FAMILY AND CONSUMER SCIENCE EDUCATORS

RECEPTIVENESS TO RESPOND TO CHANGES IN FAMILY

CAREGIVER ENVIRONMENTS

By

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Title of Study: FAMILY AND CONSUMER SCIENCE EDUCATORS RECEPTIVENESS TO RESPOND TO CHANGES IN FAMILY CAREGIVER ENVIRONMENTS

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Abstract: The current study utilized the receptive contexts of change (Pettigrew, Ferlie, & McKee, 1992) to examine innovativeness in Family and Consumer Science Educators with the Cooperative Extension Service in order to better understand factors that contribute to program implementation. Two hundred and sixteen Educators rated their perceptions of Extension's receptiveness to change and psychosocial health factors. Results indicate that geographic differences exist across study variables. Additionally, results indicate that leadership self-efficacy, social support, and subjective age were significant predictors of innovativeness. Work-related stress does not have a direct effect on innovativeness, but an indirect effect was found through supportive organizational climate and leadership self-efficacy. These results suggest that environmental, personal, and organizational factors may be crucial mechanisms through with innovativeness is achieved for Educators. Implications of these findings for future research and practice are discussed.

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CHAPTER I

INTRODUCTION

An estimated one in five Americans will be 65 years of age or older by the year 2030 (U.S. Centers for Disease Control and Prevention [CDC], 2013). Demographers have attributed this growth to increases in human longevity through advances in healthcare and older adults adopting healthier behaviors (e.g., exercise, nutritious diets), as well as the beginning of the Baby Boomer generation turning 65 in 2011 (Johnson & Parnell, 2016). Despite increases in human longevity, a proportional increase in quality of life is lacking (Allen, Hutchinson, Brown, & Livingston, 2014). An estimated 117 million Americans have at least one chronic condition (e.g., cancer, cardiovascular disease)(CDC, 2017). Three in four Americans over the age of 65 are estimated to have two or more chronic conditions (CDC, 2016). With estimates of Americans living well into their 90s (Social Security Administration, n.d.), older adults with chronic conditions living well into advanced old age are expected to put additional strain on social systems that are already taxed (Knickman & Snell, 2002). In an attempt to offset the demand that would fall on formal services, American policy has promoted the assumption that a family caregiver is present to provide care to the extent that several programs, such as Medicaid require an identifiable caregiver (Bailey & Gordon, 2016). Provision of care by family members is not a new phenomenon, but one that has become a social expectation (Brody, 1985; Eifert, Adams, Dudley, & Perko, 2015).

The National Alliance on Caregiving and the American Association of Retired Persons

Public Policy Institute [denoted further as NAC & AARP] (2015) released a report in which 84% of family caregivers believed that they needed more information and training to provide quality care for their loved ones. Recent state legislation has been mandated to address the information gap reported by family caregivers. This has created the ideal condition for educational organizations, such as the Cooperative Extension Service (denoted further as Extension), to adopt caregiving education as an organizational priority. Therefore, the purpose of this study is to examine the receptiveness of FCS educators to adopt caregiving education initiatives.

Before proceeding, several terms need to be operationalized. Family caregivers are defined as family members or friends who provide unpaid care for an ill family member and have no formal training (Bailey & Gordon, 2016). The person who receives care is termed a care recipient. Caregivers typically provide care through meeting their care recipients' activities of daily living and instrumental activities of daily living. Activities of daily living are basic tasks essential to living independently (e.g., bathing, dressing, etc.)(Fillenbaum, Blay, Andreoli, & Gastal, 2010). Instrumental activities of daily living are tasks necessary for adapting to the changing environment (e.g., shopping, money management, etc.)(Lima-Costa, Mambrini, Peixoto, Malta, & Macinko, 2016). As mentioned previously, nearly four in five caregivers report needing more information regarding caregiving. The Cooperative Extension Service is an active community education system that provides research based educational programs to community members in rural, suburban, and urban communities (General Accounting Office, 1981; USDA-NIFA, n.d.). Employees that provide educational programs within the Cooperative Extension Service are known as Extension Educators (Atiles, Jenkins, Rayas-Duarte, Taylor, & Zhang, 2014). Extension Educators provide educational programs based on community needs. Because community needs can change, Educators must be receptive and respond to shifting social trends. Receptivity among such persons is defined as the willingness or openness of personnel to change in an organization (Smith & Torppa, 2010).

Moving forward, it is important to discuss the importance of this study and where it fits in the caregiving scholarship. First, human longevity has become a national concern relative to sociopolitical policy (e.g., Social Security, Medicare), as well as families unprepared to care for multiple generations. In fact, the past two decades has seen an unprecedented expansion of the aging population with Baby Boomers between the ages of 65 and 69 expanding at a rate seven times greater than the total population, as well as persons 85 years and older expanding at a rate four times greater than the total population (United States Census Bureau, 2015). To meet the growing challenge of ensuring quality-of-life to a greater number of older adults, there needs to be system change (CDC, 2013) with regard to preparing aging families to meet the challenges of aging. Living longer with poor quality of life has increased the dependence of older adults on some kind of assistance, such as long-term supports and services (e.g., nutrition programs like Meals on Wheels, adult day health, etc.) (Nguyen, 2017). Second, while there are LTSS available to older adults, the U.S. healthcare system assumes a family caregiver is present to meet pressing needs (i.e., activities of daily living and instrumental activities of daily living) (Bailey & Gordon, 2016; Moon, 2017). In some instances, an unexpected stroke of fall may initiate the caregiving role. However, transitioning into the caregiving role is most often a gradual process with no definitive event (e.g., fall, stroke, etc.) that demarcates the beginning of the caregiving role (Adams, 2006). It is through this gradual process that caregivers begin to experience an increase in responsibilities, as well as losses (e.g., social networks) and various emotions (e.g., guilt)(Robinson et al., 2011). Regardless of the duration of the transition process, it is not uncommon for family members to report that they felt obligated in taking on the caregiving role (NAC & AARP, 2015; Tsutsui, Muramatsu, & Higashino, 2014). Third, numerous studies have examined the biopsychosocial health consequences of providing care across several life domains (e.g., health, finances, social networks). Caregivers most commonly cite experiencing caregiver burden (National Academies of Sciences, Engineering, & Medicine, Committee on Family Caregiving for Older Adults, 2016). Caregiver burden is conceptualized as a negative emotional

state that arises due to providing care that threatens the biopsychosocial health of the caregiver (Carretero, Garcés, Ródenas, & Sanjosé, 2009; Zarit, Reever, & Bach-Peterson, 1980). Lastly, since caregiving research began, studies have focused on examining the experiences of caregivers (Gaugler & Kane, 2015), but the complexities of care go well beyond reported experiences of caregivers. A recent national study (NAC & AARP, 2015) demonstrated that contemporary caregivers experienced burden. Only one in three of caregivers receive services, and four in five feel they do not have enough knowledge or training to provide quality care. These conditions point to needed social innovation related to caregiving.

Attempts at tackling the challenges created by caregiving have included legislation (e.g., tax credits for care families) and public initiatives (e.g., National Family Caregiver Support program) to create change across American society in order to better aid care families, yet little success in these programs have been reported. Caregivers reportedly underutilize resources, citing unawareness or inability to access programs as barriers to service utilization (Li, 2006; Liu, Eom, Matchar, Chong, & Chan, 2016). These experienced barriers are indicative of needed change within communities through education initiatives. Family and Consumer Science (FCS) educators within Extension have a unique blend of training and education that can help shape community transformation (Franck, Penn, Wise, & Berry, 2017). The importance of this research lies in understanding the receptivity of Extension to make caregiving education an organizational priority. With this foundation, this study may advance the next chapter of caregiving education through organizational innovation.

CHAPTER II

REVIEW OF LITERATURE

Societal issues are often fabricated, such that the action or inaction of individual humans are the causes of the problems, threatening the safety and quality of life of a large number of individuals on a local, national, or global scale (DeTombe, 2017). Common characteristics of societal issues include: 1) involvement of a group of individuals or societal subsystem; 2) issue is related to an event or a series of events; 3) activities related to the event that become part of the event (e.g., various interpretations, news reports); and 4) problem situations that are not isolated events, but are connected to particular social practices (Liebl, 2002). As the population of older adults is expected to increase exponentially due to increased longevity, family caregiving is quickly becoming a national social issue. Coupled with the goal to promote quality of life and healthy living, advances in areas of education (Brown et al., 2012), healthcare (MacGregor, 2003), nutrition and medicine (Byrne & Winter, 2009), and public health (e.g., sanitation, personal hygiene) (Ivaschenko, 2005) have not only increased longevity, but have extended the length of time that individuals are impaired (Pearlin, Mullan, Semple, & Skaff, 1990; Talley & Crews, 2007). The threat of human longevity lies not in the length of an individual's lifespan, but the losses in quality of life associated with increased longevity (e.g., debilitating conditions, limited functional ability) (Yach, Hawkes, Gould, & Hofman, 2004), requiring the need for additional assistance from either the community through long-term supports and services or family members to provide care. However, despite the presence of long-term support and

services, most resources are underutilized by the public (Administration for Community Living [ACL], 2017; Li, 2006). In turn, the demand for family caregivers is expected to increase exponentially in the coming decades (Kearns, 2015). Yet of the current 43.5 million caregivers in the United States, nearly 84% perceive their abilities to provide quality care as insufficient due to lack of training or information on caregiving topics (e.g., safety in the home, managing own stress, etc.)(NAC & AARP, 2015). Discontentment with current conditions (Ziegler, 2017), as well as the far-reaching and lasting consequences of caregiving motivated Gans (2013) to call for social innovation in the domain of caregiving. Social innovation is a multifaceted construct that cannot be restricted to one dimension (Bosworth et al., 2016). Because of innovation's multidisciplinary and multidimensional nature, social innovation can originate at any level of society (Ziegler, 2017). Thus it is important to acknowledge that this dissertation research will focus on one aspect of social innovation: social innovation through community education.

Social Innovation through Community Education

Innovation that is, as a concept has predominantly focused on technical and economic development (Howaldt, Domanski, & Kaletka, 2016). This has been an industrial focus on competitive innovation, or invention to support aggressive positioning in commercial marketplaces (Gurstein, 2013). Gurstein (2013) described "grassroots innovation" as a type of innovation not focused on competition, but adaptation in social or community settings to changing social circumstances (e.g., caregiving, aging-in-place). Gans (2013) termed this as social or community innovation. Social innovation can be broadly described as the emergence of new social arrangements in society that lead social betterment through new and improved ways of collaborative action (Bitencourt, Marconatto, Cruz, & Raufflet, 2016; Neumeier, 2017; Rivers, Armellini, Maxwell, Allen, & Durkin, 2015). In other words, innovation is not simply having a novel idea, but putting that idea into practice to initiate social processes that require interaction among individuals through discussion, networking, and group formation (Ziegler, 2017). Social

innovation is driven by the urgency to serve individuals in better ways that are effective, efficient, and sustainable (Lam & Shulha, 2015). Community innovation takes place within the context of communities to better undertake tasks they are already responsible for or to undertake new tasks that may arise (Gurstein, 2013).

Communities are not static, but transformable systems that can adjust to the needs of residents (Bowling & Brahm, 2002). The convergence of social and ideological trends over the past century has created new challenges for communities and societies (Grenade & Boldy, 2008; Wiseman & Brasher, 2008), creating the opportunity for community innovation. All communities contain some form of disadvantage (e.g., poverty, limited life choices) (Hacker & Hayes, 2017). However education has an associated role in reducing inequality (Adams & Hess, 2010). In fact, most forms of innovation can be directly attributed to education's role in instilling intelligence and creativity among community members (Gurstein, 2013). The ultimate goal of community innovation is to create outcomes (i.e., products, services, models) that more effectively meet social needs and create new collaborations between groups (Bosworth et al., 2016). Adams and Hess (2010) note that community innovation is a process that has distinctive conditions and stages that must be understood and acted upon to promote community innovation.

Thorsteinsson (2012) described the process of community innovation using high school students. In this process, students proposed conceptual solutions to real world problems. As the students researched how to enact this conceptual solution, students found gaps in their knowledge and researched appropriate information to fill those gaps. This resulted in students' relying on knowledge from various sources to implement their solution. As with this experiment, community innovation requires the interaction of individuals to generate solutions, creating a multi-disciplinary, multi-individual discussion of innovation (Ziegler, 2017). Thus, this generates the opportunity of contrasting ideas on how to solve the issue, significant differences in values and attitudes between opposing parties, or unbalanced distribution of benefits and liabilities (Liebl,

2002). Neumeier (2017) noted that empowering citizens and enterprises, in conjunction with the need for interdisciplinary participative processes, is critical to the success of social innovation. This means that social innovation is dependent upon the level of citizen empowerment and how entities within and outside the environment interact to "create new collective learning, coordination, and communication processes" (Neumeier, 2017, p. 37). Extension is one such community entity that has a unique blend of education and training and is able to provide pivotal leaders in community innovation initiatives (Franck et al., 2017). Extension is a part of the knowledge creation process and delivers educational programs to further drive community innovation (Bowling & Brahm, 2002). Extension educational programs (discussed below) address important issues in the community that embed values in community members that shape the way they interact with their environment (Bowling & Brahm, 2002).

Bioecological Model

Theoretical History and Overview

Human development refers to progressive and regressive changes of an individual's size, shape, and function (Magnusson, 1995). For nearly a century, developmental psychologists have debated whether genetics (nature) or the environment (nurture) has a greater influence on an individual development (Ridley, 2003). Researchers have gained a better understanding of the influences of genetics and the environment on human development, slowly moving from the dichotomous stance of *nature v. nurture* to one of a blended influence between both genetics and the environment on human development. Human ecology offers a useful approach relative to understanding the effects humans produce on the lives of others and how individuals adapt to changing environments (Klein & White, 2008). Human ecology combines the views that: 1) humans develop as biological organisms with limited genetic capacities; 2) individuals demonstrate their fitness by adapting to changing environments and, 3) through education,

humans can understand their interactions with their environment to direct their consumption or production to benefit their overall environment (Klein & White, 2008). Because of the emphasis on the interrelationships and the reciprocal interactions between individuals and their environments, understanding human development from an ecological perspective requires examining the influences of community and culture on psychosocial process (e.g., sense of self, relationship development) across the lifespan (Harney, 2007). Bronfenbrenner (1995) proposed a process-person-context-time (PPCT) model to analyze variations in developmental processes and outcomes (Williams & Nelson-Gardell, 2012) with explicit attention to multiple contexts and influences of bidirectional processes between individuals and contexts (Harney, 2007) (See Figure 1).

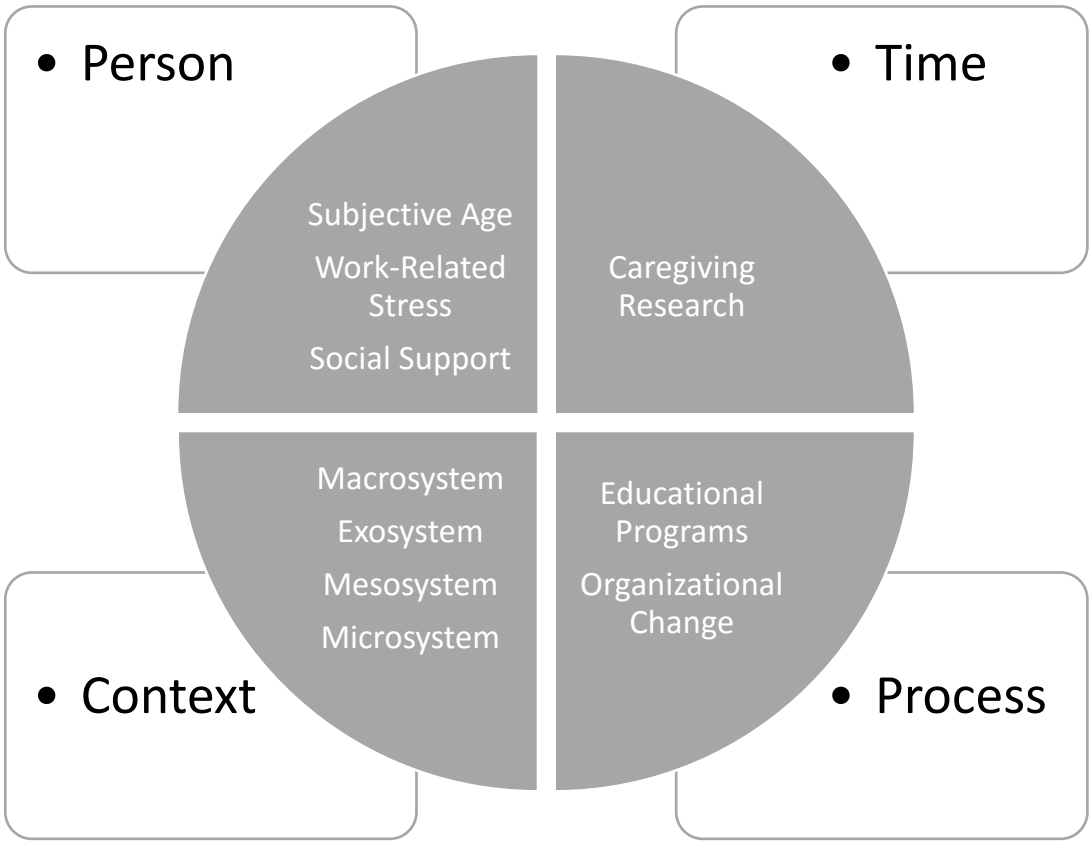

Figure 1. Application of the Bioecological Model using Study Terms.

To provide context for this study, the following section will discuss the characteristics of the process-person-context-time (PPCT) model and will review previous literature pertaining to the scope of this study in terms of the PPCT model.

Time

Bronfenbrenner (1995) reported that the course and outcome of human development is influenced by the time of transitions. Society is not static, but changes across time, thus human development is a function of not just where the individual is in the life course, but also the historical period during which humans develop over time (Bronfenbrenner & Morris, 2006; Waugh & Guhn, 2014). While providing care for a family member is not a new phenomenon, it was not until the 1950s that researchers began to examine the consequences of caregiving. Reports of burden or stress related to caregiving began to be published shortly after the end of World War II (Kay, Beaumish, & Roth, 1964; Townsend, 1957). Since then, studies have documented the biopsychosocial consequences of providing care. Outside of reporting burden (Lazarus, 1990; Savundranayagam & Montgomery, 2010; Zarit et al., 1980), caregivers have reported experiencing sleep disturbances (Ahmad, 2012; Chang, Chiou, & Chen, 2010), immunological disorders due to increased stress (Carretero et al., 2009), as well as an increased risk for hypertension and heart disease (Koyama et al., 2017). Bull (2014) noted that most caregiving studies report depression as a common finding, while others have reported feelings of frustration, guilty, or helplessness (Giosa, Stolee, Dupuis, Mock, & Santi, 2014). Recent studies have begun to link providing care with an increased risk for cognitive problems later in life (Vitaliano, Murphy, Young, Echeverria, & Borson, 2011). Home and community-based services have been created to provide help for family caregivers (ACL, 2017). However, most services are underutilized by care families due to unawareness or inability to access the services (Li, 2006). The current state of caregiving in the US has sparked state and federal legislation in an attempt to better prepare care families.

Context

Development occurs in the ecological environment (Eamon, 2001) and within the confines of a specific context (e.g., family, neighborhood) (Moen, 1995). The ecological environment was conceived as four nested levels with the developing individual at the focus of the model: microsystem, mesosystem, exosystem, and macrosystem (see Figure 1) (Bronfenbrenner, 1979; Norris, Fancey, Power, Ross, 2013; Schiamberg & Gans, 1999). By conceiving the environment as a nested structure, the entire environment can be evaluated (Bronfenbrenner, 1979) for change that may originate at any level of society (Ziegler, 2017). The microsystem is the immediate setting that contains the developing individual in which interactions influence developmental outcomes (Eamon, 2001; Norris et al., 2013; Young, 1983). It is this setting in which the individual experiences a pattern of activities, roles, and interpersonal relationships (Bronfenbrenner, 1979; Lee, 2011) that influence his or her reciprocal interaction among biopsychosocial factors (e.g., genetics, personality) and their environment (Bronfenbrenner & Morris, 1998; Magnusson, 1995). The mesosystem consists of interrelations between two or more microsystems (Bronfenbrenner, 1979), each of which the developing individual is an active participant (Lee, 2011). Bronfenbrenner conceived the exosystem as a process whereby the individual's development is affected by events that occur in settings, or contexts in which development occurs (e.g., home, work, school), that the individual may never be present in, but impact the individual's immediate setting (Bronfenbrenner, 1979; Lee, 2011). The focus of this research is not on care families' immediate or proximal environments, but legislation and organizations contained within care families' distal environment. Thus this research will focus on care families' macro- and exosystems.

