

MOTIVATIONAL NEEDS OF SECONDARY FAMILY & CONSUMER SCIENCES
STUDENTS

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ABSTRACT

This study examined North Dakota junior and senior high school FCS students' perceptions of their motivational needs. The survey instrument used was created by Turner & Herren (1997). The questionnaire measured the motivational needs for achievement, affiliation, and power from McClelland's (1987) theory of motivation.

175 secondary, junior and senior, students completed web-based questionnaires. One-way ANOVAs were run to determine the influence of independent variables (grade level, GPA, gender, race/ethnicity, and FCCLA membership) on the three motivational needs (achievement, affiliation, and power).

The data indicated that FCS students expressed the greatest need for achievement. Females have a greater need than males for achievement. FCCLA members have a greater need for power and achievement than non-FCCLA members. The study also showed that students with GPAs of 3.5-4.0 show a greater need for power than those with GPAs of 2.5-2.99 and a greater need for achievement than those with GPAs of 2.0-2.99.

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Thank you to the students who willingly participated in the study. The information collected in this study may help our North Dakota family and consumer sciences teachers become better at serving future students by learning what motivates all of you to learn.

DEDICATION

My parents served as my mentors when it came to learning—whether it be an informal or formal learning environment. They instilled in me at an early age that learning has no timeline and one should never stop learning. They are the reason that I have held the goal of obtaining a master’s degree so close to my heart and that I never gave up hope of someday finding the time to reach the goal. To my husband, Bob, for 35 years you have been my cheerleader! You have always allowed me to take advantage of every opportunity afforded me so that I could flourish in my teaching career. I will always be thankful for the love, the appreciation, and the support you give to me every day.

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1. INTRODUCTION

1.1. History of Family and Consumer Sciences in Federal Legislation

The academic courses that makeup Family and Consumer Sciences Education (FCSE) at the secondary and post-secondary levels have early ties to federal legislation when the United States Congress passed the Morrill Act (1862). This act established land-grant colleges. The mandate created the opportunity to apply scientific methods and research to modern activities currently practiced in the home in an educational setting. These activities included cooking, laundry, sewing, housecleaning, care of the sick, and sanitation (Berlage, 1998). The research of these activities led to the introduction of rudimentary domestic science courses in the late 1800's (Berlage, 1998). At this time, a link between the federal government and the field of home economics was established.

In the early 1900's, the United States Congress passed the Smith-Lever Act (1914) and the Smith-Hughes Act (1917), which mandated and funded occupational preparation for home economics classes. During this time, home economics classes were established at most land-grant colleges. The goal of home economics education during this time was to train women to be effective managers of the home (Berlage, 1998).

During the early to middle years of the 20th century, the need for home economics courses continued to grow as families began to purchase more than they produced. During this time, two goals for students of home economics classes emerged. The first goal was to teach students how to be efficient homemakers and consumers. The second was to work with manufacturers and political leaders to make sure the needs of the homemaker were heard (Randolph, 1942). These two standards provided the mission of home economics education in schools through most of the 20th century.

Throughout the years, home economics has been taught using other names: “Domestic Economy, Domestic Science, Domestic Art, Household Arts, Household Science, Foods, Clothing, Household Economy, Homemaking, and Home Economics” (Randolph, 1942, p. 11). In 1994, the American Home Economics Association changed its name to the Association of Family and Consumer Sciences. The name change reflected the idea that the field had expanded educational opportunities to covering aspects outside of home life and wellness as well as to encourage young men to participate in the classes (AAFCS, 2018).

In 2006, the United States Congress re-authorized the Carl D. Perkins Career and Technical Education Act. This legislation emphasizes that Career and Technical Education (CTE) focuses on preparing students to be college and career ready. The re-authorization coincides with the mandates of the acts No Child Left Behind (2001) and Every Student Succeeds (2015), establishing a new level of rigor in education. These mandates encourage addressing rigor in secondary education through setting high standards of achievement and establishing measurable goals. The premise is that high standards with measurable goals could increase student success.

1.2. What is Secondary Family and Consumer Sciences Education (FCSE)?

Home economics education, known today as FCSE, continues to evolve to meet the needs of today’s students. FCSE is an integral part of CTE, previously known as Vocational Education (VE) and Vocational and Technical Education (VTE). To meet the strict standards of educational legislation, today’s high school FCSE curriculum is three-fold. The first is the continuance of teaching skills needed to be a contributing adult in society specifically focusing on family, work, and interpersonal relations. The second is to aid students in becoming college and workforce ready. The third is to offer an opportunity for students to build leadership skills

that are transferable from home to work to community through membership in the Career and Technical Student Organization (CTSO): Family, Career, and Community Leaders of America (FCCLA) (NDCTE, 2017).

