

GATEKEEPERS OF FAMILY AND CONSUMER SCIENCES: A QUANTITATIVE STUDY
EXPLORING FACTORS INFLUENCING ADMINISTRATOR AND COUNSELOR
PERCEPTIONS OF FAMILY AND CONSUMER SCIENCES

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ABSTRACT

The purpose of this quantitative study was to identify which factors may predict the perception of family and consumer sciences curriculum (FCS) programs by administrators and school counselors. The study was centered around Kurt Lewin's Gatekeeper theory, in which an individual or group acts as a gate through which information passes. Principals and school counselors were chosen as the sample for this study because of their role as gatekeepers in a school, deciding which programs are offered and which information is conveyed to students. A Likert-scale survey was sent to all Virginia public high school principals and school counselors. Data analysis followed a predictive correlational design, utilizing a multiple regression statistical analysis. There were four predictor variables, region of Virginia, gender, total years of experience, and knowledge of FCS content as measured by the Value of FACS in Public schools Survey; with a criterion variable of perception of FCS. Knowledge of FCS content was the only predictor variable that can predict both an administrators' and school counselors' perception of FCS. A multiple regression was used for statistical analysis. The linear combination of the four predictor variables indicated there was a significant relationship related to an administrator's and a counselor's perception of FCS. Overall results from the survey indicated both administrators and counselors have a generally positive perception of FCS. Recommendations for future research included replication in Virginia due to the low number of responses for a more accurate picture. It is also recommended to add district level staff, including but not limited to: CTE coordinators and directors, director/superintendent of student learning, etc. Decisions made by stakeholders in these positions also act as gatekeepers in an indirect way to FCS programs compared to administrators and school counselors.

Keywords: family and consumer sciences, home economics, gatekeeper theory, school administrators, principals, attitudes, perceptions, school counselors

Dedication

This dissertation is dedicated first and foremost to my mom, Sherri. I cannot thank you enough for all of those years of endless love and sacrifice on Rock Run Road to today. You planted those seeds of the “Greenawald work ethic” and taught me to have the confidence to chase my dreams. To my dad, John, who filled a big hole in my heart. I love you both.

In loving memory of my grandparents, Ron and Aretta, and my Uncle Ronnie.

To my husband, John, your support of me on this journey made a dream a reality.

To my daughters, Paige and Madilyn – do not let anyone tell you your dreams are too big or will take too long to accomplish. You can do anything, baby girls. You have knowledge in your head, courage in your heart, and a fighter's spirit in your soul. I love you both to the moon and back. You are the best part of me.

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Finally, this dissertation is dedicated to all the family and consumer sciences teachers who have come before me and those who will carry on the discipline's legacy.

“Keep thinking.” – Ellen Swallow Richards

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List of Abbreviations

American Association of Family and Consumer Sciences (AAFCS)

American Home Economics Association (AHEA)

Career and Technical Education (CTE)

Family and Consumer Sciences (FCS)

Future Career and Community Leaders of America (FCCLA)

Future Homemakers Association (FHA)

National Association of Secondary Administrators of Family and Consumer Sciences

(NASAFACS)

Next Generation Science Standards (NGSS)

No Child Left Behind (NCLB)

Science, Technology, Engineering, and Math (STEM)

Statistical Package for the Social Sciences (SPSS)

United States Department of Education (USDOEd)

Virginia Department of Education (VDOE)

CHAPTER ONE: INTRODUCTION

Overview

Family and consumer sciences (FCS) is a discipline that has a long and storied past in American education. It had humble beginnings as home economics in the early 20th century and continued to evolve and change to meet students' needs. However, in recent years, FCS has seen a steady decline in enrollment at all levels – from secondary programs to the collegiate level. Research and surveys have explored the possible factors that have caused this downfall, with the primary opponent being the 2001 legislation of No Child Left Behind (NCLB). Its increasing testing mandates and focus on academic classes left little room for electives such as FCS. The purpose of this quantitative, predictive correlational study seeks to explore which factors may impact the perception of FCS by administrators and school counselors. Chapter One provides a background of FCS's history and issues leading to its present-day perception problem, a theoretical framework of gatekeeper theory, along with the research questions and definitions.

Background

In the last thirty years, 153 FCS educator preparation programs nationwide have closed, leaving roughly just over 100 undergraduate programs (Bowers & Myers, 2019). Thirteen states no longer offer a FCS education degree, leaving a large void in a discipline with a documented teacher shortage (Bowers & Myers, 2019). Research revealed a 38% drop in FCS teacher-education programs enrollment for Illinois's 2012-2013 school year (Arnett- Hartwick, 2017). In a cruel twist of fate, while FCS programs shutter their doors, more and more calls to bring back home economics continue to increase. Articles and commentaries in the *New York Times*, the *Journal of the American Medical Association*, and the Internet have championed home

economics' return to schools (Smith, 2016). However, home economics never left; it evolved into FCS.

Historical Background

Ellen Swallow Richards is credited as being the founder of home economics, in 1889, at a Lake Placid conference of home economic contemporaries (Deaton et al., 2018; Gentzler, 2012). Richards' background was in the sciences. She firmly believed that the new discipline should be rooted in science and chemistry and regarded with the same level of esteem as agricultural and mechanical arts (Gentzler, 2012). Her sentiment that the character of the American family was the future of the country, not railroads, machines, or industry, but the home, cemented home economics' purpose in those early years (Swallow, 2014)

Home economics was born during the progressive movement in education, and leaders like John Dewey were an important influence in the discipline. Real-life experiential learning and vocational skills were the basis of home economics classes. Classrooms were filled with sewing machines, kitchens, and laboratories for childcare for students to learn nutrition, clothing, personal resource management, and child development (Dreilinger, 2021; Gentzler, 2012; Swallow, 2014). Home economics gained traction during World War I as Herbert Hoover declared, "Food will win the war" (Dreilinger, 2021). Soon after, Americans began to ration, and the need to transform their diets gave home economics classes the opportunity to focus on teaching new food preparation methods. After the war, when government bureaucracy ended the U.S. Food Administration's home economics work, Martha Van Rensselaer and Lenna Cooper fought for the government to finally recognize the contributions home economics gave to the war effort (Dreilinger, 2021). Home economics had won the war and was embraced by the government, for good. The Smith-Hughes Act of 1917 helped secure funding of home economics

because of its vocational aspect, making home economics the only vocational subject recognized by law for girls (Drielinger, 2021; Swallow, 2014).

Home economics continued its upward trajectory in secondary education through the middle of the century, teaching almost every young girl how to prepare meals and take care of her future family. In the 1960s and 1970s, however, the discipline's fortune began to change as it began to be viewed as a gendered subject area stuck in a bygone era. During these decades, societal schisms born out of the progressive thinking about gender issues and social rights caused boys and girls to enroll in home economics classes (Alharbi, 2019). It was believed that both boys and girls would have skills that would make them more capable of caring for their future families and communities (Alharbi, 2019).

The discipline still faced negative perceptions in the 1980s. It faced a reckoning: adapt or be left behind. The discussion began about the possibility of rebranding home economics to reflect modern society's goals while yet honoring its founding principles. Home economics became family and consumer sciences (FCS) in 1993 (Gentzler, 2012; Nickols & Kay, 2015). Discipline leaders, at this time, felt the name change would propel the subject back to its former glory. Sadly, the name change did not help FCS regain its place in school systems. Today, many leaders in the profession feel that the name change compounded FCS's image problems and led to confusion about what the subject matter fully entailed (Duncan et al., 2017).

Society-at-Large

Introduction of the 2001 No Child Left Behind legislation dealt a hard blow to many elective curricular areas, not just FCS, as the focus began to shift towards academics and standardized testing (Duncan et al., 2017). As enrollment in high school programs dropped, programs were closed. Due to low enrollment, colleges and universities struggled to keep teacher

education programs open. Schools could not fill vacant positions and further closed FCS programs, and the cycle has become unending (Duncan et al., 2017). If attrition rates continue at the same pace as they have over the last thirty years, FCS could cease to exist by 2050. The American Association of Family and Consumer Sciences (AAFCS) and National Association of Secondary of Family and Consumer Sciences (NASAFACS) created the "Say YES to FCS!" campaign in 2015 in a joint effort to recruit the next generation of FCS teachers as well as bring awareness to the community (Duncan et al., 2017, Randel & Spavone, 2016).

Understanding the history of home economics and its evolution into FCS is to understand the complexities of contemporary culture (Elias, 2011). Its growth mirrors a change in American lifestyles and educational trends over the last century. Once regarded as women's domestic studies, the theoretical framework of FCS derived from the sciences and other fields of study to which it is related (Elias, 2011). In its foundations, theorists such as Bandura, Kolb, and Lewin are reflected.

Theoretical Framework

Albert Bandura was a developmental psychologist known as the social learning theory creator. Born in Canada, Bandura began his academic appointment at Stanford University after finishing graduate work at the University of Iowa (Grusec, 1992). Bandura, famously noted for his Bobo doll experiments, studied how children learned aggression through the observation of adults. Research from these experiments led Bandura to develop self-efficacy theory. Self-efficacy is defined as how people believe in their own abilities and capabilities (Grusec, 1992). Through his work, Bandura explained people are intrinsically motivated to learn by watching the behavior and actions of others through modeling (Bandura, 1971). This form of learning, in which students learn by example, is similar to Kolb's theory of Experiential Learning.

David Kolb's modern version of Experiential Learning Theory is based upon the historical works of philosophers such as Plato, Aristotle, and John Dewey (Kihm & Slawson, 2020). He was inspired by his examinations of management's effectiveness in facilitating professional learning within their organizations as he formally developed his theory (Kolb, 1976). Kolb explained learning does not occur without experience. Authentic experiences are necessary for new learning (Peterson & Kolb, 2017). According to Kolb, learners are classified into four categories based upon their strengths and weaknesses.

Influences from both Bandura and Kolb can be found in FCS curriculum. Modeling and experiential learning are the basis for FCS classes. Teachers model various concepts for students and facilitate learning as students practice skills on their own. For example, a culinary instructor may demonstrate how to bone a chicken or searing techniques on the grill. Students practice the skills in class under the supervision of a teacher, enabling students to apply their knowledge and skills at work. A child development teacher may model proper reading techniques to students in preparation for students to intern at a daycare facility. Concrete learning experiences initiate the learning cycle leading to reflection, abstract thinking, and active experimentation (Peterson & Kolb, 2017). Learning activities that offer students hands-on application are only good if students have access to those classes that provide such opportunities and are not blocked by various educational gatekeepers.

Kurt Lewin was the first to identify gatekeeping theory in a 1943 government report, "Forces Behind Food Habits and Methods of Change" (Shoemaker & Voss, 2009). It was not until a 1947 posthumous publication of his unfinished manuscript, "Frontiers in Group Dynamics II: Channels of Group Life; Social Planning and Action Research," that his theory of gatekeeping gained notoriety (Shoemaker & Voss, 2009). Lewin (1947) used the concept of changing a

population's food habits as his example to illustrate how various factors impact what foods are eaten in the home and who, ultimately, controls what a parent will feed their children. Lewin (1947) explained that the characteristics (i.e., food available in a grocery store, grocery budget, individual tastes) decided by different people (manufacturer, grocer, parent) act as gates, and the forces of these factors would either make the gate open or closed for purchase and consumption. Furthermore, he proposed that not all population members have equal importance in deciding what can be eaten (Shoemaker & Voss, 2009).

Lewin's theory is not only true for decisions about what travels through the various food channels but also for the travel of news in various media outlets, movement of goods, and the social movement of people within a group (Lewin, 1947). Gates are governed by the various individuals or group gatekeepers that have the power to make decisions for what is in or out. Understanding the gate's function is critical to understanding the factors impacting the gatekeepers' decision-making (Lewin, 1947). McGee et al. (2021) explained that language influences gatekeepers' thoughts and actions. Concepts shape the various daily decisions made, held perceptions, and interactions with others. Language has always been used as a tool to shape and influence and has been especially powerful when outsiders use it in a field to shape perceptions about the field (McGee et al., 2021).

A study of Australian schools found various gatekeeping practices where schools sought to restrict and minimize enrollment of students with disabilities. In this situation, administrators created and maintained gates, placing them as gatekeepers (Poed et al., 2020). Gatekeeping strategies included disability labels, unwelcoming environments to families, and failing to meet minimum service levels in hopes the family would withdraw the student. Principals act as gatekeepers in a variety of ways at the building level. They have an ultimate say in what

programs and classes will run and the disbursement of funds for those programs. During scheduling, counselors act as gatekeepers by exploring class options with students based on their interests or future career plans. E. Stevenson (personal communication, February 22, 2021), a FCS teacher, retold the story of a counselor who dissuaded a student from taking a culinary class because it would not look "academic enough" on his transcript. Because of this counselor's words, the student chose a different elective even though he had a personal interest in taking the culinary class. Another FCS teacher, K. Jett-McVea, recalled her own high school experience. She tried to sign up for a FCS class but was dissuaded when her counselor told her only the "stupid" kids who aren't going to college take FCS, geography, and art (personal communication, May 2, 2021).

Research involving the impact of attitudes and stereotypes on social behavior has been researched for decades. By the 1930s, researchers Allport, Thurstone, Katz, and Braly had investigated this concept and developed methods to measure attitude in its conscious form (Greenwald & Banaji, 1995). Katz and Braly (1935) built upon research by Bogardus and examined Princeton University students' racial stereotypes. This study was groundbreaking in understanding stereotypes since they impact how people interact and simplify the world, reducing the amount of mental processing required (McLeod, 2015). The foundation precept of FCS was for teachers to use science to engage students in an overall effort to improve life for the individual, family, and community, regardless of society's issues, at that time. For example, in Richards's 1907 book, *Sanitation and Daily Life*, she reflected on strategies for individuals and families to secure clean and safe living environments (Nickols & Kay, 2015). The book was released when many families lived in unsanitary conditions in cities. People will always need to make decisions in the ever-increasing global society about what they eat, wear, and child-rearing

practices; there will always be a need for home economics (Gentzler, 2012). FCS teachers easily recognize the importance of this type of curriculum in a student's overall education. The stereotype of old home economics still has not changed with FCS's evolution (Harden et al., 2018).

Problem Statement

Evidence found through research showed that FCS faces a multifaceted problem in resolving its future (Duncan et al., 2017). It has been impacted from being almost too broad of a content area to enrollment cuts from the emphasis placed on academic areas due to NCLB (Duncan et al., 2017). However, the main problem of FCS is public opinion and its perceived value in education. In recent years, home economics has been the subject of jokes in mainstream media (Harden et al., 2018). An example of this is depicted in the movie *Superbad*, where one of the scenes shows a cooking class represented as a farce and a complete waste of time (Mottola, 2007). Even though the discipline has become much more specialized and diversified, the home and household context are still contextually bound to gender (Harden et al., 2018). McGregor (2019) posits that FCS has a unique role in national development by teaching skills and concepts aimed at poverty alleviation, employment generation, human resource development, and people empowerment.

McCombie and Hwang (2017) stated that a portion of the population perceives FCS as a dull, narrow-minded, and conservative discipline stuck in a bygone era. Research has been conducted about various perceptions of FCS curriculum. Administrator responses showed that many believe the domain is at a crossroads, where the purpose and objectives are unclear and stuck in a home economics mindset, unchanged over the years (Harden et al., 2018). Studies involving school counselors', students', and parents' opinions about FCS have also sought to

explore and find solutions to the perception problem (Hansen et al., 2019; Nanayakkara et al., 2018). FCS falls under the umbrella of Career and Technical Education (CTE).

Recommendations from various studies indicated that replication in other states and by other stakeholders would further examine the perception of FCS (Smith et al., 2001; Grewe, 2019).