Macrosystem. The macrosystem is the broad cultural context that influences the levels nested within this system (Bronfenbrenner, 1979; Young, 1983). Eamon (2001) describes the macrosystem as the "cultural blueprint" (p. 261) that involves the belief system, norms, or

ideology of the system (Lee, 2011) to partially determine the social structures and activities in the previous system levels. It is through the macrosystem that national legislation, social policy, and national strategies are implemented (Avdulaj, 2017). As mentioned previously, recent legislation at both the state (CARE Act) and federal (RAISE Act) levels have created the optimal context across the system levels for caregiving education initiatives.

Care Policy. Given, Given, and Sherwood (2008) assessed knowledge and skill needs of family caregivers, and found that caregivers received little guidance from healthcare providers. In examining the discharge process, Fitzgerald, Bauer, Koch, and King (2011) acknowledged that caregivers routinely do not receive information regarding post-discharge care requirements, most caregivers feel they have to "chase" (p. 368) hospital personnel for information. Meanwhile, most hospital staff do not have information to provide. Given et al. (2008) reported that caregivers do not know how to transition into the caregiving role, how much care was needed, or how to access or utilize resources. State and federal legislation (CARE and RAISE Acts, respectively) were passed in order to help bridge the information gap for caregivers and healthcare providers.

CARE Act. In 2014, The Caregiver Advise, Record, and Enable (CARE) Act was passed in Oklahoma with the explicit purpose of ensuring good transitional care by educating and training (Caregiver Advise Record and Enable Act of 2014; Coleman, 2016). This bill stipulates that hospitals are required to provide patients with the opportunity to nominate a family caregiver upon admission. If a caregiver is nominated, the hospital must attempt to notify the nominated caregiver of any of the care recipient's transfers or discharges. Upon discharge, the hospital is also required to educate the caregiver on the aftercare treatment plan. Since its inaugural passage in 2014, 35 other states and three territories have passed the CARE Act (see Figure 2). This legislation was the first initiative aimed at addressing the 84 percent of caregivers who reported a need for more information or training (NAC & AARP, 2015). Because of the legislation's focus

on educating caregivers, Extension is uniquely positioned to help caregivers by developing or delivering programs focused on needed caregiving topics.

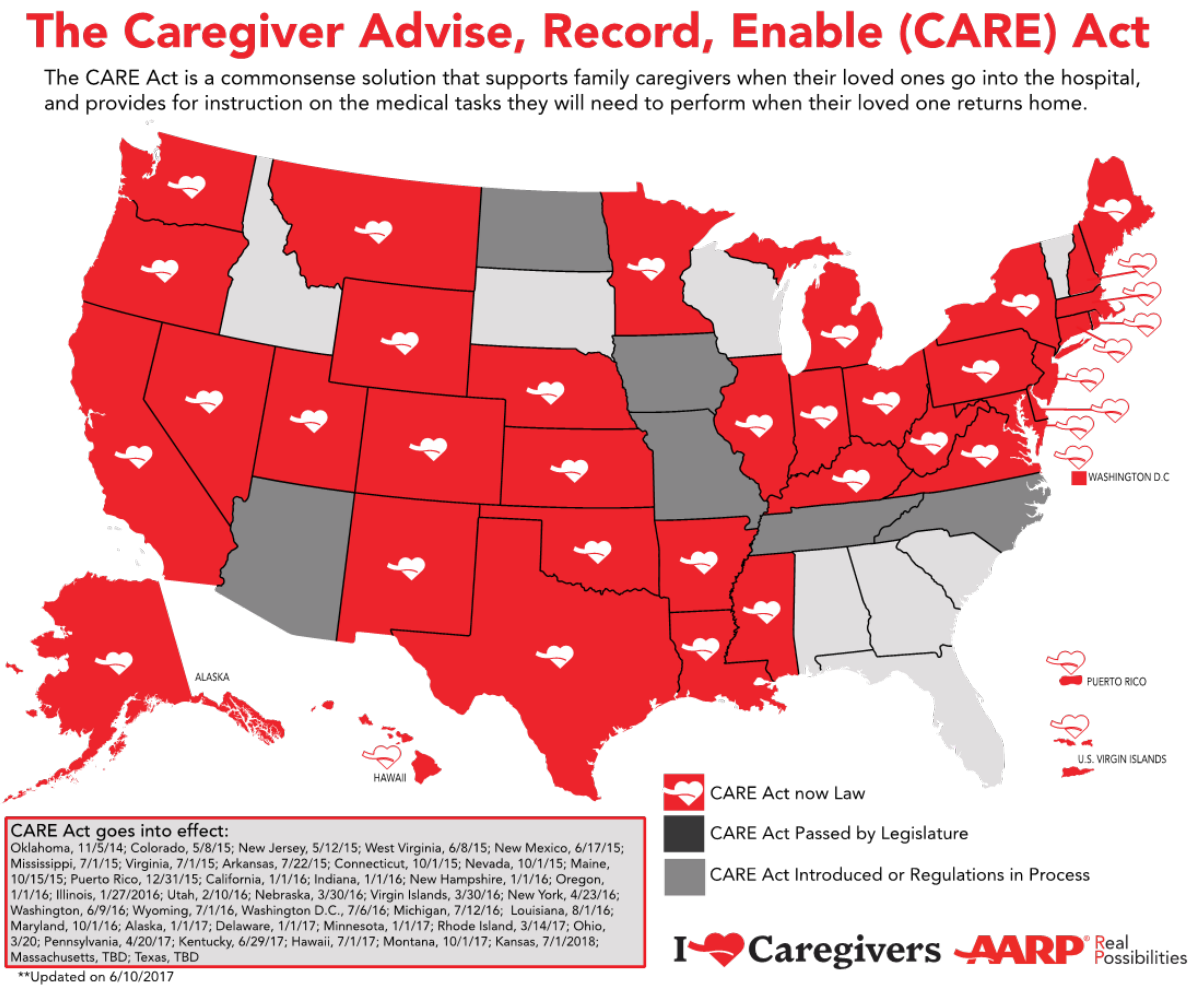

Figure 2. Map of U.S. States that have enacted the CARE Act. From "New State Law to Help Family Caregivers," by American Association of Retired Persons, n.d. (https://www.aarp.org/politics-society/advocacy/caregiving-advocacy/info-2014/aarp-creates-model-state-bill.html). Copyright by American Association of Retired Persons.

RAISE Act. In an attempt to better meet the needs of care families, the Raise, Assist, Include, Support, and Engage (RAISE) Family Caregivers Act was passed in 2018 (American Association of Retired Persons [AARP], 2018). This legislation requires the federal government to develop a national strategy to support family caregivers by bringing together both the private

and public sectors to promote greater adoption of person- and family-centered care by all aging service providers, training and information for family caregivers, respite options, workplace policies to provide better flexibility, and financial security (Recognize, Assist, Include, Support, and Engage Family Caregivers Act of 2018). Much like the CARE Act, Extension can help fulfill the RAISE Act educational requirements and train family caregivers, as well as community members regarding the needs of care families.

Exosystem. The exosystem is comprised of connections between two or more settings, but only one contains the developing individual (Eamon, 2001) andcan be considered an extension of the mesosystem (Norris et al., 2013). Exosystems provide a regulatory structure for local governance and organization of community supports (e.g., government agencies, legislation, institutions responsible for maintaining social order) (Norris et al., 2013). Despite the presence of services available to care families, several studies have noted that family caregivers do not seek assistance until moments of crisis, later in the caregiving career, or during advanced stages of the family members' disease due to barriers such as perceived lack of information, availability, and resources within their communities (Carpentier, Ducharme, Kergoat, & Bergman, 2008). Communities are open-ended, transformable systems that are capable of adjusting to the needs of their residents and learning how to actively take part in guiding their own evolution (Bowling & Brahm, 2002). Applied to caregiving, communities have the capacity to evolve to better accommodate care families through providing more long-term supports and services, as well as education initiatives through community partners, such as the Cooperative Extension Service.

Cooperative Extension Service. Bowling and Brahm (2002) proposed the Cooperative Extension Service (denoted further as Extension) as an educational resource that communities use to shape their own evolution, Extension was founded on the principle of educating the public. Founded by federal legislation (i.e., Morrill Land-Grant Act of 1862 and Smith-Lever Act of

1914), Extension is an educational network that consists of federal, state, and local partners (Atiles et al., 2014).

Atiles et al. (2014) described the structure of Extension at each level of the network (See Figure 3). The United States Department of Agriculture-National Institute of Food and Agriculture (USDA-NIFA) houses Extension at the national level. USDA-NIFA sets national outreach objectives and provides partial funding to Extension programs at land-grant institutions. Every U.S. state and territory maintains an Extension presence. The public is served through a network of regional and local offices that are staffed by professionals in different fields. Traditionally, each county had an Extension office (USDA-NIFA, n.d.). However, budgetary restrictions have forced some states to consolidate county offices into regional offices (Atiles et al., 2014). In a typical county office, a county director oversees administrative duties (e.g., budget

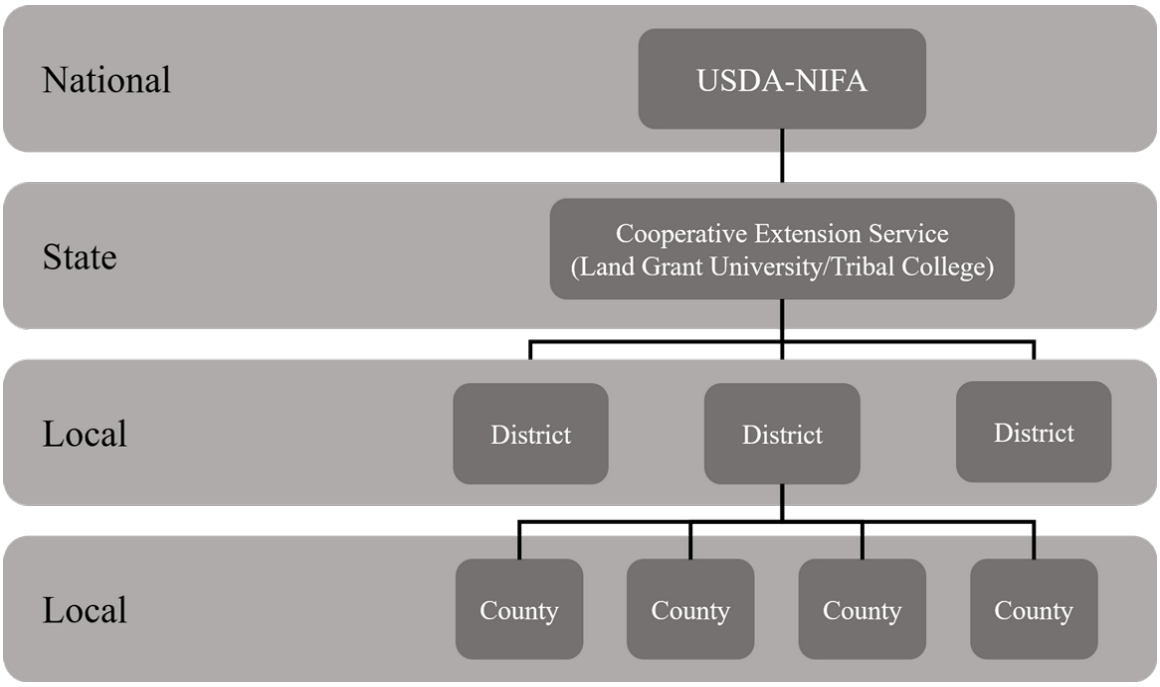

Figure 3. Cooperative Extension Service Organization in the United States. From "Service, Cooperative Extension, and Community Engagement," by J. H. Atiles, C. Jenkins, P. Rayas-Duarte, R. Taylor, and H. Zhang, in R. J. Sternberg (Ed.), *The Modern Land-Grant University* (p. 67), 2014, West Lafayette, IN: Purdue University Press. Copyright 2014 by Purdue University. Reprinted with permission.

oversight, coordination and oversight of county educators and programs) and several county educators develop and deliver educational programs to the community in their areas of expertise (i.e., Family and Consumer Sciences, 4-H Youth Development, or Agricultural and Natural Resources). Educators typically focus on major issues (e.g., nutrition needs for older adults, housing safety) that affect county residents, creating and delivering educational content to better the lives of their clients. Family and Consumer Science Educators have been at the leading edge of shaping modern American society by teaching families not only leading research on family issues (Goldstein, 2012), but also acculturating families to societal changes (e.g., women working outside the home)(East, 1980). The far reach and structure of Extension strategically positions FCS educators to improve the health and well-being of older adults through education and support services (Young, Weinert, & Spring, 2012), especially in rural areas.

Process

Individuals do not develop in isolation (Schwebel & Brezausek, 2007), meaning that human development occurs through a progressively complex system of interactions, conceptualized as proximal processes, between the developing individual and their environment (i.e., places, people, and situations, Bronfenbrenner & Ceci, 1994; Eamon, 2001; Klein & White, 2008). Individuals interact with their environment and those interactions can influence individuals' growth and development (Lee, 2011; Schwebel & Brezausek, 2007). For these proximal processes to be effective, individuals must regularly interact with their environment for an extended period of time; although the effectiveness of these processes is dependent on the biopsychosocial characteristics of the individual and their environment (Eamon, 2001). When proximal processes are weak, individual based potentials for effective functioning remain low unless the magnitude of the proximal process increases, progressively actualizing effective functioning in individuals (Williams & Nelson-Gardell, 2012). In regards to Extension, education

programs are one of the main proximal processes that can be employed to shape human and community development.

Education programs through Extension. Educators' mission has always been to teach programs that improve the lives of their clients (Bowling & Brahm, 2002). Changing environmental influences often stimulate organizational change (Rowe, 2010). As the conceptual distinctions between self, community, and culture has become less defined (Trask & Anguiano, 2012), Extension, and more importantly Educators, has experienced transformational changes in educational programming (Lakai, Jayaratne, Moore, & Kistler, 2012) to adapt to such changes while reaming focused on their core mission in aiding community members to meet an ever-changing home, community, and social environment (Atiles & Eubanks, 2014). Contemporary Extension provides a wide range of education programming covering topics such as the role of resilience in fostering positive community development (Weaver, 2016), health-related topics (e.g., nutrition, physical activity, preventative health) (Cox & Corbin, 2011; Lynch, Fuhrman, Duncan, & Hanula, 2015; Pucciarelli & Faith, 2012), and family science areas (e.g., family relationships, financial planning) (Allen et al., 2011).

Despite covering a wide range of topics, few of Extension's educational programming have focused on older adults or caregiving families in community-based projects. Sellers and Garcia (2012) assessed the effectiveness of training Extension agents on traumatic brain injury (TBI) through the TBI*options* program, a web-based program that connects individuals with TBI to local community resources. Their results showed that participation in the program increased the agents' knowledge and ability to identify community resources. Young and colleagues (2012) assessed the Health Enhancement for Rural Elderly (HERE) Project in four rural counties in Montana. The overall goal of this project was to improve health literacy and well-being in older adults (Young et al., 2012). This project was implemented through town hall meetings with a broad spectrum of community members attending. Young and colleagues (2012) reported that

despite the large attendance at the town hall meetings to introduce the program, only 66 percent of those attending participated in the program, indicating that a more direct delivery method would be more beneficial, such as a hands-on workshop. Young and colleagues recommended one example of initiating organizational change.

Organizational change. Environmental influences can stimulate change (Rowe, 2010) and Extension is not immune to these influences. Like other organizations, Extension is facing challenges with economic declines, technological innovations, and shifts to a knowledge-based workforce (Smith & Torppa, 2010). Cochran, Ferrar, and Arnett (2014) note that Extension must change from broad educational initiatives to targeted initiatives focused around a particular programmatic or organizational theme. As Cochran and colleagues explain, initiatives lend special emphasis to critical public issues and provide organizations a chance to respond to these issues. Pressures from changing societal conditions (e.g., budget declines, technological innovations) has led to changes in the way Extension operates programs, Smith and Torppa (2010) caution that continuous change can cause Extension personnel to suffer change fatigue or resistance to change.

For change to occur, an organization or community must be ready to implement that change. Organizational readiness for change refers to members' commitment to and self-efficacy to implement organizational change (Weiner, 2009). It is important to note that organizational change is influenced by the context in which it is being initiated. Pettigrew, Ferlie, and Mckee (1992) linked the progress of organizational change to the receptivity of the context in which the change was occurring, such that a more receptive context for change would enable the progression of a change initiative. Although a receptive context for change does not directly translate into readiness (Weiner, 2009), a great emphasis is placed on the change context (Pettigrew, Woodman, & Cameron, 2001).

Receptive contexts for change. For development to occur, contexts must contain effective social interconnections between settings (Bronfenbrenner, 1979). It is through these social interconnections, or proximal processes, that individuals grow and develop. This notion is vital to this study for two reasons. First, families obtain resources and capabilities through their interactions with their community, society, and culture (Masten & Monn, 2015). However, as mentioned earlier, care families are ineffective in obtaining resources from their community due to a perceived lack of information and availability of resources. It is here that Extension could lead communities to evolve through education initiatives focused on family caregiving. Second, in response to shifting clientele needs (Rowe, 2010), Educators must be flexible and receptive to organizational change that may result from new initiatives adding to existing programs or a shift in organizational focus (Cochran et al., 2014).

Pettigrew et al. (1992) describe a receptive context as features and actions within a specific setting that seem to be positively associated with forward movement regarding a specific action. Pettigrew et al have linked a set of eight conditions that are believed to provide high energy around change: 1) good quality and coherent policies surrounding change; 2) people in critical posts leading the change; 3) long-term environmental pressure to trigger the change; 4) organization is supportive in programmatic changes; 5) effective relationships between directors and staff; 6) cooperative inter-organizational networks; 7) goals and priorities for change are simple and clear; and, 8) high goodness of fit between the desired change and the community. Pettigrew and colleagues caution that all eight inter-correlated conditions are needed for a receptive context for change and possible subsequent organizational change or innovation. This change theory was used in the current study to examine the receptivity of Educators to adopt caregiving education initiatives.

Good quality and coherent policies surrounding change. Implementing effective initiatives requires coherent policies (Mirza et al., 2013). Policy coherence can be conceptualized

as mutually reinforcing policy actions across an organizational system with the purpose of creating processes that meet agreed upon objectives (Sørensen, 2016). Coherent policies are part of normative and vital processes (Scobie, 2016) in creating a conducive environment for innovation by reducing or reversing contradictory or confusing processes that can slow organizational innovation (Fertel, Bahn, Valillancourt, & Waaub, 2013; Mann, 2016). Organizations must first be able to create such policies. An organization's ability to identify and integrate knowledge from other organizations or community partners in their environment is essential to developing coherent policies (Haas, 2015; Song & Thieme, 2009).

Information is needed at all levels of the organizational system for policy development (Lora, Legage, Pathare, & Levas, 2017). Lack of information at any level of the system can limit participation, possibly resulting in biased decisions (Yang, 2013). This has serious implications for Educators. Bailey, Hill, and Arnold (2014) examined information seeking practices of Educators. Their results concluded that Educators typically seek information to either develop new educational programming or answer clientele questions. However, Educators expressed uncertainty over where to find credible information and what should be used once the information is obtained. Bailey et al.'s (2014) findings are indicative of Educators' perception of a barrier to serve growing clientele needs by limiting the development or modification of educational programming.

People in critical posts leading the change. Innovative processes require a clear strategy (i.e., coherent policy) and leadership to establish organizational readiness and commitment to innovation (Dobni, Klassen, & Nelson, 2015), as well as facilitating the innovative processes from development to implementation (Friedrich, Mumford, Vessey, Beeler, & Eubanks, 2010). Because effective leaders are vital to implementing successful initiatives, it is important to understand common characteristics of effective leaders. McDaniel and DiBella-McCarthy (2012) describe good leaders as individuals that constantly strive to be better leaders by always seeking

to learn information that can improve their effectiveness. Seibert, Sargent, Kraimer, and Kiazad (2015) conceptualize leaders as individuals who engage in activities such as planning, initiative direction development, coordinating and delegating tasks, communicating, and motivating others. Despite conceptualizing leaders in different terms, both studies highlight leadership self-efficacy as a driving force for effective leaders.