1.3. What is Family, Career, and Community Leaders of America?

The federal government's Department of Education, Office of Career, Technical, and Adult Education (OCTAE) recognizes eight CTSOs as an integral part of CTE. These organizations have been promoted in legislation as early as the Smith-Hughes Act (1917). CTSOs offer an option for students in CTE courses to assess skills developed in the defined curriculum through leadership development, promotion of personal growth, career exploration, development of an appreciation for life-long learning, and promoting citizenship through community involvement (McNally, et al. 2001). FCCLA is the only identified student organization that complements the FCSE curriculum and is recognized by the federal government (OCTAE, 2017).

FCCLA was formed in 1945 as Future Homemakers of America (FHA). The organization's membership changed the name in 1998 to coincide with the change of home economics education to FCSE. From the beginning, the eight purposes of the organization have remained the same. Students are provided opportunities 1.) for personal development and preparation for adult life, 2.) to strengthen the function of the family as a basic unit of society, 3.) to encourage democracy through cooperative action in the home and community, 4.) to encourage individual and group involvement in global events, 5.) to promote positive relationships between youth and adults, 6.) for decision making and assuming responsibilities, 7.) to prepare for the multiple roles of men and women in today's society, and 8.) to promote FCSE and related occupations (FCCLA, 2009).

Membership in FCCLA is open to students in grades six through twelve. Members must have completed at least one FCSE class or be currently enrolled in a FCSE class before joining the organization. Membership in FCCLA is not required for students of FCSE. Teachers are encouraged to integrate FCCLA into the curriculum but are given the option of operating a chapter outside the confines of the classroom.

1.4. Problem Statement

The call for increased rigor in secondary education, through setting high standards of achievement and motivating students to succeed, has become more challenging for the classroom teacher. At the same time, students are becoming more distracted by technology. Motivational diversity in the classroom comes in all forms and teachers must motivate and meet the needs of all students. Teachers need to address the diversity that exists whether it is by gender, by grade level, by grade point average (GPA), by race/ethnicity or in the case of FCSE teachers, whether their students choose to or not to join the CTSO, FCCLA. It is important to know how FCS students from various backgrounds differ with respect to motivational needs.

“Students who are motivated to learn achieve more than students who are not motivated to learn” (Redick & Vail, 1990, p.iii). Teachers can meet this challenge of encouraging students to become actively engaged in the educational process by learning from past and current motivational research. The purpose of this study was to explore the motivational needs of secondary FCS students.

1.5. Motivation Theoretical Framework

David McClelland’s (1987) motivation theory is the selected theoretical foundation for this study. His theory provides the basis that motivation to learn is important to study.

McClelland's (1987) theory described three different types of motivational needs as achievement, affiliation, and power. His theory is based on the belief that most people are motivated toward a certain pattern of behavior by one or more of the three identified motivational needs. His theory also suggests that intrinsic motivators are critical for meeting the needs of students because they describe a pattern of how a person may behave. The FCSE curriculum can provide opportunities through which students can meet their needs of achievement, affiliation, and power in a formal education setting.

The human motivation theory has been used in a variety of studies. Two previous studies (Rutter, Hall, & Smith 2002; Turner & Herren, 1997) applied McClelland's theory of motivation with students in CTE. These studies examined secondary students and their need for achievement, affiliation, and power. The present study replicates these two previous studies by employing the same three dependent variables with a different population.

McClelland (1987) believed that people who perceive that achievement, affiliation, and power affects how they complete tasks are better able to make decisions that allow them to reach their goals. Individuals who understand achievement, affiliation, and power as they relate to personal attributes such as gender, grade level, race/ethnicity, GPA, and FCCLA membership status are better able to make informed decisions because they can change their behavior as it relates to each situation.

1.6. Purpose Statement and Research Questions

This descriptive survey study used McClelland's (1987) theory of human motivation to examine the influence of the independent variables of gender, grade level, race/ethnicity, GPA, and membership in FCCLA on the perceived need for affiliation, achievement, and power of secondary FCS students.