Researchers explained that understanding the various groups' viewpoints helps determine if their views reflect the current changes being made in the discipline (Smith et al., 2001). Researchers believed perception research of individual classes (i.e., cooking education), in addition to whole content research, could help influence, explain, and justify these classes to administrators (Hansen et al., 2019). The problem is that the literature has not fully addressed how administrators and school counselors perceive FCS programs.

Purpose Statement

The purpose of this quantitative, predictive correlation study is to fill the gap in the literature by attempting to identify which factors may predict administrators' and school counselors' perceptions of FCS curriculum. The four predictor variables include administrators' and counselors' years in education, gender, region of Virginia, and FCS curricular content knowledge. The criterion variables of this study are administrator and counselor attitudes toward FCS. Administrators are the final determinate of what classes and programs are offered in their school. A program cannot flourish without administrator support. School counselors assist students in choosing classes based upon interest and future career goals. Therefore, it is vital to determine what influences both administrators' and school counselors' perceptions of FCS curriculum to stop the closure of programs. The population for this study includes a convenience sampling of high school administrators and school counselors from across Virginia.

Significance of the Study

Family and consumer science classes provide students with more than essential life skills, but critical thinking skills are a part of the curricular foundation (Swafford & Rafferty, 2016). More than ever before, society has become increasingly global. Students need critical thinking skills to be successful adults. In turn, the STEM background in a FCS class provides math, science, and literacy skills through content in nutrition, child development, clothing construction, and personal finance, laying the path for developing needed future critical thinking skills (Swafford & Rafferty, 2016).

When home economics was in its infancy, the average American housewife spent around 44 hours a week preparing meals (Cunningham-Sabo & Simmons, 2012). Compared to today, where half of Americans' food budget accounts for take-out food, many feel they do not have the knowledge, skills, and/or time to prepare food at home (Cunningham-Sabo & Simmons, 2012). Nutritionists believe that reintroducing foods and nutrition curriculum in schools could help to reverse course in a predominately overweight and undernourished country (Cunningham-Sabo & Simmons, 2012). Students would leave high school more prepared for their futures by taking FCS classes. FCS is too valuable of a discipline to be forgotten and discarded.

Home economics was far more than baking lumpy blueberry muffins, sewing throw pillows, or lugging a bag of flour around in a baby sling to learn the perils of parenting. In its purest form, home economics was about changing the world through the household. (Dreilinger, 2021, p. ix – x)

The research found that FCS is not seen or respected as a scholarly discipline (Harden et al., 2018). One recommendation by researchers was to have a more prominent research presence and

communicate the value of what FCS has to offer (Harden et al., 2018). This study aims to add to the body of FCS research that can help teachers and other stakeholders address administrator and counselor perceptions in their schools. Research on administrators' and counselors' perceptions of FCS programs would help shed light on ways to increase school programs and student enrollment. FCS has a documented teacher shortage. There are simply not enough high school graduates entering the profession. More students exposed to the content and the possibility of future careers in the profession would start to fill FCS teacher education programs. The decline of FCS could, potentially, begin to reverse course and begin to increase participation.

FCS falls under the umbrella of Career and Technical Education (CTE). CTE also faces some of the same perception concerns as FCS (Duncan, 2018). Almost twenty years ago, the National Research Center for Career and Technical Education declared the mission of CTE was to provide students the necessary preparation for lifelong roles in work, family, and community to serve the nation as a whole (Duncan, 2018). This mission is highly similar to the FCS body of knowledge published by the American Association of Family and Consumer Sciences (AAFCS), which strives to provide a comprehensive body of knowledge to help individuals achieve an ideal quality of life as a whole person – individual well-being, interpersonal relationships, and resource management (AAFCS, 2009). A research study that brought attention to the implications of administrators' implicit bias on FCS programs could also benefit CTE programs.

Research Questions

RQ1: How accurately can administrators' perceptions of FCS be predicted by a linear combination of their years in education, gender, region of the state, and FCS curricular content knowledge?

RQ2: How accurately can counselors' perceptions of FCS be predicted by a linear combination of their years in education, gender, region of the state, and FCS curricular content knowledge?

Definitions

1. *Carl D. Perkins Act* – Commonly referred to as “Perkins,” is the primary federal funding source for secondary and postsecondary career and technical programs (USDOEd, 2021).
2. *Career and Technical Education* – Formerly known as vocational education, CTE classes are designed to prepare students to be college and career-ready by providing employability skills, including academic, technical, and job-specific skills. CTE encompasses 16 career clusters that include Human Services; Business, Management, and Administration; Hospitality and Tourism; STEM; Law, Public Safety, and Security; Agriculture, Food and Natural Resources; Transportation, Distribution, and Logistics; Finance; Architecture and Construction; Arts, A/V Technology, and Communications; Health Science; Government and Public Administration; Manufacturing; Marketing, Sales and Service; and Information Technology (ACTE, 2021).
3. *CTE Completer* – A student who has taken a required sequence of courses in a CTE concentration and all requirements for a high school diploma (VDOE, 2021)
4. *CTE Credential* – An industry-related assessment that falls into one of four categories state-issued professional license (Ex. LPN), full industry certification of particular occupation (Ex. Microsoft Certified Professional), pathway industry certification (Ex. Automotive Service Excellence), or an occupational competency assessment (Ex. ParaPro) (VDOE, 2021).

5. *Experiential learning* – An approach to learning that allows learners to understand themselves, thus taking charge of their own performance, learning, and development (Kolb, 1976).
6. *Family and Consumer Sciences* – Known initially as home economics, it is a field of study that uses science to improve living and working, enabling the development of skills to lead better lives, be work and career ready, build strong families, and be a contributing member to the community (AAFCS, 2021).
7. *Home Economics* – A field of study encompassed by the knowledge and skills primarily concerned with strengthening families from 1901 to 1993 (Dreilinger, 2021).
8. *Science, Technology, Engineering, and Math* – A discipline encompassing science, technology, engineering, math, and computer science designed to provide students the needed skills to meet the constant demands of a constantly changing future workforce (USDOEd, 2021).

CHAPTER TWO: LITERATURE REVIEW

Overview

Chapter Two begins with a discussion of the theoretical framework. Social Learning Theory, Experiential Learning Theory, and Gatekeeping Theory are all explained as the framework for the research. The evolution of home economics to family and consumer sciences is discussed in the literature review. The literature review also presents the current state of FCS as a profession and the relevance of today's FCS curriculum. This chapter synthesizes key findings in previous perception studies and addresses gaps in the body of knowledge. Chapter 2 ends with a summary of the chapter.

Theoretical Framework

Social Learning Theory

Albert Bandura created his social learning theory in the 1960s at Stanford University. While he based his work on development psychologist B.F. Skinner, Bandura and colleague Richard Walters believed imitation was much stronger in learning than Skinner's rewards and punishments (Grusec, 1992). Humans, Bandura stated, are not controlled by external reinforcement, but through prior experience, they know that certain expectations will bring specific outcomes (Bandura, 1971). Learning would be rather dull if it relied solely on rewards and punishments. The influence of learned behavior, either deliberate or accidental, is powerful and is attributed to most people's behaviors (Bandura, 1971). Thus, Bandura found that modeling can be more intrinsically motivating, that it can hold the attention of all age groups for an extended period of time.

Social learning theory has always been a part of the FCS classroom. Students have long watched teachers demonstrate the various breadth of knowledge contained within the FCS

curriculum, such as knife skill demonstrations in a culinary class, how to swaddle a baby in child development, creating a math lesson for preschoolers in early childhood education, and more. By modeling proper techniques, students acquire a basic understanding and then practice the skills, independently. Social learning theory is frequently the theoretical foundation of most cooking and nutrition education programs (Diker et al., 2013). Since time began, people have used observation, imitation, and modeling (Deaton, 2015). This was true during Bandura's time and even more so, now, with the advent of technology and social media. Deaton (2015) explained that social media presents an interesting platform where students learn through observation and give educators new opportunities to engage with students. Miller (2018) recommended FCS teachers harness social media as part of their instruction. Assignments would include students creating social media posts that address social inequities to create positive social change.

Experiential Learning Theory

Experiential learning dates to the early philosophers such as Aristotle, Plato, and Socrates and contains modern roots in progressives like John Dewey (Kihm & Slawson, 2020). David Kolb developed the modern Experiential Learning Theory at the University of California, Berkeley. Kolb's theory was born out of his examinations of management's effectiveness in facilitating professional learning within their organizations (Kolb, 1976). Kolb (1976) established that learning is cyclical and exists in four stages: concrete experience, reflective observation, active conceptualization, and active experience. Reflection and observation are essential components necessary for the learner's growth. Kolb's theory also included four types of learning styles based upon their strengths and weaknesses as learners. Experiential education is a highly effective methodology that improves student learning and supplements classroom instruction (Kihm & Slawson, 2020). The National Society for Experiential Education (NSEE)

states learning environments in real-world contexts provide opportunities for authentic learning providing students the opportunity to apply knowledge in a valuable and meaningful way (NSEE, 1998). Because FCS is an applied science discipline, experiential learning ensures students can transfer classroom learning to real-life situations.

Like modeling and social learning theory, experiential learning theory has always been part of FCS, even if it did not have a formal name. It formed the theoretical basis to model proper techniques for students to learn and practice the needed skills to take care of their families and communities. When a teacher acts as a facilitator in experiential learning, student learning becomes self-directed, thus enabling students to interact differently with the content and the teacher (Kolb, 1976). Experiential learning is better represented by the learner because it creates cognitive gains and emotional and affective gains for the student (Heinrich & Green, 2020). Students receive hands-on instruction in various ways in FCS classrooms (Kihm & Slawson, 2020). From cooking labs in culinary to internships at schools in pre-service education classes, there is a wide array of hands-on opportunities for students to develop and refine their skills.

Gatekeeping Theory

Kurt Lewin was a Polish psychologist and philosopher who immigrated to the United States in 1933 from Berlin (Burnes & Bargal, 2017). He had written extensively during his time in Berlin and continued his work at the University of Iowa and then at MIT, where he established the Research Center for Group Dynamics (Burnes & Bargal, 2017). Unfortunately, Lewin died in 1947, and his work on Gatekeeping Theory was published posthumously (Shoemaker & Voss, 2009). Lewin's (1947) essay, *Frontiers in Group Dynamics*, was the first to showcase gatekeeping.

Lewin (1947) used food consumption by families as his example. He explained that food comes to the table through specific channels. These channels included the grocery store and the home garden. He also explained that factors like cost, appearance, family likes and dislikes, and ideas about what foods are considered essential play in creating forces on the housewife's decision making. These forces create gates in the channel that will allow certain foods and not others to pass through to get to the family table. Lewin (1947) stated that this theory did not just apply to foods but also to the movement of goods and information through channels in a group or organization. Impartial rules of gatekeepers then govern the sections. It is necessary to understand the decisions being made by the gatekeeper, so a change may begin to influence or replace the gatekeeper (Lewin, 1947).

The first task is to find the actual keeper. Lewin (1947) used the example that even though the wife may choose the vegetables in the garden to serve her family, the husband makes the decision of which vegetables to plant. The gatekeeper in this situation is the husband, not the wife. It is the same in education. The student is not the gatekeeper of his choice of classes, but rather the gatekeepers who decide which courses and programs are available for study. Gatekeepers in education can range from school counselors to administrators and up to the superintendent.

A school administrator's role and responsibility constantly evolve (Reid, 2020). The tasks of today's principals are relatively similar to their historical roles of liaison between school and community, monitoring teacher improvement and student learning, and handling discipline issues. Studies have examined principals as discipline gatekeepers (Poed et al., 2019; Williams et al., 2020). Research has shown perception of race influences an administrator's decision-making in handling student discipline issues. Findings revealed that principals cannot be treated as a

color-blind disciplinary gatekeeper when their responsibility is to protect and advocate for all students, regardless of color, ethnicity, or gender (Williams et al., 2020). Australian principals employed restrictive gatekeeping practices to minimize the enrollment and participation of students with disabilities (Poed et al., 2019). School counselors are another group labeled as a gatekeeper in education. Criticism aimed at counselors for their role in career guidance stems from their lack of training for their position of gatekeepers of status attainment and social mobility (Yogev & Roditi, 1987). Research has shown that school counselors' post-secondary recommendations differ, as more students from higher-income backgrounds are recommended more for college than lower-income students (Yogev & Roditi, 1987).

Related Literature

History of Family and Consumer Sciences

Home Economics can trace its history back to the mid -1800s to Sir Benjamin Thompson, also known as Count Rumford, and Catherine Beecher (Nickols & Collier, 2015). Born in Massachusetts, Rumford lived in Bavaria after the Revolutionary War, where he was Minister of War, in 1788, over the Bavarian army. During this time, there was immense poverty in Bavaria, and Rumford created what he called "houses of industry," where the homeless could work, receive food and education (Rutter, 2010). Labeled as a forgotten genius, Rumford is credited with the concept of convection, thereby creating a more efficient oven for this period, the redesign of fireplaces to produce more heat, and the drip coffee pot (Shubert, 2019). He also presented new crops along with new methods of planting to Bavaria (Rutter, 2010).

Catherine Beecher founded the Harford Female Seminary in New England, which taught domestic education as part of the curriculum. Her book, *A Treatise on Domestic Economy*, went through fifteen editions and was considered the standard textbook on domestic sciences

(Drieling, 2021; Nichols & Collier, 2015). Beecher and her sister, Harriet Beecher Stowe, co-wrote *The American Woman's Home: Principles of Domestic Science* in 1869, which provided information on religion, science, common sense, and how they impacted family life (Nickols & Collier, 2015). The impact of these books was tremendous since they acknowledged the importance of women's labor in the home and its overall effect on the family unit (Nickols & Collier, 2015). The Morrill Act of 1862, and its reauthorization in 1890, provided funding for land-grant institutions that focused on applied science in the areas of agriculture, domestic science, and mechanical arts. Land-grant institutions, cooking schools, training programs, and services for poor women in New England, combined with the progressivist movement, allowed for the systematization of creating the academic discipline of home economics (Nickols & Collier, 2015).

In her own right, a pioneer and trailblazer, Ellen Swallow Richards is considered the founder of home economics. Roughly fifty years after the printing of the Beecher sisters' book, Richards and others in the profession held a conference at Lake Placid, New York, where they went to work in creating a framework for the new discipline (Deaton et al., 2018; Gentzler, 2012; Swafford & Rafferty, 2016). Richards was extraordinary for a female during her time. Not only was she the first woman to graduate with a chemistry degree from Vassar College, but she was also the first female admitted into Massachusetts Institute of Technology (MIT), where she would become MIT's first female professor (Deaton et al., 2018; Gentzler, 2012). Richards worked at the New England Kitchen in Boston and, from her work there, wrote her highly regarded book, *The Chemistry of Cooking and Cleaning*, in 1882 (Gentzler, 2012).

Home economics was created to be a mission-driven profession (Nickols & Kay, 2015). The issues of caring for immigrants, improved familial conditions, malnutrition, poverty, and

financial responsibility are just a few of the areas home economics sought to address.

Coincidentally, these issues are still just as relevant today as they were over a hundred years ago. Immigration, social welfare, and women's rights were at the forefront of society during home economics' infancy. Many Americans worked in factories and mills with hazardous and unsafe working conditions. Child labor was common, and a child born during this period had an average lifespan of 47 years (Gentzler, 2012). Those living in the city were faced with poor living conditions in tenement housing, causing diseases like typhoid and tuberculosis. Women were still working to secure the vote. Home economics saw beyond gender, ethnic, racial, and political boundaries and sought to promote healthier people in all communities (Gentzler, 2012, Nickols & Kay, 2014). Richards believed that managing a household and raising children were just as essential tasks in American life as running a steamboat or engine; thus, its citizenry should be educated on such topics (Swallow, 2014).