Leadership self-efficacy refers to one's perceived capabilities and knowledge to perform functions necessary to meet demands and accomplish specific leadership challenges in order to achieve situational changes (Cho, Harrist, Steele, & Murn, 2015; Ng, Ang, & Chan, 2008). Considering leadership self-efficacy, McDaniel and DiBella-McCarthy (2012) highlighted several influences on leadership self-efficacy, placing emphasis on the leaders' attitudes or expectations about the organization's capacity for change and the role of leadership in this change. McDaniel and DiBella-McCarthy (2012) emphasized that an effective leader must believe that a leadership action will result in the desired effect and that he or she has the necessary skills and resources to perform the leadership tasks. McDaniel and DiBella-McCarthy (2012) concluded that leaders constantly collect and analyze information from their environment and social interactions to inform their goals and performances.

Leadership self-efficacy can be connected with policy coherence. Knowledge is needed to first inform leaders for policy development, and thereafter throughout the implementation process to inform the leader of the effectiveness of the initiative and their strategy for implementation. Leaders must also perceive themselves as causal agents for change, thus if Educators believe they do not have the skills to locate credible information to develop or implement a program, an organization (e.g., regional office, county office) may be ready for change, but no efficacious leader would be present to lead that change.

Long-term environmental pressure to trigger the change. As discussed previously, organizational change is typically initiated due to changing conditions in the organization's

external environment. An organization's external environment consists of the relevant physical and social factors located outside an organization that drive the decision-making processes within the organization (van der Voet, Kuipers, & Groeneveld, 2015). Innovation is an organization's or community's repeated and sustained adaptations to changes in the external environment and encountered internal problems (Tsang & Zahra, 2008). The rate at which organizations or communities change is relative to the pace of environmental changes (Sørensen & Stuart, 2000).

Organization is supportive in programmatic changes. A supportive organization climate includes both a supportive organizational structure, as well as supportive supervisors.

Organizational structure. Moran and Brightman (2000) emphasize that organizations must be flexible in their ability to initiate change. According to these investigators, organizations must update or develop new rules and responsibilities to reflect new demands brought on by the initiatives. Unlike the flexibility of Extension to adapt to changing clientele needs, organizational structures that cannot allow adjustments in its structure cannot initiate organizational change.

Effective relationships between directors and staff. Organizational change can take many forms (e.g., alterations to organizational structure, new initiatives, etc.) which can exacerbate pre-existing or magnify current stressors (Smollan, 2017). In the current economic climate, Educators are expected to expand their programming reach with fewer resources (Cochran et al., 2014). However, with budget cuts and positions vacated by colleagues (Strong & Harder, 2009), many Educators are taking on more responsibilities, limiting their ability to launch new programs. Thus, adding a new initiative can exacerbate stress and cause resistance to change. However, studies have shown that perceived social support from supervisors can buffer the effects of stress, enhancing an employee's sense of well-being and motivating the employee to engage in change initiatives (Thakur & Srivastava, 2018; van Emmerik, Bakkas, & Euwema, 2009).

Cooperative inter-organizational networks. Employees receive various kinds of support from their workplace, especially from coworkers. Research has shown that colleagues can

provide instrumental or tangible support by reducing workloads or redesigning difficult roles (Smollan, 2017). For example, two Educators may partner together to deliver a particular program in their area, thus reducing the needed effort on both Educators to prepare for the program.

Goals and priorities for change are simple and clear. Organizational change is a complex phenomenon with most initiatives falling short of goals or failing outright (Jacobs, van Witteloostuijn, & Christe-Zeysa, 2013). One reason initiatives fail is that organizations do not create clear and simple short-term goals (Kotter, 1995). Kotter states that without clear, attainable short-term goals, most employees will not follow through with the initiative within 12 to 24 months after the start of the initiative. Much like coherent policies, initiatives must have simple and clear goals that employees can understand and achieve.

High goodness of fit between the desired change and the community. Because environmental influences stimulate change, it is vital that the resulting change fits the needs of the environment. Community innovation is classified as successful if the initiatives lead to more effective, efficient, and sustainable social arrangements that benefit the community or society at large (Lam & Shulha, 2015; Neumeier, 2017). In other words, initiatives achieve environmental fit by closely aligning with the needs of the clientele (Zajac, Kraatz, & Bresser, 2000).

Person

The magnitude of proximal processes are functions of the time period and environmental context in which the processes occur, as well as the biopsychosocial characteristics of the developing person (Waugh & Guhn, 2014). Williams and Nelson-Gardell (2012) note that the bioecological model distinguishes between two types of personal characteristics that influence development: resource or liability characteristics and force characteristics. Resource or liability characteristics (e.g., ability, knowledge, skill) are biopsychosocial liabilities or assets that influence the capacity of the individual to effectively engage in proximal processes. It is the

purpose of these characteristics to either limit or promote the effectiveness of the proximal processes (Bronfenbrenner & Morris, 2006). Force characteristics reflect the developing person's inclination to initiate and sustain interaction with their environment (Williams & Nelson-Gardell, 2012). As with the previous characteristics, force characteristics are active behavioral dispositions (e.g., problem-solving skills, sense of optimism) that can either set proximal processes into motion or actively interfere with their occurrence (Bronfenbrenner & Morris, 2006; Waugh & Guhn, 2014). Conceptualizing engagement in organizational change as a proximal process, the current study examined person characteristics that could either enhance or impede Educators' interaction with organizational change: subjective age, work-related stress, and social support.

Subjective age. A large portion of the literature on the influence of age-related variables and work motivation has focused on an individual's chronological age, with the assumption that work motivation declines with increasing chronological age (Akkermans et al., 2016). Studies have examined the influence of chronological age and organizational citizenship behavior, defined as behaviors (e.g., helping colleagues, voluntarily heading initiatives, etc.) that are outside of the organization's formal reward system, but promote the efficiency of the organization (Huang, McDowell, & Vargas, 2015). However, no conclusive relationship has been found. These mixed results may be due to adults perceiving themselves as either higher, lower, or equal to their chronological age (Kunze, Raes, & Bruch, 2015), known as their subjective age. An individual's subjective age can be defined as how old a person feels (Huang et al., 2015). This perception is derived from how the individual perceives his or her external appearance, interests or hobbies, behaviors and manners, and mental functioning (Hubley & Arim, 2012; Rioux & Mokounkolo, 2013). Individuals who suffer from negative biopsychosocial health also tend to rate their subjective age higher than their actual age (Huang et al., 2015), impacting their work and organizational change. Self-perceptions of being "old" can have a negative effect on motivation to complete tasks and perform new tasks (Akkermans et al., 2016).

Individuals who reported a higher subjective age than their actual age have typically reported heavier daily workloads and higher stress levels (Rioux & Mokounkolo, 2013), increasing their risk for exhaustion and workplace burnout and lowering their organizational citizenship behavior (Huang et al., 2015). To date, there has been no known study that has examined the association of subjective age on Educator's motivation to develop or deliver new programming. However, when applying the above findings to Extension, Educators who perceive themselves as "old" may be less motivated to provide programming in their communities or may tailor their programming to fit their own needs. Educators who perceive themselves to be older may also view organizational change as adding more work to their already busy workload, thus hindering change. While most adults perceive themselves to be younger than their chronological age, individuals under the age of 30 perceives themselves to be older than their chronological age (Rioux & Mokounkolo, 2013).

Work-related stress. Stress is conceptualized as a negative emotional state that arises when an individual's demands exceed his or her resources (Lazarus, 1990). This may occur through two work-specific variables: role overload and role conflict. Role overload occurs when an individual's total demands on time and energy are too great for an individual to adequately or comfortably perform the duties of that role (Fu & Shaffer, 2001). In the light of budget cuts, Extension educators have faced downsizing, working long and abnormal hours, and consolidation of county offices (Fetsch, Flashman, & Jeffiers, 1984; Strong & Harder, 2009). With increased public demand for services from Extension (Fetsch et al., 1984) and expectations to complete paperwork for both the land-grant institution and county, educators are experiencing an increase in their workload (Ensle, 2005). Prolonged exposure to work-related stress can result in a decline in morale and productivity, as well as increased anxiety, frustration, and absenteeism (Stevenson & Harper, 2006; Syaifuddin, 2016) or job burnout, the exhaustion of one's physical and mental resources (Wang, Huang, & You, 2016).

Separate life domains (e.g., family, work) compete for limited time and biopsychosocial resources, such that when one domain utilizes or provides greater opportunities for resources, other domains can be negatively or positively affected (Grzywacz & Marks, 2000). Changing social trends, such as increased numbers of single- and dual-earner families (Greenhaus & Powell, 2012) and growing needs of the aging population (Butler, 2015), have created new work and family arrangements that were unknown to previous generations (Grzywacz & Marks, 2000). These changes have made balancing work and family roles difficult, thus households may experience a push of work life into family life and vice versa (Stevens, Minnotte, Mannon, & Kiger, 2007). Because of the long and abnormal hours that educators work, balancing work and family responsibilities has become an organizational concern for Extension (Strong & Harder, 2009). Difficulty in balancing responsibilities across work and family domains, termed work-family conflict, is becoming a common occurrence among dual-earning families (Young, 2015). Women are still primarily responsible for household responsibilities (e.g., domestic chores, childcare), thus women are more likely to be affected (Fu & Shaffer, 2001; Young, 2015). Using a conservation of resources theory perspective, an increase in conflict originating in one domain may result in individuals expending more resources in that domain in order to maintain effective performance in that domain (Selvarajan, Cloninger, & Singh, 2013). Limited resources (e.g., time, energy) in one domain results in reduced availability of resources in another domain (Selvarajan et al., 2013) and more negative spillover in another domain (Sharma & Parmar, 2017). Pretrus and Kleiner (2003) suggested that stress should be managed in an attempt to reduce negative health outcomes. Social support has been linked to health outcomes related to stress and perceived levels of conflict (Jacobsen et al., 2014).

Social support. Social support can be defined as an informal network that an individual can rely upon to provide emotional, practical, and information support (Md-Sidin, Sambasivan, & Ismail, 2010). Research has supported the stress-buffering hypothesis in that social support

reduces the risk of illness from a negative stress appraisal (Chang et al., 2010; Fu & Shaffer, 2001; Underwood, 2000). This effect may arise due to individuals with high levels of social support in one domain are able to expend fewer resources in that domain and expend more resources in another domain (Selvarajan et al., 2013). For example, an educator who has a spouse to take care of household tasks may be able to spend more time delivering educational programs in the community. However, Silverstein, Chen, and Heller (1996) note that too much social support may cause distress in the individual receiving support. The distress that individuals experience may be linked to the individual's desire to remain independent, but overly vigorous support may limit an individual's autonomous functioning (Silverstein et al., 1996).

A priori organizational path model. Work-related stress can limit an Educator's willingness to develop or deliver new education programs. See Figure 4 for the proposed a priori mediation model. First, leadership self-efficacy has not only been linked to improved functioning in dynamic or stressful environments, but is also recognized as a significant predictor of behavior change (Grant et al., 2017). However, lower leadership self-efficacy may lead to increased work-related stress and decreased innovativeness. Educators' lack of confidence in leading change could lead to feeling overwhelmed with the responsibilities required to promote change. Second, the interaction of individuals with their environment is an important consideration for adaptation (Fletcher & Sarkar, 2013). Organizational change is stimulated from changing environmental conditions, which can put additional pressure on Educators to develop or adopt new curriculum initiatives. Educators are already experiencing greater workloads with few resources, adding environmental pressure may increase their workload and reduce innovation. Third, organizational support that provide for employees' socioemotional needs and lowering work-related stress add positive contribution to employees' positive work behaviors (i.e., developing or adopting new programming) (Bukhari & Kamal, 2017). In other words, Educators who perceive their organization as helping to alleviate their workload, they are more likely to engage in positive

work behaviors, such as developing new programs. Social support and subjective age may be related to work-related stress. Received social support has been linked to buffering the effects of stress, increasing innovation. Higher subjective age may increase work-related stress because Educators may feel that they are "too old," and thus less motivated to add additional programs to their full workload.

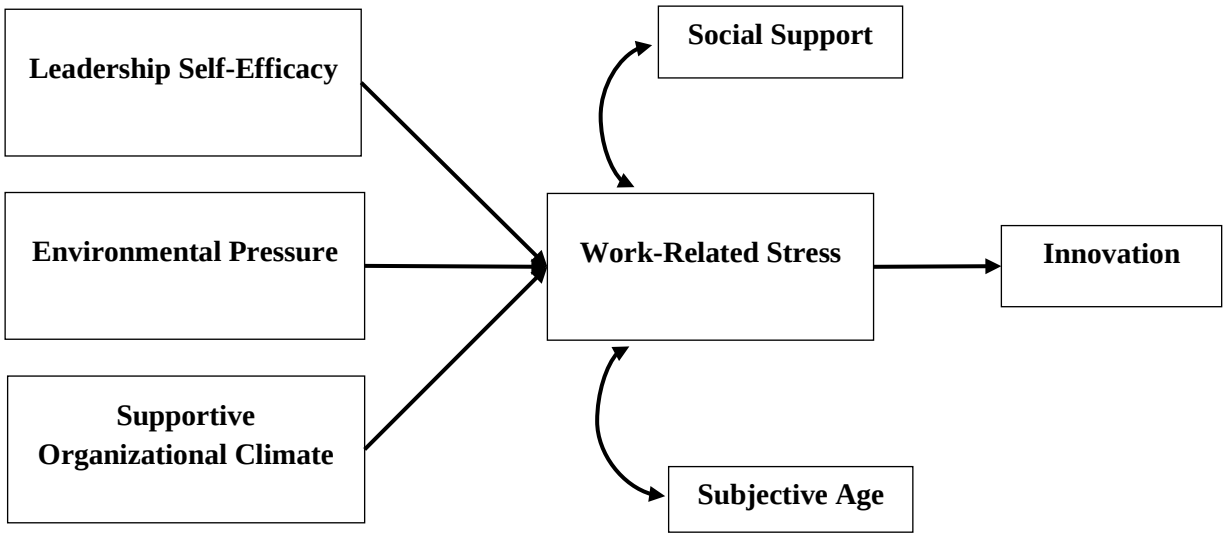

Figure 4. Proposed a priori path model between work-related stress and innovation.

Literature Summary

Changing societal conditions have placed Extension at a critical juncture of deciding if the organization is receptive to developing or adopting initiatives focused on family caregiving topics. For organizational change to be implemented, an organization must satisfy eight conditions to be considered a receptive context for change. Despite the possibility that an organization might be receptive to change, several personnel factors can still limit the possibility of change. This study is leading the examination of the influences of subjective age, work-related stress, and social support on an Educator's innovation behaviors (i.e., developing or adopting caregiving curriculum).

Dissertation Aims

The overarching aim of this study was to examine the receptiveness of Family and Consumer Science (FCS) educators to adopt caregiving education initiatives. This study provides an understanding of how prepared Extension is to respond to growing concerns within their communities. To answer the overarching aim, this study will examine the following hypotheses:

1. It is hypothesized that Educators will have high policy coherence, high leadership self-efficacy, perceive high environmental pressure, perceive high supportive organizational climate, perceive high interoffice support, high social support, high work-related stress, high innovation, and low subjective age.
2. It is hypothesized that organizational factors (i.e., policy coherence, leadership self-efficacy, environmental pressure, interoffice support) will significantly predict innovativeness more than personal factors (i.e., subjective age, work-related stress, social support).
3. It is hypothesized that the proposed model will predict the relationship between person (leadership self-efficacy), organizational (supportive organizational climate), and environmental (environmental pressure) variables and work-related stress and innovativeness.

CHAPTER III

METHODS

This chapter describes the methodology used to examine the receptivity of Family and Consumer Science (FCS) Educators to adopt caregiver education initiatives. This chapter includes the research design, participant selection and characteristics, research procedures, measurement of variables, operational hypotheses, and statistical analyses.

Research Design

This study used a cross-sectional survey design to examine the differences among individuals who "differ in the variable of interest, but share other characteristics, such as socioeconomic status" (Daniels, 2011, p.444). Cross-sectional survey research is appropriate for assessing self-report data through self-administered questionnaires (Lavrakas, 2008). A cross-sectional design allows for the researcher to make subgroup comparisons, as well as testing research models (Lavrakas, 2008), yet limitations of this design should be noted. Foremost, difficulty inferring causation and measuring one-time point (Levin, 2006; Setia, 2016). Despite these limitations, implementing a cross-sectional design is well suited for the current study due to its exploratory nature (Setia, 2016). This study cannot infer causation. Instead, it is rather a first step in understanding what outcomes might be related with organizational change in this population.

This study used a purposive convenience sampling method. Convenience sampling is a type of nonprobability sampling that allow members of a population who meet certain practical

criteria (e.g., accessibility, willingness to participate) to participate (Etikan, Musa, & Alkassim, 2016). However, because convenience sampling is focused on ease of recruiting participants, there is no systematic recruitment process (Battaglia, 2008). This limits data analysis by limiting variability and generalizability and increases the possibility of bias (Acharya, Prakash, Saxena, & Nigam, 2013). To reduce bias and increase variability, purposive sampling techniques were used in tandem with the convenience sampling techniques (Etikan et al., 2016). Purposive sampling techniques apply expert knowledge in a non-random manner to select criteria that would result in a cross-section representative of the population (Barratt, Ferris, & Lenton, 2015; Etikan et al., 2016). Because of the subjectivity of this technique (i.e., different experts may choose different criteria), purposive sampling is most appropriate for samples from limited geographic areas or a restricted population definition (i.e., FCS Educators with Extension) (Battaglia, 2008).

Study methods were approved by the appropriate Institutional Review Board. Consent was obtained from all participants. No identifying information was obtained to ensure confidentiality.

Participants

Participants were recruited via the United States Department of Agriculture-National Institute of Food and Agriculture (USDA-NIFA) Division of Family and Consumer Sciences national distribution list. The distribution list contained 170 state and national organizations that included all FCS State Programs Leaders at land grant institutions (i.e., founded under the Morrill Acts of 1862 and 1890), national program leaders, leadership of the Board on Human Sciences, Extension Committee on Organization and Policy, the American Association of Family and Consumer Sciences, and Council of Administrators of Family and Consumer Sciences. Sampling resulted in a total of $N = 216$ ($n = 6$ males, $n = 208$ females, $n = 2$ missing) participants who met the inclusion criteria of being current employees of the Cooperative Extension Service with at least some employment assignment designated as Family and Consumer Science.

Procedure

A one-time, self-report online questionnaire was distributed through the national distribution list. The organizations included in the national distribution list were asked to disseminate the survey down through their networks, but the exact numbers of reached individuals is unknown to both USDA-NIFA and the researchers. The email contained a brief description of the study, as well as a link to the informed consent form and online questionnaire. The questionnaire assessed selected demographic variables along with other variables assessing personal, environmental, and factors of organizational change. The survey took approximately 10 minutes to complete.

Measurement

In addition to evaluating socio-demographic composition, nine previously validated scales were used to assess the following variables: policy coherence, leadership self-efficacy, environmental pressure, supportive organizational climate, interoffice support, work-related stress, subjective age, social support, and innovation. Variables and measures in the study are summarized in Table 2. The survey, including both demographic items and the scales, is available in Appendix B.

Socio-demographics. FCS Educators answered demographic questions concerning their position within Extension: age, gender, ethnicity, relationship status, assignment percentage, number of counties assigned, and rural or urban context of county.

Policy coherence. A modified version of the Perceived Information Gathering Capacity Measure (Yang, Kahlor, & Li, 2014) was used to assess policy coherence. The original scale is composed of 3-items on a 6-point response scale (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree) that focus on gathering information about climate change. The modified scale changed “climate change” to “family caregiving.” A sample item includes “it is difficult to find information about family caregiving.” Composite scores were calculated by summing the items, with higher scores indicative of greater perceived information gathering capacity. A Cronbach’s alpha of .81 was established.

Leadership self-efficacy. A modified version of the Leadership Self-Efficacy Scale (Grant, 2014) was used to assess leadership self-efficacy. This Likert-type measure is composed of 4-items on a percentage response scale (0 – 100%) A sample item includes "Setting a clear direction for teamwork in order to reach organizational goals." Composite scores were calculated by averaging the participant's responses across the four items. Higher scores were indicative of greater leadership self-efficacy. This scale has shown strong internal consistency (α = .88) in a sample (n = 38) of executives and senior and middle managers (Grant, 2014). A Cronbach's alpha of .87 was established using data from this study.

