed that the volunteers, clientele, and community members that she interacts with are "really passionate folks that really came to the table to rally about the value of Extension and [they] want to make sure that the things they know and love about Extension" continue to exist.

When there is a move away from agriculture in programming, concerns are often expressed, sometimes quite strongly by historic or traditional stakeholders. This feedback loop goes to the public via social media, to the Extension and university administration, and to the legislature. Susan shared an example of how a single disgruntled volunteer:

> . . . Took to social media and started this huge hoopla. [They] started a social media campaign that went all through Cattle Women's and Farm Bureau and was riling people up.

Curt described the response to efforts to communicate inclusion toward LGBTQ+ youth:

> There's a pushback in opposition to that and it [is] kind of [fueled] particularly on Facebook and Instagram and some of these types of settings. So, there's a struggle to be able to respond against that. . . but also not fuel it.

In both of these instances the feedback was public and outward facing and caused historic stakeholder groups to be involved in the process.

Ryan captured the tension that Extension, but especially the 4-H program, is experiencing. He shared this:

> I think we have this tight tightrope [to walk]. How do you be an innovative organization without alienating or upsetting the stakeholders that you've had for so many years? So, whether it is traditional agricultural companies or organizations like Grange or Farm Bureau, how do you make those opportunities available? How do you invest time in programming like photography or computer coding or expressive arts and make them understand that we're not losing our roots as an agricultural organization; we're just expanding that to bring everybody in and make them understand that everyone's engaged in agriculture in one way, shape, or form and [that] we want to . . . educate everyone. I think that's really the fine line that we have to walk.

He captured that the organization is going to stay committed to agricultural programming but also needs to expand into new areas of programming. Additionally, he highlighted that there is pushback from traditional stakeholders, both individuals and organizations, on organizational change.

The 4-H Delivery Model. The model and approach that 4-H serves youth was discussed at length because the traditional community club model membership has remained stable nationwide, while the youth population has continued to grow. Stable, however, does not mean that the membership is strong. Robert recognized that "We only have 1.6 percent of the . . . eligible population and we're going to get lost . . . with all the other clubs and organizations and activities that are out there." In addition to the recognition that a small market share of the population is enrolled in the community club 4-H program, there is also the recognition that there is growing competition for youth participation.

Additionally, according to administrators, the 4-H community club program remains predominantly white; it is legacy-oriented in nature—meaning that youth are joining because their parents and grandparents have been members and thus the organization continues to serve a predominantly rural, white, middle-class population in this model. At the same time, administrators recognized the community club model is the strongest positive youth development delivery method the organization has to offer.

To reach new audiences, including minorities and urban populations, the 4-H program has turned to a continuum of models that are shorter term for the participant and easier to "access" by the program staff. These short-term programs have included overnight and day camping; in-school clubs; a diverse array of after-school programs and initiatives from clubs to supplying curriculum or staff training; and school enrichment programming that primarily focuses on curriculum enhancement activities. These initiatives have been emphasized primarily for the ease of access to youth—they are already pre-organized in the school system, and the youth population is at parity. Therefore, 4-H staff have used this point of entry to serve a racially representative youth population.

As was captured above, there are strengths in this short-term approach. In addition to access to an organized and racially representative population, there is access to youth at parity. Administrators recognized that competition for youth time is increasing from many different activities, a condition one administrator called the “overscheduled child.” Using schools and after-school programs means that 4-H is able to access youth time. A second reason is that the school system already has policies and procedures in place for how to work with and protect youth, which is an ongoing issue for all 4-H program administrators. A third reason is that there is much less program management effort in providing the direct youth content in school than when doing the work through volunteers in out-of-school time. This means staff are spending more time in direct education mode. Without as much of the organizational components to manage, they are able to deliver content directly to more youth.

Administrators also acknowledged weaknesses in these short-term approaches that may rise to being threats. Chief among these potential new threats was the lack of connection between the participant and the 4-H brand. It was recognized that, while for the short-term there were slight disadvantages in youth outcomes versus number of youth reach. The long-term implication was that there would be potentially less public support in the future because “4-H members” and their families would not know that they are actually members. Over time it was recognized by administrators that a shift towards short-term delivery models could erode away the support for the program because there will be fewer potential legacy youth.

In that same vein, there is the threat of not providing equal opportunities to all youth. Not serving all youth with the same level of youth development opportunities becomes a long-term issue. Choosing to emphasize short-term, more limited experiences in order to reach minority youth, and yet continuing to serve higher engagement activities to the historic youth sets the organization up to be perceived as perpetrating an injustice rather than striving to serve all—the intent of the short-term programming. More practically, not engaging more diverse youth today will continue to shrink the numbers of legacy youth into the future, because there will be fewer youth who are aware they were positively impacted by 4-H. Additionally, less programming using volunteers means there are fewer community advocates for the organization. While the time and money it takes to provide volunteer management is a consideration, the loss of volunteers to support the organization was recognized as a considerable threat.

The range of responses to this consideration was as wide-ranging as the states. However, two themes for how to manage the approach to the 4-H club model emerged: one was that there should be a matrix of approaches and that all of the approaches should have the key components of the traditional club model; and the other was that work needed to be done to allow and encourage a new generation of youth join community club programs.

A matrix of approaches. 4-H program leaders used the phrase "variety of approaches" to describe the different ways that a youth could participate in the 4-H program model. They recognized that there were different levels of participation and that different levels of participation were right for different youth—not ALL youth want to participate in a community club for ten or more years. Rather, they realized the 4-H program needs to provide a variety of experiences focused on delivering the Positive Youth Development model. When we think about the essence of 4-H, not simply as a club, Elizabeth shared:

> It helps us to think broader about what our possibilities are—the glory of the 4-H program [is] that you can use any instrument and any content area to organize and do

> 4-H. 4-H is simply a group of young people who are working on something that they have a passion [for], with a caring adult and [an] experiential learning model for the development of their head, heart, hands, and health.

It was also emphasized by a majority of state 4-H program leaders that the emphasis should be on encouraging youth to move from the lower-engagement activity into the more complex model of engagement. It was emphasized that, throughout their experiences, the youth and their families must be aware that they are participating in a 4-H and Extension program.

Reducing barriers for new enrollment. The need to create pathways for involvement by new members was recognized. Some strategies that were identified were reducing the amount of enrollment paperwork, changing the membership requirements for number of meetings, educating about the program model and the language used when discussing the program, and changing the types of programs offered. More than any specific change, this represents a shift in the focus of the organization to "first generation youth," a term used by Elizabeth to communicate a strategy to help orient volunteers and staff toward helping youth be successful, whether it is a youth member entering a livestock project for the first time or a native youth member on a reservation joining a new club. David said of this about first-generation youth:

> So, I think it's being more comfortable, and I'm clear on what we are and something we maybe took for granted in the past. People just knew about us, and it was generational. We have to think about first generation 4-H members and families and communities and how do we position our program and overcome the barriers to participation for those folks.

David identified that when the 4-H program cannot rely on generational knowledge of the organization, then the organization needs to be more intentional about outreach to make sure youth are willing, and able, to join.

Feedback

Feedback is important for the administrator to be able to make good decisions. Nancy was reflective about feedback, saying this:

> I think that one of the ways to do that is . . . you have to surround yourself with people that are willing to tell you what's going on. And that's not always easy. And so, you have to make sure that people in your organization feel free to tell you things without repercussions. So, it's people that [are] being really honest with you, and I think that's important. And so, I think you have to listen.

She highlighted that seeking feedback is an individual behavior when she said "have to," "surround," "make sure," and "listen" to describe the effort that it takes to receive feedback. Administrators discussed at length how they seek and receive feedback.

Committees for external scanning. Extension administrators all talked about the programming feedback loop. Feedback is sought formally and informally, from internal and external stakeholders. Some sought it primarily from those with whom they have close working relationships, while other administrators chose to seek feedback from outside of their normal sphere of influence. Consistently, there was a discussion of the feedback process; and the most common form of programmatic feedback was the committee; another term used regularly was the council.

To convey the breadth of approaches to committees and councils, a variety of comments where shared. Nancy shared that in her state:

We are legislatively mandated to have Extension committees in every county. So, we have 87 Extension advisory committees: county committees that are appointed by the county commissioners. So, they range anywhere from 10 to 20 people on those committees. So, [multiply] 87 [by] at least 10 people. So . . . we have close to a thousand people really on those advisory committees that provide input for Extension. Extension also has a statewide citizens' advisory committee of about 30 members that reports directly to myself and senior leadership and Extension, and they provide input and also serve as advocates for Extension in the state.

Nancy highlighted that in some instances states are legislatively mandated to have advisory committees, as is the case in her state. She emphasized the volume of people who are involved in the formal feedback process across the state. Additionally, she showcased that feedback committees occur at different levels of the organization; in the case of this state, they have committees at both the county and state level. At each of these levels, the information for decision making is fed to the administrator differently; in the case of this state's county committees, the feedback is channeled through the organization at the county level to her, and then she has also had an advisory committee that provides feedback directly.

Brian also has a direct advisory committee that he uses to receive organizational feedback. He explained it this way:

We have a statewide advisory group we call [Specific Name]. It's our advancement council. It's a combined group from . . . five districts; they . . . [elect representatives] through a pretty extensive process. They nominate people to be representatives to the advisory or advancement council, [then] they make an application, and then they come on board. This advisory council has Farm Bureau, Department of Ag, all our lending institutions for agriculture, like Wells Fargo, and those type people on it. We have representatives from the retirement community, representatives from youth organizations, and representatives [from] business and industry, chamber of commerce, Smithfield. So, it's a pretty diverse group of individuals that can tell us about . . . what's going on in the state programs.

This administrator has created an organization that is geographically representative of the state, having linked participation to regions, and the committee is representative across the Extension's program areas, having retirement community representatives and youth organizations, along with those from the Chamber of Commerce and agricultural organizations.

At the state 4-H program leader level, Mary also discussed the use of committees for program feedback:

> We have a 4-H advisory committee that meets [to] talk about 4-H as a whole. . . . This group of people . . . comes from all different areas of the state. They're not necessarily strong 4-H participants by any means. They might have been former 4-H'ers or [maybe] a superintendent of schools and different people like that, but they give us a lot of suggestions as to where we might look at programming, what we might look [at to do] differently.

She, too, was seeking feedback about programming from a mix of both internal and external stakeholders. She continued her comments to talk about her role in another committee, explaining:

> We also have a state Extension advisory committee that includes [representatives of] both our 1890 and our 1862 [land grant university] programs. So, it's a joint advisory committee, which is not always the same [in] all the other states. So, we get a lot of

> interaction about how we could work together as two organizations and then what we need to do on the state level [as far as] possible new audiences, programs, etc.

Here is yet another layer of feedback that occurs beyond the county, state program, and state whole organization level; it's at the multi-organization level, as demonstrated by both working with other universities as well as other organizations, which represents an effort to achieve a feedback loop that allows the organization to respond appropriately.

Diverse committees provide valuable feedback. Administrators recognized that feedback was valuable. Additionally, it was explained that whom the feedback was coming from was also important. Sam shared a challenge that he experienced when he took on the new role as state Extension director:

> Advisory boards by design are supposed to get input from the community on how we can engage new folks. But the problem I saw was that we had the same people serving on the advisory boards [for] the last 10 or 15 years. And so, we needed to institute a new procedure to allow new folks to get onto those advisory boards and also to diversify and broaden those advisory boards.

Curt reiterated what Sam shared when he said this:

> We tend to ask questions of people that are connected with us, [knowing] that they're going to give us the answers that they think we want to hear. And so, I put together a statewide advisory group that has a number of outside individuals; quite frankly, I bring them on because they don't have a connection with us, and part of [the new person's] potential criticism of us is that we've not done an appropriate enough job connecting with them.

Administrators recognized the need for a diverse feedback loop. As Sam shared, even with this recognition, the feedback loop was not always perfect. They acknowledged that the individuals inside the "system" may not share the full answer and that the only way to approach new perspectives is by inviting individuals outside of the system into the feedback loop. There was consensus that it was important for there to be diversity in experiences and backgrounds in the formalized committee structures to receive the information the administrators needed to make better decisions.

Staff for internal feedback. In addition to the formalized feedback loop for external scanning, there was consistent discussion about how administrators learned about their own organizations from the people inside their organization. Inside the organization, the emphasis was not on committees but on direct interaction between the administrator and employees. This form of feedback is based on relationships and trust that the feedback giver is providing honest and accurate feedback. William relayed this:

> We have advisory committees that we use, but our junior leader folks are working with their subject matter folks exploring those ideas all the time. So, there are always things bubbling up. There are only 18 to 20 of us . . . I communicate with almost every one of them on a pretty continuous basis—one of the good aspects of being small.

William emphasizes the need to have regular and consistent conversations with those from whom you are seeking feedback. He emphasized later that the conversations were relationship building, talking not only about organizational issues but also about family and things that make up a person's life outside of work.

Timothy expressed the emphasis that he places on internal feedback, saying this:

> You're hoping that the people that you're talking to have a feel for the people that are below them, and they below them, so that if I'm talking to a [Extension director at the

> county level] about something, [I know that] they have a pretty good [reading] of what's going on in their county—not only [from] their advisory committees or . . . the commodity groups, but also [from] the agents in their office…. When you make a decision, you have to hope that your people are in tune.

Timothy makes an important point that each person is responsible for the feedback that they are sharing and that it is only as strong as each individual's understanding of the context. In short, the person has to trust the feedback is accurate.