Richards firmly believed that the discipline should be rooted in science and advocated for the new subject to be called human ecology. At an 1889 conference in Lake Placid, Richards and leaders in the field decided on the name of home economics. Over ten years, the home economists met at yearly conferences as they continued to refine the new discipline. Following the progressivist view of hands-on experiential learning, early classrooms were filled with sewing machines, kitchens, and childcare laboratories, creating a link to vocational education, which helped the new discipline secure federal funding (Dreilinger, 2021; Gentzler, 2012). The Smith-Hughes Act of 1917 was the first federal legislation to include home economics with vocational education (Hillison & Burge, 1988). The act opened doors for women in levels elementary through collegiate, even before women had won the right to vote (Hillison & Burge, 1988). Due to the advocacy work of Van Rensselaer and Cooper, along with home economics'

role in the war effort of WWI, President Warren Harding created the Bureau of Home Economics, part of the Department of Agriculture, in 1923 (Dreilinger, 2021).

Home economics has always been a multifaceted, complex discipline that sought to connect theory to everyday practice. Personal resource management, nutrition and safe food handling, clothing and textiles, and child development were identified as crucial areas for students to prepare for their future roles in their families and communities (Gentzler, 2012; Swallow, 2014). As the country evolved over the 20th century, the discipline also had to evolve. Women's liberation and more focus on opportunities for women in the workforce began to create a backlash for the curriculum during the 1960s and 1970s. Many saw it as pigeon-holing women into being homemakers and stay-at-home mothers. This negative viewpoint, coupled with trends in food production that included more ready-to-eat foods and convenience items available for purchase, suddenly made the concept and knowledge of home economics outdated.

Marjorie Brown and Beatrice Paolucci, two home economics professionals, wrote *Home Economics: A Definition* (1978), which sought to redefine the mission and discipline to fit modern society (Dreilinger, 2021; Gentzler, 2012; Nickols & Kay, 2014). They sought to determine what could be done to bring the optimal development of children, adults, and families in a modern way (Gentzler, 2012). The new goals focused primarily on empowering individuals to become productive and cooperative stakeholders in their families and communities. The new mission would teach students to make informed decisions using critical thinking skills to obtain a high quality of life (Swafford & Rafferty, 2016).

There was much debate in the 1980s on adapting the discipline to modern times. The decision was made to rebrand the profession, and new, updated standards and curriculum would help modernize home economics. Some believed the name was not the problem and changing it

would only cause more harm than good. Home economics, they said, needed more relevancy and updating to the curriculum to move forward (Dreilinger, 2021; Gentzler, 2012). After much debate, in 1993 at a Scottsdale, Arizona conference, home economics became known as family and consumer sciences, with which a decision that one-quarter of the Scottsdale participants disagreed (Dreilinger, 2021). American Home Economics Association became the American Association of Family and Consumer Sciences (AAFCS). Future Homemakers Association (FHA) became Family, Career, and Community Leaders of America (FCCLA) to reflect the modern goals and mission more accurately (Nickols & Kay, 2015).

Family and Consumer Sciences Today

Unfortunately, the rebranding of home economics into FCS did not propel the discipline forward, as hoped. School districts have closed FCS programs and liquidated all equipment and resources. Reasons for program closure include a lack of student interest, budget constraints, and a shortage of certified teachers (Duncan et al., 2017). In the past ten years, there has been a 26% decrease in the number of FCS teachers in the country (Bowers & Myers, 2019; Duncan et al., 2017). The decline has been attributed to the increased attention on core subjects and the associated standardized testing from NCLB (Duncan et al., 2017). If there is a lack of exposure to high school FCS programs, no students can enter the field after graduation. Colleges and universities have shuttered their FCS education programs due to declining enrollment. In 1984, there were 261 collegiate programs. Today, only 100 remain in 37 states. (Bowers & Myers, 2019). This has created an endless cycle of a shortage of jobs and an absence of teacher preparation programs to fill the void. Program closures have effectively caused a slow trickle through the FCS teacher pipeline (Duncan, 2011; Duncan et al., 2017, Gentzler, 2012). If the FCS trajectory continues as it has, the discipline could be all but gone by 2050.

However, the AAFCS has been working to combat the steady decline of programs over the last thirty years. Several initiatives have been instituted to remedy the teacher shortage problem and increase student participation in the secondary school setting. One of these initiatives is between AAFCS, Family, Career, and Community Leaders of America (FCCLA), and the State University of New York (SUNY) at Oneota. The partnership was awarded a 3-year grant of approximately \$750,000 from the United States Department of Agriculture – National Institute of Food and Agriculture (USDA-NIFA) in addition to matched funds from AAFCS, FCCLA, and SUNY Oneota, for a total of \$936,572, to address the documented nationwide shortage of FCS educators (Bowers & Myers, 2019). The partnership between the USDA-NIFA, SUNY Oneota, AAFCS, and FCCLA has been called "The National Partnership to Recruit, Prepare, and Support Family Consumer Sciences Educators" (Bowers & Myers, 2019). The partnership will focus on the northeast, but it is working to create a national, self-sustaining model and create a leadership academy for high school students interested in becoming FCS teachers. Proposed outcomes of the partnership, if successful, will create a national, online directory of certified FCS teachers, an online catalog of curriculum guides and resources, free online professional development, a resource of college preparation programs for students, in addition to a network of scholarships and financial aid, and more (Bowers & Myers, 2019).

A second recruiting initiative developed by the National Association of Secondary Administrators of Family and Consumer Sciences (NASAFACS) and AAFCS was called the "Say YES to FCS!" campaign. The initiative provided educators tools for recruitment in 2015 (Duncan et al., 2017; Randel & Spavone, 2016). The "Say YES to FCS!" initiative is primarily a social media campaign that targets teens' and parents' use of social media through Twitter, Facebook, Snapchat, and Instagram and, as of 2017, had 1,886,102 engagements (Duncan et al.,

2017; Randel & Spavone, 2016). This initiative hopes to bring more awareness to the existence of FCS programs, recruit for participation in both FCS classes and FCCLA as a way to recruit future teachers into the profession. The Kentucky Department of Education created a recruitment program called Kentucky FCS University (KFCSU) (Godbey, 2016). KFCSU provides juniors and seniors a day-and-a-half interactive program and includes information on college admissions, program requirements, certification requirements, and roles/duties of a FCS teacher and FCCLA advisor. At the conclusion of the event, almost half of the participants said they were committed to FCS education (Godbey, 2016). Similar programs have been documented in South Dakota, Tennessee, and Oklahoma (Duncan et al., 2017).

Curriculum for Today's Students

Paradoxically, there have been articles and petitions for a return of home economics, even though the discipline never left. The current obesity crisis in the United States has drawn attention back to FCS. It has been suggested that a return of home economics-style classes would improve education about food and cooking for both boys and girls where they would learn the basic principles to feed themselves and their families, thereby reducing obesity rates (Lichtenstein & Ludwig, 2011). Similar articles have also appeared in the *New York Times*, the *Washington Post*, and other media outlets petitioning for a revival. Critics, however, have warned that the last thing FCS professionals would want to do is promote classes as a "cure" for obesity (Smith, 2016). Doing so would create an unacceptable pedagogy of food shaming and oversimplifies learning to cook as a means of fixing obesity rates (Smith, 2016).

Many in the field have explained that the calls to bring back home economics perpetuated negative stereotypes (Pendergast et al., 2013). Instead, professionals should use the opportunity to refocus attention back to today's modern FCS curriculum. Through research, paradoxical

comments on social media posts claim skills taught in FCS could easily be taught at home (Pendergast et al., 2013). The theory that basic life skills are taught at home is rather presumptuous. It assumes that families have the means and background knowledge to effectively teach their children how to cook, balance a checkbook, make smart food choices, and other essential life skills. The modern family is very different today, than it was years ago. The U.S. Census Bureau reports that even though most children live in two-parent families, 26% of children live in single-parent families, with almost 30% of these families living under the poverty line. The 2021 Children's Defense Fund report indicated more than 10 million children – one in seven (14.4%) -lived in poverty in 2019, with half of these children living in extreme poverty. Extreme poverty is defined as half of the poverty threshold (annual income of \$26,172) or an annual income of \$13,086 for a family of four (Children's Defense Fund, 2021). Food insecurities, poor hygiene, and minimal parental support are factors that put students living in poverty at greater risk for educational issues (Arnett-Hartwick & Harpel, 2020). The U.S. Bureau of Labor Statistics reports that 80% of two-parent families have at least one parent working, and 63% are dual-income households. Families do not have the time or the resources to replace critical lessons obtained from a FCS classroom.

FCS has learned to pivot and continue its evolution as it has tried to stay relevant to an ever-changing society. Science, technology, engineering, and math (STEM) and critical thinking skills have always served as the pedagogical foundation. The mission of FCS has always been to use scientific knowledge to improve the everyday lives of individuals and families for the betterment of society (McGregor, 2020). The increasing emphasis on math and science is recognized as being more important in students' future career choices (Nanayakkara et al., 2018). Many in the field are calling for FCS to return to its scientific roots and integrate more STEM

into the curriculum (Deaton et al., 2018; McGregor, 2019). They believe Richards would have confronted the shifting tides in FCS education by welcoming STEM back into the FCS classroom (Deaton et al., 2018). The conversation has shifted to designating FCS as a stand-alone discipline under the STEM umbrella (McGregor, 2019). Society is dependent on STEM, and it also depends on the family as a fundamental societal institution (McGregor, 2019). FCS's reputation as an interdisciplinary and integrated content area that values collaborative teamwork is leading some to call it a lynchpin to strengthen STEM (McGregor, 2019).

Educators have begun to align the National Standards for Family and Consumer Sciences Education (NSFCS) with the Next Generation Science Standards (NGSS) to provide more STEM opportunities in FCS, as depicted in Table 1 below (Deaton et al., 2018). Incorporating more STEM into FCS content can help cement a more academic focus within the discipline and improve its longevity. This foundational precept gives FCS a critical and indispensable tie to the school's overall academic performance (Deaton et al., 2018).

Figure 1

Alignment of the NGSS High School Life Science Standards, NSFCS standards, and suggested learning activities (Deaton et al., 2018)

NGSS HIGH SCHOOL LIFE SCIENCE	NATIONAL STANDARDS FOR FAMILY AND CONSUMER SCIENCES EDUCATION	INTEGRATED STEM LEARNING ACTIVITIES
<p>HS-LS 1 From Molecules to Organisms: Structures and Processes HS-LS1-3. Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.</p>	<p>Human Development Comprehensive Standard 12.1.3 Analyze current and emerging research about human growth and development, including research on brain development.</p>	<p>Investigate current and emerging data regarding various types of diabetes, including research regarding blood glucose homeostasis. Essential questions include: What causes diabetes? What role does fat play in promoting blood glucose homeostasis? What trends are evident in various cultures? What are the effects of diabetes brain development?</p>
<p>HS-LS 2 Ecosystems: Interactions, Energy, and Dynamics HS-LS2-1. Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.</p>	<p>Food Production and Services Comprehensive Standard 8.1.4 Analyze the effects of food production and services occupations on local, state, national, and global economies.</p>	<p>Research a specific food producer and the impact that organization has had on local, state, and global economies. Systematically chart your findings. What impact has this producer had on our ecosystem both nationally and internationally?</p>
<p>HS-LS 2 Ecosystems: Interactions, Energy, and Dynamics HS-LS2-7. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity</p>	<p>Food Production and Services Comprehensive Standard 8.2.8 Analyze current types of cleaning materials and sanitizers for proper uses and safety hazards. 8.2.10 Demonstrate safe and environmentally responsible waste disposal and recycling methods.</p>	<p>Chart various cleaning materials and sanitizers according to their chemical characteristics. Research their impact on the environment and biodiversity. Develop alternative cleaning materials with an emphasis on reducing the environmental impact. Investigate and implement responsible disposal and recycling methods.</p>
<p>HS-LS4 Biological Evolution: Unity and Diversity HS-LS4-5. Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.</p>	<p>Human Development Comprehensive Standard 12.2.2 Analyze the impact of social, economic, and technological forces on individual growth and development. 12.2.5 Analyze geographic, political, and global influences on human growth and development.</p>	<p>Research a specific sub-population, with an emphasis of analyzing the impact of social, economic, and technological forces on each area of growth and development. Chart birth rates, mortality rates, life expectancy, and changes in the population over a set period of time. Hypothesize the implications for the next generations based on historical evidence.</p>

STEM concepts are interwoven in a variety of ways. Fashion FUNdamentals (F.F.) is a free program that runs for two weeks in the summer, targeting middle-school-aged (11-14 years) girls created by the Department of Design and Merchandising at Colorado State University (Ogle et al., 2017). The idea behind F.F. was to use social activity in conjunction with hands-on application of STEM principles to explore real-world problems in the fashion industry. The girls designed their own digitally-printed fabric, which was then turned into a garment. They then

examined the production costs, profit margin, fiber properties, and characteristics. Girls who participated in F.F. reported they felt more confident in themselves and their STEM abilities, leading to an interest in taking similar classes in the future (Ogle et al., 2017). Opportunities like F.F. in FCS classes would help create more of a pipeline for girls to enter STEM-related fields after graduation (Carter et al., 2015). This inherent link between FCS and STEM is strengthened by student participation in FCCLA. Students can participate in Students Taking Action with Recognition (STAR) events competitions at the national convention. STAR events allow students to demonstrate their knowledge and skills to actively identify issues concerning individuals, families, and communities to advocate for change (www.fccla.org). STAR event planning guides are closely tied to the NGSS (Carter et al., 2015). These guides equip students with the necessary tools to engage in inquiry-based practices to solve real-world challenges and problems. This embedded hands-on, project-based learning in FCS classes exemplifies the scientific foundation of the discipline and its ability to continue to evolve to fit the needs of students.

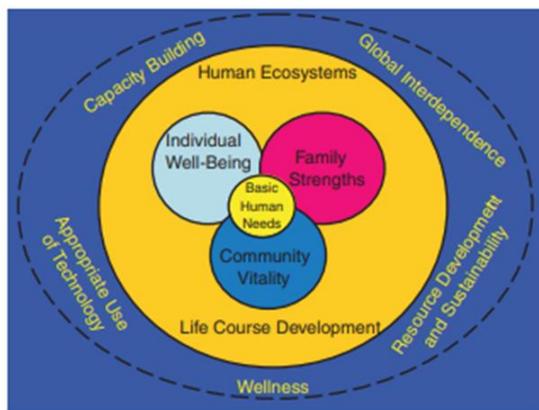
Learning how to think critically is an essential skill needed for developing literacy skills and constructing knowledge (Chaffee, 1992). Critical thinking allows students to solve problems and make decisions. Developing critical thinking skills is crucial for students to succeed in all areas of life, not just in education but in students' future workplaces and personal lives. One of the main goals of American education was to develop critical thinking and problem-solving skills (Snyder & Snyder, 2008). In today's global society, global citizenship depends on thinking deeply and reasoning fairly, which are identified as critical thinking skills (Sellars et al., 2018). Content in FCS classes naturally lends itself to critical thinking skills. FCS teachers continually challenge students to dig deeper into the learning, examine cause and effect, and analyze and

assess issues. Home economics' early inclusion of project-based and student-directed learning opportunities made it a radical form of pedagogy and surprisingly interdisciplinary in nature (Elias, 2011). The hands-on, authentic element of a FCS classroom promotes reflection on daily life and encourages connections to future life events (Swafford & Rafferty, 2016).