Environmental pressure. A modified version of the Readiness-to-Change Scale (Banyard, Eckstein, & Moynihan, 2010) was used to assess environmental pressure. The original scale was composed of 9-items on a 5-point response scale (1 = not at all true, 2 = somewhat untrue, 3 = neutral, 4 = somewhat true, 5 = very much true) that focused on sexual violence prevention. A sample item from the original scale includes "I don't think sexual assault is a big problem in my area." The scale was modified by changing the term "sexual assault" to "family caregiving" and adding three additional questions. The additional questions were written by the researcher to assess factors that are specific to FCS Educators (i.e., I have faced challenges in teaching care families; I have faced challenges in reaching care families; and, family caregiving is an important topic in my Cooperative Extension Network). Composite scores were calculated by summing the items, with higher scores indicative of greater perceived environmental pressure. The scale has demonstrated moderate internal consistency (α = .69) in a sample (n = 389) undergraduate students. Relative to thi study, the Cronbach's alpha was .57. Further examination of alphas of scale items lead to deleting item 2 (i.e., I don't think there is much I can do about family caregiving in my area) and item 4 (i.e., sometimes I think I should learn more about family caregiving, but I haven't done so yet). After deleting these items, the resulting Cronbach's alpha was .73.

Supportive organizational climate. The Litwin and Stringer Organization Climate Questionnaire (Litwin & Stringer, 1968) was used to assess supportive organizational climate. This Likert-type measure is composed of 5-items rated on a 4-point scale (1 = definitely disagree, 2 = inclined to disagree, 3 = inclined to agree, 4 = definitely agree). A sample item includes "I felt that I was a member of a well-functioning group." Composite scores were calculated by summing the items, with higher scores indicative of a more supportive organizational climate. The scale has demonstrated strong internal consistency (α = .82) in a sample (n = 122) undergraduate students. The present study produced a Cronbach's alpha of .80 pertaining to educators' perception of a supportive organizational climate.

Interoffice support. A modified version of the Employee Teamwork Scale (Barsade & O'Neill, 2014) was used to assess interoffice support. The original measure is composed of 5-items rated on a 5-point scale (1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, 5 = strongly agree). A sample item includes "my unit functions as a team." The modified scale changed "staff on this unit" to "County Extension office staff." Composite scores were calculated by summing the items, with higher scores indicative of greater employee teamwork. The scale showed strong internal consistency (α = .81) in a sample of 185 employees of a long-term healthcare facility (Barsade et al., 2014). A Cronbach's alpha of .91 was produced for interoffice support.

Work-related stress. The Work-Related Stress Scale (McCutcheon & Morrison, 2016) was used to assess work-related stress. This Likert-type measure is composed of 4-items rated on a 7-point scale (0 = never, 1 = rarely, 2 = occasionally, 3 = sometimes, 4 = often, 5 = nearly always, 6 = always). A sample item includes "I feel overwhelmed by my workload." Composite scores were calculated by summing the items, with higher scores indicative of greater work-related stress. The scale has exhibited strong internal consistency (α = .88) in a sample of 337

faculty members from Canadian universities (McCutcheon & Morrison, 2016). Using the study data, Cronbach's alpha was .89.

Subjective age. The Subjective Age Identity Measure (Hubley & Arim, 2012) was used to assess subjective age. The Subjective Age Identity Measure is a Likert-type measure that is composed of 7-items (e.g., most of the time, I feel) rated on a 7-point response scale (1 = a lot younger than me, 2 = somewhat younger than me, 3 = a little younger than me, 4 = about the same as my age, 5 = a little older than my age, 6 = somewhat older than my age, 7 = a lot older than my age). A sample item includes "most of the time, I feel: [item question is completed through selecting choice from the above-mentioned Likert-type options]." Composite scores were calculated by averaging the participant's responses across the seven items. Higher scores were indicative of higher subjective age. The scale has exhibited strong internal consistency ($\alpha = .82$) in a sample of 267 adolescents (Hubley & Arim, 2012). The current data produced a Cronbach's alpha of .83.

Social support. The Social Provisions scale (Cutrona & Russell, 1987) was used to assess perceived social support. The measure was composed of 12 items with 2 items measuring each subscale (sample items included in parentheses): guidance (e.g., there is no one I can turn to for guidance); reassurance of worth (e.g., I do not think other people respect my skills and abilities); social integration (e.g., there are people who enjoy the same social activities I do); attachment (e.g., I have close relationships that provide me with a sense of emotional security and well-being); nurturance (e.g., I feel personally responsible for the well-being of another person); and, reliable alliance (e.g., there are people I can depend on to help if I really need it). Participants will be instructed to think about the support they receive from other family members. They will then be asked to rate each of the 12-items on a four-point Likert-type scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). Composite scores were calculated by summing the subscale items, with higher scores indicating increased social support across the six domains. All subscales had internal consistencies above .70 (Cutrona & Russell, 1987). The

social provisions scale was shown to have convergent validity through accounting for 66% of the variance in scores on the UCLA loneliness scale (Cutrona, 1984). The current study obtained a Cronbach's alpha of .83 for social support.

Innovation. The Trendsetting Questionnaire (Batinic, Wolff, & Haupt, 2007) was used to assess innovation. This Likert-type measure is composed of 9-items rated on a 5-point scale (1 = not true at all, 2 = somewhat untrue, 3 = neutral, 4 = somewhat true, 5 = completely true). A sample item includes "I often notice that I cope better than others with changing to new things." Composite scores were calculated by summing the items, with higher scores indicative of increased innovation. Across four samples of working individuals (total N = 19,486), this scale showed strong internal consistency (α's = .85 - .91) (Batinic et al., 2007). A Cronbach's alpha of .81 was established for this study.

Table 1

Summary of Measures

Variable	Scale	Citation	Study Alpha	Items	Likert Range
Policy Coherence	Perceived Information Gathering Capacity Measure	Yang et al., 2014	.81	3	4
Leadership Self-Efficacy	Leadership Self-Efficacy Scale	Grant, 2014	.87	4	4
Environmental Pressure	Readiness-to-Change Scale	Banyard et al., 2010	.73	10	4
Supportive Organizational Climate	Litwin & Stringer Organizational Climate Questionnaire	Litwin & Stringer, 1968	.80	5	4
Interoffice Support	Emplpoyee Teamwork Scale	Barsade & O'Neill, 2014	.91	5	4
Work-Related Stress	Work-Related Stress Scale	McCutcheon & Morrison, 2016	.89	4	7
Subjective Age	Subjective Age Identity Measure	Hubley & Arim, 2012	.83	7	7
Social Support	Social Provisions Sclae	Cutrona & Russell, 1987	.83	12	4
Innovation	Trendsettting Questionnaire	Batinic et al., 2007	.81	9	4

Data Analysis Plan

Prior to data analysis, data were downloaded from *Qualtrics* and cleaned and inspected through the examination of frequencies, means, skewness, kurtosis, and standard deviations on each item. Outliers were individually examined by the researcher, but remained unmodified in the dataset. Descriptive statistics and hierarchical regressions were analyzed using *IBM SPSS 23.0.* Nonresponse cases (i.e., cases that did not contain a data point) were deleted from the dataset. Descriptive statistics (i.e., frequencies, means, standard deviations). To answer hypothesis one, descriptive statistics (i.e., frequencies, means, standard deviations, bivariate correlations) were calculated for the total sample and primary study variables. General linear models (i.e., one-way, two-way ANOVAs) were used.

Hierarchical multiple regressions were used to determine predictors of innovation (Hypothesis two). Prior to running the regressions, all predictor and criterion variables were mean-centered to reduce strong correlations between predictors and interaction terms (i.e., multicollinearity) (Dalal & Zickar, 2012). Interaction products of uncentered variables typically result in high correlations between the variables and the product score (i.e., interaction term). By centering variables around the mean (i.e., computing deviation scores), the correlation terms between the variables and the product score are smaller than if the variables were uncentered (Iacobucci, Schneider, Popovich, & Bakamitsos, 2016). First, a hierarchical regression was used to examine what predictors are associated with innovation. Predictors were entered in the following order: demographics (i.e., age, county composition, assignment included older adult audience, percentage of FCS appointment, years in current position) (block 1); contexts of change (i.e., policy coherence, leadership self-efficacy, environmental press, supportive organizational climate, interoffice support) (block 2); personal factors (i.e., personal subjective age, workplace subjective age work-related stress, social support) (block 3); and, interaction terms (i.e., Personal Subjective Age X Policy coherence, Personal Subjective Age X Leadership Self-Efficacy, Personal Subjective Age X Environmental Press) (block 4). Any significant interactions were

analyzed further using Sobel's test to test the significance of the indirect path (Baron & Kenny, 1986). The first regression equation is as follows:

$$\hat{y} = b_0 + ax_1 + cx_2 + dx_3 + ex_4 + fx_5 + gx_6 + hx_7 + ix_8 + jx_9 + kx_{10} + lx_{11} + mx_{12} + nx_{13} + px_{14} + qx_{15} + rx_{16}$$

Table 2

Definition of First Regression Equation Terms

Equation ID	Variable ID	Description
$\hat{y}$	Innovation	Coded: continuous variable
b0	Regression Constant	Y-intercept
ax	Age	Coded: continuous variable
cx	Gender	Coded: categorical variable; 0 = male, 1 = female
dx	Years in Current Position	Coded: continuous variable
ex	County Composition	Coded: categorical variable; 1 = rural, 2 = suburb, 3 = urban
fx	Policy Coherence	Coded: continuous variable
gx	Leadership Self-Efficacy	Coded: continuous variable
hx	Environmental Press	Coded: continuous variable
ix	Supportive Organizational Climate	Coded: continuous variable
jx	Interoffice Support	Coded: continuous variable
kx	Work-Related Stress	Coded: continuous variable
lx	Personal Subjective Age	Coded: continuous variable
mx	Workplace Subjective Age	Coded: continuous variable
nx	Social Support	Coded: continuous variable
px	Personal Subjective Age X Policy Coherence	Coded: continuous variable; calculated interaction term between personal subjective age and policy coherence
qx	Personal Subjective Age X Leadership Self-Efficacy	Coded: continuous variable; calculated interaction term between personal subjective age and leadership self-efficacy
rx	Personal Subjective Age X Environmental Press	Coded: continuous variable; calculated interaction term between personal subjective age and environmental press

Second, another four-step hierarchical regression was used to examine what predictors are associated with innovation. Predictors were entered in the following order: demographics (i.e., age, county composition, assignment included older adult audience, percentage of FCS appointment, years in current position) (block 1); contexts of change (i.e., policy coherence,

leadership self-efficacy, environmental press, supportive organizational climate, interoffice support) (block 2); personal factors (i.e., personal subjective age, workplace subjective age work-related stress, social support) (block 3); and, interaction terms (i.e., Work-related Stress X Policy coherence, Work-related Stress X Leadership Self-Efficacy, Work-Related Stress X Environmental Press) (block 4). Any significant interactions were analyzed further using Sobel's test to test the significance of the indirect path (Baron & Kenny, 1986). The second regression equation is as follows:

$$\hat{y} = b_0 + ax_1 + cx_2 + dx_3 + ex_4 + fx_5 + gx_6 + hx_7 + ix_8 + jx_9 + kx_{10} + lx_{11} + mx_{12} + nx_{13} + px_{14} + qx_{15} + rx_{16}$$

Table 3

Definition of Second Regression Equation Terms

Equation ID	Variable ID	Description
$\hat{y}$	Innovation	Coded: continuous variable
b0	Regression Constant	Y-intercept
ax	Age	Coded: continuous variable
cx	Gender	Coded: categorical variable; 0 = male, 1 = female
dx	Years in Current Position	Coded: continuous variable
ex	County Composition	Coded: categorical variable; 1 = rural, 2 = suburb, 3 = urban
fx	Policy Coherence	Coded: continuous variable
gx	Leadership Self-Efficacy	Coded: continuous variable
hx	Environmental Press	Coded: continuous variable
ix	Supportive Organizational Climate	Coded: continuous variable
jx	Interoffice Support	Coded: continuous variable
kx	Work-Related Stress	Coded: continuous variable
lx	Personal Subjective Age	Coded: continuous variable
mx	Workplace Subjective Age	Coded: continuous variable
nx	Social Support	Coded: continuous variable
px	Work-Related Stress X Policy Coherence	Coded: continuous variable; calculated interaction term between work-related stress and policy coherence

Table 3 cont.

Equation ID	Variable ID	Description
qx	Work-Related Stress X Leadership Self-Efficacy	Coded: continuous variable; calculated interaction term between work-related stress and leadership self-efficacy
rx	Work-Related Stress X Environmental Press	Coded: continuous variable; calculated interaction term between work-related stress and environmental press

Third, a four-step hierarchical regression was used to examine what predictors are associated with innovation. Predictors were entered in the following order: demographics (i.e., age, county composition, assignment included older adult audience, percentage of FCS appointment, years in current position) (block 1); contexts of change (i.e., policy coherence, leadership self-efficacy, environmental press, supportive organizational climate, interoffice support) (block 2); personal factors (i.e., personal subjective age, workplace subjective age work-related stress, social support) (block 3); and, interaction terms (i.e., Work-related Stress X Years in Current Position Work-related Stress X Personal Subjective Age, Work-Related Stress X Social Support) (block 4). Any significant interactions were analyzed further using Sobel's test to test the significance of the indirect path (Baron & Kenny, 1986). The third regression equation is as follows:

$$\hat{y} = b_0 + ax_1 + cx_2 + dx_3 + ex_4 + fx_5 + gx_6 + hx_7 + ix_8 + jx_9 + kx_{10} + lx_{11} + mx_{12} + nx_{13} + px_{14} + qx_{15} + rx_{16}$$

Table 4

Definition of Third Regression Equation Terms

Equation ID	Variable ID	Description
$\hat{y}$	Innovation	Coded: continuous variable
b0	Regression Constant	Y-intercept
ax	Age	Coded: continuous variable
cx	Gender	Coded: categorical variable; 0 = male, 1 = female
dx	Years in Current Position	Coded: continuous variable

Table 4 cont.

Equation ID	Variable ID	Description
ex	County Composition	Coded: categorical variable; 1 = rural, 2 = suburb, 3 = urban
fx	Policy Coherence	Coded: continuous variable
gx	Leadership Self-Efficacy	Coded: continuous variable
hx	Environmental Press	Coded: continuous variable
ix	Supportive Organizational Climate	Coded: continuous variable
jx	Interoffice Support	Coded: continuous variable
kx	Work-Related Stress	Coded: continuous variable
lx	Personal Subjective Age	Coded: continuous variable
mx	Workplace Subjective Age	Coded: continuous variable
nx	Social Support	Coded: continuous variable
px	Work-Related Stress X Years in Current Position	Coded: continuous variable. Calculated interaction term between work-related stress and years in current position
qx	Work-Related Stress X Personal Subjective Age	Coded: continuous variable; calculated interaction term between work-related stress and personal subjective age
rx	Work-Related Stress X Social Support	Coded: continuous variable; calculated interaction term between work-related stress and social support

To answer hypothesis three, MPlus (Muthén & Muthén, 1998/2017) was used to analyze the path model depicted in Figure 3. Model parameters were estimated using the maximum likelihood method. The method of maximum likelihood utilizes the likelihood function to estimate model parameters from observed data (Eliason, 1993). Maximum likelihood estimation is appropriate to use for incomplete data because partial data contributes to the linear estimation of all parameters (Peugh & Enders, 2004). The model's goodness of fit was assessed using comparative fit index (CFI, Bentler, 1990), Steiger-Lind root mean square error of approximation and its 90% confidence interval (RMSEA; Steiger, 1990), and the standardized root mean square residual (SRMR). The CFI is an incremental fit index that compares the amount of departure of the experimental model from that of the null model (Kline, 2016). Hu and Bentler (1999) suggest

that a CFI score greater than or equal to .95 is indicative of good fit. The RMSEA indicates badness-of-fit, such that a value of zero is indicative of good model fit (Kline, 2016). Steiger (1990) suggests that a RMSEA score less than .05 is indicative of good model fit. The lower bound of the confidence interval should be as close to zero as possible and the upper bound should be less than .10 to be indicative of good model fit (Kline, 2016). The SRMR is also a badness-of-fit statistic, thus a SRMR score of .05 or less is indicative of good fit (Kline, 2016). A mediation hypothesis investigate that work-related stress mediates the relationship between supportive organizational climate and innovativeness will be examined.

CHAPTER IV

RESULTS

Sample Descriptives

The total sample (N = 216) included current employees of the Cooperative Extension Service [denoted further as Extension] with a portion or all of their job assignment designated as Family and Consumer Science (FCS). Thirteen percent of the sample (n = 28) did not complete their survey, skewing the data; caution is required when interpreting the results due to possible biased parameters. Frequencies, means, and standard deviations for the incomplete responses can be found in Appendix B.

Geographic data was initially sorted into regions based on popular opinion (i.e., Pacific, Frontier, Midwest, South, Northeast)(White, n.d.). Upon further examination of regional frequencies, the Pacific and Frontier regions were combined into one group (i.e., West). The geographic diversity of the total sample was as follows: 21 (9.7%) worked in Northeastern states (i.e., Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, Ohio, Pennsylvania), 59 (27.3%) worked in Southern states (i.e., Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, Virginia, West Virginia), 58 (26.9%) from Midwestern states (i.e., Illinois, Indiana, Iowa, Kansas, Michigan, Missouri, Nebraska, North Dakota, Wisconsin), 60 (27.8%) from Western states (i.e., Alaska, Colorado, California, Montana, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington), and 18 (8.3%) did not

report in which state they were employed. The sample consisted mostly of white (*n* = 193, 89.4%) females (*n* = 208, 96.3%) who currently held the position of Extension agent (n = 171, 79.2%). A majority of the sample had been in their current position (*M* = 10.05, *SD* = 9.67) from 0 to 9 years (*n* = 131, 60.6%), followed by those who have been in their current position 10 to 25 years (*n* = 87, 29.6%) and those who have been in their current position 26 to 47 years (*n* = 21, 9.7%). When asked about how many years they have been with Extension in total (*M* = 14.05, *SD* = 11.09), 41.2% (*n* = 89) reported 0 to 9 years, 40.3% (*n* = 87) reported 10 to 25 years, and 17.6% (*n* = 38) reported 26-47 years. One hundred and sixty-one (74.5%) of participants were designated as 75 to 100% FCS, 40 (18.5%) were designated as 40 to 70% FCS, and 13 (6%) were designated as 0 to 33% FCS. Fifty participants (23.1%) worked in a rural county (i.e., population 2,500 or less), 97 (44.9%) worked in a suburban county (i.e., population between 2,500 and 50,000), and 65 (30.1%) worked in an urban county (i.e., population of 50,000 or more). A majority of participants (*n* = 130, 60.2%) reported that their assignment did not specify older adults or family caregivers as an audience they had to serve, compared to the 86 participants (39.8%) who reported such language existed in their assignment. Frequencies related to the Educators position in Extension can be found in Table 5.

Table 5

Sample Frequencies Specific to Position in Extension (N = 216)

Variable	*N*	%
U.S. Region		
Northeast	21	9.7
South	59	27.3
Midwest	58	26.9
West	60	27.8
Missing	18	8.3
Gender		
Male	6	2.8
Female	208	96.3
I'd Rather Not Say	2	0.9

Table 5 cont.