The following research questions guided the study:

1. What is the perceived motivational need for achievement, need for affiliation, and need for power of students enrolled in secondary FCSE programs?
2. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on gender?
3. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on grade level?
4. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on race/ethnicity?
5. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on FCCLA membership?
6. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on GPA?

1.7. Importance of Study

In North Dakota, Family and Consumer Sciences Education serves more than 8,700 students in grades 9-12 (NDCTE, 2017). It is the largest program area within North Dakota Career and Technical Education (NDCTE, 2017). The motivational needs of FCS students in North Dakota have not been studied. This study examined the perceived motivational need for achievement, affiliation, and power of students enrolled in secondary FCSE programs, specifically, juniors and seniors. The study, using a sample of North Dakota secondary FCS students, aimed to discover if differences existed between independent variables of gender, grade level, race/ethnicity, GPA, and membership status in FCCLA in relation to the needs of achievement, affiliation, and power.

This research will be the first of its kind in North Dakota. The results of this study can be used as additional research to discover the motivational needs of students not only in FCSE, but for all instructors teaching in any program that falls under the umbrella of CTE. It is important to seek out differences among gender, grade level, race/ethnicity, and academic achievement as they occur in relation to the needs for achievement, affiliation, and power in a formal education setting. Information shared may arm educators, high school counselors, CTE leaders, the Executive Director of FCCLA, and state supervisors at NDCTE with an understanding of how students can be motivated to succeed. The results of this study may lead to updating current learning strategies within the FCSE curriculum to accommodate the needs of all students enrolled in these courses. Research that promotes creating a curriculum that meets the needs of all students enrolled in CTE courses is necessary regardless of their membership status in a CTSO.

1.8. Definitions

The following definitions are provided for reader clarity. Each is used periodically throughout the chapters of this thesis.

Career and Technical Education (CTE): Career and Technical Education is a term applied to schools, institutions, and educational programs that specialize in the skilled trades, applied sciences, modern technologies, and career preparation. Previously known as Vocational Education (VE) and Vocational and Technical Education (VTE) (ACTE, 2018).

Career and Technical Student Organizations (CTSO): Career and Technical Student Organizations are vocational organizations primarily based in high schools and career technology centers (OCTAE, 2017).

Family and Consumer Sciences Education (FCSE): Science and art of teaching career planning, job skills, resource management, time management, nutrition, food preparation, menu planning, parenting, substance abuse, child care and development, healthy living, clothing and textiles, consumer education, money management, decision making, problem solving, human relationships, and family development (AFFCS, 2018).

Family and Consumer Sciences (FCS): A career and technical education program that focuses on and teaches students about family and consumer sciences education, including how individuals develop and function in family, work, and community settings and how they relate to their physical, social, emotional, and intellectual environments (NDCTE, 2017).

Family, Career and Community Leaders of America (FCCLA): Family, Career and Community Leaders of America is a national CTSO that provides personal growth, leadership development, and career preparation opportunities for students in FCSE. The organization was once known as the Future Homemakers of America (FHA) and Future Homemakers of America & Home Economics Related Occupations (FHA/HERO) (FCCLA, 2009).

FFA: is a student organization that provides opportunities for growth in agriculture and leadership for agricultural education students (FFA, 2015).

Future Business Leaders of America (FBLA): The Future Business Leaders of America organization is an American career and technical student organization that prepares students for lives in the business world and supplies them with leadership skills (NDCTE, 2017).

North Dakota Career and Technical Education (NDCTE): North Dakota Career and Technical Education is an agency of the state of North Dakota whose mission is to work with others

to provide all North Dakota citizens with the technical skills, knowledge, and attitudes necessary for successful performance in a globally competitive workplace (NDCTE, 2017).

Office of Career, Technical, and Adult Education (OCTEA): Office of Career, Technical, and Adult Education is an agency of the federal government that administers and coordinates programs that are related to adult education, literacy, career and technical education, and community colleges (OCTAE, 2017).

1.9. Summary

Since the late 19th century, home economics education, now called FCSE, has had a role in both secondary and post-secondary education to prepare students with the skills necessary to be successful adults. FCSE instructors play an important role in helping prepare FCS students to become contributing citizens in society, but students must be motivated to learn the skills. McClelland's (1987) theory of motivation promotes the idea that human motivation to succeed is comprised of the motivational factors of achievement, affiliation, and power. This study examined what motivates students enrolled in a secondary FCSE program based on gender, grade level, race/ethnicity, GPA, and FCCLA membership status on the need for achievement, affiliation, and power.