The mission of AAFCS is to use an integrative, holistic approach to promote the FCS body of knowledge (Figure 2 below) to professionals in the field (www.aafcs.org).

Figure 2

FACS Body of Knowledge (Retrieved from: www.aafcs.org)



Classes like nutrition, personal finance, and family relations allow students to put theory into practice. Students do not need to learn all the methods of egg preparation. Years ago, this lesson was necessary because a wife would not know how her future husband liked his eggs (Dreilinger, 2021). Today, a lesson on nutrition labels will enable students to assess how a food item fits into a person's dietetic needs when discussing the relationship between diet and disease. In a child development class, students may observe children to identify atypical behaviors that may indicate a developmental delay. Clothing and fashion students may examine various fabric treatments and finishes to determine their effects on fabric wearability. Today's teachers lead sophisticated discussions, making connections between science and hands-on experiences,

building students' critical thinking skills (Dreilinger, 2021). Human relationships have become increasingly complex with technology and social media in this modern age. FCS can help students critically analyze factors that influence healthy interpersonal and familial relationships (Swafford & Rafferty, 2016).

FCS falls under the category of CTE, which was previously known as Vocational Education. The Smith-Hughes Act of 1917 was the first vocational education law in the United States to provide federal money for secondary school vocational programs (U.S. DOEd, 1993). It was reauthorized as the Vocational Education Act of 1963 to expand federal funding in several categories and later reauthorized as the Carl D. Perkins Act of 1984 (U.S. DOEd, 1993). The Perkins Act placed more focus on legislation, program improvement, and advancing technology and training (U.S. DOEd, 1993). Since 1984, Perkins was reauthorized in 1990, 1998, 2006, and, most recently, in 2018. FCS was not included in the original draft of the 2018 Perkins reauthorization, and FCS-related professional organizations had to fight to ensure its inclusion (Dreilinger, 2021).

The goal of CTE programs has always been to prepare students for employment in one of the sixteen designated career clusters. FCS tends to be overlooked because it connects across several clusters (Dreilinger, 2021). There is a push for high school students to earn career-specific industry credentials in CTE classes. AAFCS offers various credentials that can prepare students for two-thirds of the careers in the *Occupational Outlook Handbook* by the Bureau of Labor Statistics (Makela, 2018). With much of the current debate surrounding undergraduate degrees and student loan debt, students in FCS are exposed to various careers after high school graduation that do not require an undergraduate degree. While bachelor's degrees have become the preferred qualification for job entry, the job market demands more middle-skilled workers

(Makela, 2018). These jobs do not require a bachelor's degree. The focus is shifting to making students career and college-ready, instead of recent years' either/or scenario. AAFCS offers 11 different assessments and certifications for secondary and post-secondary students that enable them to enter the workforce out of high school and pursue a degree later, if they choose (Makela, 2018). Industry collaborations and internships allow students to develop their critical thinking and problem-solving skills while increasing their job readiness for future employment (Marcketti & Karpova, 2014).

The FCS national standards contain 16 areas of study that have transferable skills and knowledge interwoven throughout. Whichever class a student takes, they have an opportunity to obtain transferable skills and certifications to prepare them for life after high school. In Virginia, there are 44 approved credentials for FCS students (VDOE, 2021). The credentials include nationally recognized assessments such as ParaPro, Praxis, Child Development Associate (CDA), and ServSafe. From a data request sent to VDOE (2021), there were 385,084 high school students in Virginia for the 2020-2021 school year. Of these students, 132,865 were enrolled in a FCS class. Nine thousand fifty-nine students were identified as a CTE completer; of these students, 4,436 students earned at least one FCS-related credential. Students have two diploma options in Virginia – standard or advanced studies. To receive a standard diploma in Virginia, students must complete at least 22 credits and obtain a CTE credential. Students who met the requirements of a CTE course sequence and received a credential are considered a CTE completer (VDOE, 2021). Students could potentially enter the workforce right after high school earning high pay based upon their CTE credentials.

The Future for Family and Consumer Sciences

The impact of the COVID-19 pandemic in 2020 was felt worldwide. Overnight, businesses, schools, and restaurants were closed; Americans quarantined at home. Suddenly, individuals and families needed to rediscover their home economics' roots (Dreilinger, 2021). One reason for this was the necessity for people to cook at home due to the closing of restaurants and social distancing. Another reasoning for this occurrence was the large amounts of time Americans suddenly found themselves trying to occupy. In response to the pandemic, flour and sewing machines disappeared from store shelves (Dreilinger, 2021). Social media feeds were filled with people making sourdough starters, sewing masks and other personal protective equipment, and even planting their own gardens. A new light shone on FCS – its relevance amplified as families struggled to adapt (Ogden, 2020). Dreilinger (2021) believes a revival is overdue, especially in the last twenty years of food blogs, Pinterest, Instagram, Project Runway, and eco-friendly fashion.

Many in the field are examining what FCS will do next to adapt to 21st-century challenges to keep with its mission of teaching students to achieve optimal well-being (McGregor, 2019). The year 2020 was a challenge in the wake of political and social protest amidst a pandemic. FCS is poised to tackle same-sex marriage in family studies, addressing diversity and divisiveness, caring for aging populations, climate change, and resource management (Hall et al., 2019). Some in the field propose FCS can help improve regions across the country (Hakeem, 2009; McGregor, 2019). The key to national prosperity is situated in more secure and thriving families (McGregor, 2019). Both nationally and globally, citizens are dealing with poverty, unemployment, sustainability, and other issues. These are the same issues that Richards saw a connection over 100 years ago. She recognized a thriving nation is dependent

upon the health and security of the family unit. Conversely, a thriving family depends on the country's health and security (McGregor, 2019). FCS is beginning to look inward and shift instruction back to its original reason for being created instead of outward at its specializations (Hakeem, 2009; Harden & Spangler, 2019).

FCS professionals seek to empower individuals to create alternative solutions to everyday challenges. Studies show that a healthy home environment influences family members' physical health, including their intellectual development and psychological wellness (Hakeem, 2009). Quite simply, FCS is about everyday living, through meanings, connections, and the learning that occurs through action and experiences in the classroom (McGregor, 2015). The future of FCS rests in the emerging leaders from Generation X and Millennials, as Baby Boomers retire. FCS needs future leaders who genuinely care about others and will challenge current and dominant paradigms in the field, as meeting human needs is the perennial focus of the discipline (McGregor, 2015).

FCS: Misunderstood and Overlooked

Over the years, many professionals have researched and studied FCS's various issues. However, each decade the same problems are again investigated, labeled, and discussed, but never resolved. Many had proposed the field has been lost since the late 1930s when incompetent leadership could not continue the momentum set forth by Richards (Marshall, 1973; Harden et al., 2018). Instead, the discipline became compartmentalized and specialized instead of maintaining its original synthesis. Many have asked how Richards's original plan become just the practice of cooking and sewing to so many (Marshall, 1973). Societal trends in the 1930s through the 1950s influenced changes in the discipline that shifted the focus to training young women to set up a home, establish a family, and manage family finances (Marshall, 1973;

Schneider, 2000; Harden et al., 2018). Preparing women for roles in the home and the labor force hijacked the original social reform mission; preparation for a particular work became more important than developing the individual (Schneider, 2000; Harden et al., 2018).

Leadership is still seeking to answer the same question set forth by Marshall (1973). Leaders have identified studies where FCS is still facing challenges in continued specializations instead of a comprehensive interdisciplinary field (Vincenti, 1990; Apple & Coleman, 2003; Harden et al., 2018). An overly specialized profession cannot survive in higher education; it will be broken apart and divided up in administrative power plays from other disciplines (Marshall, 1973). Teaching about nutrition goes together with family resource management, as does teaching about shelter with space utilization; the field cannot be fragmented (Schneider, 2000). Some have argued the pendulum needs to swing back to the founding idea of inspiring social responsibility and focus on an integrative collaboration (Harden et al., 2018).

The identity crisis has influenced how those outside the discipline perceive FCS as a content area. There has always been a concern in the field that society's perception of FCS did not match an accurate understanding of the profession's goals (Torrie & Wendland, 1993; Harden et al., 2018). Its image and perception have been a common theme in FCS research as it has tried to navigate the field's future direction (Harden et al., 2018). Many have voiced the continued need for assessing perceptions and attitudes towards the value and importance of FCS (Torrie & Wendland, 1993). FCS educators are committed to educating students to make lives better, but continually struggle for respect and recognition, often defending their curriculum and job importance (Schneider, 2000). No one would think of asking that of an English or science teacher.

Those in the profession have routinely discussed public perception of FCS. Many have ultimately questioned if the root of the perception problem lies in its mostly female population (Marshall, 1973; Schneider, 2000; Nickols & Kay, 2015; Harden et al., 2018). When FCS was first established as home economics, women's domestic roles were unquestioned, and as the years went by, it was regarded as a gendered discipline (Harden et al., 2018; Alharbi, 2019). By the 1970s, both male and female students took home economics classes (Marshall, 1973; Alharbi, 2019). Societal shifts during this time indicated both men and women would need training in how to be ready for marriage, parenthood, and other social roles to establish successful homes and challenge gendered roles (Marshall, 1973; Alharbi, 2019). As much as the profession has attempted to reverse this negative perception, it has still been criticized for perpetuating old stereotypes of gendered roles in the home.

There is a need for future research to understand why some still have no desire to think of home economics/FCS as anything but as a remnant of the 1950's kitschy culture (Elias, 2011). When someone recalls their home economics experience from their schooling, images of botched recipes, microwave cooking, and improperly sewn skirts and sleeves are instantly conjured. Memories of these lessons and activities can also elicit the feelings felt during the lesson. Some have recalled their lessons as some of the stupidest they have learned and left them scarred for life, despite acknowledging that their experience may not be indicative of all home economics/FCS classes (Schneider, 2000). Misconceptions such as those can stay throughout life; once the idea is in the mind, it is difficult to erase (Fedje, 1999). Misconceptions can be held in the mind, unconsciously, and reinforced by family, friends, media, popular culture, and government (Fedje, 1999). The vital skills of critical thinking, applied life skills, and cross-curricular ties that make up the foundation of FCS are often overlooked due to still widely held

misconceptions about the discipline (Fedje, 1999). FCS teachers are responsible for creating a new curriculum while simultaneously convincing stakeholders of its value (Fedje, 1999; Purcell, 2001). Furthermore, non-FCS professionals think they understand what FCS means just like they think they know what it means to be a doctor (McGregor, 2015). They assumed they know what FCS can teach, already knowing everything about families, food, and clothing (Schneider, 2000).

There have been several studies that have attempted to research the perceptions of FCS by various populations. These studies have revolved more around the perception of FCS by different groups such as parents, students, and teachers, or perception of a specific element of FCS (cooking education, standards, etc.) Studies regarding student and parent general perception of FCS indicated over 50% of respondents in grades 7-10 and 45% of juniors and seniors agreed FCS was one of the most important subjects (Nanayakkura et al., 2018; Hansen et al., 2019). Results also showed that FCS ranked just as important as physical education, health, and technology classes (Nanayakkura et al., 2018). Many believed cooking was a necessary skill to obtain before leaving home. Students believed classes such as FCS should remain an elective because a mandatory class designation would ruin the experience for those genuinely interested (Hansen et al., 2019). Students reported feeling their FCS teachers gave them more confidence in their skills and expressed appreciation for their FCS teachers and the social atmosphere they created (Hansen et al., 2019).

Researchers have attempted to investigate how principals perceive and supervise FACS programs. The earliest evidence of this was a 1948 American Vocational Association (AVA) study on factors affecting the job satisfaction of home economics teachers. Teachers reported negative attitudes towards their classes from other teachers in building as being for those students of lesser cognitive abilities building (AVA, 1948). The AVA recognized even then, it

would be in the best interest of home economics for principals to develop a better understanding of the programs and contributions to their school buildings by home economics classes. This would help improve the stature of home economics within the school community. Teachers who had knowledgeable administrators who respected home economics reported higher budgets, better equipment, and more opportunities for students to study home economics (AVA, 1948). Image and administrative support were listed as reasons why FCS teachers leave the profession early on. Teachers explained that FCS classes were considered dumping grounds for students who have nowhere else to go and that administrators had asked them to do a cooking show for faculty and collect and wash the new basketball uniforms (Arnett, 2012).

There are significant gaps in the literature regarding administrator perception of FCS. An investigation has found that administrator perception studies happen infrequently and span over extensive periods of time (AVA, 1948; Goldsmith, 1960; Webber, 1998; Barnum, 2018). The most recent perception studies involving administrators have also included other groups such as school counselors, state CTE administrators, and state legislators. These studies were conducted in Texas (Webber, 1998) and Utah (Barnum, 2018). For this reason, there is no current research involving administrator and counselor perception, and this study would add to the already existing body of literature. Furthermore, no perception studies of FCS have been conducted in Virginia. Both Webber (1998) and Barnum (2018) both suggested their studies be replicated in other states for future research.

Webber's 1998 study is the most recent comprehensive gatekeeper research. The study surveyed state education administrators, politicians, school counselors, and FCS teachers. Results indicated that respondents with strong leadership characteristics had the lowest FCS knowledge. Even those who possessed knowledge of FCS programs did not reflect a positive

attitude towards the discipline. Counselors had the least favorable attitudes toward FCS classes. Webber (1998) recommended that future research include clarifying the concept of gatekeepers in relation to FCS and replicating the study in a different geographical region of the United States. This study would provide current data and research regarding gatekeeping theory and its effect on FCS programs.

A school administrator's ability to effectively lead a school determines the trajectory of student achievement, the learning environment, and employee job satisfaction, among many other aspects of the day-to-day functioning of a school. Successful schools have principals who have knowledge and experience with current theories and practices of improving student achievement and the teaching/learning environment (Webster & Litchka, 2020). The role of the principal is multifaceted as they must balance operational management and instructional learning. Principals have struggled to balance the two sets of responsibilities since the inception of a principal in the 1900s (Kellough & Hill, 2015). Problem-solving, decision-making, and planning abilities are the most critical aspects of today's school administrators (Webster & Litchka, 2020). Teachers report a more supportive atmosphere when principals adopt a transformational school culture where leadership is shared, a collaborative decision-making process is utilized, and teachers feel valued by their expertise (Devine & Alger, 2011; Webster & Litchka, 2020).

By the very nature of their leadership role, principals are gatekeepers of a school. Gatekeepers have the power to control what comes in or goes out through the various gates in their charge (Lewin, 1947). Principals manage the gate regarding which classes are offered, based upon student enrollment and staffing needs, while also determining the budgets for each department to deliver instruction, effectively. For example, FCS classes will require a larger

instructional budget due to increasing food, materials, and equipment costs, depending on the class. Budget slashing due to NCLB mandates and standardized testing are often to blame; however, recessions in 2007 and 2020 have left school districts scrambling for appropriate funding (Danovich, 2018; Dreilinger, 2021).

There has long been a distinction in the grouping of classes between those deemed as academic or as an elective. Classes like music, art, FCS, CTE, and physical education (P.E.) all fall under the domain of electives. There is a lack of research comparing how principals act as gatekeepers between the two broad-content categories. "The principal effect" is an area of research in physical education classes where the principal acts as a gatekeeper of P.E. programming (Bradford et al., 2019). Research indicated an overall lack of knowledge about P.E. curricula and a general marginalization of the content. When stakeholders, such as administrators, devalue a particular content area, the already difficult task to provide quality educational experiences for students becomes even harder (Bradford et al., 2019). FCS commonly finds itself in the same situation. Many administrators have an overall lack of knowledge about FCS content. A state education department FCS administrator lamented that many people believe we sit around baking all day (Dreilinger, 2021). It is the experience of many FCS teachers, including the researcher, that principals do not understand FCS' content.