Variable	*N*	%
Ethnicity		
American Indian/Native American or Alaska Native	1	0.5
Asian American	1	0.5
Black or African American	11	5.1
Hispanic or Latino	5	2.3
White	193	89.4
Multiracial	4	1.9
Missing	1	0.5
Current Position		
Extension Agent	171	79.2
Faculty, Specialist, Administration	43	19.9
Missing	2	0.9
Years in Current Position		
0-9	131	60.6
10-25	64	29.6
26-47	21	9.7
Years in Extension		
0-9	89	41.2
10-25	87	40.3
26-47	38	17.6
Missing	2	0.9
FCS Assignment		
0-39%	13	6.0
40-74%	40	18.5
75-100%	161	74.5
Missing	2	0.9
County Composition		
Rural (Population 2,500 or less)	50	23.1
Suburb (Population 2,500 - 50,000)	97	44.9
Urban (Population (50,000 or more)	65	30.1
Missing	4	1.9
Older Adults Written in FCS Assignment		
Yes	86	39.8
No	130	60.2

Regarding personal factors, 152 (70.4%) of participants reported being married, 35 (16.2%) were never married, three (1.4%) were separated, four (1.9%) were widowed, 19 (8.8%) were divorced, and three (1.4%) listed their relationship status as other, but no description was provided. On average, participants were 47.09 years of age (*SD* = 12.24), with the age groups as follows: 41 (19%) classified as young adult (i.e., 22 to 34 years of age), 85 (39.4%) early middle adults (i.e., 35 to 54 years of age), 67 (31%) late middle adults (i.e., 55 to 69 years of age), and 23 (10.6%) did not provide an age. One hundred and forty-six (67.6%) participants perceived themselves as not healthy, compared to the 70 (32.4%) of participants who felt they were healthy. When asked about how satisfied they were with their lives, 52.8% (*n* = 114) reported being satisfied, while 47.2% (*n* = 102) were not satisfied with their lives. Frequencies regarding the Educators' personal factors can be found in Table 6. Means, standard deviations, and bivariate correlations of study variables can be found in Tables 7 and 8.

Table 6

Sample Frequencies Specific to Personal Factors (N = 216)

Variable	*N*	%
Age Group		
Young Adult (22-24)	41	19
Early Middle Adult (35-54)	85	39.4
Late Middle Adult (55-69)	67	31
Missing	23	10.6
Relationship Status		
Married	152	70.4
Separated	3	1.4
Divorced	19	8.8
Widowed	4	1.9
Never Married	35	16.2
Other	3	1.4
Caregiving Status		
Yes	34	15.7
No	180	83.3
Missing	2	0.9

Table 6 cont.

Variable	*N*	%
Perceived Health		
Not Healthy	146	67.6
Healthy	70	32.4
Life Satisfaction		
Not at all satisfied	102	47.2
Satisfied	114	52.8

Table 7

Means and Standard Deviations of Study Variables

	M (SD)	*N*	Range	Skewness	Kurtosis
Age	47.09 (12.24)	193	47	-.30	-1.01
Years in Current Position	10.05 (9.67)	216	47	1.15	.67
Years in Extension	14.05 (11.09)	214	47	.72	-.45
Policy Coherence	11.33 (3.27)	206	15	-.11	-.30
Leadership Self-Efficacy	77.97 (16.30)	204	82.5	-1.37	2.15
Environmental Press	26.84 (6.41)	194	31	.08	-.34
Supportive Organizational Climate	14.88 (3.06)	193	15	-.46	.24
Interoffice Support	19.75 (5.22)	190	20	-.97	.16
Work-Related Stress	15.8 (5.27)	192	23	.28	-.48
Personal Subjective Age	3.45 (.85)	188	4.71	.13	.27
Social Support	39.52 (5.21)	188	23	-.47	-.36
Innovation	34.43 (4.77)	187	34	-.54	2.40

Table 8

Study Bivariate Correlations

	1	2	3	4	5	6	7	8	9	10	11	12
(1) Age	-											
(2) U.S. Region	-.12	-										
(3) Perceived Health	-.00	-.02	-									
(4) Life Satisfaction	.02	-.12	.35	-								
(5) Years in Current	.51**	-.08	-.05	.01	-							
(6) Years in Extension	.65**	-.09	-.09	-.03	.80*	-						
(7) FCS Percentage	-.04	-.06	-.02	.02	-.02	-.16*	-					
(8) County Composition	.18*	-.12	-.00	.08	.04	.13	.10	-				
(9) Older Adult Audience	.01	.12	.01	.01	-.00	.02	.04	-.04	-			
(10) Policy Coherence	-.01	-.10	-.01	.08	.09	.11	-.02	.09	.13	-		
(11) Leadership Self-	.04	-.07	.34**	.25**	.06	-.05	.11	.04	.01	.06	-	
(12) Environmental Press	.16*	.11	.01	-.03	.13	.15*	.06	-.09	.39*	.20**	.07	-
(13) Interoffice Support	.05	-.07	.19**	.33**	.06	.04	-.04	-.08	.03	.10	.24**	.05
(14) Work-Related Stress	.11	.22*	-.15*	-.21**	.12	.13	-.13	-.04	.02	-.24**	-.19**	.03
(15) Subjective Age	-.33**	.09	-.28**	-.26**	-.08	-.09	-.13	-.11	.08	.02	-.28**	-.04
(16) Social Support	-.13	-.04	.30**	.44**	-.13	-.19**	-.02	.07	.14	.17*	.33**	.06
(17) Innovation	.04	-.09	.24**	.19*	-.13	-.10	-.04	.16*	.11	.08	.18*	.16*

*$p < .05$, **$p < .01$

Table 8 cont.

	13	14	15	16	17
(1) Age					
(2) U.S. Region					
(3) Perceived Health					
(4) Life Satisfaction					
(5) Years in Current Position					
(6) Years in Extension					
(7) FCS Percentage					
(8) County Composition					
(9) Older Adult Audience					
(10) Policy Coherence					
(11) Leadership Self-Efficacy					
(12) Environmental Press					
(13) Interoffice Support	-				
(14) Work-Related Stress	-.16*	-			
(15) Subjective Age	-.20**	.25**	-		
(16) Social Support	.32**	-.23**	-.20**	-	
(17) Innovation	.00	.01	-.28**	.35**	-

*$p < .05$, **$p < .01$

Group Comparisons

A one-way analysis of variance indicated significant mean differences between age groups on leadership self-efficacy ($F(2,184) = 3.405$, $p = .035$, $\eta^2 = .036$) (See Table 12). A Bonferroni post hoc test revealed that participants aged 35 to 54 years old had significantly higher leadership self-efficacy averages ($M = 74.03$, $SD = 13.31$) than participants aged 22 to 34 years old ($M = 74.03$, $SD = 16.42$). A one-way analysis of variance indicated that significant mean differences existed among the age groups on personal subjective age ($F(2,172) = 10.87$, $p = .000$, $\eta^2 = .114$) (See Table 9). A Bonferroni post hoc test revealed that participants aged 22 to 34 years old, on average, reported a higher subjective age ($M = 3.97$, $SD = .76$) than participants aged 35 to 54 years old ($M = 3.41$, $SD = .83$) and participants aged 55 to 69 years old ($M = 3.18$, $SD = .84$). Participants aged 35 to 54 years of age reported a higher subjective age than participants aged 55 to 69 years old. Statistically significant mean differences were found between age groups on innovation ($F(2,170) = 3.24$, $p = .042$, $\eta^2 = .037$) (See Table 9). A Bonferroni post hoc test revealed that participants aged 35 to 54 years old were significantly more innovative ($M = 35.37$, $SD = 4.41$) than participants aged 22 to 34 years old ($M = 33.08$, $SD = 3.92$).

Table 9

Mean Age Group Differences in Main Study Variables

	Young Adult (22 to 34)		Early Middle Adult (35 to 54)		Late Middle Adult (55 to 69)			
	M (*SD*)	*N*	*M* (*SD*)	*N*	*M* (*SD*)	*N*	*F*	η^2
Policy Coherence	11.06 (2.75)	40	11.54 (3.24)	81	11.09 (3.44)	65	.46	.01
Leadership Self-Efficacy	74.03 (16.42)	38	81.67 (13.31)	82	77.5 (17.55)	64	3.41*	.04
Environmental Pressure	24.89 (5.15)	38	27.26 (6.52)	78	27.56 (6.52)	59	2.34	.03
SOC	15.22 (2.47)	37	14.68 (3.16)	78	14.9 (3.46)	60	.37	.00

*$p < 0.05$, **$p < 0.01$.
Note. SOC = Supportive Organizational Climate

Table 9 cont.

	Young Adult (22 to 34)		Early Middle Adult (35 to 54)		Late Middle Adult (55 to 69)			
	M (SD)	*N*	*M (SD)*	*N*	*M (SD)*	*N*	*F*	η^2
Interoffice Support	19.57 (4.86)	37	19.83 (5.65)	76	19.836 (5.65)	60	.11	.00
Work-Related Stress	15.7 (5.73)	37	15 (4.99)	77	16.95 (5.2)	60	2.36	.03
Subjective Age	3.98 (.76)	37	3.41 (.83)	76	3.18 (.84)	59	10.87**	.11
Social Support	40.38 (5.24)	37	39.43 (5.39)	74	39.54 (4.82)	59	.44	.01
Innovation	33.08 (3.92)	36	35.37 (4.41)	73	34.1 (5.13)	61	3.24*	.04

*$p < 0.05$, **$p < 0.01$.

A one-way analysis of variance indicated significant mean differences between U.S. regions on environmental press ($F(3,179) = 3.303$, $p = .022$, $\eta^2 = .054$) (See Table 10). A Bonferroni post hoc analysis revealed that participants from Midwestern states perceived greater environmental pressure to innovate ($M = 28.44$, $SD = 7.30$) than participants in Northeastern states ($M = 23.43$, $SD = 3.89$). A one-way analysis of variance resulted in significant mean differences between U.S. regions on work-related stress ($F(3,178) = 3.22$, $p = .024$, $\eta^2 = .053$) (See Table 10). Participants in Western states reported higher work-related stress ($M = 17.4$, $SD = 4.52$) than participants in Northeastern states ($M = 13.3$, $SD = 6.67$).

Table 10

Mean Regional Differences in Main Study Variables

	Northeast		South		Midwest		West			
	M (SD)	*N*	*M (SD)*	*N*	*M (SD)*	*N*	*M (SD)*	*N*	*F*	η^2
Policy Coherence	11.1 (3.1)	21	11.05 (3.08)	57	11.72 (3.34)	57	10.63 (3.42)	56	1.62	.03
Leadership Self-Efficacy	79.33 (18.48)	21	79.75 (13.17)	55	76.42 (16.02)	56	76.79 (19.98)	56	.5	.01
Environmental Pressure	22.43 (3.89)	21	26.85 (5.59)	52	28.44 (7.3)	52	26.44 (6.44)	54	3.3*	.05
SOC	15.67 (3.71)	21	14.72 (2.92)	54	14.9 (3.35)	51	14.68 (2.94)	53	.55	.01
Interoffice Support	21.33 (5.51)	21	19.72 (4.83)	53	18.85 (5.2)	52	19.82 (5.38)	51	1.18	.02
Work-Related Stress	13.3 (6.67)	20	15.38 (5.34)	53	15.65 (5.39)	52	17.4 (4.52)	53	3.22*	.05
Subjective Age	3.28 (.71)	21	3.37 (.86)	52	3.65 (.9)	48	3.48 (.86)	54	1.25	.02
Social Support	41.71 (4.16)	21	39.12 (5.06)	50	38.65 (5.49)	51	40.17 (5.47)	52	2.07	.04
Innovation	35.57 (3.79)	21	34.47 (4.37)	51	34.24 (3.91)	50	34.06 (5.85)	52	.55	.01

*$p < 0.05$, **$p < 0.01$.
Note. SOC = Supportive Organizational Climate

A one-way analysis of variance indicated significant mean differences between length of time working in Extension on environmental press ($F(2,189) = 3.836$, $p = .023$, $\eta^2 = .039$) (See Table 11). A Bonferroni post hoc analysis indicated that participants that worked for Extension 10 to 25 years perceived higher environmental pressure to innovate ($M = 28.14$, $SD = 6.38$) than participants that worked 0 to 9 years ($M = 25.46$, $SD = 6.27$).

Table 11

Mean Differences in Main Study Variables by Years in Extension

	Years in Extension							
	0 to 9		10 to 25		26 to 47			
	M (SD)	*N*	*M(SD)*	*N*	*M(SD)*	*N*	*F*	η^2
Policy Coherence	11.15 (3.06)	87	11.33 (3.57)	81	11.83 (3.15)	36	.55	.01
Leadership Self-Efficacy	78.08 (15.63)	84	78.23 (15.75)	83	77.05 (19.33)	35	.07	.00
Environmental Pressure	25.46 (6.27)	82	28.14 (6.38)	79	27.55 (6.10)	31	3.84*	.04
SOC	15.23 (2.69)	82	14.47 (3.39)	77	15.16 (3.07)	32	1.37	.01
Interoffice Support	20.02 (4.67)	81	16.19 (5.47)	74	20.73 (5.38)	33	1.19	.01
Work-Related Stress	15.32 (5.2)	82	15.71 (5.12)	75	17.3 (5.76)	33	1.7	.02
Subjective Age	3.55 (.81)	80	3.38 (.91)	76	3.36 (.81)	30	.92	.01
Social Support	40.48 (5.15)	80	39.2 (5.08)	75	38.13 (5.27)	31	2.65	.03
Innovation	34.58 (4.19)	79	34.8 (4.64)	74	33.44 (6.14)	32	.95	.01

*$p < 0.05$, **$p < 0.01$.
Note. SOC = Supportive Organizational Climate

An independent-samples t-test was conducted to compare the study variables in healthy and unhealthy adults. There was a significant mean difference in scores on leadership self-efficacy ($t(162.22) = -5.12$, $p = .000$), interoffice support ($t(188) = -1.99$, $p = .048$), subjective age ($t(186) = 2.94$, $p = .004$), social support ($t(186) = -4.13$, $p = .000$), and innovation ($t(185) = -3.07$, $p = .002$). These results suggest that Educators who a favorable health self-perception report higher leadership self-efficacy, interoffice support, social support, and innovativeness than Educators who have an unfavorable health self-perception. Educators with unfavorable self-

perceptions of their health report a higher perceived subjective age than Educators who have a favorable health self-perception. Means and standard deviations are shown in Table 12.

Table 12

Independent Sample T-Test of Study Variables and Perceived Health

	Favorable *M (SD)*	Unfavorable *M (SD)*	*t*	*df*
Policy Coherence	11.2 (3.4)	11.39 (3.22)	.39	207
Leadership Self-Efficacy	85.33 (12.58)	74.53 (16.73)	-5.12***	162.22
Environmental Pressure	27.25 (6.59)	26.64 (6.33	-.62	192
Supportive Organizational Climate	15.42 (3)	14.61 (3.06)	-1.74	191
Interoffice Support	20.85 (5.1)	19.24 (5.21)	-1.99*	188
Work-Related Stress	15.02 (5.19)	16.19 (5.29)	1.45	190
Subjective Age	3.18 (.83)	3.57 (.84)	2.94**	186
Social Support	41.66 (4.76)	38.46 (5.11)	-4.13***	186
Innovation	35.95 (4.46)	33.71 (4.76)	-3.07**	185

*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$

An independent-samples t-test was conducted to compare the study variables in Educators who reported being satisfied and unsatisfied with life. There was a significant mean difference in scores on leadership self-efficacy ($t(163.38) = -3.87$, $p = .000$), supportive organizational climate ($t(191) = -2.86$, $p = .005$), interoffice support ($t(188) = -3.13$, $p = .002$), work-related stress ($t(190) = 2.99$, $p = .003$), subjective age ($t(186) = 2.71$, $p = .007$), and social support ($t(186) = -5.36$, $p = .000$). These results suggest that Educators who perceive themselves as satisfied with life report higher leadership self-efficacy, a more supportive organizational climate, interoffice support, and social support than Educators who are unsatisfied with life. Educators who are unsatisfied with life report a higher perceived subjective age than Educators who are satisfied with life. Means and standard deviations are shown in Table 13.

Table 13

Independent Sample T-Test of Study Variables and Life Satisfaction

	Satisfied *M (SD)*	Unsatisfied *M (SD)*	*t*	*df*
Policy Coherence	11.68 (3.3)	10.93 (3.21)	-1.66	204
Leadership Self-Efficacy	82.05 (12.77)	73.29 (18.56)	-3.87***	163.38
Environmental Pressure	26.74 (6.54)	26.96 (6.28)	.23	192
Supportive Organizational Climate	15.45 (3.03)	14.21 (2.97)	-2.86**	191
Interoffice Support	20.82 (4.61)	18.5 (5.62)	-3.13**	188
Work-Related Stress	14.77 (5.14)	17 (5.21)	2.99**	190
Subjective Age	3.29 (.82)	3.62 (.86)	2.71*	186
Social Support	41.28 (4.72)	37.47 (5.01)	-5.36***	186
Innovation	34.92 (5)	33.85 (4.44)	-1.54	185

*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$

An independent-samples t-test was conducted to compare the study variables in Educators whose job description specifically stated that older adults and family caregivers are a target audience and those whose job description did not require older adults as a target audience. There was a significant mean difference in scores on environmental pressure ($t(192) = -5.88$, $p = .000$). These results suggest that Educators whose job description requires targeting older adults and family caregivers perceive greater environmental pressure related to family caregiving needs and initiatives than Educators whose job description does not require targeting older adults or family caregivers. Means and standard deviations are shown in Table 14.

Table 14

Independent Sample T-Test of Study Variables and Inclusion of Caregiving Populations

	Yes *M (SD)*	No *M (SD)*	*t*	*df*
Policy Coherence	11.84 (3.49)	10.98 (3.07)	-1.87	204
Leadership Self-Efficacy	78.22 (17.14)	77.8 (15.76)	-.18	202
Environmental Pressure	29.88 (5.86)	24.79 (5.95)	-5.88***	192
Supportive Organizational Climate	15.04 (3.07)	14.77 (3.06)	-.59	191
Interoffice Support	19.95 (5.09)	19.61 (5.32)	-.43	188
Work-Related Stress	15.93 (5.07)	15.72 (5.42)	-.28	190
Subjective Age	3.53 (.89)	3.4 (.82)	-1.05	186
Social Support	40.37 (4.83)	38.95 (5.39)	-1.85	186
Innovation	35.04 (4.35)	34.01 (5.01)	-1.46	185

*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$

An independent-samples t-test was conducted to compare the study variables between Extension Agents and Faculty or Specialists. There was a significant mean difference in scores on supportive organizational climate ($t(189) = -2.19$, $p = .029$). These results suggest that Faculty or Specialists with an FCS appointment perceive their organization to have a more supportive organizational climate than Extension agents. Means and standard deviations are shown in Table 15.

Table 15

Independent Sample T-Test of Study Variables and Extension Position

	Extension Agent *M (SD)*	Faculty/Specialist *M (SD)*	*t*	*df*
Policy Coherence	11.2 (3.29)	11.84 (3.19)	-1.08	202
Leadership Self-Efficacy	77.23 (16.63)	80.74 (15.16)	-1.22	200
Environmental Pressure	26.78 (6.16)	26.91 (7.61)	-.11	190
Supportive Organizational Climate	14.64 (3.08)	15.89 (2.84)	-2.19*	189

*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$

Table 15 cont.

	Extension Agent *M (SD)*	Faculty/Specialist *M (SD)*	*t*	*df*
Interoffice Support	19.54 (5.27)	20.64 (5.06)	-1.1	186
Work-Related Stress	16.14 (5.34)	14.64 (4.88)	1.55	188
Subjective Age	3.49 (.88)	3.26 (.73)	1.41	184
Social Support	39.51 (5.18)	39.67 (5.45)	-.16	184
Innovation	34.42 (4.66)	34.74 (5.18)	-.35	183

*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$

Years in current position might contribute to personal subjective age, but that relationship might differ across U.S. regions. A two-way analysis of variance tested the personal subjective age of educators who had worked in their current position across three groups (i.e., 0-9, 10-25, 26-47) across four different U.S. regions (i.e., Northeast, South, Midwest, West). No significant mean differences were found across years in current position ($F(2,163) = .94$, $p = .39$, $\eta^2 = .01$) or U.S. regions ($F(3,163) = .10$, $p = .96$, $\eta^2 = .00$) (See Table 16). The interaction of years in current position and U.S. region was significant ($F(6,163) = 2.41$, $p = .03$, $\eta^2 = .08$).

Table 16

Mean Level of Subjective Age by U.S. Region and Years in Current Position

			U.S. Region			
			Northeast	South	Midwest	West
Years in Current Position	0 to 9	*M (SD)*	3.24 (.66)	3.52 (.76)	3.86 (.93)	3.27 (.87)
		N	13	31	29	33
	10 to 25	*M (SD)*	2.95 (1.11)	3.16 (.98)	3.39 (.76)	3.84 (.76)
		N	3	15	16	20
	26 to 47	*M (SD)*	3.57 (.66)	3.14 (1.01)	2.90 (.86)	2.86 (-)
		N	5	6	3	1

As Figure 5 shows, among Western states, educators who have been in their position less than 10 years reported lower average subjective age scores than educators who have been in their position for 10 to 25 years. While there are no other significant mean differences among the groups, most respondents reported feeling younger than their chronological year (see Table 16).