2. REVIEW OF LITERATURE

2.1. Motivation

“One secondary school student drops out every 26 seconds in the United States, and many other students drop out of postsecondary education” (DeWitt, 2013, p. 12). Dropouts cite a variety of reasons for quitting but one of the leading factors is “lack of interest” (Bloomfield, Foster, Hoes, Konopnicki, & Pritz, 2013, p. 25). “Motivation is probably the most important factor that educators can target to improve learning” (Williams & Williams, 2011, p. 1). This mindset has pushed me to seek out what others are saying about how motivation drives student success.

For the most part, behavior and motivation experts agree on their definitions of motivation. Motivation is defined as “something that causes a person to act” (Merriam-Webster, 1999, p. 340). DuBrin (2008) defines motivation as acting with effort and expecting results. Motivation refers to “the reasons underlying behavior” (Guay et al., 2010, p.712). Broussard and Garrison (2004) use the following as a definition for motivation: “the attribute that moves us to do or not to do something” (p.106). Kleinginna and Kleinginna define motivation as it relates to learning is an “internal state or condition that activates behavior and gives it direction” (as cited in Huitt, 2011, p.1). Franken describes motivation as “the arousal, direction, and persistence of a behavior” (as cited in Huitt, 2011, p.1). Motivation has also been defined as the process whereby goal-directed activity is instigated and sustained (Pintrich & Schunk, 1996). These definitions are broad and promote the idea that motivation is driven by action and can be applied to any situation. Most definitions of motivation are similar, but even more important is that the underlying reasons for specific behaviors sparked by motivation can be further differentiated as intrinsic or extrinsic motivation.

Conventional wisdom has it that humans are compelled to act by an internal or external drive. Intrinsic motivation has been defined as an “internal state or condition that activates, guides, and maintains or directs behavior” (Kostecky, 2005, p. 438), or as an internal drive that activates behavior and gives it direction (Ramondo, 2011). According to Deci and Ryan (1991), intrinsic behavior can promote the creative process and induce spontaneous behaviors. Behavior from within is animated by personal enjoyment, interest, or pleasure. “Intrinsic motivation energizes and sustains activities through the spontaneous satisfactions inherent in effective volitional action” (Deci, Koestner, Ryan, 1999, p. 658). The idea behind intrinsic motivation is that a person engages in activities that he or she enjoys.

Contrary to intrinsic motivation, extrinsic motivation pertains to a “wide variety of behaviors which are engaged as a means to an end and not for their own sake” (Vallerand et al., 1992, p. 1003). Examples of extrinsic motivation would be money paid for a job, a test grade or achieving gold medal status in competition. Deci (1975) defined extrinsic motivation as doing something for a reward. The idea behind extrinsic motivation is that a person behaves in a way that results in receiving a reward.

Educators and students identify with intrinsic and extrinsic motivation differently. Standford and Couch (1985) learned that members of Future Homemakers of America/Home Economics Related Occupations (FHA/HERO) preferred intrinsic forms of recognition such as respect for others, self-satisfaction, and achieving personal goals. Their FHA/HERO advisors identified that they thought students wanted and responded best to extrinsic rewards such as trophies, plaques, compliments, and praise.

2.2. Views of Motivation

Last September, some students returned to school after the summer break while others chose to drop out. Students file into classrooms only to spend the day in uncomfortable seating with little allowance for movement or talking, while teachers lecture to them for about an hour. Why do they do it? What motivates students to act? Effective teachers are looking for answers to these questions (Redick & Vail, 1991).

The study of human motivation is a direct result of the study of human behavior. The study of human behavior goes as far back as Aristotle and Plato (Redick & Vail, 1991). Motivation research views can be traced back more than nine decades and categorized as behaviorist, cognitive, and humanist. Human behavior theories are based on behaviors exhibited by study participants in controlled situations (Redick & Vail, 1991). Behavior theory has been gaining popularity for more than 100 years. The standard way of thinking about behavior theory is to understand what ignites and directs the behavior (Redick & Vail, 1991).