There are only slightly a few more studies regarding the perception of FCS held by school counselors. Two studies have been published since 1961 that surveyed counselors' definition and perception of FCS (Betz, 2010; Torrie & Wendland, 1993). Early studies of counselor perception primarily focused on perceptions in home economics as a career and what makes an ideal home economics' program (Betz, 2010). School counselors play an essential role during a student's academic study. The role of a school counselor is to aid students in academic

achievement strategies, manage emotions and develop interpersonal skills, and most importantly, plan for post-secondary options (ASCA, 2021). Their role in helping students create academic and career plans makes it critical that counselors advise students without negative stereotypes or perceptions of different courses or future career paths. Because of the school counselor's vital role, FCS teachers need to understand the various perceptions held in their schools.

School counselors have been a part of education since the early 1900s (Blake, 2020). During the early period of school counseling, the profession was known as vocational guidance. The primary role of counselors, who were often principals or teachers, was to match students with occupational placements based upon their aptitudes and abilities, similar to the career counseling performed by counselors today (Lambie & Williamson, 2004). During World War II, the counselor's role began to incorporate mental health to educate students on coping strategies for emotional needs (Blake, 2020). The Vocational Education Act of 1968 continued to emphasize the need for counselors to provide career guidance. The school counselor's role continued to evolve and grow over the next several decades to meet students' needs. During this period, they were referred to as guidance counselors, ancillary to the other faculty in a school (Blake, 2020). The change in name from guidance counselor to school counselor in the 1990s reflected the changing scope of work counselors performed in schools (Zyromaski et al., 2018). Today, the typical school counselor holds a master's degree in counseling and provides support for social and emotional needs, academic needs, and postsecondary counseling (Blake, 2020; Lambie & Williamson, 2004).

Research has documented school counselors' influence on students' academic and career planning (Blake, 2020; House & Hayes, 2002; Rosenbaum et al., 1996). Even years later, adults can recall what they deemed a life-defining experience with a school counselor. Statements like

“they would never be able to go to college” or “they would not be successful in a rigorous class like Chemistry” were commonly said by counselors (House & Hayes, 2002, p. 250). Counselors have admitted they have influenced students’ college decisions, going as far as telling parents their child should not apply to college (Rosenbaum et al., 1996). However, some have argued that counselors need to act as some type of gatekeeper, so that students have the necessary information required for completing high school and beyond (Rosenbaum et al., 1996).

However, counselors do not work in a vacuum. Collaboration with students, parents, teachers, and others in the school is part of the ASCA’s national model to effectively provide counseling and guidance to students (ASCA, 2021). Frequently, counselors are confronted with pushback from parents when they disagree with the counselors’ advice. As a result, counselors provide unclear and inadequate information for post-secondary prospects to avoid conflicts with parents (Rosenbaum et al., 1996). Counselors have reported they have had to choose between what is best for a student and what is in the school's best interest (Blake, 2020). One counselor shared her experience tracking down students to take standardized tests to protect the school’s ranking. One student had recently given birth and one incarcerated; tracking these students was not about eliminating obstacles for them to graduate, but ensuring the school met its testing requirements (Blake, 2020). Similarly, there is a push by school systems for more “ordinary” students to be included in Advanced Placement (AP) courses under the guise of providing them exceptional educational practices in an attempt to approve the school’s ratings and perception (Eppich, 2010).

Research has attempted to identify how counselors’ perception of FCS affects student enrollment (Betz, 2010; Johnson et al., 1987; Torrie & Wendland, 1993). These three studies identify school counselors as their primary or sole research audience. While counselors may play

a small role in student career choice, they significantly impact student scheduling and class placement. Earlier research studies (Johnson et al., 1987; Torrie & Wendland, 1993) indicated school counselors were supportive of FCS programs and regarded them as valuable, useful, and knowledge-oriented; however, the image of cooking and sewing was still persistent. The research found counselors had limited knowledge of FCS programs and could not identify specific examples of the curriculum (Betz, 2010). References were made to foods and parenting curriculum, but they failed to mention other areas of FCS. Counselors did reveal they push students into FCS classes because they believed the content holds valuable information and skills for everyday life. These findings indicated a change in FCS's perceptions compared to results from the earlier studies (Betz, 2010).

Researchers have come to a general consensus (Betz, 2010; Johnson et al., 1987; Torrie & Wendland, 1993) that continuous research on FCS marketing by school counselors to students is needed. Future research was recommended to include the marketing and collaboration between FCS teachers. Further research is required to identify and analyze counselors' perceptions of high school FCS programs (Betz, 2010). Furthermore, the study mentioned above is the most current research in the body of literature regarding counselor perception. This study seeks to add the body of literature regarding themes of counselor perception with current research.

Summary

Ellen Swallow Richards said, "The quality of life depends upon society's ability to teach its members how to live in harmony with their environment – defined first as family, then as a community, then the world and its resources" (McGregor, 2015, p. 14). Family and consumer sciences has a long and storied history in its mission to improve the lives of individuals, families, and communities. It recognized that the family is the basis of society, and the health of the

family is critical for a thriving nation. It encouraged individuals to take social responsibility for the improvement of communities. FCS provides various opportunities for students to develop critical thinking, reasoning, and decision-making skills in a learning environment that emphasizes hands-on practical learning. This curricular framework has roots in both social learning theory and experiential learning. FCS is just as relevant for today's students as it was over a hundred years ago, and maybe even more so if one looks deeply at the issues facing America.

Even though FCS still faces an identity and perception problem, research on how individual gatekeepers in school perceive the discipline may help shed light on how much has changed over the last decade. Many stakeholders in the field understand the value of FCS programs and the necessary skills that FCS teaches students. Understanding the perception of those who control access to FCS classes will provide critical information to allow FCS teachers to develop plans to advocate for their programs.

CHAPTER THREE: METHODS

Overview

The purpose of this quantitative, predictive correlation study is to determine what variables can predict administrators' and counselors' perception of FCS. The population for this study includes public high school administrators and school counselors. This chapter discusses the quantitative methods, defines the variables, and outlines the research questions and null hypotheses. Participants, sampling, procedures, and data analysis follows. This chapter also provides a thorough explanation of the survey instrument.

Design

This non-experimental quantitative study will utilize a predictive correlational design. Correlational research is a non-experimental research design that predicts and explains the relationship between variables (Gall et al., 2007; Kite & Whitley, 2017; Seeram, 2019). Correlational research is also used to detect differences in correlations, for example, investigating if two variables have the same relationship in groups, such as men and women (Kite & Whitley, 2017). Predictive correlational studies are widely popular in education because they explore causal relationships and predict scores from one or more variables' effects on another (Gall et al., 2007). Gall et al. (2007) define prediction research as "a type of investigation that seeks to predict future events, conditions or accomplishments from variables measured at an earlier point" (p. 649). The purpose of this study is to identify which combination of variables can predict the perception of family and consumer sciences programs by administrators and school counselors.

In a predictive correlational research design, variables are selected because it is suspected that one or more variables, X, may impact or influence Y (Warner, 2021). Riazi (2016) explained

that defining variables in a research study is at the researcher's discretion, depending on their research questions. Predictor variables are defined as independent variables that influence other variables in quantitative research designs that utilize regression analysis (Gall et al., 2007; Salkind, 2010). This study contains four predictor variables, administrators' and counselors' years in education, gender (male/female), VDOE region of Virginia (Central, Tidewater, Northern Neck, Northern Virginia, Valley, Western Virginia, Southwest, and Southside), and FCS curricular content knowledge. The criterion variable is defined as the dependent variable, which changes because of the result of the cause-effect relationship of the predictor variable (Gall et al., 2007). This study's criterion variable is attitudes towards FCS.

Research Questions

RQ1: How accurately can administrators' perceptions of FCS be predicted by a linear combination of their years in education, gender, region of the state, and FCS curricular content knowledge?

RQ2: How accurately can counselors' perceptions of FCS be predicted by a linear combination of their years in education, gender, region of the state, and FCS curricular content knowledge?

Hypotheses

The null hypotheses for this study are:

H₀₁: There will be no significant predictive relationship between the criterion variable (administrator's perception of FCS as measured by the Value of FACS in Public schools Survey) and the linear combination of predictor variables (years in education, gender, region of the state, and FCS curricular content knowledge).

H₀2: There will be no significant predictive relationship between the criterion variable (counselor's perception of FCS as measured by the Value of FACS in Public schools Survey) and the linear combination of predictor variables (years in education, gender, region of the state, and FCS curricular content knowledge).

Participants and Setting

The population for this study draws upon administrators and school counselors in the Commonwealth of Virginia. According to the Virginia Department of Education (VDOE), there are 305 public high schools (2021). To become a principal in Virginia, one must have obtained a master's degree from an accredited university, completed three years of successful teaching in public or private school, completed an approved program in supervision and administration from an accredited university, completed a supervised internship consisting of 320 clock hours, and pass the school leaders licensure assessment (VDOE, 2021). National statistics provided by the United States Department of Education - National Center for Education Statistics (NCES) 2011-2012 *Schools and Staffing Survey (SASS)* show that 55% of administrators are female and 45% are male (U.S. Department of Education, 2016). The average age of a school principal is 54 years. A request for Virginia-specific demographics was submitted to VDOE; however, the data requested does not exist (VDOE, Personal communication, November 9, 2021).

There are two paths to licensure as a school counselor in Virginia, according to the VDOE. The first option states that a candidate must have earned a degree from an accredited in-state school counselor preparation program with at least 200 clock hours divided between elementary and secondary settings along with two years of either successful full-time teaching or full-time experience as a school counselor. The second path is the same as option one, except that the program may have been completed out-of-state. National demographics from the

American School Counselor Association's (ASCA) 2020 State of the Profession Report showed most school-counselors are female (87%), and the majority (38%) are aged 40 years or younger (ACSA, 2021). A request for demographics for school counselors in Virginia was submitted to VDOE; however, VDOE (2021) reported this data does not exist (VDOE, Personal communication, November 9, 2021).

Participants

The participants for this study will be drawn from a convenience sample of public-school administrators and school counselors from across Virginia. High school principals and school counselors in all 95 counties will be invited to voluntarily participate in the survey, totaling approximately 305 administrators and 1,500 school counselors. For a predictive correlation design using multiple regression analysis, a minimum of 66 respondents was needed assuming a medium effect size, power of .7 statistical, and an alpha set to .05 (Warner, 2021). A total number of 67 participants responded, which met the large effect size. Demographics from the sample indicated that 11 male and five female administrators responded to the survey. The data showed most respondents came from the Northern Virginia region. Of the administrators who responded, three have been in education for 21 or more years, five for 16-20 years, and two for 11-15 years. Demographics from the sample indicated that 11 male and 41 female school counselors responded to the survey. The data showed most respondents came from the Northern Virginia region. Of school counselors who responded, 12 have been in education for 21 or more years, eight for 16-20 years, eight for 11-15 years, seven for seven -10 years, five for four - six years, and 12 for one - three years.

Setting

The study setting includes public rural, suburban, and urban school systems in Virginia to have a broad sampling of schools and the needs of FCS programs. This study did not include private schools because they do not require FACS programs. FACS is required as part of CTE in Virginia public schools (VDOE, 2022).

Instrumentation

Barnum's (2018) "*Value of FACS in Public Schools*" survey was used to measure both administrator and school counselor attitudes and beliefs towards FCS. The original purpose of Barnum's (2018) instrument was to evaluate the attitudes of administrators, school counselors, and teachers in one Utah county for a study she conducted in 2015. See Appendix B for instrument. Barnum (2018) based her original instrument on a similar 1993 study by Wendland and Torrie. Wendland and Torrie (1993) conducted a study to assess the perception of home economics by high school parents, students, and counselors. Barnum (2018) utilized the word pairings from Wendland and Torrie (1993) to create her instrument for a small-scale study in one Utah county to determine the value of FCS programs by high school administrators, school counselors, and FCS educators.

In 2018, Barnum updated the 2015 instrument for her dissertation to include all 41 counties in the state of Utah. Questions were developed from six conceptual areas: perceptions of FCS programs, FCS courses, skills, and employment preparation, support for FCS courses and academic standards of FCS, professional development in FCS, additional thoughts on FCS programs, and why did teachers say "Yes to FCS"? (Barnum, 2018). The questions were first submitted to a group of Utah FCS educators to review clarity and reliability in 2013, prior to data collection from Barnum's 2015 research study. The instrument was updated to incorporate a

larger survey population for the 2018 research study (Barnum, 2018). Following revisions, a pilot study of the instrument was conducted by sixteen FCS educators where validity, relevance, and clarity were reviewed. Several suggestions were made to change the different conceptual area titles and minor updates to the wording of questions (Barnum, 2018). To date, no other peer-reviewed studies have utilized Barnum's (2018) instrument. However, Wendland and Torrie's (1993) study has been cited in several peer-reviewed studies, including Smith et al. (2001), Stonely and Klein (2004), and Smith et al. (2005). Construct validity for the instrument was derived from the results of Barnum's 2015 original study, in which she surveyed one Utah county. Critique from the pilot study resulted in a final survey of 23 questions pertaining to administrators, 23 questions pertaining to school counselors, and 32 questions pertaining to FCS teachers, along with demographic questions. A self-reporting survey was created using a four-response Likert-type scale rating system where each question is analyzed individually, in which the questions are stand-alone but retain a portion of Likert response choices (Barnum, 2018). Responses were as follows: Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, and Strongly Disagree = 1. Barnum (2018) did not combine responses into a composite scale.

The final survey was sent to 260 administrators, 980 school counselors, and 538 FCS teachers in Utah public high schools in May 2018. The survey was distributed to all public high school FCS teachers in Utah through the Utah Education Network's FCS listserv. FCS educators were asked to forward the survey onto the administrators and counselors in their building (Barnum, 2018). The email contained an introduction to the study and a link to the SurveyMonkey research instrument. Upon opening the survey, participants granted consent to proceed through the rest of the questions. The survey allowed participants to skip questions they felt uncomfortable answering and took approximately ten minutes to complete (Barnum, 2018).

Participants could register to win one of eight \$25 Amazon gift cards upon completion. Weekly follow-up emails were sent to remind participants to complete the survey, and a participation thank you. The survey closed, and data analysis began in June 2018.

Data collection and analysis were completed using Statistical Package for Social Sciences (SPSS). The researcher was the sole scorer responsible; thus, no training was needed. Data was broken down by the three population groups and further organized by the five conceptual areas (Barnum, 2018). Several statistical procedures were used to analyze the data, including frequency distributions, measure of central tendency, percentages, analyses of variance using Kruskal-Wallis H test, and a post-hoc Mann-Whitney U test with a Bonferroni adjustment (Barnum, 2018). The Mann-Whitney was utilized as a non-parametric alternative because the questions were scored independently between the three groups, and Barnum (2018) did not want to combine responses into a composite score. Reliability tests using Cronbach's alpha indicated $\alpha = .89$ for administrators, $\alpha = .90$ for school counselors, and $\alpha = .89$ for FCS teachers. Upon analysis, several questions showed weak correlations; however, if removed, alpha would have been significantly lowered (Barnum, 2018). Permission to use the questionnaire was obtained from Dr. Shelliann Barnum in August 2021. See Appendix A for permission to use instrument.