As Nancy said in the opening quote to this section, it does take specific behaviors beyond having conversations with individuals. Here Ryan shared his approach to decision making and then the feedback loop associated with the decision. He said that his philosophy has always been that:

> If you disagree with something I'm saying or an idea that I have [and] you feel like I'm headed down the wrong path, you have to tell me. I don't mind people disagreeing with me. In fact, from time to time, I think it's really helpful when people say, "Hey, you were wrong" or "We can't do it this way," as much as that can be frustrating at times. [For example] my assistant will say . . . "you don't understand the history that goes behind that decision that you're beginning to make." And she is right. I don't understand that history. So, whenever we're thinking about making an organizational change, it's a discussion [among] the six people in the state office and the five area educators, and we typically try to survey our educators as much as we possibly can just to gather that feedback. Nothing's a big secret. We try to let them know [that this is] the change that we're thinking about making. What are your thoughts on that? What are the pros, what are the cons?

In this quote, Ryan captures that in the internal feedback loop, administrators seek information through informal conversations and occasionally through surveys and other means. More important, he highlights that the individual administrator's behaviors matter in the process to ensure the safety of feedback—the leader needs to be explicit in asking for contrary feedback and then needs to listen and process the contrary feedback.

Stay hungry for new knowledge. In addition to direct organizational feedback, administrators emphasized the need to seek out new knowledge. Some administrators would read a book, serve on another organization's board, explore other industries, or get involved with the national level leadership organizations in order to gain new perspectives. Each administrator's approach was different; however, each recognized that there were times that they needed to seek out new knowledge or a new perspective.

Being intentional matters. Administrators talked about scheduling writing days or strategic planning hours. Joseph and James were both leading a book club around a specific book in order to have strategic conversations, but also it was a chance for them to continue their own growth. James shared that:

> [The book] is about how to ignite a spark about something which your child is passionate [about in] their own life. . . . I got a copy for all of the agents that wanted to take part in that and we're going to do like a chapter a month and do an online discussion. And again, it's about leadership development.

James shared about exploring the book with staff. Yet, he was also committed to developing himself and others as leaders.

Distractions will happen. Administrators were all concerned with the threat of constant and ever-present distractions. Often these distractions from focusing on work they deemed as core organizational strategy were from risk issues: an unhappy parent, a social media rant, the livestock fair competition gone awry—this is a specific example: A state 4-H program leader was contacted when:

> A woman contacted the head of [USDA]-NIFA last week because her son lost his geology project . . . A chain of emails was started and I, of course, get it thrown on my desk. They don't have any information. I have to do some background work.

The same state 4-H program leader also shared this story:

> We got a complaint email yesterday from a woman who didn't sign her name, her county, or give any information [except] that she was furious about a horse camp.

While these examples are humorous, the effects are frustrating for the administrators. Each expressed the challenge of staying focused on the bigger picture when they could spend their entire day just addressing the small-scale crises and never focus on the larger challenges.

Perspective. When the distractions are overwhelming or the administrator is no longer able to see the problem clearly, there needs to be a way to gain perspective again. Carolyn tied it all together when she shared about when she needs to gain perspective:

> There's this leadership concept called "getting on the balcony"—you know, when you're on the dance floor, you can't see what's going on because you're too busy bumping into people; when you get on the balcony, it's really clear what's happening. . . . You know, lots of times I'm struggling with a problem because I'm on the dance floor, [not on] the balcony, so sometimes I'll . . . talk to someone. . . . I could solve somebody else's problems like that. It's just sometimes, I am too close.

She highlighted the need to remove herself from the distractions and get counsel on the issue. She talked about being "too close" to the problem, and therefore getting perspective gives her space from the challenge. It was the hope of all of the administrators that when they seek a new perspective, outside counsel, or reflection that it would allow them to regain their focus on the organizational strategy.

Leaders Behaviors toward Strategy Implementation

Administrators' approaches to organizational change were remarkably consistent. Across the administrators, there were clear approaches toward strategy implementation that emerged as best practices. These behaviors could be categorized as: understand the problem, set goals, build work goals and performance goals around the strategy, resource the strategy, assess stress levels, and stay in change mode. Additionally, there were other behavior characteristics that were practiced or achieved. These included communication and trust.

Understand the problem. Administrators recognized that they could not make organizational decisions without first understanding the problem. Formal and informal, internal and external feedback was important to this process. In addition to that feedback process was a commitment to learn about the problem. Carolyn relayed this:

> I literally never thought I would study as much as I did when I was in graduate school, but I study harder today than I ever have because every single day I'm confronted with a problem that oftentimes I know absolutely nothing about . . . So, in order for me to figure out what we need to do to address the white fly issue in [state], I got to figure out first what are white flies?

Understanding the problem pertains to both the external issue, for example, youth cyber bullying or an invasive insect in corn, which is often a technical issue. For the administrator, they need to understand the technical problem in context and then combine that information with the organizational capacity that is being relayed through the organization. Once the administrator understands the problem, they are able to move on to setting organizational goals.

Set goals. Administrators emphasized the importance of setting clear and consistent goals to achieve organizational change. Consistently there was a recognition that Extension is a large organization with many levels and therefore organizational change takes a "long" time. Consistency of goals and the development of goals each were points of emphasis.

Choose the goals wisely. Change causes fatigue to all members of the organization. The fatigue resulting from change was recognized by administrators who were experiencing current organizational changes and from those who worked in states that had previously experienced significant changes. James said "So, going forward we're needing to communicate even more to get people to buy in, but eventually there will be so much fatigue . . . that they're just, they'll be like, I can't do this." Sarah also shared about her state's recent reorganization due to a significant budget cut, saying:

> There's a fatigue right now, a pretty big fatigue. I'm trying to figure out next steps and what it means. The pace is pretty rapid right now. So, there is an organizational fatigue . . . [and] there's some anxiety with the unknown of some of these shifts. That also adds to some of the fatigue.

Captured in both of these examples is the concept that at some point in the change process, the individuals in the organization will become fatigued and they will no longer be able to respond or be willing to. As Curt states here:

> I pushed our people and they certainly were very responsive. They were on board with me. They're very passionate and emotionally connected with the 4-H program, so they certainly rallied together, and as we moved ourselves forward, in retrospect, what I

> realized is that I've burned them out. It just . . . became too large. They couldn't keep up with it all. Unfortunately, it resulted in some negative morale concerns among our team . . . currently. Now we have the reality [that] everyone's worn out, they can't sustain it. Then what do you do with that? So . . . that is a weakness now. I think that's made us vulnerable.

This inability to respond becomes an organizational threat when a large-scale crisis does arise—those in the organization won't be ready to do the large-scale lifting that will be necessary. Rather if the administrator is able to choose the most important, specific, and intentional goals with small incremental movement forward, then the organization will not function at a level of fatigue and thus be able to do the significant change necessary.

Extension is a big organization that takes time to shift. Extension is an organization with an enormous number of internal stakeholders—for example, staff, volunteers, and members with varying levels of engagement to the organization—plus all of the external stakeholders—for example, legislators, county commissioners, and service organizations. The size of the organization, the structure of the organization, and the relationships of the individuals all were recognized as factors that contribute to Extension organization change taking a long time.

Organization structure. Extension was acknowledged as being an organization with many levels. For each state, the structure was unique, as far as how administrators provided supervision to employees. In some states, the administrator provided direct supervision to county level staff. In most cases, the administrator provided "dotted-line" supervision to individuals, meaning they provided programmatic input to a regional or county administrator who provided direct supervision. Geography and distance also contributed to all states, recognizing a loose structure to the organization with few supervision levels.

Volunteer perspectives. Volunteers are relied on, particularly in the 4-H program, to deliver direct programming. These individuals are the bulk of the human resources for many states, and yet they have no financial supervisory oversight. This was discussed as proving to be an added challenge to coordinating organizational change because adopting organization change was linked to staff engagement with the goal and the volunteers' willingness to adopt the new model. Rhonda shared that "[some of] our long-term volunteers. . . live in yesteryear and want to recreate what their 4-H experience was. They actually become resisters; they're not even fence sitters, they're resisters." Ryan recognized the challenge but asked this:

> How do you get over that? Take the fear out that if you don't live on a farm or you don't have an animal, there is a place for you within 4-H. . . . you also have to change the mindset of the volunteers because a lot of your volunteers and your club leaders have the mindset that . . . "when I was in 4-H, it was just for the ag kids, it was just for the farm kids," and you have to let them know that, well, no, we want to engage as many youth as we possibly can. And then [from] the staffing, you also hear comments that are made that, "well, this is a really rural county and I'm not sure if, if someone who's African American or someone who's Latino or someone who's Asian American . . . [would] fit in [this] county."

Ryan, in addition to recognizing that volunteers are slow to adopt organizational goals, also identified that coordination and commitment is needed at all levels—from the administrator, county-level staff, and volunteers.

Callie talked about how that her ability to influence goal adoption by volunteers was by constantly supporting county-level staff and modeling a commitment to the work. She shared she has been focused on this:

. . . Creating an environment where people are happy about coming to work every day because I know that if [county-level staff] feel as if their job is important and valued and appreciated and means something . . . then that's how they're going to treat the volunteer; and if the volunteer feels that way, then the volunteer can turn around and treat the youth or the family member that way. I feel like it's a trickle-down [effect].

The volunteers are often the first point of contact in youth programming but the last to be reached with clear communication about organizational goals.

Remain consistent. In recognition of the organizational factors, the administrators referred to above underlined the need to remain consistent in the organizational goal. Elizabeth says here:

You cannot model constantly turning the ship, [you can't] turn the ship for that day because it sounds like a great idea. You can't model that because now you're teaching your staff something. And like I told my first boss when I arrived here, with time, you asked me to turn the ship. I got a whole ship to turn and nothing will be successful because you're constantly running after the rabbit… You have a cute rabbit over here. Another cute rabbit over there. You can't run after all the rabbits and get the outcomes you want. You have to decide which one of those rabbits or two rabbits will help you get there. Then get that rabbit anchored. Then maybe you go after the next rabbit, but you can't have 10 rabbits out there if you're going to get someplace.

As Elizabeth illustrated here, the Extension organization is a large "ship" with many stakeholders, and there needs to be dedication to the organizational mission in order to achieve results toward the goal. Remaining consistent in focusing on the goals allows for individuals at all levels of the organization to digest the process, which leads to the ship being moved, opposed to individuals chasing “rabbits,” which ends up very frantic, a lot of effort, but does not achieve the organizations goals.

Collaboration. Collaboration was recognized as important in the goal-setting process. Administrators saw the value in co-developing goals with individuals at all levels of the organization. Ryan explicitly stated, “I haven’t made a unilateral decision since last February [when I started] and that helps with the buy-in. It really does.” While Karen discussed her approach of gathering her team, relaying “our approach was [to] give them a resource but also [to] engage and get expertise and opinion and ideas from everybody.”

Robert gave an example of how he facilitated collaboration to create strategy, saying this:

> I feel very well backed and supported by the district directors . . . because we all sit down and . . . we make decisions for . . . 4-H programming. If I have a new idea that’s going to [roll] out, that’s going to take agent time and . . . agent input and stuff, you know, we’ll sit down in our Extension cabinet meetings, discuss these things—the pros and cons. And so, then when I roll it out . . . I know their support [is] behind getting the agents involved and behind it.

As seen in each of these administrator comments, they sought out opportunities to create the organizational goals with stakeholders to build “buy-in” from individuals at all levels.

Build work goals and performance goals around the strategy. It was identified that the organizational goals needed to be connected to the county programming staff’s performance expectations. County staff needed to take the organizational goals and be able to apply the expectations to their local program. Sarah explained:

> We’ve asked people to put in their plan of work that they will create at least one new SPIN club by December 2018. So, we’ve . . . embedded this concept and the many

> different elements of Extension work through systems planning [along with] regional director expectations and put all those pieces in place.

Sarah, along with her colleagues, clearly communicated performance expectations to the county-level staff to implement SPIN clubs, which are short-term clubs focused around a special interest. Sarah did not decide specifics in the expectation that allowed county-level staff to be responsive to their local clientele in light of their overall program plan. However, having it as a clear expectation of performance means local staff *have to* do the analysis of how to work toward incorporating the organization change into their program.

Administrators expressed frustration that with the loose supervision structure, even when expectations were discussed, adoption did not always occur. Nancy mused that:

> Our faculty and staff [are] slow [to change]. We help enact change and . . . help people to make better decisions [to] do this, but yet we don't want to change. We want to [keep] the same structure. We want to [stay] doing what we have [been] doing.

Rhonda shared about a state specialist not changing after several years:

> It's the individual leading that effort [and he is real] comfortable with status quo—how to get that to move? And I'm still talking about that three years later when I said I want a review to be done with this? And I guess it's likely situational. It's not that he doesn't understand the message, because when it came up again this year, I said, "You know, we've talked about this for a couple years; why is it not happening?" The response was, "Well, it's actually been three." And I said, "OK, then if you know it's been three, why am I still asking?"

While non-adoption was frustrating, administrators re-emphasized the need to build the organization goals into the work, otherwise no one will adopt them. Slow adoption is better than none at all.

State 4-H program leaders recognized that their regional director and county director partners who are providing direct supervision are key partners in goal implementation. Having clear goals for these individuals to communicate to their programmatic staff increased the likelihood that they would be included in performance expectations. Sarah explained that:

> The regional directors were happy. They wanted diverse program models. They wanted [to] increase enrollment. So, when we rolled this out and said, "Here's how we want to do it," they were like, "You bet we support it." And they were happy; they were ready for it. They wanted . . . a statewide initiative that they could then rally around and encourage their folks to adopt.

In this case, a state 4-H program leader shared that with a clear expectation the regional directors were able to be champions for the goal and emphasized it.