Extrinsic motivation is the basis for behaviorism theory as it promotes the idea that behavior is reinforced by positive and negative stimuli. Thorndike, Skinner, Pavlov, and Hull all focused on identifying consequences for behavior (Redick & Vail, 1991). However, behavior theorists do not agree on everything. Conceptually, theorists debate whether behavior should be defined as “mechanistic” or “cognitive” (Redick & Vail, 1991).

“Mechanistic” behavior focuses on humans as machines, and “cognitive” behavior focuses on how humans think. The major difference between these two terms is identifying which “higher mental processes are involved to account for the initiation, direction, intensity, and persistence of goal-directed behavior” (Redick & Vail, 1991, p. 17). Cognitive theories of motivation rely on a person’s ability to process information in a methodical manner. They focus

on an individual's perception of any given situation. At the heart of cognitive theory is problem solving and the idea that people are driven to act because of "intervening thought processes" (Redick & Vail, 1991, p. 17). Both cognitive and humanist theories are based on the idea that behavior is driven intrinsically.

Humanist theory relies on the idea that people act based on intrinsic motivation and promotes the belief that motivation is driven by "personal freedom, choice, self-determination, and striving for personal growth" (Redick & Vail, 1991, p. 19). Humanist theory was born out of the psychoanalytical theory of motivation and developed as a reaction to behavior theory and Freud's psychoanalysis theory (Deci, 1995). According to Deci (1995), the behavior of any individual has a foundation built on motivation and emotions and uses life experiences to build on the theories of both behavior and psychoanalysis. People are free to make decisions (Deci, 1975; Skinner, 1963).

2.3. Theorists and Theories Impacting Motivation in Education

A timeline of motivation theorists gives way to understanding how motivation research has evolved over time. In 1898, Edward Thorndike, known as the father of modern educational psychology, promoted the idea of behavioral conditioning called the law of effect (McLeod, 2007). Thorndike studied learning in animals. He devised an experiment in which a cat was put in a puzzle box. The purpose of the study was to time the cat to see how long it took before it was able to get out of the box. This process kept repeating until the cats learned to press the lever to be released from the box thus receiving the reward (McLeod, 2007).

Ivan Pavlov and B. F. Skinner became widely known for their studies in human behavior. Pavlov used dogs to demonstrate his theory of classical conditioning (McLeod, 2015). This conditioning, a theory of learning, used dogs to demonstrate that if dogs naturally salivated when

approached with food, they could learn to salivate with the use of a ringing bell presented before food is offered. Pavlov used this activity to cite that humans automatically learn to respond to certain stimuli in everyday life. For instance, humans may naturally salivate when remembering their favorite food (McLeod, 2015).

B. F. Skinner, influenced by Pavlov, developed an approach to observing behavior called operant conditioning (McLeod, 2015). Unlike his predecessor, Skinner claimed that classical conditioning was too simple to completely explain human behavior. Operant conditioning is dependent on understanding behavior through the causes of an action and its consequences (McLeod, 2015).

Clarke Hull influenced by Pavlov was ambitious about developing a formal theory of behavior (Weiner, 1985). He expanded upon Pavlov's conditioned stimulus theory in that he believed that learning was ongoing and occurred in steps. This discovery gave understanding as to how humans form habits. As Hull continued to perfect his own theory of learning, he adapted the theory to agree with Edward Thorndike's law of effect (Weiner, 1990).

The behavior theories of Thorndike, Skinner, Pavlov, and Hull drew attention and were popular during much of the 20th century; however, the research focused on animal behavior; therefore, drawing the conclusion that humans might not react the same. Nonetheless, the use of behavior theories has its place in the 21st century classroom.

“Humanistic views stress the intrinsic motivation created by the need for personal growth and fulfillment” (Reddick & Vail, 1991, p. 23). Abraham Maslow theorized that all people have a strong desire to realize their full potential, a level of self-actualization (Francis & William, 2006). Maslow's hierarchy of needs consisted of a step-by-step approach to reaching the stage of self-actualization. He believed that to be a self-actualized person you had to go through the

stages one at a time (Reddick & Vail, 1991). The stages include physiological, safety, belonging, esteem, and self-actualization. Maslow believed that as a human ascends the levels of the hierarchy, one could become self-actualized. The key to moving through the hierarchy is the satisfaction of deficiency needs before growth needs (Reddick & Vail, 1991).