Procedures

Institutional Review Board (IRB) approval was obtained from Liberty University on May 6, 2021. See Appendix B for IRB approval. For this study, permission was obtained from the family and consumer sciences program specialist at the VDOE to disseminate the survey through the Virginia FCS listserv. This ensured a quick survey distribution to all public high schools with FCS programs in the Commonwealth. The email contained an invitation to participate in the survey using Qualtrics, an explanation of the purpose of the study, a copy of the informed

consent form, and a link to the survey. Participants signed the consent form electronically, before beginning the survey. See Appendix C for participant consent form.

Initial invitations were sent on May 9, 2022. Due to a low response rate, the researcher emailed administrators and school counselors on May 20 and June 3, 2022. Email reminders were sent every two weeks to participating schools. The total time for completion of the data collection was six weeks. The survey closed on June 22, 2022. A follow-up email was sent at the survey's close, thanking individuals for their participation. No individuals needed to be trained to administer the survey. All data collected from the survey was anonymous. No email addresses were collected during data collection to ensure the anonymity and confidentiality of participants. Results from the survey were downloaded and stored in an encrypted file on the researcher's password-protected computer. Data from the survey were coded and uploaded into SPSS for statistical analysis. Findings are discussed in Chapter 4.

Data Analysis

For a predictive correlation design, data analysis involves correlating scores on each predictor measure with the criterion scores (Gall et al., 2007). Multiple linear regression is the chosen statistic for data analysis for this research study. Multiple linear regression is used when there are two or more independent variables and one dependent variable (Kite & Whitley, 2017). Its purpose is to "derive an equation that predicts scores on some criterion (dependent) variable from a set of predictor (independent) variables" (Kite & Whitley, 2017, p. 446). Multiple linear regression can also be used to explain the degree of relationship within a set of predictor variables, similar to an analysis of variance (Kite & Whitley, 2017). While several multivariate statistics are available for data analysis, multiple linear regression is best for this research study because of its ability to predict scores on a criterion variable from a set of predictor variables.

This study has two criterion variables: administrator and counselor perception of FCS and four different predictor variables. It ultimately seeks to determine which of the four independent variables – gender, years in education, age, and region of Virginia – or a possible combination of variables, can predict how an administrator or school counselor perceives FACS. Two analyses will be conducted, one for administrators and one for counselors.

Initial data screening included a visual check for any missing data points and inaccuracies. The researcher searched for inconsistencies on each variable. An Assumption of Bivariate Outliers was conducted using scatter plots between all pairs of independent variables (x_1, x_2), the predictor variables (x), and the criterion variable (y). A matrix scatter plot was used to detect any outliers. Wagner (2021) identified this as the first step in regression analysis. One outlier was detected. Multiple regression requires three assumption tests (Wagner, 2013). An assumption of linearity test and bivariate normal distribution tests were conducted. For assumption of linearity, the researcher looked for a linear relationship between each pair of variables. If the variables are not linearly related, the power of the test is reduced. This assumption was tested by plotting a scatter plot for each pair of predictor variables (x_1, x_2) and between the predictor variables (x) and the criterion variable (y). The assumption of linearity was met. The assumption of bivariate normal distribution was met.

Lastly, an Assumption of Multicollinearity was conducted to ensure no indication of a Variance Inflation Factor (VIF). The presence of a VIF would indicate that two predictor variables are highly correlated, thus giving the same information about the criterion variable (Wagner, 2013). If one variable is highly correlated with another predictor variable, they provide the same information (Denis, 2020). A large VIF (greater than 10) indicates a potentially serious

problem (Denis, 2020). Denis (2020) states acceptable VIF values are 1-5. Alpha level for multiple regression was set at .05. The null hypothesis was rejected at the 95% confidence level.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this quantitative, predictive correlation study was to determine what variables can predict administrators' and counselors' perceptions of Family and Consumer Sciences. The study contained four predictor variables, years in education, gender, region of Virginia, and knowledge of FCS content. The criterion variable was perception of FCS programs. This chapter discusses data analysis, descriptive statistics, statistical analysis, and inferential statistics for each of the research questions and null hypotheses. Finally, this chapter will identify if the null hypotheses are rejected.

Research Questions

RQ1: How accurately can administrators' perceptions of FCS be predicted by a linear combination of their years in education, gender, region of the state, and FCS curricular content knowledge?

RQ2: How accurately can counselors' perceptions of FCS be predicted by a linear combination of their years in education, gender, region of the state, and FCS curricular content knowledge?

Null Hypotheses

H₀1: There will be no significant predictive relationship between the criterion variable (administrator's perception of FCS as measured by the Value of FACS in Public schools Survey) and the linear combination of predictor variables (years in education, gender, region of the state, and FCS curricular content knowledge).

H₀2: There will be no significant predictive relationship between the criterion variable (counselor's perception of FCS as measured by the Value of FACS in Public schools Survey) and

the linear combination of predictor variables (years in education, gender, region of the state, and FCS curricular content knowledge).

Data Screening

Data were screened before analysis to determine any inconsistencies on each variable. A matrix scatter plot was used to detect any bivariate outliers between the predictor and criterion variables for both administrators and counselors. One outlier was identified and removed from further analysis from the administrator group. See Figure 3 for the matrix scatter plot for administrators. See Figure 4 for the matrix scatter plot for counselors.

Figure 3

Matrix scatter plot (Administrator)

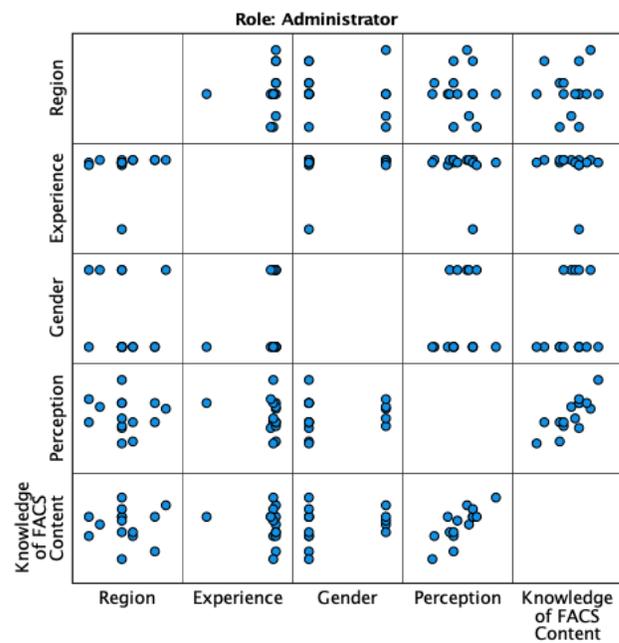
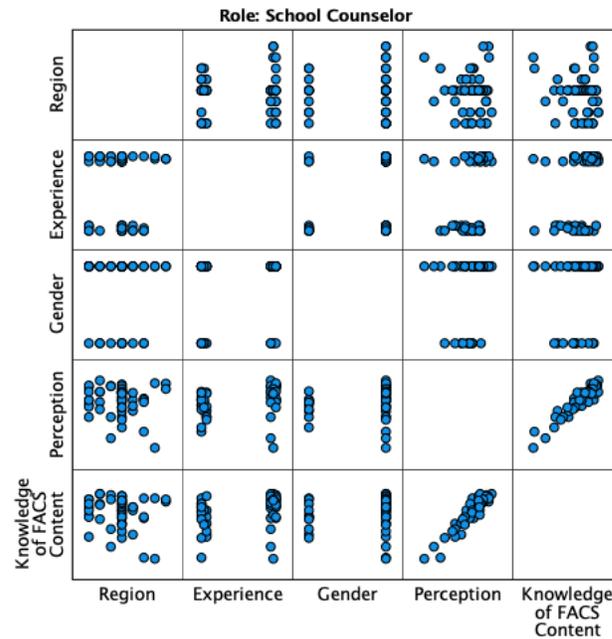


Figure 4*Matrix scatter plot (Counselor)*

Descriptive Statistics

Descriptive statistics were obtained for each of the variables. The sample consisted of 67 participants, even though initial data collection indicated 117 responses. The data were cleaned to eliminate those responses that were incomplete or missing critical information, such as one of the independent variables. The complete scores from the 4-point Likert-scale ranged from 14 to 190; a higher score indicated a positive perception, and a lower score indicated a negative perception. Sub-scores were obtained from those questions directly related to FCS content to determine what level of understanding administrators and counselors had about FCS content. Scores ranged from 14 to 73, with a higher score showing a more concrete understanding of FCS content. A lower score indicated respondents had minimal knowledge of FCS content. Descriptive statistics indicated most of the respondents were female counselors from the Northern Virginia region with 19 years of experience and had a positive perception of FCS with

a mean score of 143.7. Descriptive statistics are found in Table 1.

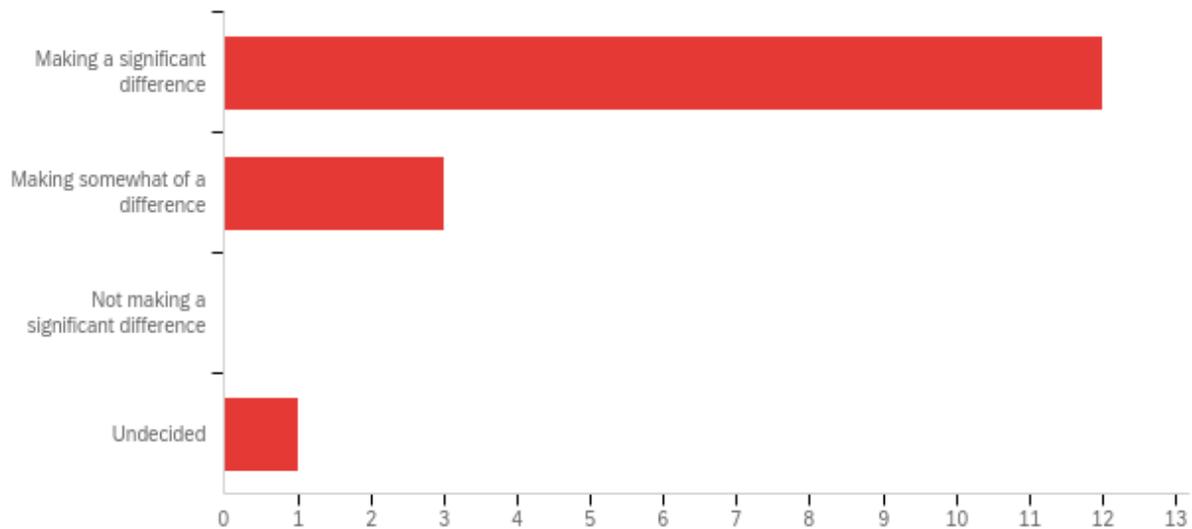
Table 1

Descriptive Statistics

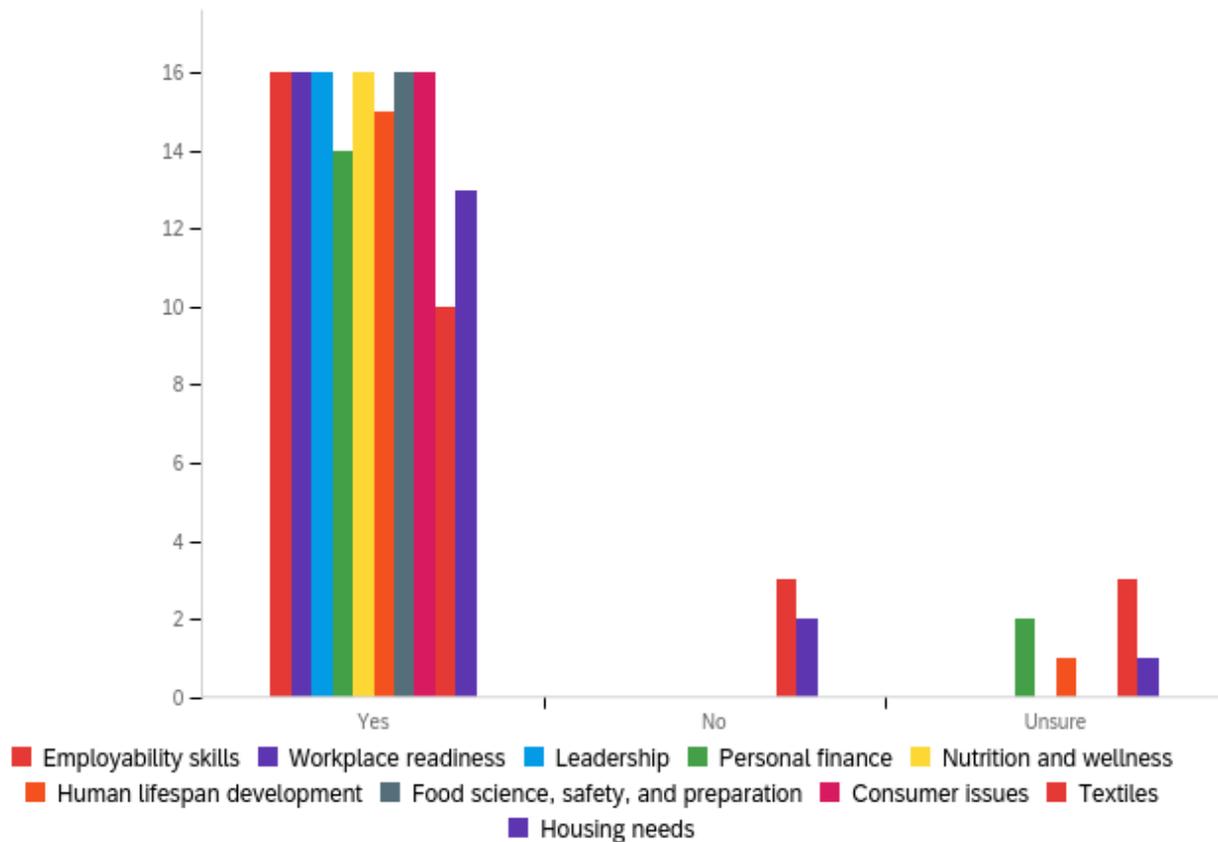
	<i>n</i>	Min.	Max.	<i>M</i>	<i>SD</i>
Region	67	1	8	3.88	1.838
Role	67	1	2	1.78	.420
Experience	67	1	30	19.40	13.221
Gender	67	9	10	9.69	.467
Perception	67	14.00	190.00	144.850	36.09678
Knowledge of FCS	67	14.00	73.00	58.6269	13.25374
Content					
Valid <i>n</i> (listwise)	67				

Survey Results

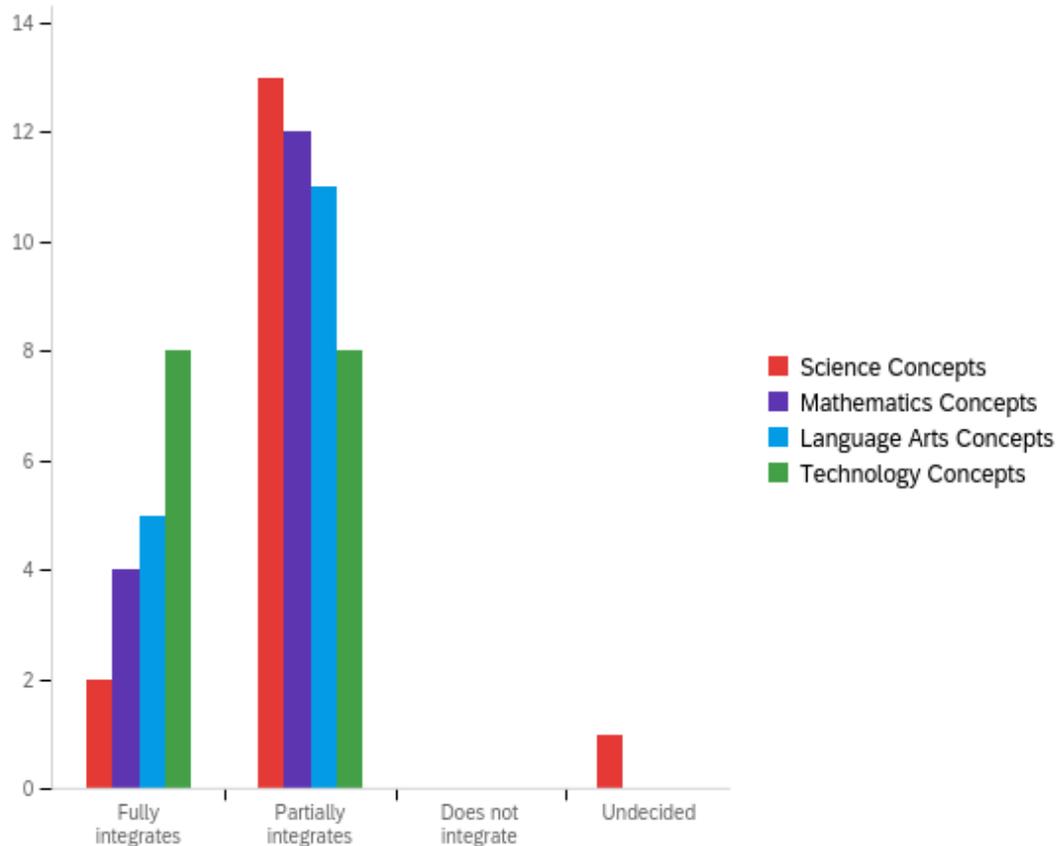
Questions eight through 11 and 17-23 were used to determine a participants' overall knowledge of FCS content. These questions asked participants to rate how FCS was respected in their building, impact of FCS content on students' employability skills, incorporation of core academic standards, as well as the specific topics covered in these classes. All administrative participants stated FCS was respected/somewhat respected and that FCS is in demand in their buildings. 12 administrators stated that FCS is making a significant difference, while the other administrators had mixed reviews. See Figure 5 below. They also believed that FCS is just as important, if not more, in comparison to other Career and Technical Education (CTE) courses such as technical education and business education classes.