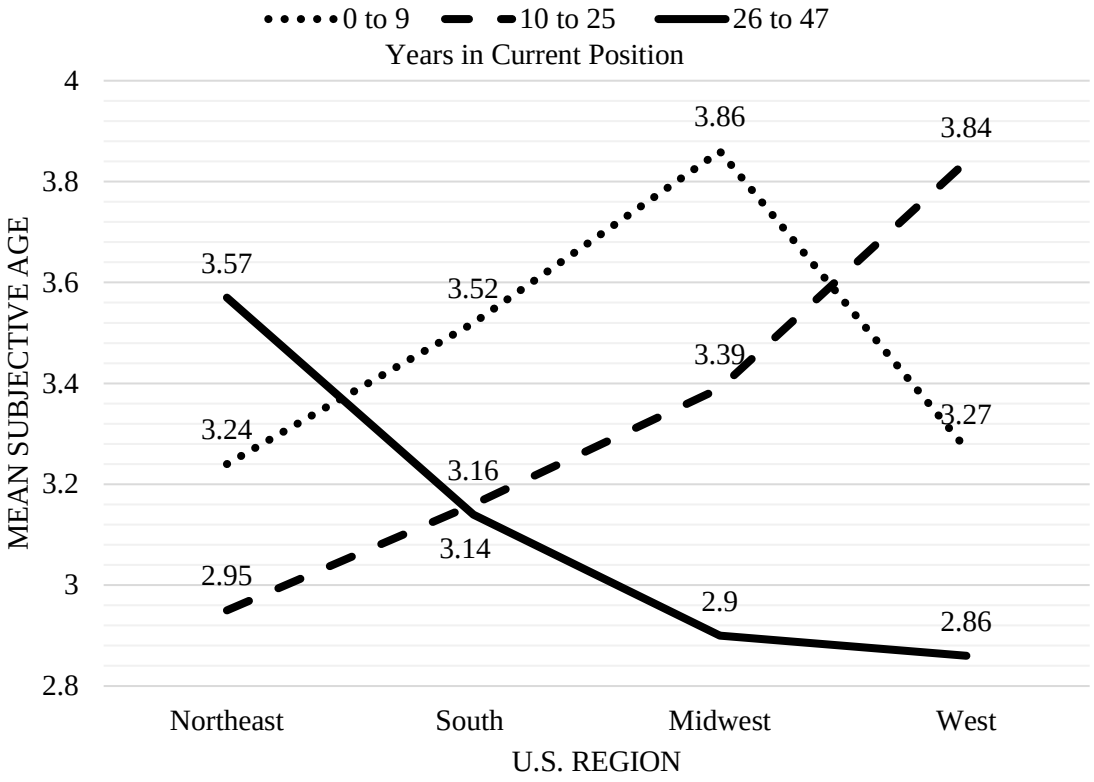

Figure 5. Relationship between U.S. region and years in current position on subjective age.

Years in current position might contribute to innovativeness, but that relationship might differ across U.S. regions. A two-way analysis of variance tested the innovativeness of educators who had worked in their current position across three groups (i.e., 0-9, 10-25, 26-47) across four different U.S. regions (i.e., Northeast, South, Midwest, West). Significant mean differences were found across years in current position ($F(2,162) = 8.05$, $p = .00$, $\eta^2 = .09$) and U.S. regions ($F(3,162) = 8.55$, $p = .00$, $\eta^2 = .14$) (See Table 17). The interaction of years in current position and U.S. region was also significant ($F(6,162) = 4.87$, $p = .00$, $\eta^2 = .15$).

Table 17

Mean Level of Innovativeness by U.S. Region and Years in Current Position

			U.S. Region			
			Northeast	South	Midwest	West
Years in Current Position	0 to 9	*M (SD)*	35.46 (3.02)	34.17 (4.67)	34.03 (3.45)	35.09 (4.75)
		N	13	30	29	32
	10 to 25	*M (SD)*	34.33 (2.08)	35.40 (4.05)	34.65 (4.95)	33.53 (5.12)
		N	3	15	17	19
	26 to 47	*M (SD)*	36.60 (6.31)	33.67 (3.83)	34.00 (2.58)	11.00 (-)
		N	5	6	4	1

As Figure 6 shows, among Western states, educators who have been in their position less than 25 years reported higher average scores of innovativeness than educators who had been in their position longer than 25 years. However, further examination noted that only one educator had worked in Western states for longer than 25 years; possibly attributing to the low mean for the group. No other significant mean differences were found among years in current positions across U.S. regions (see Table 17).

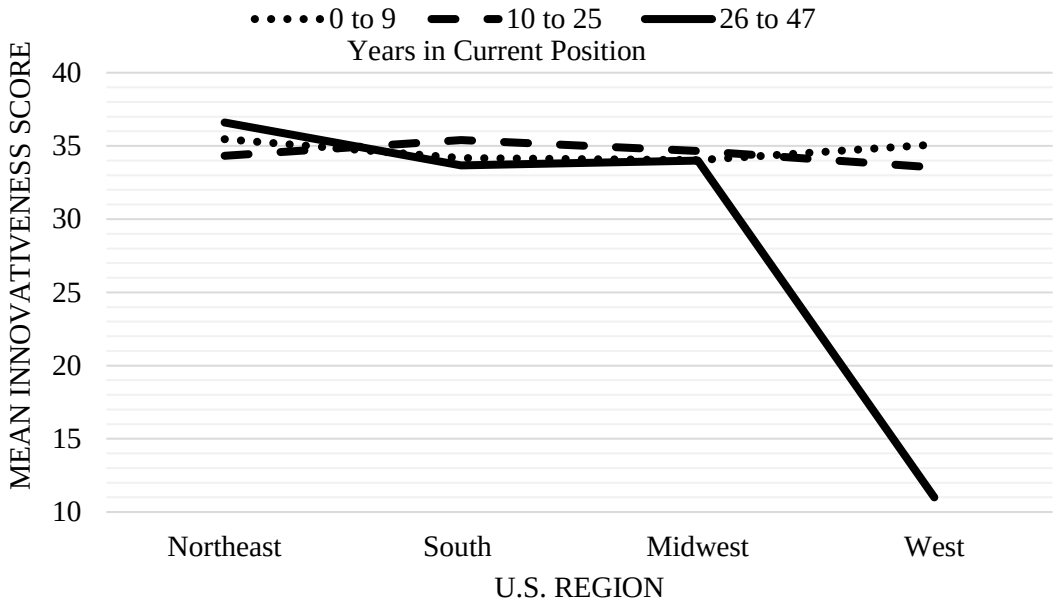

Figure 6. Relationship between U.S. region and years in current position on innovativeness

Years working for Extension might contribute to leadership self-efficacy, but that relationship might differ across U.S. regions. A two-way analysis of variance tested the leadership self-efficacy of educators who had worked for Extension across three groups (i.e., 0-9, 10-25, 26-47) across four different U.S. regions (i.e., Northeast, South, Midwest, West). No significant mean differences were found across years working for Extension ($F(2,175) = .76$, $p = .47$, $\eta^2 = .01$) or U.S. regions ($F(3,175) = 1.14$, $p = .34$, $\eta^2 = .02$) (See Table 18). The interaction of years working for Extension and U.S. region was significant ($F(6,175) = 2.76$, $p = .01$, $\eta^2 = .09$).

Table 18

Mean Level of Leadership Self-Efficacy by U.S. Region and Years in Extension

			U.S. Region			
			Northeast	South	Midwest	West
Years in Extension	0 to 9	*M (SD)*	82.05 (14.13)	79.86 (10.84)	77.98 (12.87)	74.88 (22.03)
		N	10	18	26	25
	10 to 25	*M (SD)*	61.65 (24.72)	79.22 (13.26)	75.98 (19)	82.68 (12.33)
		N	5	25	22	24
	26 to 47	*M (SD)*	89.54 (8.08)	80.71 (16.89)	74.07 (18.57)	63.46 (27.79)
		N	6	12	7	7

As Figure 7 shows, among Northeastern states, educators who have worked for Extension less than 10 years and longer than 25 years reported higher average leadership self-efficacy scores than educators who have been working for Extension for 10 to 25 years. Also, among Western states, educators who have worked for Extension longer than 25 years reported lower average leadership self-efficacy scores than educators who have been working for Extension less than 25 years. Again, this finding may be related to only one educator in Western states has been working for Extension longer than 25 years. No other significant mean differences were found among years working for Extension across U.S. regions (see Table 18).

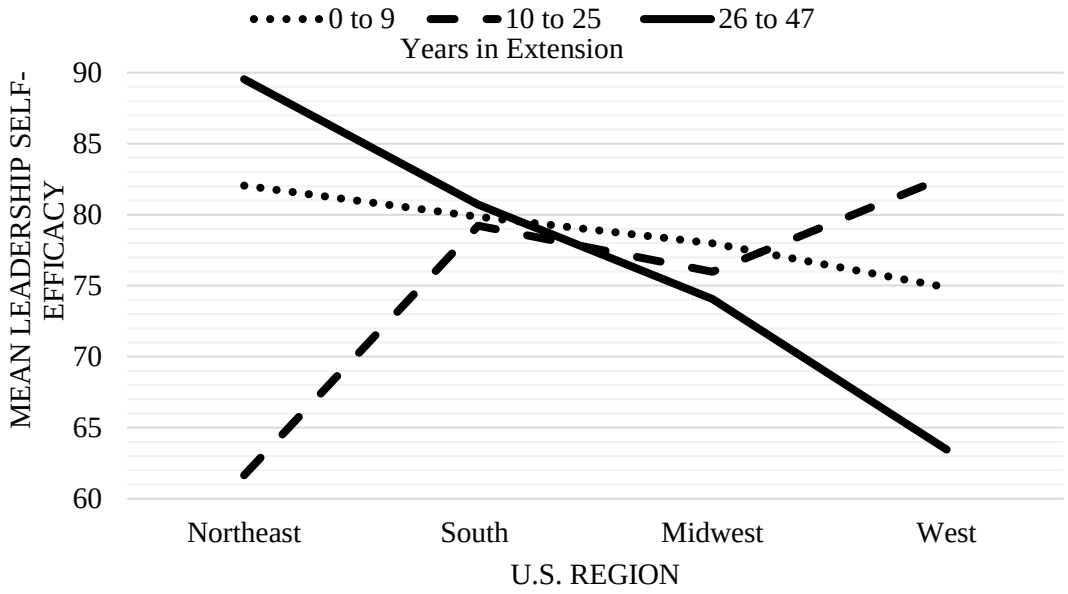

Figure 7. Relationship between U.S. region and years in Extension on leadership self-efficacy

County composition might contribute to work-related stress, but that relationship might differ across U.S. regions. A two-way analysis of variance tested work-related stress of educators who had worked among three county compositions (i.e., rural, suburb, urban) across four different U.S. regions (i.e., Northeast, South, Midwest, West). Significant mean differences were found among US regions ($F(3,164) = 4.34$, $p = .01$, $\eta^2 = .07$), but not across county composition ($F(2,164) = 1.26$, $p = .29$, $\eta^2 = .02$) (See Table 19). The interaction of county composition and U.S. region was significant ($F(6,164) = 2.28$, $p = .04$, $\eta^2 = .08$).

Table 19

Mean Level of Work-Related Stress by U.S. Region and County Composition

			U.S. Region			
			Northeast	South	Midwest	West
County Composition	Rural	*M (SD)*	10.25 (3.2)	17.33 (6.8)	16.88 (4.76)	17 (4.09)
		N	4	9	17	15
	Suburb	*M (SD)*	9.17 (3.25)	14.88 (4.84)	14.96 (5.43)	18.52 (4.95)
		N	6	26	24	21
	Urban	*M (SD)*	17 (7.33)	15.11 (5.33)	15.27 (6.34)	16.53 (4.49)
		N	10	18	11	15

As Figure 8 shows, among Northeastern states, educators working in urban counties reported higher average work-related stress scores than educators in suburb or rural counties. No other significant mean differences were found among county composition across U.S. regions (see Table 19).

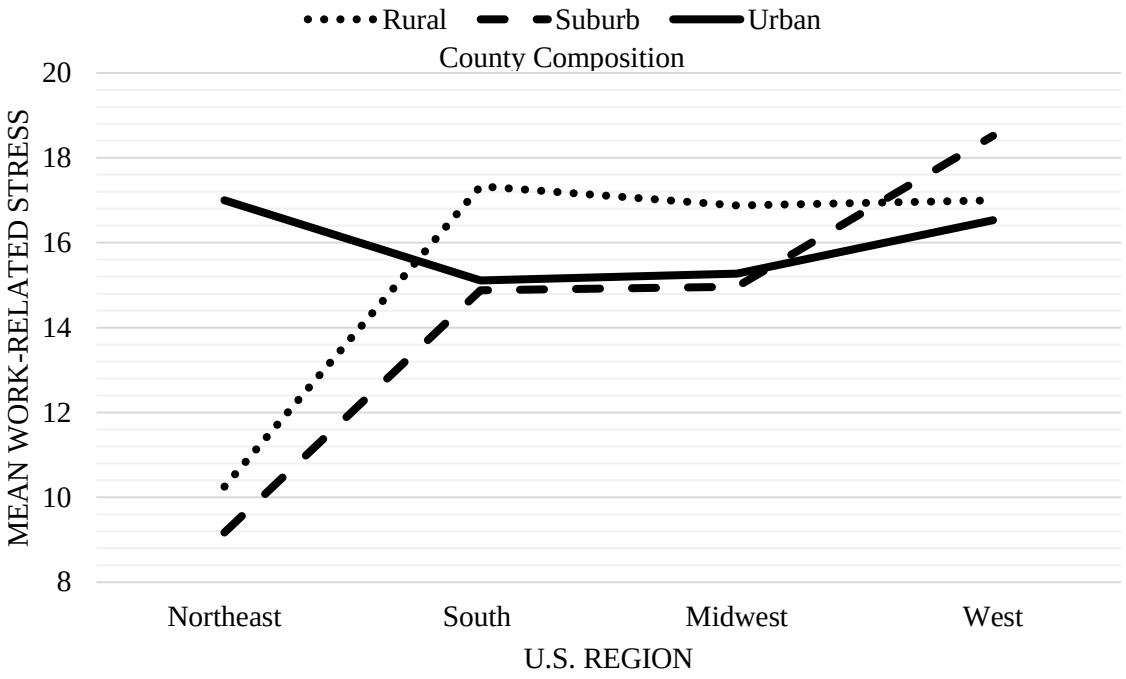

Figure 8. Relationship between U.S. region and county composition on work-related stress

County composition might contribute to work-related stress, but that relationship might differ across age groups. A two-way analysis of variance tested policy coherence of educators who had worked among three county compositions (i.e., rural, suburb, urban) across three different age groups (i.e., 22-34, 35-54, 55-69). No significant mean differences were found across county composition ($F(2,175) = .28$, $p = .76$, $\eta^2 = .00$) or age group ($F(2,175) = 1.77$, $p = .17$, $\eta^2 = .02$) (See Table 20). The interaction of county composition and age group was significant ($F(4,175) = 2.49$, $p = .04$, $\eta^2 = .05$).

Table 20

Mean Level of Work-Related Stress by Age Group and County Composition

			Age Group		
			22 to 34	33 to 54	55 to 69
County Composition	Rural	*M (SD)*	17 (5.77)	15.19 (4.85)	17.58 (5.32)
		N	10	21	12
	Suburb	*M (SD)*	15.33 (5.56)	14.44 (5.08)	16.88 (5.57)
		N	21	34	24
	Urban	*M (SD)*	14.83 (6.91)	15.68 (5.11)	16.7 (5.05)
		N	6	22	23

As Figure 9 shows, among educators age 55-69, educators working in urban counties reported higher average work-related stress scores than educators in rural counties. No other significant mean differences were found among county composition across age groups (see Table 20).

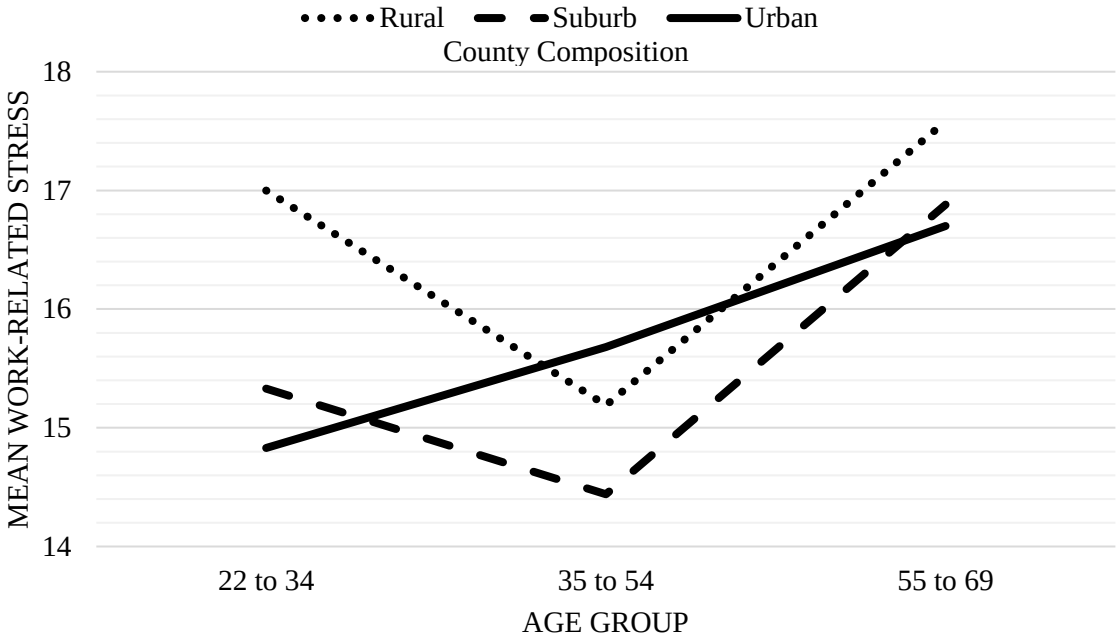

Figure 9. Relationship between age group and county composition on work-related stress

County composition might contribute to social support, but that relationship might differ across age groups. A two-way analysis of variance tested social support of educators who had worked among three county compositions (i.e., rural, suburb, urban) across three different age groups (i.e., 22-34, 35-54, 55-69). No significant mean differences were found across county

composition ($F(2,160) = 1.43$, $p = .24$, $\eta^2 = .02$) or age group ($F(2,160) = .14$, $p = .87$, $\eta^2 = .00$) (See Table 21). The interaction of county composition and age group was significant ($F(4,160) = 3.02$, $p = .02$, $\eta^2 = .07$).

Table 21

Mean Level of Social Support by Age Group and County Composition

			Age Group		
			22 to 34	33 to 54	55 to 69
County Composition	Rural	*M (SD)*	36 (5.75)	40.53 (5.6)	39.92 (3.8)
		N	10	19	12
	Suburb	*M (SD)*	41.86 (4.52)	38.65 (5.72)	38.45 (6.1)
		N	21	34	22
	Urban	*M (SD)*	42.5 (1.87)	39.71 (4.63)	40.21 (3.95)
		N	6	21	24

As Figure 10 shows, among educators age 22 to 34, educators working in rural counties reported lower average social support scores than educators working in suburban or urban counties. No other significant mean differences were found among county composition across age groups (see Table 21).