Carl Rogers was opposed to the theories of psychoanalysis and behaviorism and the idea that human behavior is a direct reaction to any given situation. He agreed with Abraham Maslow and believed that a person's satisfaction with life is basic (McLeod, 2015). Instead of categorizing self-actualization in stages as Maslow did, Rogers identified 19 principles that develop one's self-concept and progresses from childhood to adulthood (McLeod, 2015). Maslow and Rogers both believe that people develop through stages. The major difference between their theories is that of the process of self-actualization. Maslow fully acknowledges the self-actualization of individuals to their very selves, while Rogers recognizes the self not only emerges as they discover themselves from within, but that the environment plays a role in a person's development as well (McLeod, 2015).

During the 1960's, David McClelland developed need theory, a motivational model that explains how the need to achieve, belong, and assume power drives behavior. McClelland (1987) believed that all humans have three basic needs regardless of age, sex, race, or culture. He believed that people driven by achievement prefer effort-based results on tasks of moderate difficulty. A person driven by the need for affiliation prefers to spend time building relationships. They have a high desire to belong or fit in. Power-driven people enjoy recognition, competition, and winning arguments. While some people see the need for power with some negativity, people driven by power do well in helping groups to achieve goals as they take on the leadership role (McClelland, 1987).

In 1972, Bernard Weiner was a lead contributor in the founding of attribution theory (Weiner, 1995). The premise is that student success is classified as internal or external, stable or unstable, controllable or uncontrollable. Weiner's (1985) study revealed that low achievers have the mindset that they fail because they have no ability to learn. These same students believe that any success they experience is because of good luck. High achievers who experience failure often feel they didn't work hard enough. Students who learn at a low level and believe that their failure is due to internal, stable, and uncontrollable causes may develop what is called learned helplessness. These students become unreachable in a sense because they feel that they cause their own failure (Reddick & Vail, 1991).

Martin Fishbein developed the expectancy x value theory. This theory focuses on goal setting. The basic premise is that the effort people put forth to accomplish a goal depends on their expectation of being able to perform the task successfully and the degree to which they value participating in the task. Fishbein believed that people completed goals not only when they thought they could complete a task successfully but when they appreciated or enjoyed the journey to completion (Reddick & Vail, 1991).

Albert Bandura is widely known for research involving how children are motivated through observation. Bandura's social learning theory analyzed the foundations of human learning and the willingness of children to imitate behavior observed in others, especially aggression (McLeod, 2016). While he recognized Skinner and Pavlov's work with operant and classical conditioning, he felt they were inadequate as a framework for learned behavior. Bandura believes that many human behaviors are learned from others. During the mid-1980's, Bandura's research took a more comprehensive approach, and as a result social cognitive theory was born (McLeod, 2016). Social cognitive theory views humans as being self-organizing,

proactive, self-reflecting, and self-regulating not just reactive organisms shaped by environmental forces or driven by inner impulses.

All motivation theories have merit and could be used with students in identifying what motivates behavior to learn. McClelland's motivation theory has been used with secondary career and technical education students over the last 25 years and offers insight as to how achievement, affiliation, and power influences high school students' learning (Craddock, 2011; Rutter et al., (2002); Turner & Herren, 1997).

2.4. Motivation Theory as it Relates to this Study

Originally developed as a model for use in business with employees, McClelland (1987) believed that people who perceive that achievement, affiliation, and power affect how they complete tasks are better able to make decisions that allow them to reach their goals. Individuals who understand affiliation, achievement, and power as they relate to personal attributes such as gender, race/ethnicity, GPA, and leadership skills are better able to make informed decisions because they can change their behavior as it relates to each situation (McClelland, 1987).

McClelland (1987) believed that people are motivated to act based on environmental factors. The premise of his theory was that people are driven by three needs: achievement, affiliation, and power. He believed these three needs are initiated and satisfied intrinsically. McClelland (1987) asserted that teachers who receive power and achievement training are determined to use their training to engage students to succeed. This information solidified the need to use motivational theory as a basis to study achievement, affiliation, and power.

McClelland's (1987) theory provides the basis that motivation to learn is important to study. His theory described three different types of motivational needs as achievement, affiliation, and power. McClelland's (1987) theory is based on the belief that most people are

motivated toward a certain pattern of behavior by one or more of the three identified motivational needs. He believed that intrinsic motivators are critical for meeting the needs of students because they describe a pattern of how a person may behave.