Recognize efforts toward the goal. Awards recognize individual achievement toward a goal. Administrators recognized that another strategy for getting the organization on the goal was by building the award system around the goal. Mary shared that while she couldn't provide promotions or raises, she could ensure that her staff were at least recognized. She said this:

> We haven't had a lot of promotions or pay raises in the last year, which can affect overall morale . . . if you don't have some good . . . opportunities for people to be recognized for their outstanding work.

Elizabeth shared of a recent initiative that she had rolled out: "We celebrated it in different places. Where we celebrated the things that [staff] have been doing, people recognize what you celebrate and they want to be a part of the party. Then [things] will begin to happen." As she emphasized, in order to direct the work of volunteers and staff alike, it was important to provide public appreciation and recognition.

Resource the strategy. In order for the work to be accomplished at the grassroots level, resources are needed for the work to be accomplished. No goal can be accomplished if there are not resources placed behind it, whether that is financial or human resources. Several administrators talked about how in their goal-setting process, they made a point to put resources behind that goal. Karen said, "You don't want to just have a strategy." Sarah continued that thought with this:

> [It's] resourcing people and putting that in place. The other thing was communicating with Extension regional directors [that this is] how we've set people up to be successful. Here's how we're going to support them along the way.

Others showcased the challenges of goal attainment when they were unable to put the appropriate resources behind the effort. Brian shared that it is a crisis for Extension when "the organization comes up and wants to deliver the program but we don't have the manpower or the economic wherewithal to deliver it." And he underscored that from personal experience, saying this:

> We just don't have the [bodies] to do what we need to do and that can make us irrelevant in the sense that, you know, there's not enough of us so we're not seen as a player in the community.

William as the State Extension Director was relaying that the state budget challenges him to put human and financial resources into any programmatic initiatives.

Removing barriers. "What are the barriers that are going to prevent us from being successful?" "What kind of resources do we need to provide to the educators?" were the questions that Ryan used to frame his decisions. Administrators saw themselves as not only directing the local-level work but also helping to enhance that local-level work. In order to do that, they identified that they needed to remove the barriers to doing the work. Sometimes the barriers were financial, but often the barriers were more technical issues: policy, procedures, and university bureaucracy. For example, Susan found that:

> There're a few things that they mention to me that they like to see . . . changed. I say, "So why didn't you tell me?! . . . These are super easy, no problem, I'll have them fixed by the . . . next brown bag." I actually will have them all fixed by the next Tuesday. And so, it's like… [w]here's the disconnect that I'm not getting these things that are so meaningful to them, which are super-easy changes for us?

In this instance the issues were all internal policy and procedure issues that were causing stress for the county-based staff. Susan's timeliness of addressing the issues indicated her desire and willingness to alleviate the barriers to doing the work. David was seeking to reduce the barriers between 4-H county level staff and university-based researchers when he shared, "[We must] overcome the barriers and obstacles that exist between front-line staff and the researchers." He was focusing on improving the work level for the county-level agent by helping them have better data about program outcomes. The focus on barriers emerged because administrators often recognized that technical issues were the factors that were contributing stress for their employees.

Assess stress levels. Extension work is a high-stress job. Particularly, being a county-level 4-H staff person was recognized by administrators as being a high-stress job. Susan shared that she thought doing 4-H work was “consistent with a lot of staff in youth-serving organizations—it’s just in general a high turnover [job] because it [is] low pay and high stress.” High stress was recognized as detrimental to performance. David relayed this:

> The challenge, I guess, is how do you find the line between . . . pushing for change, encouraging that process to move an assessing when, when you have to step back a little bit, slow it down . . . I think that’s a challenge for me, too—to really engage where people are and [see] whether we’ve got the balance right because it’s very easy to go too far, too fast, but it’s also, I think, easy to maintain the status quo.

As David acknowledged, moderating the pace and stress level was important to ensure that staff were not overwhelmed or stressed. Carolyn communicated administrators’ sentiments, saying, “Happy people do better work, you know. I mean there is truly research that shows that a happy engaged employee will do three and a half times the work of a disgruntled person.” Administrators were committed to assessing stress in their teams to ensure that they were, if not happy, at least not experiencing stress.

Administrators discussed throughout their interviews about how to recognize stress levels. As with feedback, there were separate and distinct ways that administrators were seeking to evaluate stress levels. The first was direct interpersonal interactions. The second was through statewide organizational assessments.

Administrators used direct interpersonal interactions to measure stress with their immediate team members but also as a tool to understand stress levels across the state. David said:

> [I am assessing stress when I am at] annual in-service meetings, it happens in weekly connections, through email blasts to all of our staff—[it] happens by going out to their regional meetings and connecting with them.

Administrators commonly discussed being able “see stress” or that they were “listening” for stress.

Administrators most commonly discussed the ability to see stress. They were confident that they could read their team members and employees’ body language to understand when stress was present in their team. Rhonda said, “I think I've been blessed with the ability to read people pretty well, and I can usually tell when there’s something brewing without [their] even telling me.” Joseph reiterated a similar sentiment, saying “I’m pretty good at that because I can see it, and . . . again, that’s part of leadership.” Both administrators were confident that they could see it, that people were sharing information with them through their body language.

Administrators also regularly identified that they would listen for signs of stress. Here Brian shared, “They will tell you if you listen to them. They might tell you verbally [too, but they definitely will] in body language.” Alfred also emphasized that if he listened, his teams would share their stress level. He said:

> I think the simple answer is through listening. I think if you listen closely and read between the lines. . . between what’s being said. I think if you hear the same issues coming up time and time again from faculty and staff, I think you can begin to focus on what that stress might be.

Alfred recognizes that even when you see or hear stress, for the administrator, it is only the first step to understand what the stress is being caused by.

In an effort to recognize the whole organization's stress level, administrators also organized surveys that were administered to all employees. Susan relayed that her state 4-H team conducted them:

> We do have input surveys to see how counties would like to see our priorities shifted—how we're meeting their needs—every three years, but we changed it up a little bit this year . . . We just laid it all out there, like here are the things we think we're supposed to be doing. How do we know where we are missing them or what should we stop doing? What should we do?

They did this in an effort to understand stress levels with the program workload without relying on the relationship structures and to seek honesty in the feedback loop. Susan continued to share about the formal feedback process, saying that they found:

> What this completely anonymous survey was saying [was not at all what the state Extension director's team was telling us]. Trust me, these folks like to tell me exactly what their thoughts are in these kinds of surveys. And this is not matching up with what [state Extension director's team] was telling me, and so I realize I don't know who they're talking to, but the voice that matters is the staff and the others who fill out the survey. They're the ones that are 4-H people, not the [the county-level director] or whoever [they] were talking to.

As Susan shared, she felt like the in-person feedback was quite honest from the programmatic staff, but that in order to substantiate that, they sought out the entire state 4-H organization's feedback in an anonymous way to ensure she was getting a true account of the stress levels.

Stay in a change mode. "I simply say . . . if we're not changing, we're dying," stated Elizabeth. This idea of staying in change mode captures the aspect that the leader must keep receiving feedback, must continue to remain focused on the trends, must keep the organization focused on small incremental, intentional forward movements rather than large, high-stress lurches, and must be focused on continued improvement. As Elizabeth shared, an organization that isn't moving forward is dying.

Quality was a constant underpinning of the importance of the work. James explained that his focus was on "really tapping into . . . our ability to become, you know, the highest quality program in regard to camping. That's where we're putting a lot of our efforts and time." While, David was excited to report after receiving a grant that "[now] the Extension offices [are] a major potential provider of high quality after-school 4-H programming." Callie cautioned that Extension should not be "lured in the direction of dollars rather than sustainable quality programming." Because the administrators' focus was on "quality," it made the focus on continual advancement easy. Administrators did not want to be in high-stress situations, because "Now you're managing more than a crisis. You're managing a hurricane," shared Elizabeth. They wanted to be in a state of constant steady advancement rather than in a crisis mode.

Leadership Behaviors: Personal Characteristics

The strategy used toward organizational change is also supported by the behaviors of the individual who is seeking the change. The behaviors of the leaders were also recognized as being important to the organization change process. Some key personal behaviors that emerged were having a personal mission, having personal integrity, modeling, and taking time for personal reflection.

Personal mission. The labor of administrators was underpinned by a passion for agriculture, the organization, and its mission of "improving people's lives." Time and time again administrators talked about the "power" of Extension and/or the 4-H program to be able to improve the lives of the citizens of their states, and this intersected with their own desire to be able to do the same thing. The alignment between their own personal mission and that of the organization provided a leadership vision for the administrator. The leadership vision provided the guidance for what should be done and why. Carolyn shared this:

> I think the answer is just [to] focus on . . . doing what's right, making a difference, you know, focus . . . on making this world a better place. . . . I think that's what Extension does mean. I think that's what we're here for.

It is clear from this quote that this administrator is passionate about both Extension's and her own mission of improving lives and that it helps define the work that she then directs within Extension.

Personal integrity. Integrity is rarely thought of as a behavior; rather it is an attribute that an individual has. The Extension administrators that I talked to demonstrated their responsibility to the organization's mission and to the people in the organization. Callie shared this:

> I . . . focus on organizational learning and ethics and how it relates to the land grant mission and Extension. Are the decisions that we make . . . really for the people by the people? Is that really true?

In this statement, she is reflecting on ensuring that Extension work remains focused on the mission and ensures effectiveness. Other administrators took responsibility for their own decisions, recognizing that, as a leader, their decisions are their own and that they have to take responsibility for those decisions. Timothy shared, "I have to make decisions, and it's not a democracy . . . ultimately, I'm responsible for those decisions." Curt continued in the same vein, "I'm willing to take a stand. I'm willing to make a decision that may not be popular." He was referring to taking an unpopular stand today to achieve a long-term organizational goal that he felt was important.

Integrity in the form of taking responsibility was demonstrated in the actions that administrators took. Joseph relayed an example:

> Last year, I unfortunately had to lay off some people, and I went and met with all those people personally. I didn’t ask any manager to lay [them] off. I did it myself. I don’t like doing that, nobody does, but I thought it was very unfair for [the manager] to have to go do that. I wanted that manager to have the opportunity to work with that person [to] find a new job.

Here the administrator was doing the challenging work because he felt that it was the right thing to do, and he thought that it allowed other people to continue to have relationships. The task was hard for him, but doing it himself allowed the work to be easier for other people in the organization.

Modeling. The importance of modeling expected behaviors was regularly discussed. As leaders, they were rarely in a position to be doing the same work tasks. Rather, when they discussed modeling, it was about showing up, being present, being engaged with all levels of the organization, and being clear and constant about the organizational mission. If they were “modeling,” then the leader was putting in the same amount of effort, if not more, than the individual at the county level. Joseph shared that he thought the organization was responding to his performance.

> People are really putting in the effort, and I think they realize I do, too. . . . I hope it’s inspiring to people. I think it is when they see me spending the time and the extra time and [doing] the over-the-top stuff, and they say, “Well, he’s doing it. Ok, I’ll do it, too.”

Modeling is recognized as important to achieve not only high levels of achievement, but also the right level of achievement. Curt relayed that he had burned himself and his team out and that in order to address that concern, he was making changes. He relayed that:

> [As a state level strategy, the] 4-H program [has] been deliberate about concentrating our total team meetings around things such as mindfulness. I'm modeling well about taking leave. I'm relaying my expectations that they would meet expectations by creating a program that's more manageable.

As a response to feedback and self-reflection, Curt made changes that he intentionally modeled for the organization.

Personal reflection. Administrators were in the process of reflection throughout the study. For example, William shared about his state's significant budget cut and discussed his strategy. After he shared what he was trying to do, he shared that he was uncertain if he had accomplished the goal:

> When you have . . . shrinking budgets, it makes it even more difficult. I try to make sure that people don't get too much in despair. I try to be transparent and clear [as much as] I'm allowed to, but I won't say that I've been successful doing that.

Robert reflected on the effectiveness of curriculum writing teams across all the colleges of the university, saying:

> I don't have the sense, the feeling that the entire college feels like 4-H is their program, and we could get more collaboration . . . you know, if there was. I don't know that we've done a good job of reaching out to some of those specialists.

In these two illustrative examples, the administrator was processing the work that has been done and evaluating where the shortcomings were in the work and the process.

Communication

Clear, constant, and consistent communication was raised as the most regular leadership behavior. Of course, communication was discussed in the feedback discussion, and then in the goal setting, and now again in leadership behaviors. Communication was assessed because this important behavior is not just to receive feedback and direct attention toward the goal, but being a communicator is an important behavior in and of itself. Carolyn shared that she relies on her previous experiences to frame how she communicates:

> I [have] a strong background in judging [and] coaching, so everything . . . in my mind when I am thinking about . . . a decision, I [have to] be able to talk a set of reasons on this—I need to be able to articulate why I did what I did and help people understand that.

Sam supported her sentiment and emphasized the reason why communication was so important:

> I think, you know, it always gets back to that: communication, communication, communication—you can never have too much of it. [The trick is] figuring out how [to] do . . . that for our statewide system and make sure everybody's kind of on the same page; that's always a bit of a challenge, but it can be overcome by effort.

Together, the willingness to have a dialogue and to have consistent interactions with the followers made the administrator a good communicator. This was seen as a leadership behavior by administrators, which was characterized by "effort," as revealed in the quote by Sam above.

Dialogue. Communication was about having a dialogue with the entire organization. This meant welcoming dissenters to talk with administrators or administrators talking with staff about their work challenges and challenging those closest to them to think deeper or reflect on the purpose for their own work, but also for their organization.