Figure 5*Administrator Response to Question 9*

All administrators expressed that the FCS teacher(s) in their building always express passion about their content, while also showing job satisfaction and speaking positively about the support they receive. Most administrators responded that FCS classrooms are filled with active learning and collaboration being balanced between being teacher-centered and student-centered. They also responded that FCS classes enhance skills that prepare students to be highly employable after graduation, with 14 administrators stating they were familiar with industry credentials students can receive. One was undecided. Question 20 asked administrators which specific topics were covered in FCS classes. Most of the administrators were able to identify which topics were covered. Textiles and housing needs were the two topics that were the hardest for administrators to identify. See Figure 6 below for administrator response distribution.

Figure 6*Administrator Responses to Question 20*

When asked to rate the level of academic rigor associated with FCS standards, administrator response was mixed. The majority believe FCS content standards are moderately challenging with several choosing rigorous. One administrator stated FCS standards are categorized as easy. Most administrators recognized FCS classes do integrate concepts from three main core subjects of science, math, and language arts along with technology concepts. Most identified that there is a partial integration of all areas, with science having the largest impact. See Figure 7 below.

Figure 7*Administrator Responses to Question 23*

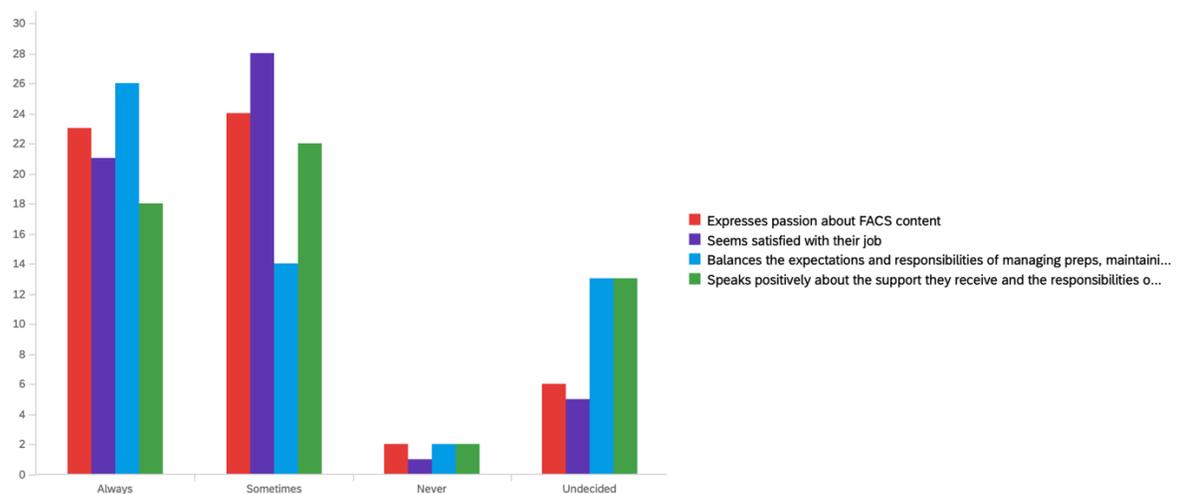
School counselor responses had more variation in how they perceived FCS when compared to how administrators answered the same questions. While most counselors' responses all tended to be positive, there were more negatively recorded responses. 26 counselors responded FCS is respected, 23 said somewhat respected, five said it is not respected and one was undecided. Counselors reported they believed FCS is making a difference for students. The majority of counselors stated it was either making somewhat of a difference ($n=23$) or making a significant difference ($n=29$). Six counselors stated that FCS is not making difference or that they were undecided. Coincidentally, when asked about the importance of FCS in comparison to other CTE classes, the similar amounts of counselors who stated FCS was making a difference, said it was equally important or more important than other CTE classes. Seven counselors stated

FCS was less important than other CTE classes or undecided. When asked about the demand for FCS classes, 26 counselors reported it is in high demand and 22 said it is somewhat in demand. Two counselors said FCS is used as a last resort or “dumping ground” with five counselors undecided on the current status of FCS in their building.

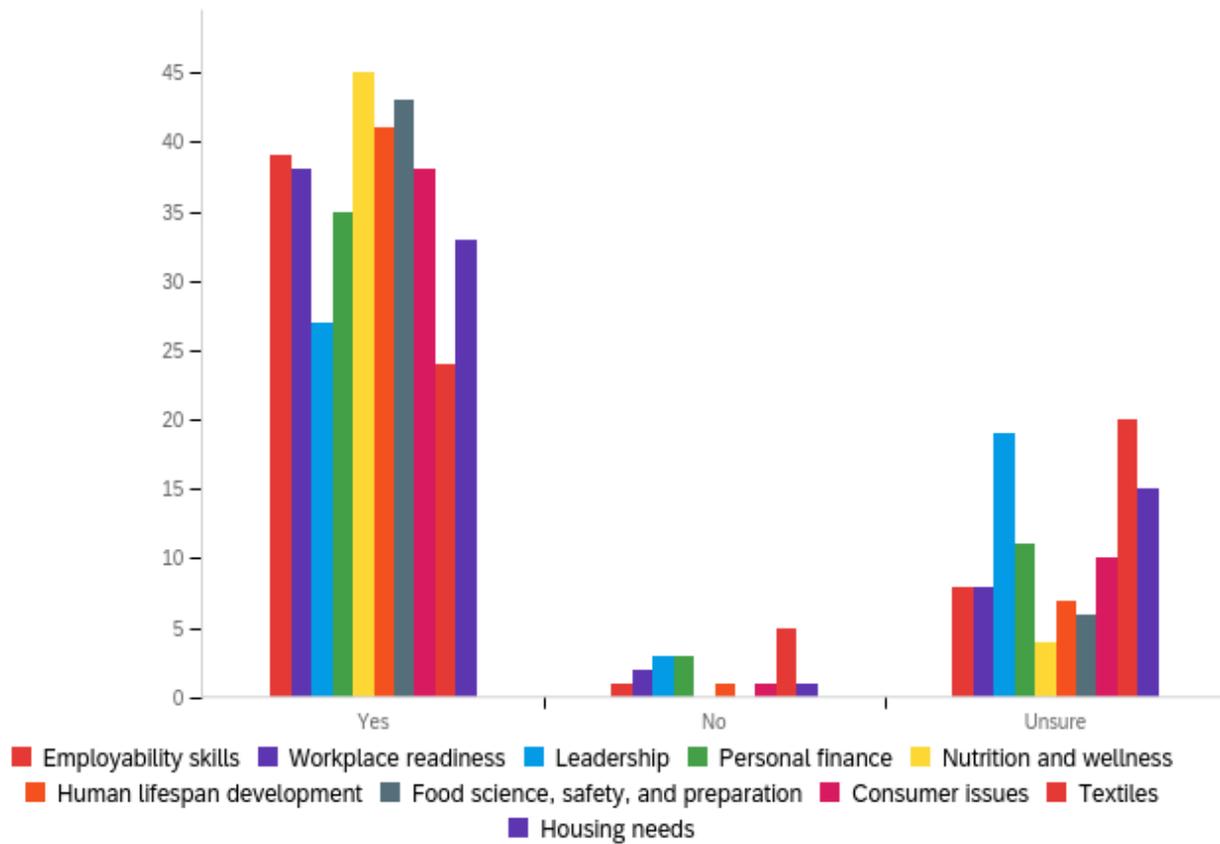
Counselors had similar responses to administrators in that most believed the FCS classroom is a place for active learning collaboration, balanced between teacher and student centered, although they tended more towards student centered. Counselors also stated that FCS classes teach students essential skills to make them highly employable. However, perception of the teacher(s) was not as positive as administrators. Over half of counselors responded that the FCS teacher(s) in their schools either always/sometimes expressed passion about their content while also showing job satisfaction and speaking positively about the support they receive. However, the remaining responses indicated the FCS teacher(s) never did these things or were undecided. See Figure 8 for counselor responses.

Figure 8

Counselor Responses to Question 14



When asked to rate the level of academic rigor associated with FCS standards, counselor response was mixed. 24 counselors believed FCS content standards are moderately challenging with only two choosing rigorous. 20 counselors responded that FCS standards are easy. The remaining responses were undecided. Interestingly, when framing this question with a counselor's knowledge of industry certifications and credentials available to students, a similar amount of counselors ($n=36$) said they were aware. 20 counselors said they were not aware of any certifications and credentials available to students. Most counselors recognized FCS classes do integrate concepts from three main core subjects of science, math, and language arts along with technology concepts. However, when asked which topics were specifically taught in FCS classes, more counselors were unable to correctly identify which topics were covered or were unsure. See Figure 9 below for counselor responses to topics taught in FCS.

Figure 9*Counselor Responses to Question 20*

Assumption Testing

Assumption of Linearity

To use a multiple regression, assumption tests must be conducted first. A matrix scatter plot was used to determine if the assumption of linearity was met for both administrators and counselors. The assumption of linearity was met for both groups. See Figures 1 and 2 for the matrix scatter plot.

Assumption of Bivariate Normal Distribution

Multiple regression also requires the assumption of a bivariate normal distribution to be met. The assumption of bivariate normal distribution was met for both administrators and counselors. See Figures 1 and 2 for the matrix scatter plot.

Assumption of Multicollinearity

A Variance Inflation Factor (VIF) test was conducted to confirm the absence of multicollinearity. A VIF test was utilized because one predictor variable should not be highly correlated with another predictor variable, thereby giving the same information about the criterion variable. A VIF should be between 1 and 5; anything higher than 10 indicates multicollinearity. The absence of multicollinearity was met between the variables. See Table 2 for collinearity statistics.

Table 2*Collinearity Statistics*

Role	Model		Collinearity Statistics	
			Tolerance	VIF
Administrator	1	Region	.945	1.058
		Experience	.902	1.109
		Gender	.862	1.160
		Knowledge of FACS	.906	1.104
		Content		
School	1	Region	.971	1.030
Counselor		Experience	.852	1.173
		Gender	.946	1.057
		Knowledge of FACS	.857	1.166
		Content		

a. Dependent Variable: Perception

Results

A multiple regression was utilized to determine how well the four predictor variables predicted the criterion variable, perceptions of FCS. The four predictor variables were the region of Virginia, total experiential years in education, gender, and knowledge of FCS content. Data was analyzed by separating the data into two groups, administrators, and counselors, before conducting the multiple regression. The linear combination of the four predictor variables indicated there was a significant relationship related to an administrator's perception of FCS,

$F(4,10) = 4.771, p = .021$. The researcher rejected null hypothesis one at the 95% confidence level. Alpha level was set at $p = .05$.

Another multiple regression was used to determine the linear combination of the four predictor variables (region of Virginia, total experiential years in education, gender, and knowledge of FCS content) had a relationship with counselors' perception of FCS, the criterion variable. The linear combination of the four predictor variables indicated there was a significant relationship related to a counselor's perception of FCS, $F(4,47) = 94.5, p = .001$. Alpha level was set at $p = .05$. The researcher rejected null hypothesis two at the 95% confidence level. See Table 3 for regression model results.

Table 3*Regression Model Results*

Role	Model		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
Administrator	1	Regressi	706.892	4	176.723	4.771	.021 ^b
		on					
		Residual	370.441	10	37.044		
		Total	1077.333	14			
School Counselor	1	Regressi	63167.227	4	15791.807	94.501	<.001 ^c
		on					
		Residual	7854.080	47	167.108		
		Total	71021.308	51			

a. Dependent Variable: Perception

b. Predictors: (Constant), Knowledge of FACS Content, Region, Experience, Gender

c. Predictors: (Constant), Knowledge of FACS Content, Region, Gender, Experience

The model's effect size for administrators was large, where $R=.810$ and $R^2=.656$, indicating that the linear combination of predictor variables can explain 66% of the variance of the criterion variable. c, where $R=.943$ and $R^2=.889$, indicating that the linear combination of predictor variables can explain 89% of the variance of the criterion variable. See Table 4 for the model summary.

Table 4*Model Summary*

Role	Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>SEM</i>
Administrator	1	.810 ^a	.656	.519	6.08639
School Counselor	1	.943 ^b	.889	.880	12.92703

a. Predictors: (Constant), Knowledge of FACS Content, Region, Experience, Gender

b. Predictors: (Constant), Knowledge of FACS Content, Region, Gender, Experience

Because the researcher rejected both null hypotheses, an analysis of coefficients was required. The coefficients determined that knowledge of FCS content was the best predictor of an administrator's perception of FCS, where $p = .002$. The coefficients determined that knowledge of FCS content was also the best predictor of a counselor's perception of FCS, where $p = <.001$. See Table 5 for coefficients.

Table 5*Coefficients^a*

Role	Model		Unstandardized		Standardized	t	Sig.
			Coefficients		Coefficients		
			<i>B</i>	<i>SE</i>	β		
Administrator	1	(Constant)	74.341	37.193		1.999	.074
		Region	-.409	.830	-.094	-.493	.633
		Experience	-.096	.250	-.075	-.385	.708
		Gender	-.489	3.590	-.027	-.136	.894
		Knowledge of FACS Content	1.612	.394	.796	4.088	.002
School Counselor	1	(Constant)	-52.706	43.874		-1.201	.236
		Region	.852	1.027	.041	.829	.411
		Experience	.080	.143	.030	.562	.577
		Gender	4.869	4.512	.054	1.079	.286
		Knowledge of FACS Content	2.434	.138	.927	17.694	<.001

a. Dependent Variable: Perception

CHAPTER FIVE: CONCLUSIONS

Overview

Chapter Five begins with a discussion of the survey results in relation to each individual research question. The findings from the study are compared to previous research studies to determine if there are any similarities or differences. The chapter will also examine study limitations and implications. Chapter Five ends with recommendations for future studies.