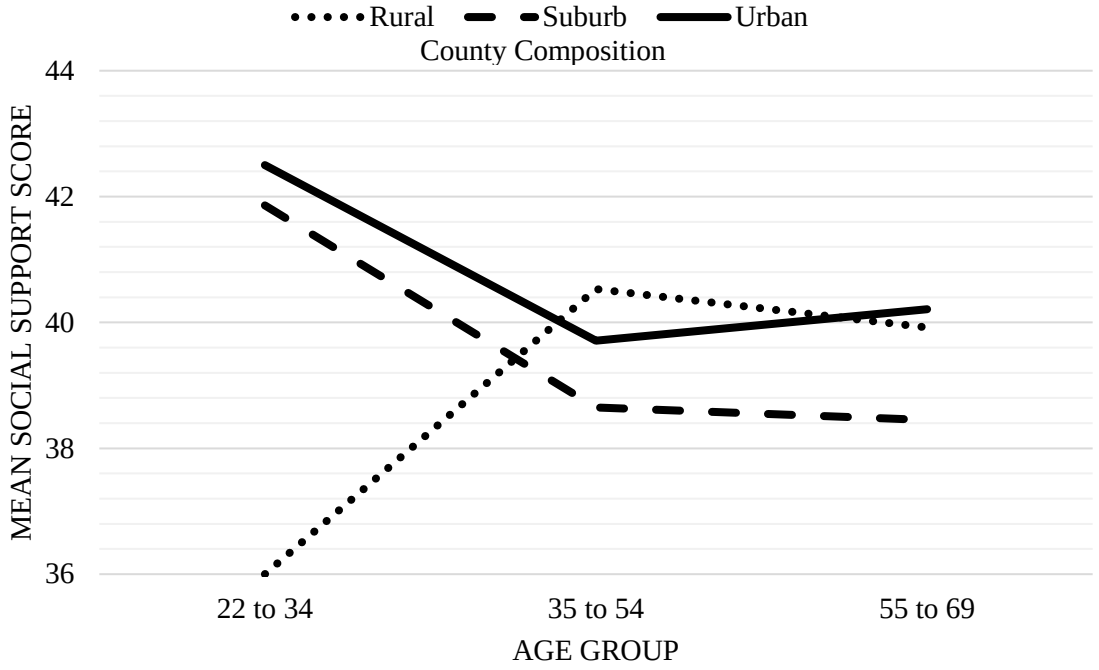

Figure 10. Relationship between age group and county composition on social support

County composition might contribute to innovativeness, but that relationship might differ across years working in current position. A two-way analysis of variance tested innovativeness of educators who had worked among three county compositions (i.e., rural, suburb, urban) across length of time in their current position (i.e., 0-9, 10-25, 26-47). Significant mean differences were found across county composition ($F(2,175) = 6.95$, $p = .00$, $\eta^2 = .07$) and years in current position ($F(2,175) = 4.73$, $p = .01$, $\eta^2 = .05$) (See Table 22). The interaction of county composition and years in current position was also significant ($F(4,175) = 3.21$, $p = .01$, $\eta^2 = .07$).

Table 22

Mean Level of Innovativeness by Years in Current Position and County Composition

			Years in Current Position		
			0 to 9	10 to 25	26 to 47
County Composition	Rural	*M (SD)*	33.19 (3.89)	35.06 (4.77)	23.5 (17.68)
		N	26	16	2
	Suburb	*M (SD)*	35.04 (4.08)	33.42 (4.99)	31.63 (5.68)
		N	50	24	8
	Urban	*M (SD)*	35.58 (4.45)	34.94 (4.15)	36 (4.18)
		N	33	16	19

As Figure 11 shows, among educators who have been in their current positions less than 10 years, educators working in rural counties reported lower average innovativeness scores than educators working in urban counties. Also, among educators who have been in their current positions longer than 25 years, educators working in urban counties reported higher average innovativeness scores than educators in rural counties. However, this result may be due to the small number of educators who have been in their current position longer than 25 years and working in rural counties ($n = 2$) as compared to the urban counties ($n = 19$). No other significant mean differences were found among county composition across age groups (see Table 22).

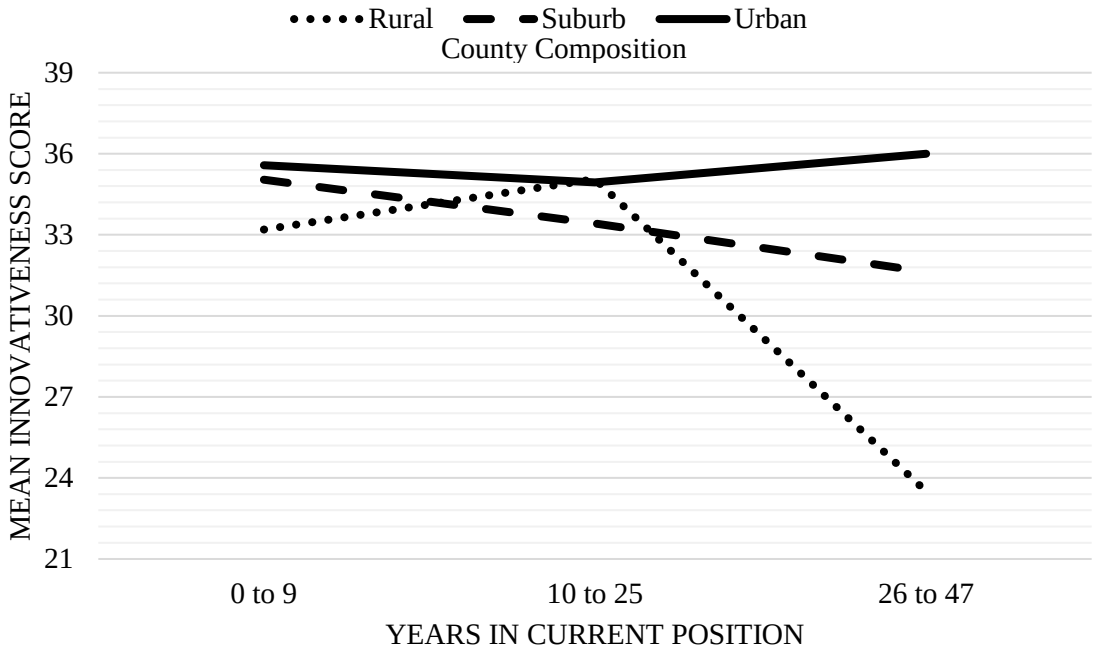

Figure 11. Relationship between years in current position and county composition on innovativeness

Family and Consumer Science percentage assignment might contribute to innovativeness, but that relationship might differ across years working in Extension. A two-way analysis of variance tested innovativeness of educators with varying FCS percentage assignments (i.e., 0-39, 40-74, 75-100) across length of time working for Extension (i.e., 0-9, 10-25, 26-47). No significant mean differences were found across FCS assignment percentage ($F(2,175) = 1.82$, $p = .17$, $\eta^2 = .02$) or years in Extension ($F(2,175) = 1.86$, $p = .16$, $\eta^2 = .02$) (See Table 23). The interaction of FCS percentage assignment and years in Extension was significant ($F(4,175) = 2.64$, $p = .04$, $\eta^2 = .06$).

Table 23

Mean Level of Innovativeness by Years in Extension and FCS Percent Assignment

			Years in Extension		
			0 to 9	10 to 25	26 to 47
FCS Percent Assignment	0 to 39	*M (SD)*	43.5 (2.12)	34.67 (6.06)	33.33 (6.11)
		N	2	6	3
	40 to 74	*M (SD)*	33.45 (5.28)	34 (4.92)	35.18 (4.43)
		N	11	17	5
	75 to 100	*M (SD)*	34.5 (3.75)	35.18 (4.43)	32.75 (6.41)
		N	66	50	24

As Figure 12 shows, among educators who have been in their current positions less than 10 years, educators with a FCS assignment of 39% or less reported higher average innovativeness scores than educators with a FCS assignment greater than 40%. No other significant mean differences were found among FCS percentage assignments across years working in Extension (see Table 23).

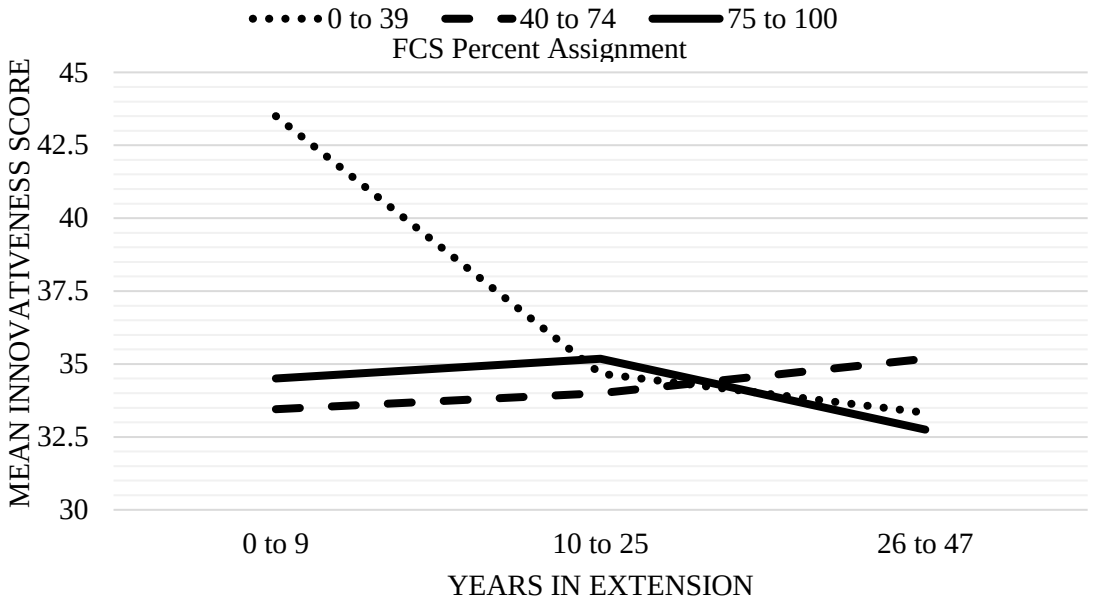

Figure 12. Relationship between years in Extension and FCS percent assignment on innovativeness

Hierarchical Regression

Three separate hierarchical multiple regression analyses were conducted to assess the impact of organizational and personal factors on educators' innovativeness. Hierarchical order of entry for the variables was the same for all analyses, excluding the interaction terms which changed for each regression. County composition was dummy coded into three variables: rural, suburban, and urban.

Variables were entered with the ordering of demographics (i.e., age, county composition, assignment included older adult audience, percentage of FCS appointment, years in current position) (block 1); contexts of change (i.e., policy coherence, leadership self-efficacy, environmental press, interoffice support) (block 2); personal factors (i.e., personal subjective age, workplace subjective age work-related stress, social support) (block 3); and, interaction terms (block 4). Supportive organizational climate was not included in the hierarchical regressions due to the already receptive nature of Extension to support new initiatives depending on the changing environment (Rowe, 2010). Initial regression analyses excluded the suburban dummy code due to low collinearity tolerance. Examinations of correlations indicated that suburban and urban were highly correlated (r = -.58, p = .00). This warranted combining the two variables into one, thus county composition was denoted as 0 = rural, 1 = suburban/urban.

Table 24 presents the results of educators' innovativeness regressed on organizational and personal factors, as well as interactions between personal subjective age and policy coherence, leadership self-efficacy, and environmental press. In this sample, the block 1 (F(5, 152) = 1.99, p = .08), block 2 (F(9, 148) = 2.34, p = .02), and block 3 (F(12, 145) = 3.80, p = .00) were statistically significant. In block 1, the predictors explained 3.1% of the variance (R^2 = .06). It was found that county composition significantly predicted innovativeness (β = .17, p = .04), as did years in current position (β = -.19, p = .05). The predictors in block 2 explained 7.2% of the

variance in innovativeness (R^2 = .13). County composition (β = .17, p = .03), years in current position (β = -.23, p = .02), and leadership self-efficacy (β = .18, p = .03) was found to significantly predict innovativeness. Predictors in block 3 explained 18% of the variance in innovativeness (R^2 = .24). Years in current position (β = -.18, p = .04), interoffice support (β = -.18, p = .03), and social support (β = .28, p = .00) was found to significantly predict innovativeness.

Interaction terms were included to assess three potential moderators. In the first hierarchical regression, interaction terms were added to the equation in Step 4 to test the contexts of change (i.e., policy coherence, leadership self-efficacy, environmental pressure) as potential moderators of the association between personal subjective age and innovativeness. The second hierarchical regression tested personal factors (i.e., years in current position, personal subjective age, social support) as potential moderators of the association between work-related stress and innovativeness. Third, interaction terms to tested organizational (i.e., leadership self-efficacy) and personal factors (i.e., personal subjective age, social support) as potential moderators of the association between work-related stress and innovativeness. Neither of the interaction terms yielded significant results. Thus, none of the contexts of change or personal factors were moderators of the personal age-innovativeness and work-related stress-innovativeness associations. Therefore, Steps 1-3 of the initial set of hierarchical multiple regression analyses reported above serve as the final analyses.

Table 24

Predicting Innovativeness through Organizational and Personal Factors

	Model 1		Model 2		Model 3	
Predictors	*β*	*t*	*β*	*t*	*β*	*t*
Controls						
Age	.14	1.53	.14	1.47	.09	.96
County Composition	.16*	2.10	.17*	2.16	.14	1.93
Older Adult Audience	.04	.47	-.04	-.42	-.03	-.35
FCS Percent Assignment	-.06	-.78	-.09	-1.12	-.11	-1.46
Years in Current Position	-.19*	-2.00	-.23*	-2.44	-.18*	-2.07
Organizational Change						
Policy Coherence			.08	1.01	.04	.49
Leadership Self-Efficacy			.18*	2.23	.06	.72
Environmental Pressure			.15	1.71	.14	1.74
Interoffice Support			-.10	-1.18	-.18*	-2.24
Personal Factors						
Subjective Age					-.11	-1.01
Work-Related Stress					-.13	-1.20
Social Support					.28**	3.38
F	1.99		2.34*		3.80***	
R^2	.06		.13		.24	
Adj. R^2	.03		.07		.18	
ΔR^2	.06		.06		.11	

*$p < 0.05$. **$p < 0.01$. ***p < 0.001

Path Model

Organizational model fit. Figure 4 shows the hypothesized path model. Examination of global fit indices revealed poor fit with the data ($\chi^2 = 95.41$, $p = .000$; Root Mean Square Error of Approximation [RMSEA] = 0.19; 90% CI 0.15, 0.22; Comparative Fit Index [CFI] = 0.23; Standardized Root Mean Square Residual [SRMR] = 0.13; see Kline, 2016). As such, respecification of the hypothesized model was necessary. To respecify, paths not estimated in the original model were re-conceptualized in the theoretical framework to determine if any could be

important in the association between work-related stress and innovation. From the organizational change lens, past empirical research was examined to determine whether evidence exists to support inclusion of paths not previously hypothesized. Prior research has indicated an association between subjective age and work performance (Akkermans et al., 2016) as well as an association between social support and work performance (Selvarajan et al., 2013). Examination of the standardized residuals indicated large z-scores across the matrix for social support, subjective age, and innovativeness. Thus, two direct paths (i.e., social support to innovativeness, subjective age to innovativeness) were added to the model. Finally, adding these paths was confirmed by reviewing modification indices in the model output of MPlus.

The more complex respecified model with the additional direct paths social support and subjective age to innovativeness showed good model fit. The Chi-Square Test of Model Fit was non-significant ($\chi^2 = 3.90$, $p = .27$). The RMSEA estimate was slightly high (RMSEA = 0.04) and the upper bound of the 90% confidence interval were slightly high (90% CI 0.00, 0.13). The Comparative Fit Index was good (CFI = 0.99) as was the Standardized Root Mean Square Residual (SRMR = 0.02). To determine which model was better, a chi-square difference test was used. Because the more restrictive model is nested within the less restrictive model, a chi-square difference statistic tests the null hypothesis of equal fit for both models (Schermelleh-Engel, Moosbrugger, & Müller, 2003); significant results are indicative of the freely estimated model better fitting the data (Schermelleh-Engel et al., 2003). The results of the chi-square difference test were significant ($p = .00$), indicating that the more complex model is a better fit. Thus, the corrected model is the final path model, displayed in Figure 13.

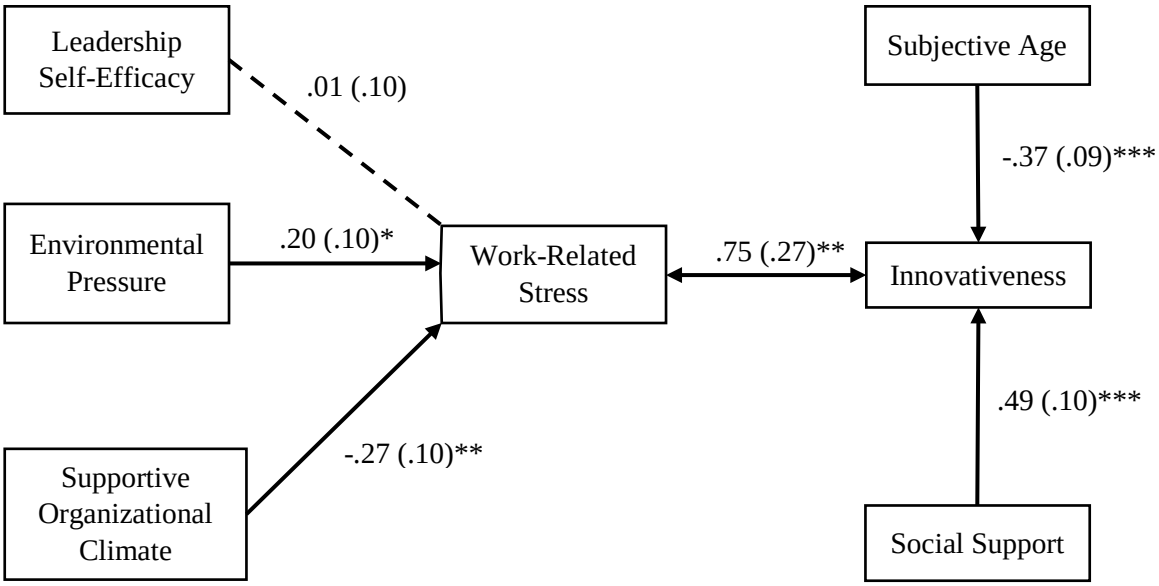

Figure 13. Respecified path model.
Note. *p < 0.05. **p < 0.01. ***p < 0.001. A dotted line represents a non-significant path.

Effects of work-related stress. No significant association of leadership self-efficacy on work-related stress was found (β = .01, p = .89). Thus, no significant effect from leadership self-efficacy to innovativeness was found through work-related stress. However, the pathway from environmental pressure to innovativeness and supportive organizational climate to innovativeness was significant through work-related stress. High levels of environmental pressure were significantly associated to high levels of work-related stress as hypothesized (β = .20, p = .05). Additionally, high levels of supportive organizational climate were significantly associated with lower levels of work-related stress (β = -.27, p = .00). High levels of work-related stress was significantly associated with higher levels of innovativeness (β = .75, p = .00). Lower levels of subjective age (β = -.37, p = .00) and higher levels of social support (β = .49, p = .00) were significantly associated with higher levels of innovativeness. Indirect effects were examined to investigate that work-related stress mediates the relationship between supportive organizational climate and innovativeness. The results did not support the mediational hypothesis (β = -.33, p = .06).

CHAPTER V

DISCUSSION

Previous research suggests that educational initiatives can foster community innovation in order to respond to shifting social and ideological trends (Adams & Hess, 2010; Gurstein, 2013; Thorsteinsson, 2012). The goal of innovation is to create outcomes that more effectively meet the needs of community members, as well as creating collaborations between groups (Bosworth et al., 2016). Extension Educators [hereafter referred to as Educators] better human lives by providing targeted educational programming to address critical needs in communities (Allen et al., 2011), thus fostering the opportunity for individuals to interact to create multi-disciplinary solutions (Bowling & Brahm, 2002). Therefore, Educators are crucial members of their community in helping to drive social innovation by creating and disseminating knowledge in response to their community's needs. The results of the present study strongly indicate that, at least for adapting or developing educational programs, environmental, personal, and organizational factors are essential to Educator's innovativeness. The aim of this study was to examine the receptiveness of Family and Consumer Science (FCS) educators to adapt caregiving initiatives and to examine possible deterrents to innovation. Given the contextual changes for family caregivers, this study offers some insight about a population of professionals who are positioned to aid care families.

Environmental Factors

Bronfenbrenner (1979) noted that development is dependent upon the setting, or context an individual is contained in due to the reciprocal interactions between biopsychosocial factors

and the environment. Findings indicated that Educators differed across local, regional, and state levels across multiple study variables. It is important to acknowledge that an overarching theoretical perspective describing regional differences does not exist. Drawing from Ziegler's (2017) observation that innovation requires social interaction to develop, it can be speculated that the regional differences resulting from this study may occur due to geographic factors, such as population density or proximity of communities to each other. The Northeastern states of the U.S., on average, have higher average population densities than other U.S. regions (U.S. Census Bureau, 2011). More densely populated areas create more opportunities for collaborations among groups, thus allowing for greater sharing and innovation of ideas than areas that have lower population densities. This speculation is supported through differences among rural and urban areas. Previous research has indicated that rural areas typically have fewer resources available to community members (Baernholdt & Mark, 2009), as well as longer distances to travel to reach resources than community members in urban areas (Khoong, Gibbert, Garbutt, Sumner, & Brownson, 2014). In rural states that are experiencing budget cuts, employee travel may be limited, further restricting group collaboration, as well as delivery of educational programming.