Consistency. A singular conversation was not considered to be enough—there needed to be consistency in dialogue. Administrators talked about developing newsletters, conference calls, and regular meetings with individuals at all levels of the organization. Karen recognized that for her statewide 4-H program staff:

> I wish we had a lot more time to do that, though, I rarely do. Once or twice a year is not enough. . .. One very small thing that [we did] was to start having a monthly Zoom meeting so people can see each other and hear what the topics are.

Rhonda supported the idea of having regular meetings, whether by technology or in person. She shared that her leadership team "meets generally biweekly via Zoom or some other technology and then once a month in a full-day meeting." William shared that he was consistent in his communication to the entire organization through "a newsletter that [he] send[s] out every two weeks. . . . I've never missed in 10 years," he relayed. The importance was placed on both the need to have the conversations and on the regular pattern of them.

Ryan shared thoughts that support that when there is not a dialogue and consistent communication, there will be a breakdown:

> I think there's a communication breakdown within Extension where people who are field-based don't understand how big decisions are made and feel like they don't have a say in how those big decisions are made. In some circumstances, leadership can't really share how we got to [a] decision. Like, you know, people have to trust that we're making the right decision; but if a policy is changed, we should do a better job of explaining why that policy change needed to take place and how it's going to affect everyone, instead of sending out an email or a memo saying, "Here's the new policy." Whenever you have a breakdown in communication, you have a breakdown in morale.

The combination of a willingness to have dialogue and consistency of dialogue contributes to the trust that a leader has with followers—that what the leader was saying was true, accurate, and in the best interest of the organization and the stakeholder.

Trust

Ryan shared in the above quote that the staff needed to "trust" administrators are making decisions in the best interest of the organization and for staff. While this is a true statement in the sense that staff may not always be able to know all of the information that is going into the decision, the "have to" trust is less accurate. Rather, administrators recognized that they have to earn the trust of all of their stakeholders. Sam highlighted that in order for employees to take on the goal "there's [got to be a] good trust foundation and you know [you are] doing it together and trying to do it for the right reasons."

Robert shared about the rollout of a new program that was going to involve large number of stakeholders:

> We have an upcoming volunteer certification program [that] to me will be a very systematic change. We're going to require some level of training and we're still working on what that's going to look like [for] our volunteers. Our volunteer development specialist has traveled to all 33 counties, conducted interviews with the agents to discuss what they see as relevant needs for the volunteers, and also has [asked] . . . "what does that training process need to look like? Does it need to be aligned, does it need to be a hybrid?" And so she's had those discussions with them and also provided [them with] my written survey that they've had to return back to her to gather some more data. . . . . [Asking questions] also provides . . . the opportunity to say, "Hey, I want your opinion . . . have you thought about this? . . . Not only is she finding out what they feel [their

volunteers'] relevant needs are, [but] she's also having the opportunity to start positioning herself for what we know is an upcoming change in the system. . . . When we reach the next step of when she consolidates her information, we [take into consideration the] system protection side as well as what the agents really feel like the volunteers are lacking and need—what are our volunteer certification programs going to look like? Or at least, the first steps of it, you know, then we'll be ready to roll that out and we'll be saying, "Hey, here we are, we're going to start rolling this out and your volunteers are required. This is why they're required." [Because they] already had that base of discussion, [they've] had time to digest that. You know, I feel like anytime you give people the time to think over something that you throw on them, rather than just throwing it on, it is usually a very positive step toward creating change.

While Robert never mentioned the word trust, he was talking about how the constant engagement, focus on shared understanding, and concern for the volunteers' and county-level staff's point of view were all aspects that contribute to trust. More important, those behaviors allowed for trust to develop. Robert also recognizes that the trust that is important is not in him as the director, but in the state 4-H volunteer specialist who will be implementing the project; therefore, she is the one doing the on-the-ground relationship building.

As demonstrated in the above quote, the trust must be earned by the administrator. Administrators communicated that trust came through communicating and demonstrating their commitment to the organization and the people they work with. Trust could be engendered through transparency. Trust could also be developed through communicating data or information about why the plan would or should be implemented. The key to moving the goal forward successfully was the followers' trust in the leader and in the plan.

Chapter Five: Discussion

The academic literature did not include Extension administrators' perspectives on organizational challenges or their leadership behaviors, and therefore it was uncertain whether the trends in the literature were a result of strategy or were the bubbling-up of local grassroots initiatives to serve local communities. It was found through this study that administrators are attune to many environmental factors, both internal and external. Administrators' attention to these factors reflected the literature's emphasis on racial and ethnic diversity changes (Erbstein et al., 2017; Hoorman, 2002; Vega et al., 2016); urbanization (Argabright et al., 2012; Bloir & King, 2010; Borich, 2001; Fehlis, 1992; Harriman & Daugherty, 1992; Henning et al., 2014; Krofta & Panshin, 1989; National Urban Extension Leaders [NUEL], 2015; National Urban Extension Task Force, 1996; Panshin, 1992; Ruemenapp, 2017; Webster & Ingram, 2007); the change in public's understanding of public value (Chazdon & Paine, 2014; Franz, 2013; Franz, 2015) and the resulting emphasis on evaluation (Boleman & Cummings, 2005; Cummings & Boleman, 2006; Franz, et al., 2014) and more importantly impacts (Wang, 2014; Zotz, 2004).; and, that technology changes the way the Extension programming is conducting, providing both an asset and challenge for delivering Extension programming (Collins, 2012; Jones et al., 2014; Radhakrishna & Thomson, 1996; Risdon, 1994; Tennessen et al., 1997).

In addition to the above environmental factors that administrators confirmed, they also highlighted other factors. Themes emerged around the necessary responses to the environmental changes, including 1) that the mission should be reframed toward health, 2) that there is an increasing need for support from Extension in rural communities, and 3) that the Extension employee pipeline needs attention. For the 4-H program specifically, administrators recognized 1) that they are at the fault line of the culture wars in regard to making efforts toward serving

LGBTQ+ youth and, 2) that modifications to the 4-H service model need to be explored to stay relevant. Administrators recognized that the organization's response to the above environmental factors has produced shifting focus friction. Additionally, administrators recognized the increased speed of environmental change.

Extension

Administrators' recognized key environmental factors that reflect the literature. These included changes in racial and ethnic diversity in our communities (Erbstein et al., 2017; Hoorman, 2002; Vega et al., 2016); urbanization and the many ways that is changing our communities (Argabright et al., 2012; Bloir & King, 2010; Henning et al., 2014; National Urban Extension Leaders [NUEL], 2015; Ruemenapp, 2017; Webster & Ingram, 2007); the changing way the public understands public value (Chazdon & Paine, 2014; Franz, 2015) and the resulting need for program outcome evaluation (Boleman & Cummings, 2005; Cummings & Boleman, 2006; Franz, et al., 2014) and impacts (Wang, 2014; Zotz, 2004).; and, that technology is a tool for Extension programming to be conducted, which can be an asset and a challenge (Collins, 2012; Jones, et al., 2014). While those environmental factors were recognized in the literature as areas of programming effort, there is still work to be done. Additionally, other factors and responses were discussed by the administrators. They are explored further in this section.

Extension is relevant AND will remain focused on agriculture. Despite the debate in the literature about the future of Extension (Hoag, 2005; West et al., 2009) or the relevance of Extension as an agriculture organization (Bull et al., 2004), administrators resoundingly rebuked Extension's extinction (West et al., 2009) and were committed to Extension as an organization that has and will remain rooted as an agriculture organization.

There was no debate among the administrators—Extension and the 4-H program will remain and should remain agricultural education organizations despite the calls in the literature for change. There was consistent passion for the mission and capacity for Extension to be able "to improve people's lives." Administrators resoundingly rebuffed any call in the literature for Extension's extinction (West et al., 2009). From the administrators' vantage point there has not been a time that needed Extension more than today.

Reframing as a health organization. Administrators were adamant that Extension must remain committed to agricultural programming. However, they did suggest the need to reframe agriculture programming to be a continuum of agriculture as food, as health, and even as community. This means that the work that Extension needs to do is not only support changes in agricultural production but also provide wraparound services in helping communities and youth. This is not new as Extension has been providing programming on agriculture production and food since it's inception (Rogers, 1988). Administrators specifically focused on how to support healthy production, how to ensure healthy food, and how to ensure healthy people in mind and body—all of which they saw as ways to achieve healthy communities. The change for the Cooperative Extension system is to frame the current work in the context of health, both as a mission and a marketing frame of reference. In achieving this re-framing there is the ability to retain traditional programming and expand into new programming and territory. More research needs to be conducted about how "Health" serves as a framing for the organization, however, the administrators had a strong sense that this was the appropriate approach to organization strategy.

Change in public's understanding of public value. The public contract between citizen, legislature, and public-serving organizations has changed. The contract is now: What is the value that is being received for the dollar invested. What is the return on investment? And, should the public dollar be invested in this program compared to any other given program. There is no longer a commitment to funding based on relationships or historic connections.

However, the importance of retaining strong relationships with legislators and funding organizations is important. Relationships become important as a tool to market empirical program outcomes to stakeholders and to stay on the radar of legislators, to be the go to organization to deliver program needs. Additionally, relationships are important to stay relevant by delivering programs that legislators want implemented at the grassroots level (Morse, 2009).

The emphasis on empirical evidence of programmatic outcomes is both a threat and a significant strength for Extension. If Extension is able to generate research-based outcomes that prove the return on investment is valuable, then there is room to change the budget trajectory,, which has been suggested by Cummings and Boleman (2006), Davis (2012), Franz (2013), Kalambokidis (2011), Stup (2003), and Zotz (2004). Obviously, this shift has expanded pressure on proof of outcomes, which has been realized through an emphasis on evaluation, as was recognized in the literature. The inborn advantage that Extension and 4-HH should have is that the relationship to research capacity within the university. Extension and 4-H being a part of a research university should help make Extension highly competitive in this environment. The administrators recognized that should be the case.

The administrators recognized that using the university resources could make them have an advantage for funding because of the desire for legislature to have empirical program results that reflected the issues and needs that the legislature expresses concern. Some administrators were striving to set their own programs up to conduct significant and impactful research: improving evaluation at the state-level, conducting research on specific program areas (e.g. camp, and yet others were looking at longitudinal alumni studies to assess longer-term impacts). However, other administrators experienced frustration that campus-based faculty –even with Extension appointments- with their own research agendas and pressure to fund their own efforts (Alexander, 2000; Leifner, 2003) were not focusing their efforts on research that would be relevant to Extension and 4-H. Thus, Extension is in a challenging position of providing funding for positions that may or may not be supporting the overall organizational community-based programmatic efforts.

Administrators are currently orienting their programmatic staff to be focusing on research rather than programmatic evaluation. A continued push is needed for communicating impact and to support scholarship efforts of the county-level and university employees. The area of continued work needs to be in connecting campus-based individuals to Extension's research agenda. To achieve this effort, it may be that Extension administrators can develop an overarching research agenda and then publish it widely and coordinate research teams around specific ends which could result in research-teams and competitive funding opportunities that would benefit both the university-based faculty and the Extension research needs. This may be the most effective strategy as there are limitations in achieving accountability within higher education (Gappa, Austin, & Trice, 2007). Other opportunities that can be utilized is building specific research agendas into new faculty job descriptions; building greater understanding about Extension needs for research with faculty and supervisors a like; and, Extension administrators putting financial resources towards funding small-topical and relevant- research projects.

Budgetary trends. Smith-Lever Capacity Grant Funds that are administered through USDA-NIFA's Federal budget are stagnant according to the study participants. Unified efforts to increase Smith-Lever Capacity Grant Funds in order to ensure future organizational stability were strongly recommended by administrators. The effort needs to be a concerted campaign of the land-grant university systems and their partners to communicate the organizational value and their mission to federal, state, and local legislators and government agencies. Additionally, Extension is no longer solely a rural community educational program and therefore should seek partnerships across the federal government. The reframing of the organization as a health organization has potential to open the doors to further federal partnerships,, as communicated by the administrators. Holt (1989) emphasized that in order for the Extension system to be effective at adapting then there needs to be a symbiosis of between count-level staff all the way through the layers of administration in order to develop support.

State budgets are variable based on the state context. Developing strong relationships with legislators and being armed with relevant outcome data were recognized as the two aspects that could help stabilize the state budget. It is interesting to note that the administrators' ability to have two-way conversations with legislators was considered important so that programming could be responsive to the needs of the legislature and thus could be on the mind of funders when there was a funding initiative. As with the federal government, reframing the organization as a health organization allows for expanding partnerships beyond the states' departments of agriculture (e.g. Department's of Education).

County-level budgets will continue to become increasingly disparate, with rural communities experiencing downward pressures on both legislatively appropriated or direct tax-levied budgets as rural communities shrink. In order to continue to be relevant in Extension's historically strong programming communities and areas, there will need to be pressure to increase urban funding to allow for other state or federal funds to be used in shrinking communities. This leads to the opportunity of increasing municipality partnerships to support

Extension in suburban and urban communities. Being able to communicate and market impacts will be essential to developing relationships and partnerships with new funding agencies.

Growing need in rural communities. Administrators recognized the flip side of urbanization was the shrinking and aging rural communities that are left behind (Carr & Kefalas, 2009; Henderson & Akers, 2009). Extension administrators recognized the need for economic and community development in these communities. However, there was tension experienced because, as the needs increase in rural communities the local capacity to fund the organization shrinks. This creates a unique pressure on Extension to urbanize. However, Extension has a long-term relationship and a commitment to rural communities (Rogers, 1988; Wessel &Wessel, 1982); therefore, it's imperative to sustain service in rural communities and increase funding in urban communities in order to continue to serve both traditional and expand new audiences.