Discussion

The purpose of this quantitative, predictive correlation study was to determine which variables can predict administrators' and counselors' perception of family and consumer sciences (FCS). A 28 question 4-point Likert-scale survey was sent out across the Commonwealth of Virginia to all public high school administrators and school counselors via the FCS listserv and through email. The survey was open during May and June 2022, in which a total of 68 useable responses were recorded. Initial data screening revealed a mostly positive perception of FCS by both administrators and school counselors.

Administrators

The first hypothesis stated that there will be no significant predictive relationship between the criterion variable (administrator's perception of FCS) and the linear combination of predictor variables (years in education, gender, region of the state, and FCS curricular content knowledge). The linear combination of the four predictor variables indicated there was a significant relationship related to an administrator's perception of FCS, $F(4,10) = 4.771, p = .021$. The researcher rejected the null hypothesis because of this relationship. The model's effect size for administrators was large. Further testing indicated FCS curricular knowledge can predict how

an administrator perceives FCS programs. Results from the survey indicated administrators had a strong knowledge of FCS content.

An administrator's knowledge of FCS is going to be dependent on a variety of factors, including, prior experience with FCS, interactions with teachers, students, and parents, and communication from the Career and Technology Education (CTE) office. CTE in Virginia directly correlates certain standards with future workplace readiness skills so students can be highly employable after graduation. FCS falls under the CTE umbrella, with these standards and skills embedded into the various curriculums. Administrators are required to report the various credentials students earn to their district's central office. This could explain why administrators rated the standards and importance of FCS very highly.

They were able to identify which concepts were included in FCS curriculum, although textiles and housing needs were the two topics that were not identified. These topics were taken directly from the Virginia Department of Education's (VDOE) website on the FCS webpage. This can most likely be attributed to the fact that textiles and housing are not widely taught throughout Virginia. An administrator's role as a leader, naturally lends itself to a different understanding of the inner workings of a school building. Administrators are responsible for adequately staffing the school based upon student needs, giving them more insight into which classes are in high demand, such as FCS.

However, what an administrator sees in a classroom, is going to depend greatly on the teacher. It is widely known that a teacher can either make or break an elective program (Goldsmith, 1960; Webber, 1998). Administrators must observe teachers throughout the year, which could explain why they are more likely to be able to identify the topics and skills in FCS classroom, along with describing it as an environment with active collaboration and core

integration. They reported that the FCS teachers in their building taught with enthusiasm and were positive about the support they received from administration. Teachers report a more supportive atmosphere when principals adopt a transformational school culture where leadership is shared, a collaborative decision-making process is utilized, and teachers feel valued by their expertise (Devine & Alger, 2011; Webster & Litchka, 2020).

Overall, results from this study confirm findings from several prior research studies in not only FCS, but also in other elective classes, such as physical education. A 1948 perception study by the American Vocational Association (AVA) concluded a clear understanding of the program by administrators led FCS (home economics) to a well-respected position in the school community. Previous research has shown a direct correlation between an overall lack of knowledge about a specific content area and how the content is viewed (Bradford, et al., 2019).

Similarly, other perception studies involving administrators (Goldsmith, 1960; Webber, 1998; Barnum, 2018) reported favorable attitudes and perceptions towards FCS programs. While knowledge and perception are often assessed together, prior research found that knowledge of FCS does not always equate to a positive perception (Webber, 1998). Webber's (1998) results indicated an administrator's leadership type coupled with their FCS knowledge was a better predictor of their perception of FCS. Administrators who were identified as strong leaders through the research instrument, had low FCS knowledge and in turn, had a negative FCS perception (Webber, 1998).

Leadership style can affect a multitude of factors in a school building. Successful schools, likewise, successful programs, are led by principals who apply their curricular knowledge and experience to enhancing the learning environment (Webster & Litchka, 2020).

Two administrators emailed saying they wanted to participate in the survey because they loved the opportunities FCS provides for students, however due to budget and staffing, they did not offer FCS at their schools. One could argue that even if an administrator is a positive leader and has a positive perception of FCS, in this era of mandated testing and budget restraints, these and other issues can be a bigger influence on a principal's gatekeeping practices (Danovich, 2018; Dreilinger, 2021).

School Counselors

The second hypothesis stated that there will be no significant predictive relationship between the criterion variable (counselor's perception of FCS) and the linear combination of predictor variables (years in education, gender, region of the state, and FCS curricular content knowledge). The linear combination of the four predictor variables indicated there was a significant relationship related to a counselor's perception of FCS, $F(4,47) = 94.5, p = .001$. The researcher rejected the null hypothesis because of this relationship. The model's effect size for counselors was very large. Further testing indicated that FCS curricular knowledge can predict how a school counselor perceives FCS programs. A key factor in this discrepancy could be attributed to the fact that there was a much higher response rate of school counselors than administrators. School counselors also have more interactions with faculty and students, in addition to parents, that give them more of a "pulse" on what is actually being said about FCS classes. A counselor's perception of FCS is going to be more influenced by student and parent complaints, especially if it is continual (Betz, 2010).

There is more prior research involving school counselors and their perception of FCS. This is because of the impact and influence a counselor's role plays on a student's academic trajectory and schedule choices (Betz, 2010; Blake, 2020; House & Haynes, 2002; Torrie &

Wendland, 1993). The results from the school counselors confirm the findings from previous studies involving counselors' perception of FCS. Overall, school counselors do view FCS with a positive perception, however, when compared with administrators, there were more negative perceptions that were reported similarly to other studies conducted by Goldsmith (1960), Torrie and Wendland (1993), and Betz (2010). Results indicated counselors are supporters of FCS and recognize that it is valuable and impactful for students (Goldsmith, 1960; Johnson et al., 1987; Torrie & Wendland, Betz, 2010). Results from this study confirmed that counselors have limited knowledge of FCS, as indicated by their responses about available industry certifications and FCS topics, detailed by Betz (2010). Counselors were easily able to identify common FCS topics such as foods and child development but struggled with other topics just as in the studies by Betz (2010) and Torrie and Wendland (1993).

Responses collected from school counselors in this survey mirror the results from a statewide study conducted by Goldsmith (1960) in Indiana. Even though the research was conducted in two very different periods of FCS history and with two different survey instruments, the overarching themes from the responses in both studies are strikingly similar. Overall, both studies' results indicated that most of the school counselors who participated had positive perceptions about FCS. School counselors had more negative responses, when compared to administrators, on questions that involved the FCS classroom environment, its level of respect, their view of the FCS teacher(s) in the building, as well as the rigor of standards. Many of the school counselors responded they saw FCS as "easy." A similar amount of counselors responded they were not aware of the various credentials a student could earn.

It could be argued that the availability of these credentials add a certain level of rigor to FCS classes. Similar to administrators, a counselor's lack of knowledge about curricular content

and available credentials, can be attributed to which classes are offered in their school system. However, all CTE classes in Virginia teach employability skills, workplace readiness, and leadership as part of the Workplace Readiness competencies that are the first 25 standards in every CTE curriculum. Most schools also offer at least one foods class and one independent living/life planning class that covers the remaining topics. This confirms that the perception issues FCS faces are not new, but the amount of FCS knowledge that an administrator or school counselor has can predict how they perceive FCS.

Implications

Research has tried to keep up with changing trends in education, however, there is a lack of relevant literature pertaining to the perception of FCS, especially amongst high school administrators. There are large gaps between the time periods in which studies were conducted, most often ranging between 20 and 30 years (Torrie & Wendlend, 1993; Betz, 2010; Barnum, 2018; Harden, et al., 2018). In the past thirty years, if not more, there has only been one study that examined perceptions by both administrators and school counselors in the same research study. More so, there is very little research on how these perceptions affect administrators' and school counselors' role as gatekeepers.

Gatekeepers are those who hold some type of power over another, and in turn, control the flow of information or access in and out from an arbitrary gate (Lewin, 1947). Administrators and counselors are gatekeepers of FCS because they can withhold, change, or direct information to students and parents. A critical aspect of Lewin's theory was his idea that forces, positive or negative, determine what passes through the gate (Shoemaker & Vos, 2009). These forces can also change polarity, changing how information flows through subsequent gates (Shoemaker & Vos, 2009). Perception of FCS is a force that will directly impact the opening and closing of the

gates because of how a gatekeeper chooses to shape, repeat, time, or display information affecting students' access to FCS classes (Webber, 1997). If an administrator views FCS negatively, then programs, funding, and support could be very limited. If a counselor views FCS negatively, they are unlikely to support students seeking enrollment in FCS classes. Counselors could persuade students to take other classes instead. Because knowledge of FCS content predicts an administrator's or school counselor's perception of FCS, it is vital that teachers be their own, and best, advocate for their programs (Johnson et al., 1987; Torrie & Wendland, 1993; Betz, 2010).

Social learning theory and experiential learning have been a part of the FCS classroom and curriculum since the discipline began. The embedded hands-on, project-based learning in FCS classes equip students with the necessary tools to engage in inquiry-based practices to solve real-world challenges and problems. This type of learning supports the development of critical thinking skills and problem-solving skills, which have been one of the main goals of American (Snyder & Snyder, 2008). As society continues to evolve into a more global atmosphere, there are calls for students to develop critical thinking skills that depend on thinking deeply and reasoning fairly (Sellars et al., 2018). Administrators and counselors were able to identify that FCS classes do support the collaborative, real-world, and interdisciplinary learning characteristics of both social learning and experiential learning theories. Furthermore, Gen Z is entering the workforce less experienced than prior generations (McGregor, 2019).

Administrators and counselors' roles as gatekeepers leave them poised to funnel students into FCS classes where they can develop the need skills and obtain industry credentials, leaving high school workforce ready.

Family and consumer sciences has a long and storied past in American education. Its humble beginnings in aiding families' domestic lives at the turn of the 19th century are still ever relevant to our everyday lived experiences in the 21st century (Elias, 2011). As society changes, so does FCS, as its mission has always been to provide resources to individuals so they can make informed decisions for themselves, their families, and their communities (AAFCS, 2022). The state of the profession is in a precarious situation. Declining enrollment numbers in both secondary and post-secondary FCS programs mean students are potentially losing opportunities for learning essential skills that only FCS can provide. Data from this study shows that all hope is not lost, as key gatekeepers, administrators and school counselors, perceive FCS positively and recognize the rigor associated with FCS standards. This study has provided new data to support and expand research from Barnum's 2018 perception study. It also adds critical data about FCS programs in Virginia to the FCS research body of literature.

Limitations

No study is without limitations. A major limitation of this study is a two-fold issue. First, there were time constraints on data collection. IRB permission was obtained on May 6, 2022. Many schools in Virginia during this time period were in the middle of end-of-year testing and also preparing for graduation ceremonies, making it a very busy time for all staff members. This affected the distribution timing to ensure initial survey participation invitations and reminders were sent before the end of the school year. The researcher received many automatic reply emails for both groups stating they were out of the office and would not be available until after the survey closed. Several school systems required prior district permission before conducting educational research. Two districts only took research questions at specific times in the calendar year. The time required for the approval process by other school system was not compatible with

the timeline for data collection. These requirements eliminated the opportunities for staff participation in this study and led to a second limitation.

The second limitation of this study came from an insufficient sample size of both administrators and counselors. Out of the possible 1,200 high school administrators and school counselors in Virginia, only 68 participated in the survey. While their responses indicated an overall positive perception of FCS, it is not a broad enough sample to be representative of the average administrator or school counselor's perception. To remedy these limitations in future research, it would be recommended to seek county approval over the summer months and distribute the survey during the first nine weeks of the school year. This would allow for the time needed to seek approval to obtain a broader and more representative sampling and increase the number of participants.

Another limitation of the study also involved the sampling. Most of the respondents were from the Northern Virginia region, which included Fairfax, Loudoun, and Prince William counties. These three counties make up the largest school systems in Virginia. Each of these counties have multiple high schools with successful FCS programs. The researcher is employed by Prince William County Public Schools (PWCS), although she excluded her school from the study, as a conflict of interest. The survey was distributed more quickly through PWCS because of this fact, resulting in a larger representation of the overall sample.

Lastly, a final limitation of this study stems from a lack of sufficient prior research studies. There were large gaps in the literature specifically related to gatekeeping practices and its relation to perception of FCS. Many of the previous FACS perception studies were situated around one population sampling and were over twenty years old. Because of this, availability of valid and reliable research instruments were not readily available.

Recommendations for Future Research

There is still a need for future research that examines the perception of FCS, because the world still needs FCS (Hakeem, 2009). It is recommended that this study be replicated in Virginia considering the limitations. A larger sample would give a clearer picture of how administrators and counselors perceive FCS throughout the Commonwealth. More accurate data would be an extremely useful tool for stakeholders in school systems to build up and retain their programs. Other recommendations for future research include:

1. Replication of this study surveying district level staff, including but not limited to: CTE coordinators and directors, director/superintendent of student learning, etc. Decisions made by stakeholders in these positions also act as gatekeepers in an indirect way to FCS programs compared to administrators and school counselors.
2. A case-study approach that includes the spectrum of stakeholders, district level administrators, school administrators, school counselors, teachers, students, and parents. Data collected from a case-study could answer more of the “why” questions about their perceptions of FCS.
3. Replication in other states. As more is understood on a national level about the perception of FCS, stakeholders could use the data to lead important conversations to showcase the benefits of FCS classes.
4. Creation of a standardized, valid, and reliable research instrument pertaining to perception of FCS by various populations that could be used nationwide by researchers or school systems.
5. A new study created to explore and identify the reasons why many want FCS classes in schools but programs are still closing despite the positive perception.

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Appendix A

Permission to Use Instrument

[External] Re: Research Instrument Copyright Permission

🕒 You replied on Tue 8/17/2021 4:28 PM

SB

Shelli Barnum (CCMS)

Tue 8/17/2021 2:44 PM

To: Tiernan, Amber



[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Hi Amber,

I am so sorry for the delayed response! I normally respond much faster. We just started our school year in Utah so I have been treading water to keep afloat!!

I am so excited for your dissertation topic!! It sounds like it will be fantastic and garner some great research. You are welcome to use my instrument and make adaptations for your research as needed. I wish you the best of luck... you have sooooo much work ahead of you!! If I can help in any way, please let me know.

Good luck!
Thank,

--

Shelli Barnum, Ph.D.



PROUD
to TEACH
FAMILY &
CONSUMER
SCIENCES



Appendix B

IRB Approval

May 6, 2022

Amber Tiernan
Marsha Coker

Re: IRB Exemption - IRB-FY21-22-778 Perception of the Value of Family and Consumer Sciences Programs in Virginia

Dear Amber Tiernan, Marsha Coker,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix C

Consent

Title of the Project: Perception of the Value of Family and Consumer Sciences Programs in Virginia

Principal Investigator: Amber Tiernan, Doctoral Candidate, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be employed in a Virginia public school and serving as either a school administrator or school counselor. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to identify how school administrators and counselors perceive the value of Family and Consumer Sciences (FACS) curriculum. This study also seeks to identify which factors may predict administrators' and school counselors' perceptions of FACS curriculum.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following things:

1. Complete the online survey "Value of Family and Consumer Sciences Programs in Virginia." It should take approximately 10 minutes to complete.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include a greater understanding of how public-school administrators and counselors perceive FACS programs thereby allowing teachers and other professionals in the field to determine how to increase participation in FACS programs.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be anonymous. No identifying data will be collected.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Amber Tiernan. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Marsha Coker, at [REDACTED].

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You can print a copy of the document for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.