Predictors of Innovation

Consistent with previous findings (Rowe, 2010), educators are receptive to change. Although there is a significant difference between educators based on factors related to their Extension position, much of the discrepancy in educator's receptiveness lies in personal factors. da Costa, Páez, Sánchez, Garaigordobil, and Gondim (2015) note that while an organization rich in resources and supports creativity (i.e., novel ideas that are deemed as suitable solutions to a problem) can foster innovation (i.e., successful implementation of creative ideas), it is the interaction of creativity and personal factors that reinforce innovation.

The hierarchical regression findings are inconsistent with the theoretical framework proposed by Pettigrew et al. (1992). As Pettigrew and colleagues stated, the eight factors

necessary for a receptive context for change are a linked set of conditions that provide the energy needed for change over a long period of time. Results from this study indicated that only leadership self-efficacy and interoffice support were necessary for innovation. This may be due to two possible reasons: organizational structure and personal factors.

First, Pettigrew et al (1992) developed their organizational change theory using an organization that does not readily implement change (i.e., hospital). Carlstrom and Olsson (2014) proposed that large health systems are created with different cultures and traditions that can complicate the change process. In other words, employees may perceive that modifications are not needed and actively resist change. With varying standards across departments, as well as different ways to communicate, many employees may not be aware of the strategic change or how their role could fit into the organizational change (Larson, 2007). However, Extension is constantly implementing change due to shifting environmental pressures (Rowe, 2010). Extension agents and specialists have recently faced increasing pressure from funding entities for greater program effectiveness and accountability through evidence-based programs (Fetsch, MacPhee, & Boyer, 2012). As Fetsch et al. (2012) discuss Educators select and adapt programs based on local community needs. Because Extension's organizational structure, typically only one agent per specific area of expertise (i.e., Family and Consumer Sciences, 4-H youth development, agriculture) is assigned to one county or region. Thus, educators are alone in implementing any programmatic changes, supporting the finding that leadership self-efficacy is a predictor of innovation.

Second, as mentioned above, personal factors may have a greater impact on innovation in organizations that are more receptive to change. Educators are expected to adjust their programming based on community needs. In the midst of state and federal budget cuts, Educators are experiencing greater workloads from an increased number of private citizens seeking help from county agents and hiring freezes for vacant county positions (Fetsch et al., 1984; Strong &

Harder, 2009). Combined with delivering programs, Educators are required to complete large amounts of paperwork for their funding agencies to show programs are impacting community needs, creating a double workload (Ensle, 2005). Upon examining turnover rates in Extension, Strong and Harder (2009) concluded that Educators often work long and abnormal hours that can include nights and weekends, making it difficult to balance work and family. This suggests that increased work-related stress may reduce innovativeness. Ensle (2005) describes Extension as "often a hectic place of work" (para. 11) due to anxiety or tension over local or societal issues, working within multiple systems and reporting to multiple supervisors, and finding money for their own salary through grant writing or contract negotiations. Encountering stress on a regular basis can lower job satisfaction, health, and productivity (Torretta, 2014), indicated by over two-thirds of the sample perceived themselves as unhealthy. However, work-related stress was not a significant predictor of innovation. This non-significant finding may be the result of Educators employing coping strategies, such as time management or humor (Torretta, 2014). Social support may also act as a buffer between work-related stress and innovation.

The stress-buffering hypothesis (Underwood, 2000) postulates that social support can reduce, or buffer the negative impacts of stress by providing an individual with more resources in domain (e.g., family) so that more resources can be expended in another domain (e.g., work) (Selvarajan et al., 2013). Masters, Stillman, and Spielmans (2007) describe three types of social support: tangible, emotional, and informational. Tangible involves direct aid or provision of assistance by someone. Emotional includes reassurance or feelings of love and acceptance. Informational support includes giving advice, feedback, or information that is aimed at resolving an issue. However, it is unclear what kind of support was received that reduced the negative effects of stress. It could be speculated that because almost three-fourths of the sample reported their marital status as married, Educators were receiving enough tangible support at home so that they were able to fulfill the necessary duties of their positions, including implementing new

programs. Further research is needed to determine which types of social support aid in innovation.

Social support received in the home was shown to promote innovation by allowing the Educators to focus more resources in one domain (i.e., work). However, social support in the office resulted in lower innovation. McGuire (2007) observed that providing support to colleagues can aid in completing work tasks, thus promoting productivity and innovation. This study's finding of decreased innovation may be linked to Educators' workloads. As mentioned previously, Educators work long hours and have increased duties due to budget cuts and hiring freezes. Providing assistance to colleagues may limit time Educators have to develop or deliver more educational programming. Further research is needed to examine effective ways to provide interoffice support that also maximizes productivity and innovation.

Organizational Path Model

A contribution of this study is understanding the influential relationship of personal, organizational, and environmental factors on work-related stress and innovation. The deleterious effects of work-related stress on morale and productivity have been well-documented in research (Stevenson & Harper, 2006; Syaifuddin, 2016). Prolonged exposure to work-related stressors (e.g., long hours, budget cuts) has been linked to job burnout (Khamisa, Peltzer, Ilic, & Oldenburg, 2016), defined as a biopsychosocial state of emotional exhaustion, depersonalization, and reduced personal accomplishment in the workplace (Harder, Gouldthorpe, & Goodwin, 2015). Azeem and Nazir (2008) suggested that burnout can occur when large workloads are combined with lack of personal control or fairness, insufficient recognition and rewards, and a breakdown of or conflicting organizational values. Those experiencing burnout have reported physical illnesses, sleep disturbances, or work/family conflict (Khamisa et al., 2016). Organizations are also affected by employee burnout through increased turnover, absenteeism, decreased interactions between coworkers and clients, and reduced performance (Swider &

Zimmerman, 2010). Harder and colleagues (2015) examined the influence of organizational factors on burnout in Extension. Shifting socio-demographics and economic declines have created new opportunities and challenges for Extension to develop or adapt programs to meet local needs, yet constant change can lead to fatigue or resistance to change in Educators (Smith & Torppa, 2010). Jones and Van de Ven (2016) argued that a supportive leadership can reduce ambiguity and anxiety surrounding change, thus reducing change resistance. Findings were consistent in that a supportive organizational climate helped decrease work-related stress.

The positive relationship between environmental pressure and work-related stress was not a surprising finding. The external environment outside of an organization consists of relevant physical and social factors that have a bearing on the decisions and actions an organization makes concerning change (van der Voet et al., 2015). Communities are transformable systems that adjust to the constant changing needs of their residents (Bowling & Brahm, 2002). Educators are expected to keep pace with these changing needs and provide educational programming to combat the critical issues (Allen et al., 2011). However, Educators are already experiencing a multitude of factors related to their positions in Extension (e.g., budget cuts, abnormal long hours; Strong & Harder, 2009) that elevates their work-related stress; delivering additional programs may overwhelm Educators. Struckmeyer, Raczkoski, Roberts, and Gordon (forthcoming) interviewed Educators regarding perceived barriers to implementing a caregiver education initiative. Findings indicated that, despite the need for caregiving programming, Educators were overloaded with the number of programs they were expected to deliver, as well as unsure what programs were a priority. In other words, despite the need for a new program, Educators were unable to deliver an additional program due to their heavy workload.

The nonsignificant association between leadership self-effiacy and innovation may be related to Extension's organizational culture and structure. The culture of Extension is one of change in response to shifts in societal norms and values (Rowe, 2010), thus in order to

implement change the organization must be flexible in their ability to adjust, as well as have adequate supervision from superiors to reduce ambiguity and anxiety (Sprang, Clark, & Whitt-Woosley, 2007). Extension provides the supportive climate for Educators to feel confident to lead initiatives. Educators are expected to find or develop programs to meet client needs and be their own leaders in program initiatives (Fetsch et al., 2012). Thus leadership self-efficacy may not be associated with innovativeness due to Educators' expectation to be both efficacious leaders and innovative in developing and delivering educational programming.

This study is among the first to directly link subjective age and social support to innovation. Educators who perceive themselves younger than their chronological age report higher innovativeness. This finding supports this study's earlier proposal regarding the relationship between subjective age and innovation. Educators who perceive themselves younger may be more motivated to try new things. As discussed previously, the link between social support and innovation may be bolstered by Educators having more resources in one domain (i.e., work) due to support in another domain (i.e., family).

Limitations

This study has provided preliminary evidence concerning the influence of environmental, personal, and organizational factors on Educator's innovativeness. It is, however, important to acknowledge the limitations of the study. First, methodological limitations included a cross-sectional design, online survey format, and unknown response rate. A cross-sectional design limits interpretations of the data to the sample and is not generalizable to the population. The online survey format may have been ineffective in reaching a high enough response rate (Nulty, 2008) creating a high probability of statistical biases (Baruch & Holtom, 2008). Second, it is cautioned that the path model should not be interpreted as causation. Third, participants were not assessed regarding current caregiving programs. Extension offices that already deliver a caregiver program may be less likely to implement a caregiver program, reducing Educator's

innovativeness. Lastly, a comparison group was not used to assess if the findings were found in educational groups similar to Extension.

Implications

Findings from this study indicate that environmental factors influence Educators' programming. Despite the increased need for assistance in late life (Nguyen, 2017), it is well documented that individuals do not plan for future caregiving needs (Bowey & McGlaughlin, 2007). Thus, Educators do not perceive a need in the community for caregiving education. Future studies are needed to examine how to reach reluctant care families in order to provide education regarding future care needs. When implementing caregiving programs, acknowledging regional differences both locally and regionally, can better guide Educators on how to modify programs to better fit their intended audiences, reducing the amount of time Educators may need to modify or recreate existing programs. Findings regarding personal factors have implications for the policy and hiring processes for Extension. Of the organizational factors, only leadership self-efficacy and interoffice support predicted innovation. For Educators who do not perceive themselves as efficacious leaders, mentors may be beneficial in helping to build new hires' leadership self-efficacy. As for support, both at home and in the office, more research is needed to determine the type of support most beneficial to Educators, as well as practices in the workplace to promote productivity and innovativeness. This study's findings indicate that Educators are receptive to caregiving programming when needed in their communities, but time in Extension resulted in reduced innovativeness. This finding was supported by Lehman's (1953) examination of creative performance over time: rapid growth in creative performance initially, followed by a short plateau of high activity, and then a steady decline for the remainder of the career. It may be important to implement training programs to keep Educators engaged and innovative throughout their career.

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APPENDICES

Appendix A: FCS Educator Receptiveness to Change Questionnaire

Demographics

Q1 What state are you employed in?

Alaska	Arkansas	California	Colorado	Connecticut
Delaware	Hawai'i	Illinois	Indiana	Kansas
Kentucky	Louisiana	Maine	Maryland	Massachusetts
Michigan	Minnesota	Mississippi	Montana	Nebraska
Nevada	New Hampshire	New Jersey	New Mexico	
New York	Ohio	Oklahoma	Oregon	Pennsylvania
Rhode Island	Texas	Utah	Virginia	Washington
West Virginia	Wyoming			

Q2 How old are you? _____

Q3 What is your relationship status?

Married	Living with partner
Separated	Divorced
Widowed	Never Married
Other, please describe _____	

Q4 Are you:

Male	Female
I'd rather not say	Other, please describe _____

Q5 How would you describe your race?

American Indian/Native American or Alaska Native	Asian American
Black or African American	Hawaiian or Other Pacific Islander
Hispanic or Latino	White

Other, please describe _____

Multiracial, please describe _____

Q6 How would you rate your overall health at the present time?

Poor	Fair
Good	Excellent

Q7 How satisfied do you feel in your life at the present time?

Not at all satisfied	A little satisfied
Somewhat satisfied	Very satisfied

Q8 What is your current Extension position? _____

Q9 How long have you been in your current position? Please respond in years. _____

Q10 How long have you worked for the Cooperative Extension Service? Please respond in years.

_____

Q11 What percentage of your assignment is designated as FCS? _____

Q12 Which of the following best describes the county in which you work?

Rural Urban

Q13 Within your assignment, is there anything that specifically identifies older adults and/or families who care for an aging member as an audience/population that you're expected to serve?

Yes No

We are interested in looking at how FCS educators view family caregivers as part of the populations that they serve.

Family caregiving is when family member(s) provide care for an ill family member for a period lasting longer than 6 months. These individuals are not paid for their work, nor have they received formal training.

Q14 Are you aware of any state legislation that passed by your state that focus on family caregivers?

Yes No

Display This Question:

If Are you aware of any state legislation that passed by your state that focus on family caregivers? = Yes

Q14a Please describe the legislation to the best of your ability. _____

Policy Coherence (Yang et al., 2014)

Q15 Please indicate how much you agree with the following statements:

	Strongly Disagree	Disagree	Agree	Strongly Agree
It is difficult to find information about family caregiving.				
I don't know where to find information about family caregiving.				
I have a hard time understanding information about family caregiving.				

Leadership Self-Efficacy (Grant, 2014)

Q16 Now we would like to assess your level of confidence in leading.

How confident are you that you can exercise leadership successfully by:

	Not at all confident	Somewhat confident	Moderately confident	Very confident
Setting a clear direction for teamwork in order to reach organizational goals.				
Collaboratively working with peers to gain their commitment and cooperation in order to reach organizational goals.				
Ensuring that organizational projects are completed on time and within budget.				
Managing reorganization and leading internal change without causing any additional organizational turbulence.				

Environmental Pressure (Banyard et al., 2010)

Q17 These questions are to assess your familiarity with family caregiving in your area.

	Not at all true	Somewhat true	Moderately true	Very true
I don't think family caregiving is a big problem in my area.				
I don't think there is much I can do about family caregiving in my area.				
There isn't much need for me to think about family caregiving in my area, that's the job of the state.				
Sometimes I think I should learn more about family caregiving, but I haven't done so yet.				
I think I can do something about family caregiving and am planning to find out what I can do about the problem.				
I am planning to learn more about the problem of family caregiving in my area.				
I have recently attended a program about family caregiving.				
I am actively involved in projects to deal with family caregiving in my area.				
I have recently taken part in activities or volunteered my time on projects focused on helping care families in my area.				
I have faced challenges in reaching care families.				
I have faced challenges in teaching care families.				
Family caregiving is an important topic in my cooperative extension network.				

Supportive Organizational Climate (Litwin & Stringer, 1968)

Q18 Please indicate your level of agreement with the following statements:

	Definitely disagree	Inclined to disagree	Inclined to agree	Definitely agree
Excessive rules and procedures make it difficult for new and original ideas to receive consideration.				
I feel that I am a member of a well-functioning group.				
People in this group don't really trust each other's judgment enough.				
Our group is willing to take a chance on a good idea.				
We are encouraged to speak our minds, even if it means disagreeing with our leader.				

Interoffice Support (Barsade & O'Neill, 2014)

Q19 We would like to ask you about your relationships with your co-workers. Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Agree	Strongly agree
County Extension staff care a lot about the county office and work together to make it one of the best.				
As a team, this county Extension office shows signs of falling apart.				
Sometimes, one of the staff members refuses to help another staff member out.				
My county Extension office functions as a team.				
I can count on my co-workers for help and cooperation.				

Work-Related Stress (McCutcheon & Morrison, 2016)

Q20 We would like for you to think about how you feel about your level of stress related to your job. Please indicate how often you stressful you feel in the following statements:

	Never	Rarely	Occasionally	Sometimes	Often	Nearly always	Always
The demands of my job make it difficult to be relaxed at home.							
I feel overwhelmed by my workload.							
I feel guilty when I'm not working.							
I have unrealistic time pressures in my job.							

Subjective Age (Hubley & Arim, 2012)

Q21 We would like for you to think about how you feel regarding your age in general.

	A lot younger than my age	Somewhat younger than my age	A little younger than my age	About the same as my age	A little older than my age	Somewhat older than my age	A lot older than my age
Most of the time, I feel:							
Most of the time, I look:							
My interests and activities are most like people who are:							
Most girls my age treat me as if I am:							
Most boys my age treat me as if I am:							
Right now I feel:							
If I could pick out the age I would like to be right now, I would like to be:							

Social Support (Cutrona & Russell, 1987)

Q23 Please indicate your level of agreement with the following statements:

	Strongly Disagree	Disagree	Agree	Strongly Agree
There are people I can depend on to help me if I really need it.				
There is no one I can turn to for guidance.				
There are people who enjoy the same social activities I do.				
I feel personally responsible for the well-being of another person.				
I do not think other people respect my skills and abilities.				
If something went wrong, no one would come to my assistance.				
I have close relationships that provide me with a sense of emotional security and well-being.				
I have relationships where my competence and skills are recognized.				
There is no one who relies on me for their well-being.				
There is no one who shares my interests and concerns.				
There is a trustworthy person I can turn to for advice if I were having problems.				
I lack a feeling of intimacy with another person.				

Innovation (Batinic et al., 2007)

Q24 When thinking about how innovative you are, please indicate your level of agreement with the following statements:

	Not true at all	Somewhat untrue	Somewhat true	Completely true
I often read detailed articles about the latest ideas, trends, and developments.				
There are some domains where it is important for me to always be up to date.				
I like trying something new.				
I often notice that I cope better than others with changing to new things.				
I often take time to explain to my friends about the new things that they do not know about.				
Regarding the latests ideas, trends, and developments I often notice that others act in accordance with me.				
I am more likely to tell my friends and acquaintances about the newest ideas, trends, and developments than they are to tell me.				
I have the impression that I am generally regarded by my friends and acquaintances as a good source for advice concerning the newest ideas, trends, and developments.				
I usually provide my friends and acquaintances with lots of information when we discuss the newest ideas, trends, and developments.				

Appendix B: Frequencies and Descriptives of Incomplete Responses

Table 25

Frequencies of Incomplete Responses Specific to Position in Extension (N = 28)

Variable	*N*	%
U.S. Region		
Northeast	0	0
South	8	28.6
Midwest	8	28.6
West	7	25
Missing	5	17.9
Gender		
Male	1	3.6
Female	27	96.4
Ethnicity		
Black or African American	4	14.3
Hispanic or Latino	1	3.6
White	23	82.1
Current Position		
Extension Agent	20	71.4
Faculty, Specialist, Administration	8	28.6
Years in Current Position		
0-9	18	64.3
10-25	8	28.6
26-47	2	7.1
Years in Extension		
0-9	10	35.7
10-25	13	46.4
26-47	5	17.9
Missing		
FCS Assignment		
0-39%	2	7.1
40-74%	6	21.4
75-100%	19	67.9
Missing	1	3.6

Table 25 cont.

Variable	*N*	%
County Composition		
Rural (Population 2,500 or less)	6	21.4
Suburb (Population 2,500 - 50,000)	15	53.6
Urban (Population (50,000 or more)	6	21.4
Missing	1	3.6
Older Adults Written in FCS Assignment		
Yes	10	35.7
No	18	64.3

Table 26

Frequencies of Incomplete Responses Specific to Personal Factors (N = 28)

Variable	*N*	%
Age Group		
Young Adult (22-24)	5	17.9
Early Middle Adult (35-54)	11	39.3
Late Middle Adult (55-69)	6	21.4
Missing	6	21.4
Relationship Status		
Married	22	78.6
Separated	1	3.6
Divorced	2	7.1
Widowed	1	3.6
Never Married	2	7.1
Other	1	3.6
Perceived Health		
Not Healthy	18	64.3
Healthy	10	35.7
Life Satisfaction		
Not at all satisfied	15	53.6
Satisfied	13	46.4

Table 27

Means and Standard Deviations of Study Variables of Incomplete Responses (N = 28)

	M (SD)	*N*	Range
Age	45.45 (11.78)	22	43
Items Completed*	31.68 (19.38)	28	60
Percent Progress	38.17 (23.35)	28	72.29
Policy Coherence	11.05 (3.29)	19	12
Leadership Self-Efficacy	81.19 (13.25)	16	52.5
Environmental Press	26.9 (5.42)	10	20
Supportive Organizational Climate	14.75 (1.91)	8	6
Interoffice Support	20.2 (3.7)	5	10
Work-Related Stress	10.67 (3.39)	5	.14
Personal Subjective Age	3.77 (.08)	5	.75
Social Support	39.33 (4.16)	3	8
Innovation	0	0	0

Note. The survey was 83 items total.

VITA

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