Urbanization. Urbanization is recognized by administrators as *the* challenge for Extension: the tension between shrinking rural communities where they have a strong base of support and large-population communities that are unknown territory (Fehlis, 1992). In urban communities Extension administrators recognized a high concentration of competition not only for financial resources but also for clientele. Additionally, administrators consistently recognized that the county unit scale is daunting for servicing urban communities.

While there are challenges, they also recognize that the shifting demographics require that Extension serve urban communities with their traditional programming, including 4-H, nutrition, agriculture through Master Gardeners, and community development. This shift is required because the continuous trend of shrinking rural communities will erode political support for rural-only organizations and serving all people is part of their public service mission. Additionally, urban counties and municipalities have stronger tax bases. The implications for

Extension working in urban environments is that Extension will need to market themselves in order to gain market traction at the same level that Extension has earned over a century of providing services in rural communities. This work is required of both Extension and the 4-H brands.

Relationships need to be built between Extension employees and urban county officials and local municipalities. The outcomes that result from conversations within these relationships need to be as responsive to community needs as they would be in rural communities. The staffing scale needs to support this responsiveness. In order to achieve this level of responsiveness, the “budget scale” should be communicated to state, county, and local municipalities. Carolyn shared a quote about the difference in funding levels between an urban county and a rural county—the difference being between 15 percent of the rural county’s budget and less than one percent of an urban county’s budget. If the county even funded Extension at five percent and each municipality funded Extension at one percent, the staffing capacity would start emerging to respond to the public needs of urban communities.

This funding model acknowledges the need to have, as Joseph shared, “high touch” encounters in the communities, to be engaged face-to-face. Extension will lose out to the competition if the focus is not on ensuring the connection between university employees with research-based programming and the community’s needs. Technology will need to be used to enable this work by sharing technical knowledge and facilitating virtual face-to-face meetings. However, the strength of Extension was recognized as a convener, a facilitator of solutions to complex problems (Vines, 2017). If there are not staff who understand the community or have relationships with the partners, then the value of the community-based Extension system is lost.

Technology: high tech *and* high touch. Administrators experienced the tension between using technology, which could result in devaluing the effectiveness of programming, and using technology to enhance programming effectiveness and reach. Additionally, there was a strong commitment to the idea that Extension's value is the closeness to communities and the deep knowledge of the community that only that face-to-face connections can produce. Joseph used the terms "high tech and high touch" to capture an Extension strategy that uses technology.. Different strategies for technology use by Extension are: virtual learning classrooms (Kudryavtsev, Krasny, Ferenz, & Babcock, 2007; Mains, Jenkins-Howard, & Stephenson, 2013; Oleson, 2004; Zamora, Blinn, Chura, Sagor, Coyle, & Domke, 2012) or big data (Hill & Hino, 2016) to understand community need trends..

Additionally, Technology is not a cost-saving measure. It was recognized that technology adoption is expensive. Rather it is an intentional shift in the way the organization completes its work. It costs money and takes investments to maintain the technology infrastructure, in tight budgets administrators are faced with expending money on technology or people. The decisions do not have to be either or, rather it needs to be a mix of both approaches.

Technology is not a panacea as there are significant barriers for clients to be able to use and access the tools (Seger, 2011). The costs and barriers to serving constituents makes a compelling argument that adopting technology is necessary, while also having staff in each county-or municipality- who are then able to be local conveners to facilitate complex problem solving.

Diversity. Administrators recognized their mission mandate to serve the representative populations in their state. At the same time, they recognized that there was still significant work to be done to serve diverse audiences in both urban and rural communities. Administrators recognized that there needs to be an intentional effort to develop programs that target minority populations rather than just waiting for individuals to walk through the front door. Efforts to modify existing curriculum for diverse communities was acknowledged (e.g. translating curriculum). The need for diverse and qualified staff was acknowledged.

Extension's Workforce. The importance of staff was emphasized over and over by administrators. It was recognized that staffing levels need to be increased.. Logically, the downward trend in staffing levels (Astroth, 2007) are linked to downward pressure of funding because the majority of the Extension budget is in human resources. Strategy needs to be developed to increase both numbers of community-based agents and a higher educational level of employees.

Additionally, the other challenge of staffing was that the current employees were predominantly white and did not have insider knowledge of growing number of ethnic populations: their cultural norms, language, religion, or networks (Vega et al., 2016). The administrators recognized this low-level of system -wide diversity of staff as a limitation.

It was also recognized that it was hard to recruit qualified candidates from community representative populations. This implies that there are barriers to entry, either that there are not enough racially and ethnically diverse individuals being trained as Extension professionals or that they do not see a place for themselves in the organization. In either case, work remains to be done to ensure diversity and inclusion in the county- and state-level workforces. If there is a lack of individuals entering the pipeline than there is an imperative to improve cultural competency (Daniel, Duncan, Navarro, & Fuhrman, 2014) of the primarily Caucasian current workforce of county-level staff (Young & Jones, 2015). Administrators recognized the need for improving language skills of Extension agents to be able to serve immigrant, refugee, and English as a

Second Language (ESL) learners (Behnke, 2008) who are present in both rural and urban communities. Language skills, cultural competency can be improved through cultural competency training but is also enhanced through international immersion experiences (Daniel et al., 2014; Elliott-Engel, Grove, & Bush, 2018).

The employment challenge for Extension is not only about recruiting diverse candidates, it is also challenged by the difficulty of retaining individuals, especially in the most rural and most urban communities (Young & Jones, 2015). Administrators recognized that heavy-turnover of staff prevented program excellence in the communities that have the greatest need. Young and Jones (2015) identified that for rural communities and urban communities the employees were not as embedded into the work-place making them more likely to leave.

An administrator identified that there was a disconnect in individuals who have a historic connection to Extension, that end up working in rural and urban communities. Meaning, that employees in those communities were either transplants into the community or were from the community but did not have previous experience with Extension. Administrators recognized that for the rural community the agent pipeline was hindered because there has been an increased competitiveness for undergraduates to get into the land-grant university. This was recognized as a significant barrier because there were potential future agents who had been a part of the 4-H program or agricultural education that would want to return to the communities but were not able to earn the credentials to be hired. Bachtel (1989) nearly thirty years ago encouraged a move away from the requirement of an agriculture degree to be an Extension agent. In urban communities it was recognized that there is not a long-history of engaging with the populations to generate a long-standing pipeline of those 4-H alumni or other individuals interested in

Extension as a career. For both the rural and urban communities these challenges caused a cultural disconnect for agents being hired.

Administrators need to develop intentional strategy to recruit future Extension agents from a diverse populations- rural and urban; racial and ethnic diversity; and, individuals with language and cultural competency skills. This is a call for language and cultural competency to be built into the curriculum of Extension agent preparation programs. For current employees more cultural competency training needs to be conducted, including more international immersion experiences- both domestically and internationally; and, there needs to be opportunities for agents to improve their own community-relevant language skills.

4-H Youth Program

Administrators are committed to the value that the 4-H model can contribute to a young person. They also recognized that they are not serving a representative population, whether that is across racial or rural-urban demographics and this shortcoming is an existential challenge that must be addressed (LaVergne, 2015). Administrators have also experienced pressures of increasing youth program competition, adult volunteer availability, the need to manage risk, and financial pressure. Thus, as administrators try to figure out the appropriate strategy to be a public good and serve a larger portion of the population, they have started to tinker with the 4-H model.

Toying with the 4-H model. Administrators recognize the premier value of the traditional community club model (Lerner & Lerner, 2013) and identified that the traditional club model may not be the ideal point of service for all youth. Administrators each had varying levels of commitment to a statewide program approach that emphasized: only community club model, to primarily in-school club programming, to heavy emphasis on the expansion of special interest and school enrichment programs. Five key points stood out in this study: 1) key components of the traditional club model need to be ensured in all programming conducted; 2) the need to develop a club programming matrix to help county-level staff manage their workload; 3) that being a good partner will expand the 4-H programs capacity; 4) the need for increasing involvement of first generation youth and families; and 5) an emphasis on intentional marketing and raising awareness of the *new* 4-H brand.

4-H participation experiences are not all created equal. Administrators recognized that the community club model had the most ability to make positive impacts on young people because of this idea of the greatest level of treatment which is an emerging idea from the newly introduced Thriving Model for 4-H Youth Development (Arnold, 2018). Several administrators talked about making sure that the aspects of the community club experience were embedded in the special interest project or camp or school enrichment. There has not been research conducted to assess what benefits those given aspects have on the overall outcomes from youth participation in each of the given areas. Research will need to be conducted to examine how these components influence a youth's experience as the emphasis on shorter-term experiences increases.

Additionally, administrators recognized that nonwhite youth still participated in the traditional community club model at lower rates than white students.. There is an important point of reflection in the turn toward new programming areas to obtain a demographically representative membership: Have nonwhite youth experienced an equally strong positive youth development experience through participation in short-term 4-H programs compared to predominantly white youth who continue to populate the traditional community club? And, has the 4-H program served minority populations well if they have not achieved parity within the traditional 4-H club program?

Program matrix. It was recognized that staffing levels are low and that the programming need is large. Staff only have so much capacity. In order to balance those two aspects, some administrators emphasized that their county-level staff should be focusing on direct teaching because those administrators felt that staff model could achieve maximum capacity of youth served. While other administrators proposed a county-level programming matrix that remained focused on the traditional club model—either in-school or out-of-school club models—and also included a few key large scale activities that engaged in another delivery mode, for example, in-school, after-school, special interest project clubs, or camps. The emphasis on this programming model balanced maintaining the higher-impact traditional club model, which is going to reach a smaller portion of the population, with reaching a larger population with high-quality educational experiences. Administrators did not talk explicitly about using those programming areas as a recruitment strategy. They did, however, view them as important ways to market the program by emphasizing aspects of the brand to larger audiences.

Partnerships. Partnerships were recognized as increasingly valuable for delivering programming. Instead of being in competition with other youth-serving organizations, providing quality curriculum and youth development expertise expands our program reach. Timothy talked about the Boys' and Girls' Clubs wanting to serve youth but seeking out 4-H for programming. If a mutually beneficial partnership is developed, that would be a transformational expansion of 4-H membership as youth participate in 4-H designed curriculum through their service providers. There continue to be opportunities to rethink the roles of 4-H staff delivering 4-H content.

First generation strategy. This strategy involves reducing barriers and being service oriented to support families who do not have generational experience with 4-H. Several administrators talked about reframing the recruitment experience for 4-H as a first generation strategy. To them, this meant that there was intentionality around helping new families understand what 4-H is and how it operates in an effort to get them in the door and keep them in the program. This was a strategy to increase 4-H membership from racial minority, urban, and rural populations. The use of first generation was intentional so as not to be “othering,” either to the minority youth populations who were being sought or to the traditional 4-H club families who are the base of the program.

Marketing. Marketing was important for attracting youth and families to the 4-H program and for ensuring that youth who participate in 4-H experiences outside of the traditional 4-H club are aware that they had a 4-H experience. In order to attract first-generation youth to the program, marketing needs to be clear about how individuals can get involved and reduce barriers for participation. Additionally, youth and families need to understand that they are 4-H members or that they have had a 4-H experience when they are participating in a camping program, after-school program, in-school program, or school enrichment program.

It is imperative that 4-H alumni are aware that they are still 4-H alumni even if they participated in a 4-H mode of delivery other than a traditional 4-H club, especially as the 4-H program moves away from a traditional club model. Particularly when thinking about reaching out to minority populations, this may become the strategy for engaging those first-generation club members in the future, once they begin to have children and remember their 4-H experiences.

LGBTQ+ youth inclusion. 4-H has found itself on a culture war fault line. The land-grant university is committed to serving all youth while being present in rural communities across the country. All 20 administrators talked about the importance of serving LGBTQ+ youth without it being a specific area of questioning. It was on administrators’ minds due to current events occurring at the time of data collection. It was clear that as leaders they were committed to serving the youth who are in their programs, and if they happened to be LGBTQ+, they wanted to continue supporting those individuals. However, they recognized the socially and politically precarious situation that 4-H has been put in because of the social backlash toward a LGBT inclusion policy. There was a recognition that not all 4-H staff, volunteers, or families were inclusive and that they were on occasion part of the backlash. Negative feedback was being spread through social media, right-wing media, and direct contacts to the legislature, university administration, and the administrators themselves. Administrators also shared deep concern about USDA-NIFA staff being "muzzled" by the Trump administration on the topic. Administrators remained adamant that as leaders their role was to stay committed to inclusion and that they would continue to advance efforts that may be unfavorable in the short term for the long-term benefit of LGBTQ+ youth and their families.

Forward Motion: Addressing Shifting Focus Friction

Discussed above are a wide range of environmental factors that administrators recognized for the Extension system as a whole and the 4-H program specifically. There are many, and they are complex. Administrators raised the idea of *shifting focus friction.* Shifting focus friction is the backlash from important stakeholders to organizational changes (Figure 5.1).

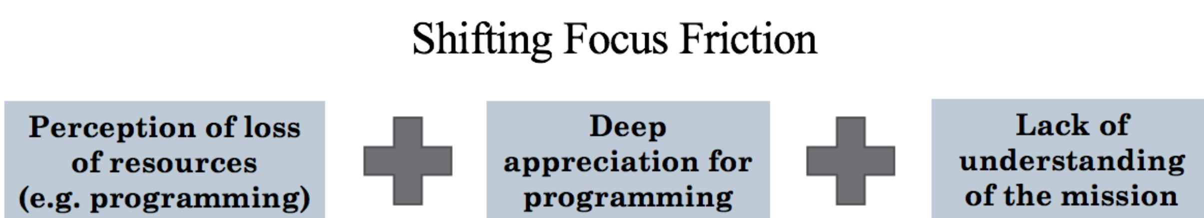

Figure 5.1. Contributing Factors for Shifting Focus Friction

The shifting focus friction is a backlash that is raised when there is either an actual loss or a perceived loss of resources to another focus. The individuals causing this friction are experiencing real stress from the real or perceived loss. Administrators recognized that this shifting focus friction is generated from a deep appreciation for the services that they have experienced from Extension. This appreciation is paired with a lack of understanding about the entire organization's mission, which makes them focused on preserving the services that they utilize and appreciate.

Frequently, historic stakeholders such as long-term volunteers or agricultural organizations will be the ones who demonstrate behaviors that are intended to prevent organization change. Extension audiences with political power will use their relationships and connections to try and ensure that shifts in the organization mission do not take place, unless their special interest is maintained. Examples of responses administrators relayed, included: social media campaigns, personal attacks on administrators, campaigns toward legislators, and communicating with university administrators. Individuals within the organization who are non-adopters of the program because they do not agree with the changes contribute to shifting focus friction.

The program planning model is predicated on seeking out clients and asking them, "What is it you need?" However, these historic stakeholders, who are passionate about their own 4-H experiences, provided feedback about their own narrow aspect of the organization. In order to understand where the organization needed to move, administrators realized that they needed to focus on gathering nonuser information to understand the needs of the expanded community.

To address concerns generated from shifting focus friction and to remain committed to organizational change, administrators emphasized the need for relationship building, an effort to bring individuals into the bigger mission of the organization and for constant communication to achieve a shared vision. These skills undergirded their leadership behaviors.

Leadership

Administrators described many different leadership behaviors, either those behaviors that lead to strategy implementation or personal leadership characteristics. Table 5.1 connects the leadership behaviors and concepts of administrators to the adaptive leadership that Heifetz proposed (1994). Many of the concepts have been addressed in the previous discussion of leadership behaviors and characteristics that emerged in the data analysis. After connecting the themes of leadership behavior that emerged in this study with the Heifetz (1994) adaptive leadership framework it is determined that Extension administrators are fundamentally adaptive leaders.

Table 5.1

Leaders Demonstrated Behaviors Connected with Adaptive Leadership

Adaptive Leadership Behavior	Administrator Behaviors That Reflect This Concept
1. Get on the balcony.	**Stay in Change Mode** **Understand the Problem** Constantly learning **Feedback**
2. Identify the adaptive challenge.	**Set Goals** **Choose the Goals Wisely** Stay in change mode
3. Regulate distress.	**Collaborate** Listening for stress Creating space for understanding
4. Maintain disciplined attention.	**Remain Consistent** Putting strategy and resources to work to achieve the goal
5. Give the work back to the people.	**Connect Goals to Strategy** **Award Efforts** **Resource the Strategy** **Remove Barriers**
6. Protect leadership voices from below.	**Collaborate** Create structure for feedback

Note. Bold concepts are themes from the leadership behaviors. Non-bolded are concepts that are specific supporting behaviors demonstrated by study participants.

Extension administrators are behaving in ways that put them in a position to assess adaptive versus technical solutions for the cooperative extension and the 4-H program. However, the work is never done and as soon as a solution is devised for an issue new issues or changes emerge to cause new approaches to be needed. They are constantly evaluating the issues and tasks that they face.

Administrator Adaptive Leadership Practice Limitations. If administrators are serving as ideal adaptive leaders than the cooperative extension system would have addressed the identified environmental factors. Rather, it was identified that there are a discrete number of environmental factors that provide unique challenges for administrators in their own state contexts. The system is still struggling to adapt to the challenges. Because there are still challenges to adapt, it is an indication that there are still shortcomings in the the system's approach to leadership.

One area of concern that emerged from this line of research was the shifting focus friction. This concept emerged from historic stakeholders being stressed out about change. Heifetz (1994) discussed the need for holding environments for leaders and organizations to help those individuals to express their concerns and for the leaders to respond. Administrators in this study shared their strategy for dealing with stakeholders, both internal and external, who were contributing to shifting focus friction. These individuals can be a powerful threat. While the work of adaptation is underway, it is also important for Extension to be intentional in working to alleviate this distress. Strategies suggested by administrators included balancing urban versus rural programming, focusing on the vision, and using data to communicate the bigger organizational goals, among others. These strategies will be necessary to moderate these threats. In other words, more work needs to be done by the administrators to create a holding environment (Heifetz, 1994) for those individuals and organizations causing shifting focus friction.

For example, the shifting focus friction with regard to serving minority and LGBT audiences is a significant threat for both the 4-H and Extension organizations. Administrators were willing to face the threat and acknowledged their commitment to doing the hard work, even in the face of negative feedback which demonstrates the moral and ethical compass the administrators are using to guide their work. This personal and professional commitment is essential for progress toward such an entrenched social and structural issue, which reflects a transformational approach (Burns, 1978). However, because of the complexity of the social dynamics in the challenge it serves as an example of an adaptive challenge that these administrators are working to help the organization respond. In order for this particular challenge to be handled the leaders are going to have to work to create a large holding environment (Heifetz, 1994). Large, referring to the need to engage stakeholders-broadly defined- in the need to change. There is an important proverb that may apply in this case: If you want to go fast, go by yourself; if you want to go far, go together. Ensuring deep understanding within the organization and its stakeholders is going to help the mission be adopted more easily (Silvia, 2011)—while it may take a longer time, it has the greater potential to reduce threatening backlash.

In this specific example, it highlights that administrators not only have a transformational philosophical approach about improving people's lives (Bass & Avolio, 1993), but also the adaptive leadership approach to assess the environment and recognize the problem (Heifetz, 1994). They are assessing if the problem is solely a technical issue (e.g. overnight sleeping policies for transgender youth) or if there is an adaptive challenge in helping shift attitudes towards LGBT youth (e.g. training staff and volunteers) (Corazzini, Twersky, White, Buhr, McConnell, Wiener, & Colón-Emeric, 2014).

Another area of adaptive leadership Extension administrators need to reflect on their practice is giving the work back to the people (Heifetz & Laurie, 1997). The indicators are that in language administrators want to engage county-level staff in the programming approach: Connect Goals to Strategy, Award Efforts, Resource the Strategy, and Remove Barriers. While these efforts are designed to help the county-level staff implement the strategy. The underpinning strategy was developed by the administrator with feedback from diverse feedback processes, and shared with employees, who then relay the strategy to local stakeholders. In this top-down approach the administrators fail short in Heifetz (1994; Heifetz & Laurie, 2014) approach to returning the work back to the people, where the individuals at all levels of the organization (e.g. county-level employees, volunteers, and participants) are asked to understand the need to adapt. The challenge that has remained is how do you engage all the individuals in the organization, who have varied formal connection to the organization to take on the adaptive work, and still have a unified system? This study does not provide an answer, but the indicators are that the need for systematizing feedback through clear and constant communication is necessary.

Communication. At every turn, communication was the action, behavior, or attribute that was highlighted as being most valuable in the work of the administrator. Communication was the tool that administrators relied on. The importance of clear, authentic, transparent, and effective communication was the skill that was constantly required and demonstrated. A leader needs to understand that they are not a good leader unless they are a good listener, speaker, and writer. The demonstrated ability to communicate was the fundamental behavior of the adaptive leader. Heifetz (1994) expresses the need for communication within the holding environment in particular, however, according to the leaders of this expansive community based organization communication was required throughout each step as a key behavior. It was not about good oratory skills which within the personality and charismatic leadership leadership philosophy would constitute good communication (House & Howell, 1992), rather this was about constant interactive listening and sharing to help build understanding among individuals at all level of the organization.

Trust. Administrators talked about trust as the key to effective strategy implementation. Followers had to give their trust to the administrator. This trust was placed in the leader when the follower believes the leader is operating in their best interest. Trust with stakeholders needed to be established to successfully implement strategy, because this trust becomes the causal mechanism that leads to the follower to be willing to accept the vision and strategy of the leader (Conger, 1999; Shamir et al, 1993; Burns, 1978). Administrators communicated that trust was earned through communicating and demonstrating their commitment to the organization and the people they work with which reflected transformational leadership (Burns, 1978). Additionally, in this study the leaders recognized that it was both their commitment to the organization and stakeholders in addition to communication that supported trust in the approach which supports the holding environments conceptualization (Heifetz, 1994). Additionally, trust could be engendered through transparency, which could be achieved by sharing data or information about why the plan would or should be implemented.

Trust was the foundation for implementation of strategy. Funders were willing to give a grant to the organization when they could trust that the project will be implemented. Legislators trusted Extension to deliver programming in every county, because it has been demonstrated. And, trust was needed between stakeholders and administrators before they would adopt the strategy. Trust was the key to starting the adoption process. That does not mean that trust could not break down afterward or that other factors could affect implementation afterward.

Leader Level Perspective. State Extension Directors and State 4-H Program Leaders each expressed that they expected that the people at the levels below them were providing them relevant, accurate, and representative information upwards. This reflected what Yukl and Mahsud (2010) shared, that lower-level managers are often in better positions to see indications of problems. The quality of information was also a contributing factor about who would be in a position to see issues.

Yukl and Mahsud (2010) highlighted that there is often a mismatch between subordinate priorities and their bosses' concerns. However, the respondents in this study reflected the same focus on mission success, however, the difference was the scope of their focus. The State 4-H Program Leaders were focused on their programmatic area, with some consideration for other aspects of the organization. While, the State Extension Directors were focused on management issues of: budgets, people, technology which reflected the unit focal level (Baard et al., 2014), while State 4-H Program Leaders placed their foci on their team of programmatic staff. Both populations of leaders were focused on the future of the organization, framing the importance of strategy.

Organization Change

Environment assessment (Duncan, 1972), environmental scanning (Choo, 2001), and organizational adaptation (Hrebiniak & Joyce, 1985) are models used to frame how leaders within the organization are able to recognize environmental challenges. The ability to understand the environment influences the leaders' conceptions of the problem. Therefore, the ability of the leader to assess, scan, and adapt results in successful organization adaptation, or even in implementing strategy that can positively influence environmental factors.

The pace of environment change is increasing. Administrators recognized that the speed at which the environmental landscape is shifting is increasing. This increase in change reduces the administrators' ability to understand the organizations environment (Choo, 2001; Daft & Weick, 1984). Administrator's specifically talked about the speed of information that needs to be digested and the rate at which they need to respond. This rapid pace effected the ability to pay attention to the larger systemic issues. Which means, that even though the environment is analyzable it takes intentionality for the leader to focus on understanding the environment.

Environment assessment. Environmental uncertainty can shift and change (Duncan, 1972). Extension has experienced a shift in the environmental uncertainty, reflected in the change of where people are living (e.g. urbanization), who is living in communities (e.g. diversity), and a changing funding models. While these trends are not new, their presence has been felt by Extension and therefore indicates that the organization(s) have moved into a new category of environmental uncertainty and, with that, it will require an alteration of organization strategy (Tushman & Nadler, 1977, 1980).

Revisiting the Slagter (2010) framework for environment assessment. Extension and 4-H are experiencing a simple environment and unstable change meaning that the organization is in a period of moderate-high uncertainty. Administrators were able to identify the list of environmental factors that were pressuring the organization(s) meaning that the environment is simple (Slagter, 2010). While, within each of the environmental factors there was inconsistency between states and from year-to-year, or community-to-community, therefore while the administrators could identify the issues the challenges were unstable.

Environment scanning. Choo's (2001) approach to the scanning process informs the organization's construction of their conception of the environment. Scanning meaning the ability for the organizations leader to be able to gather information to inform organizational strategy. The environment is analyzable because administrators were able to list a discrete number of environmental factors (Choo, 2001). Administrator's also expressed a passivity in organizational intrusiveness, meaning that they were working to improve communication with stakeholders to increase funding. The remaining strategies were responding to environmental changes e.g. emphasis on impact evaluation, grant writing, and fund development. This constitutes that administrators have a conditioned view of the environment. The organization is driven by norms and beliefs (Choo, 2001) which has been underscored by the culture of Extension and traditional audiences' relationships to the organization, and their expectations. Administrators primarily relayed on the cultural knowledge of their communities, their legislator's expectations, and struggling against traditional frames of what the organization is e.g. agrarian in urban communities-for both 4-H and Extension. A conditioned view of scanning is supported by the administrators' decision making approach which has been a programmed/rational mode. This is supported by the use of councils and surveys for feedback. Administrators are seeking to organize data to best understand the situation in a rational approach (Choo, 2001). In short, a conditioned view conceives the environment as analyzable (Aguilar, 1967; Choo, 2001) and seeks to understand their environment.

Organization adaptation. Because the environmental is stable while also being complex, it spurs the need for organizations to be active to find solutions and enactive of the changes (Hrebiniak & Joyce, 1985). Currently, Extension and 4-H are in a position of low strategic Choice due to the limited funding options and narrow clientele served. Currently environmental determinism is also low. Meaning the organization has low and steady pressures on organization change, which has resulted in slow change on the environmental factors that have been present for decades. These two factors result in organization adaptation by chance (Hrebniak & Joyce, 1985), e.g. some county Extension and 4-H programs are vibrant and others are extinct.

Organizations' environmental change determination. Having framed Extension within environment assessment, environmental scanning and organization adaptation. Extension is situated in the lower-right quadrant in the framework in Table 5. Organizations' Environmental Change Determination. The lower-right quadrant means that the environment is analyzability with some instability. Leaders are able to understand the environment, but are still influenced by traditions and cultural norms. This stability in the environment means that there is not a lot of pressure to adapt, and therefore strategy towards success is by chance.

Organizational determination can be influenced when the organization is able to understand the organizational environmental factors and develop strategy. Thus, strategy towards required adaptation reaps the benefits of catalyst that is experienced by organizations that are in an a more unstable organization, while also being in a position to be able to best understand the environment. Therefore, the call to stay in change mode was the appropriate response to the current environment for Extension and 4-H if the organizations want to adapt to thrive into the future.

Environment Change Response

Administrators recognize that their environments are becoming more fast-paced, such as with the speed of information and information response required. Additionally, administrators have acknowledged that their environments are becoming more complex with the pressure for more grants, fees, and contracts (Jackson & Johnson, 1999) in addition to the many demographic shifts. This change in "speed" is indicative of a change in complexity of the organization as is showcased in Figure 5.2.

The implications of these shifts means that there is greater uncertainty. Therefore, there will need to be an intensification of intentional feedback to recognize where the risks and opportunities exist (Choo, 2001). Feedback will need to be about how new audiences want to receive programming versus asking what programming current Extension clientele appreciate. Although, that when seeking feedback from non-user clientele there needs to be education about what Extension can offer to be able to get effective feedback (Elliott-Engel, Corkins, & Westfall-Rudd, 2018).

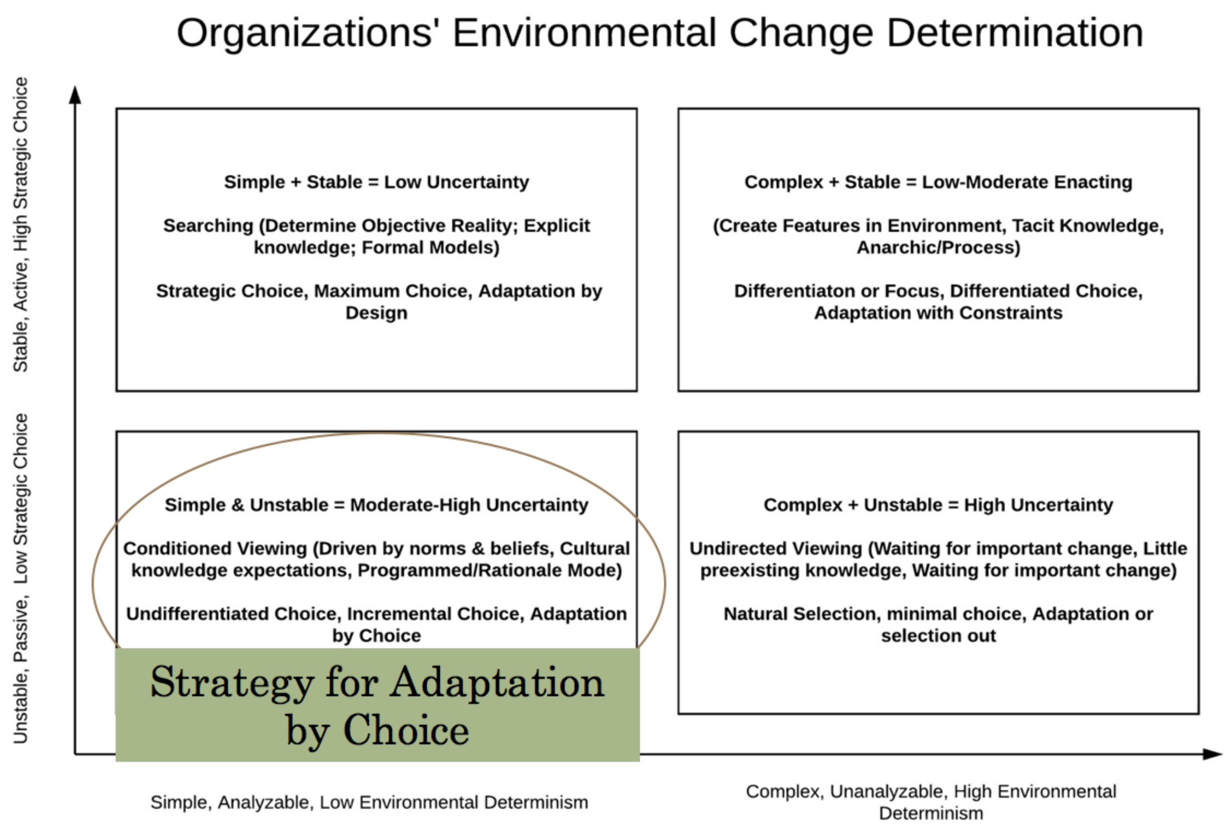

Figure 5.2.. Extension's New Environmental Determination Context

In order to respond in this environment, more strategy is needed (Hrebiniak & Joyce, 1985). More coordination between national strategic agendas and implementation. Additionally, in the more complex environment, each individual program will need to take risks in order to pilot programs that can take advantage of new opportunities (Hrebiniak & Joyce, 1985). These two approaches may seem contradictory. However as there is a more concerted national effort towards a targeted mission, programmatic areas, and even specific programs in order to increase understanding what Extension can offer –to funders, to communities, and stakeholders at all levels of the organization there is continues to be a need for states to pilot approaches locally, that are responsive to local community needs. From these pilot programs the "most effective" then be scaled up for national adoption. This is how the Extension model has operated since it's inception. The difference is that there needs to be more strategy about focusing work around specific mission areas, and focusing on adopting new programs nationally, so that there is recognition and branding of programmatic efforts across land-grant university, and state.

It is imperative that administrators and supporters of Extension recognize that in an increasingly complex environment the risk of failure also increases. While there is room for opportunities, there remains the greater risk that a state could lose their Extension system or an even greater risk to the organization if loses its focus on extending "vital, practical information to agricultural producers, small business owners, consumers, families, and young people" from land grant universities (USDA-NIFA, n.d.).

Recommendations for Further Research

Yukl and Mahsud (2010) identified that the adaptive leadership literature retained a gap on the leaders' skills and traits utilized by the leader. This study illuminated both leadership behaviors towards strategy implementation and specific leadership behaviors because the behavioral mechanisms which represent knowledge, skills, and abilities needed to accomplish adaptive leadership (Baard et al., 2014). Yet, this study was unable to assess the quality of leader change identification within a situation nor how they connect their responses to the appropriate response. This study does provide the baseline for future research that would allow for the exploration of quality because the issues are identified and process behaviors have been illuminated.

In the change process friction is expected (Heifetz, 1994). However, future research needs to be conducted to understand what is required of adaptive leaders to create holding environments which moderate changing focus friction. Particularly, what is necessary for the adaptive leader to create a holding environment for large-expansive organizations. The ability to create the holding environment is linked to both the transformational process (Nadler & Tushman, 1980) and environmental change determinism. Future exploration is needed to expose the strategic responses to accompany the varying environmental determination characteristics for moderating changing focus friction, as well as for the organizations ability to alter the environment.

This study needs to be replicated with 1890 Land-Grant and 1994 Tribal Land-Grant institution administrators, as well as with 1862 Land-grant administrators from the U.S. territories which had not been included in this study. Additionally, an investigation of program administrators in Agriculture and Natural Resources, and Family and Consumer Sciences are needed to fully understand the direction of the organization, and the need for adaptation. This study was focused on the leader’s perspective towards the organization. However, to understand the actual organization adaptation, further investigation is required to assess the system-level response process.

Implications

Following the current approach Extension and 4-H have been in the holding environment with their current stakeholders on the environmental factors identified, primarily diversity and urbanization. Administrators have been in the holding environment, which has resulted in slow progress because Administrators have been concerned with, but have not been intentional about focusing on new audiences, and emphasizing urban programming. This statement is not to diminish the progress made, rather a recognition of the slow pace of change. Efforts have been focused on technical issues of impact evaluation and technology which had less risk of blowback. Extension and 4-H needs to become intentional about shifting the organization:

- to serve the United States population at parity, meaning: ethnically and racially representative and demographically representative.
  - Be intentional in serving ethnically and racially diverse populations
  - Improve the Extension employee pipeline in order to be more culturally responsive- staff diversity and culturally competency
  - Explore adaptation in the 4-H model to serve more youth
  - Implement policy to be inclusive of LGBTQ+ youth and families
- to serve urban communities at the same level as rural communities
  - increase partnerships with local municipalities
  - service urban communities at a hyper-local level
  - Expand partnerships
- Improve research and evaluation efforts to support impact arguments
- Utilize technology to relay content to allow the organizational human resources to focus on convening community-based problem solving

Extension and 4-H administrators do not need to solicit from current stakeholders in strategy development, because this has held back the organization from making the strategic change that has been recognized as a need. To achieve this existentially significant change, there needs to be concerted strategy from administrators to reduce changing focus friction among traditional audiences by building a shared vision with traditional stakeholders. This can be achieved by: communicating the commitment to the mission of agriculture, and acknowledging the challenges being experienced in rural communities and maintain resources in rural communities. Administrators recognized the changing focus friction as a powerful force that can cause significant harm to the organization and have been tentative to address it direct. However, with a concerted strategy that ensures that resources are not "lost" rather they are "shared" among clientele.

When traditional clientele understand that the organization mission is still focused on their areas of concern, and that there is leader commitment to serving traditional audiences a space for expansion into new communities can be created. If this two prong approach is followed, that is: ensure commitment to traditional stakeholders and educate stakeholders on the need to expand it may create the opportunity to bring traditional stakeholders to the aide of the necessary expansion efforts. This organizational adaptation therefore may allow Extension and 4-H to move the needle on the organizational environment, stabilizing funding and reducing the number of environmental factors that pose challenges to the organization.

Despite the environmental challenges requiring adaptation, administrators expressed excitement about the opportunities for Extension and 4-H program growth. The changing environment presents greater opportunities for strategies to be successful. Understanding the organizational environment and the environmental factors can help Extension and 4-H administrators develop strategy to extend the programs reach and expand the potential for improving more people’s lives.

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Appendix A. A priori Table

A priori Table (7 pages)

Problem Statement	Literature Review Concept	Research Question	Interview Question(s)
		The problem	
Extension needs to change Boehlje & King, 1998; Bull, Cote, Warner, & McKinnie, 2004; Graf, 1993; Hoag, 2005; McDowell, 2004; West, Drake, & Londo, 2009).	Extensions historic audience has been challenged as no longer being necessary. Shift away from citizens having agrarian needs (Hoag, 2005)	Q1	Who should Extension be serving? Why? Who should the 4-H program be serving? Why? Are there audiences that Extension and 4-H should be serving that are not being served? Why or why not?
	Extension is no longer relevant and should become extinct (Hoag, 2005; West, Drake & Londo, 2009)	Q1	Can you explain in your own words if Extension relevant today? Why do you say that? How does this relate to 4-H?
	Extension has moved away from Agriculture and has lost its mission (Hoag, 2005; Bull, Cote, Warner, & McKinnie, 2004). Extensions historic audience has been challenged as no longer being necessary.	Q1	What do you think the role of Extension is in relationship to Agriculture? 4-H? Is it important to provide agricultural programs? Is it important to move away from agricultural programming?
		Study Population	
Administrators shape the response of Extension to environmental factor shifts (Morse, 2009)	Administrators make decisions daily about how to develop strategies that will moderate organizational crises to achieve stability. (Morse, 2009). The gap in the literature is on Extension administrators and the type and kind of	n/a	n/a

	decisions that they are making in response to environmental factor changes and how those decisions influence program implementation.		
	Environmental Factors		
Every 5-10 years an economic downturn causes a budget constraint (McDowell, 2004; McGrath, Conway, & Johnson, 2007).	**Extension is being shaped by funding reductions** (Graf, 1993; McDowell, 2004; McGrath et al., 2007). Neoliberalism is changing societies willingness to fund public institutions (Giroux, 2004).	Q1.	SWOT Analysis process
	Public value Statements. If Extension improves communication of value improved communication of results has not resulted in financial stability for Extension. In order to build support for Extension, Public Value Stories and Statements (Chazdon & Paine, 2014; Franz, 2013)	Q1. Q3.	How have you experienced Extension utilize Public Value statements, public-good, and SROI? Have you seen a change? Has the use of these tools resulted in changes for the organization? If so, what would you say the change(s) is/are?
An increase need to prove relevance (McGrath, Conway, & Johnson, 2007; Morse, 2009; Franz, 2015; Kalombokidis,	**Public good.** public good (Franz, 2013, 2015) Franz (2015) acknowledged that "in contemporary United States culture, society demands proof of Extension and LGUs as valuable public goods" (p. 13). Public Good (Franz, 2015)	Q3	How well is the organization using its resources? How well is the organization attaining its desired goals?
	Return on Investment. Extension has turned to a Social Return on Investment (SROI) model to demonstrate its program impacts, which is	Q3	How well is the organization using its resources? How well is the organization attaining its desired goals?

	the process for understanding, measuring, and reporting the social, economic and environmental value created by an intervention, program, policy or organization (Banke-Thomas, Madaj, Charles, & van den Broek, 2015; Scholten, Nicholls, Olsen, & Galmidi, 2006).		
Urbanization. United States Demographics are shifting from rural populations to urban residency (Pew Research Center, 2015).	Extension is starting to reflect a mission that must include serving urban, as well as rural, audiences (Argabright, McGuire, & King, 2012; Bloir & King, 2010; Borich, 2001; Fehlis, 1992; Harriman & Daugherty, 1992; Henning, Buchholz, Steele, & Ramaswamy, 2014; Krofta & Panshin, 1989; National Urban Extension Leaders [NUEL], 2015; National Urban Extension Task Force, 1996; Panshin, 1992; Ruemenapp, 2017; Webster & Ingram, 2007).	Q1. Q3.	SWOT Analysis process What demographic changes are relevant for Extension? Has Extension experienced successes in reaching new audiences? Is this enough?

U.S. population is becoming more diverse (increasing Hispanic, refugee, and English language learners). (Erbstein, Moncloa, Olagundoye, Diaz-Carrasco, & Hill, 2017)	Growing Hispanic populations require culturally responsive Extension programming (Argabright, McGuire, & King, 2012; Bloir & King, 2010; Borich, 2001; Henning Bucholz, Steel, & Ramaswamy, 2014; Hoorman, 2002; National Urban Extension Leaders (NUEL), 2015; National Urban Extension Task Force, 1996; Ruemenapp, 2017; Vega, Brody, & Cummins, 2016; Webster & Ingram, 2007).	Q1 Q3	SWOT Analysis process What demographic changes are relevant for Extension? Has Extension experienced successes in reaching new audiences? Is this enough?
The U.S. is in a new technological age (ones, Doll, & Taylor, 2014)	Extension has regularly adopted new technology in order to continue to serve clients by remaining relevant (Tennessen, PonTell, Romine, & Motheral, 1997; Risdon, 1994).	Q1 Q3.	What trends have you experienced in your career that relates to how clients engage with information? What have you done to change how Extension agents extend information?
	Leadership Response		
"Adaptive leadership is specifically about change that enables the capacity to thrive" (Heifetz, Grashow, & Linsky, 2009)	Burke developed three guiding questions that would help elicit the necessary information: 1. How well is the organization attaining its desired goals of production, service, return on investment, and so on? 2. How well is the organization using its resources? 3. How well is the organization coping with changes in its environment over time? (2014, p.211)	Q3.	How well is the organization using its resources? How well is the organization attaining its desired goals? How well is the organization coping with changes in its environment over time?

Leaders ability to understand the environment influences organizational adaptation (Choo, 2001; Nadler & Tushman, 1987)	The leader removes themselves from the fray of the process and gains perspective on what work needs to happen to ensure forward motion towards challenge resolution (Heifetz & Laurie, 1997). This may be about task-orientation for an individual, or large-scale efforts by the organization. Choo (2001) organizational scanning by the leader. Organizational and environmental factors affect the ability of the organizational leader to be able to understand and construct strategy towards the environment.	Q2. Q3.	Looking at your SWOT analysis, thinking about organizational factors what would you describe as a crisis for Extension? Looking at your SWOT analysis, thinking about organizational factors what would you describe as a crisis for the 4-H program? How do you monitor for indications that the organization is heading towards that type of a crisis?
1. Get on the Balcony (Heifetz, 1994). The leader scanning the environment for the Strengths, Weaknesses, Opportunities, and Threats (SWOT).	The first dimension of task complexity change is intended to define what has changed that requires adaptation. A basic assumption is that environmental shifts drive task demands that then necessitate adaptive performance (e.g. Kozlowski et al., 1999; Kozlowski, Gully, et al., 2001; Marks et al., 2001; Terreberry, 1968).	Q2.	What have you done to remove yourself from the fray to gain perspective? Follow up. Do you do this regularly or is this in response to a specific issue? How do you collect information that informs your understanding of the challenges that you face?
2. Identify the Adaptive Challenge	The leader must analyze and diagnose the problems they have identified and differentiate them between technical or adaptive challenges (Heifetz, 1994).	Q2	SWOT Analysis process
3. Regulate Distress: Change is	Creating a holding environment is a strategy to	Q2.	What can/are you doing to prepare agents for this change? Are these

essential in addressing adaptive challenges, and that can cause stress (Heifetz, 1994).	help the leader receive feedback to assess the stress level in 'followers.' It is up to the leader to manage how fast change is implemented to ensure distress does not become an adoption impediment (Heifetz, 1994). Changes in task features (that may be driven by environmental shifts) that represent different dimensions of task complexity (Baard, Rench, Kozlowski, 2014; Wood, 1986).		steps systematically planned or your own behaviors? Are you taking steps towards this? If so what?
4. Maintain Disciplined Attention (Heifetz, 1994).	The leader helps followers to focus on the hard work that needs to be accomplished, to keep people focused on the effort, rather than avoiding or disengaging with the challenge (Heifetz, 1994). When subordinates lack strong commitment for a task, the leader should explain why it is important, appeal to their values and emotions, and provide valued incentives for successful execution of the task (Yukl & Mahsud, 2010).	Q2.	What would you say you have been most been focused on in your career? What have you done or can you do to remain focused on this? What has pulled your attention and efforts away from this? What have you done to return your efforts to this? Have you? Can you?
5. Give the Work Back to the People (Heifetz & Laurie, 2014)	When the leader provides the right level of guidance and structure to the work that needs to be done, then people feel secure in what they are doing. Too much, it disempowers people and reduces their confidence in decision-making. Too little guidance and a lack of support generates stress and chaos	Q3.	How do you determine the right amount of work you give to your team? Do you have a philosophy on how you distribute work, accountability, and change decision-making to your team? Will you describe it?

	ensues (Heifetz, 1994). When a subordinate is highly competent and reliable, the leader should delegate more responsibility and encourage more initiative in resolving work related problems (Yukl & Mahsud, 2010).		How do you determine stress in your team, and your organization? If you do you recognize distress, how do you respond?
6. Protect Leadership Voices from Below (Heifetz, 1994)	A leader needs to listen to all voices, including those voices from the socially-outcast, and the dissenting voices. It can be challenging for the leader to do this, because listening to non-conforming voices may disturb the social equilibrium (Heifetz, 1994; Northouse, 2016).	Q3.	Who is influencing your decision making when it comes to organizational decisions? Who has the most influence? Why? Why is the least likely to be heard? What have you done to hear either of these voices? Do you think there is someone/group that you have missed?
Appropriate adaptations are characterized by leadership responses that are towards "good" (Heifetz, 1994).	Teleology refers to a type of development where the forces conclude in goals setting and goals are enacted (Durand, 2006). It is the confluence of the ethical considerations of purpose, goal-end, and function (Woodfield, 2010). Teleological theory informs the morality that derives duty or moral obligation from what is good or desirable as an end to be achieved. These behaviors and the underlying ethical and moral considerations are the actions	Q1. Q3.	Why do you do this work? What makes you get up in the morning and come to work? How have you tried to shape your work around your world view? Grand vision?

	that inform whether behaviors are simple acts or behaviors that are conceived of as leadership (Johnson, 2005).	

Appendix B. Recruitment E-mail

Dear State 4-H Program Leader or State Extension Director,

You have been identified as the individual who provides state level leadership for the 4-H Youth Development program. Your participation is requested in a doctoral dissertation study about Extension administrators' perceptions of environmental factor challenges and their response strategies for Extension and 4-H programs. This study intends to inform the Cooperative Extension and 4-H programs responses to changes in the organizational environment.

Participants will be asked to complete a semi-structured interview via WebEx (75 to 90 minutes), approximately 60 minutes of pre-interview preparation of a Strength, Weakness, Opportunity, Threat (SWOT) analysis, and brief phone conversation following data analysis. The nature of this study will support the study participants' strategic thinking about their work. Participants will be provided with key findings from this study about the trends that Extension and 4-H administrators are discussing. Emergent themes on best practices will be shared directly to the participants.

The researcher seeks participation by State Extension Directors and State 4-H Program Leaders from the same state. It is preferred that both of these roles from a state participate in the study. There is no need to coordinate participation. Each individual will be interviewed separately and no responses will be shared between the individuals in these roles.

Please respond to this e-mail with your willingness to serve in this study. Participation will occur on a first-come, first-served basis. Once you acknowledge that you would like to participate in this research study by responding to this e-mail, the researcher will schedule a time for the interview to be conducted via WebEx. You will find the informed consent document attached. If you would like to participate in this study, please review the informed consent form and return a signed copy via e-mail to [e-mail].

If you have further questions about participation in the research study or consent, please feel free to contact the researchers at [(###)[(###) ###-####].

Appendix C. Semi-structured Interview Protocol

Interview Protocol

My name is _______, and I am a PhD candidate at Virginia Tech. I would like to begin by thanking you for participating in this interview today. The purpose of this interview is to collect information about how state Extension directors and 4-H program leaders recognize the challenges the organization face, and how these individuals are responding to these challenges. Today, I will ask you questions regarding your experience in one of these roles.

We will start by talking about your role as a participant in this study and obtaining informed consent. Then, I will ask questions from my discussion guide. My role as interviewer is to ask questions related to specific topic areas of interests, request additional details on specific responses, and keep track of time. This interview will last approximately one hour.

First, will you please read and review the consent form. If you have any related questions, please feel free to ask them throughout. **(Allow time to read)**

What questions do you have?

(Participants read the consent form, collect signed consent forms. Resume interview [~5 minutes]).

Keep in mind during this interview that there are no right or wrong answers. If at any time you feel uncomfortable or unsafe in the interview, please let me know and we can discontinue the interview, the recordings will not be utilized, and they will be destroyed.

For the purpose of this study, we will need to record this discussion. Is it alright with you if we use a recording device for the interview?

I will begin recording now. (Allow the interviewee to read their assigned participant name to "record" voice recognition)

Interview (75 to 90 minutes)

<u>Demographics</u>

Can you give me a brief overview of your previous work experience?

Please tell me about your current role with Extension?

<u>Environmental Factor Shifts</u>
You were provided a fillable document prior to the interview, which is a SWOT analysis. A SWOT analysis asks a program manager to identify Strengths, Weaknesses, Opportunities, and Threats for the organization. I have asked you to do this independently for both Extension and 4-H programs. We will go through the SWOT analysis for both 4-H and for Extension. Go through Strengths, Opportunities, Weaknesses, and Threats for both 4-H and Extension respectively.

Organizational Adaptation

Thinking about organizational factors, how would you describe a crisis for your organization (4-H or Cooperative Extension respectively)?

How do you monitor for indications that the organization is heading toward this type of a crisis?

How well is the organization using its resources?

How well is the organization attaining its desired goals?

How well is the organization coping with changes in its environment over time?

Leadership Behaviors

Please tell me about why you do this work?

What would you say you have been most been focused on in your career? What have you done or are you doing to remain focused on this?

What has pulled your attention and efforts away from this? What have you done to return your efforts to this? Have you? Can you?

What have you done to remove yourself from the fray to gain perspective?

How do you determine the level of stress in your team, and your organization?

How do you think that agents will respond to the change that you see as needed?

> Follow-Up. What have you done/are you doing to prepare agents for change? Are these steps systematically planned or your own behaviors? Are you taking steps toward this? If so what?

Who is influencing your decision making when it comes to organizational decisions?

> Follow-Up. Who are the groups of people the most influence? Why?

> Follow-Up. Who are the groups that are least likely to be heard?

> Follow-Up. What have you done to hear either of these voices?

SWOT (continued)

> Follow-Up. What demographic changes are relevant for Extension?

> Follow-Up. What has/is Extension doing to engage new audiences?

Follow-Up. Has Extension experienced successes in reaching new audiences? Is this enough?

Who is engaging in the program design/change conversation?

Is it important, or not, to provide agricultural programs?

Wrap-Up (Remaining Time): We have reached the end of our preplanned questions. What else is there that you would like to share?

Again, thank you for your participation in this interview. I will transcribe this session verbatim. We will then interpret the findings to learn more about Extension leadership and the environmental factors Extension faces. We may need to contact you during the data analysis process. I will send a complete transcript of what you said for you to make sure that I have captured your words verbatim, and that you are comfortable with the characterization of your statements. After initial data analysis has occurred, I will share the emergent themes with you, and I would like to meet to talk with you to make sure that the themes are congruent with your understanding. If at any time after this process you have any questions or additional comments, please feel free to contact me.

Appendix D. SWOT Analysis

SWOT Analysis

The researchers appreciate your willingness to participate in this study. The researchers are asking you to complete a SWOT (Strength, Weakness, Opportunity, Threat) Analysis to prepare for your in-person semi-structured interview. This exercise should take no longer than an hour. A SWOT Analysis is a strategic analysis that is often associated with strategic planning. For the research purposes we are using your SWOT analysis as a conversation prompt. You will only share aspects of the SWOT Analysis that you deem relevant to the research. The researchers will not ask for you to share the written SWOT Analysis with the researchers, nor will the researcher share any aspect of this exercise with other members of your organization, or to other study participants except in final results and will be done without identifying characteristics.

Instructions

1. Familiarize yourself with SWOT Analysis (see below)
2. Complete one SWOT Analysis for both for Cooperative Extension (overall)
3. Repeat the process for 4-H Youth Development in your state.
4. Review each analysis and mark things that you see as different between the two SWOT Analyses.

Bisk (n.d.) Image retrieved from Notre Dame Online at https://www.notredameonline.com/resources/business-administration/what-is-swot-analysis/#.WqKU9q2ZNo4

SWOT Analysis is a strategic Analysis to organize information so that organization leaders are able to respond, whether by emphasizing strengths or addressing threats. SWOT Analysis takes into account both external and internal influences on the organizations ability to thrive. Data and multiple organizational perspectives can be used to inform this analysis when done in a strategic planning process.

___________ Cooperative Extension (Overall) SWOT Analysis

Strengths	**Opportunities**
Weaknesses	**Threats**

Reflection Thoughts (Not Required for Study):

___________ 4-H Youth Development Program SWOT Analysis

Strengths	Opportunities
Weaknesses	**Threats**

Reflection Thoughts (Not Required for Study):