Research using McClelland's (1987) motivational theory is not uncommon but largely conducted with college-age students. There is not an overabundance of motivation research in the field of CTE at the secondary level; however, there are a few studies that examined students and their need for achievement, affiliation, and power. These dependent variables serve as a base for studying student motivation in the secondary classroom.

2.4.1. Affiliation as a Form of Motivation

Motivation theorists believe that a student's ability to form positive and long-lasting relationships with peers can predict a student's overall success in and out of the school. "Children who succeed in social endeavors are the most successful students" (Wentzel, 1999, p. 76). Affiliation is the desire to build relationships with others. According to Deci and Ryan (1991), the need for relatedness "encompasses a person's striving to relate to and care for others" (p. 243). Vallerand (1997) suggested that relatedness "involves feeling connected" (p. 300) to others. People have an innate drive to form "lasting, positive, and significant impersonal relationships" (Baumeister & Leary, 1995, p. 497). Goodenow (1993) asserted that the educational setting must encourage a student's ability to develop a "sense of being accepted, valued, included, and encouraged by others" (p. 25).

2.4.2. Achievement as a Form of Motivation

Achievement is defined by "one person's need to succeed and is frequently seen as a key motivator in obtaining the ability to perform well or to master difficult tasks" (Williams & Williams, 2011, p. 4). Vallerand (1992) concluded that "if an individual's focus is on the process

of achieving rather than on the outcome, achievement motivation can be seen as being subsumed under the umbrella of intrinsic motivation to accomplish things” (p.1005). High achieving students flourish when provided with competitive opportunities in and out of a classroom setting (Williams & Williams, 2011). These competitions can be intra- or extra-curricular. Williams and Williams (2011) asserted that high achievers take on the role of performer, problem-solver, goal setter, and risk-taker.

2.4.3. Power as a Form of Motivation

Adolescents looking for power have a need to control others. A leader’s role is to influence others (Winston & Patterson, 2006). In a study to identify a student’s self-perception of leadership, it was noted that affiliation, achievement, and power toward leadership involvement were most often expressed by those who sought leadership positions within an organization (Kagay, Marx & Simonsen, 2015).

2.5. Results of Motivation Theory Research in Career and Technical Education

There have been a variety of studies conducted (Broussard & Garrison, 2004; Craddock, 2011; Goodenow, 1993; Guay et al., 2010; Rohs & Anderson, 2001; Rutter, Smith, & Hall, 2002 and 2005; Turner & Herren, 1997) on motivation theory in education. Some of those studies focused on students in CTE classes or members of CTSOs. Turner and Herren (1997) developed a questionnaire based on McClelland’s (1987) need theory to survey with agricultural education students. Rutter et al. (2002) and Craddock (2011) used Turner’s questionnaire with FCS students and business and computer science students respectively. The results of the Turner and Herren (1997) study shows that agricultural education students were motivated by the need for achievement. The results of the Rutter et al., (2002) study indicate that FCS students are motivated more by achievement than affiliation and more by affiliation than power. Rohs, et al.

(2001) conducted a similar study with middle grade agricultural education students. Results indicate that middle school agricultural students have a higher need for achievement than for affiliation or power. Craddock's (2011) study summarized that business and computer science students were more motivated by the need for affiliation than achievement or power..

There are also trends based on grade level and gender. Two of the studies indicate that twelfth graders have a higher need for power and ninth graders have a higher need for affiliation. Three of the studies showed that females have a higher need for power than males. Turner and Herren (1997) also learned that students living in a rural setting have a higher need for power than students living in an urban setting. There were some differences with respect to race noted in the Turner and Herren (1997) study. Results indicated that African-American agricultural education students have a higher need for achievement and power than those classified as other or Caucasian.

Studies have also looked at students who are members of student organizations. Results have similarities and differences. Results of two studies indicate that students who are members of CTSOs have a higher need for affiliation and power than students who are not members. Rohs & Anderson (2001) did not report measurable differences in the need for achievement, affiliation, or power with middle school agricultural education students regardless of their membership status in FFA. Turner and Herren (1997) found that agricultural education students who were members of FFA had a higher need for all three of the motivation needs (achievement, affiliation, and power) than agricultural education students who did not join FFA.

2.6. Summary

Motivation theory is a by-product of behavior theory and has evolved over the last 100 years. It can be categorized as behaviorist, cognitive, and humanist theories (Redick & Vail,

1991). Motivation theory research has been conducted in the education setting across the board from elementary to college with the most studies conducted with college-age students.

McClelland's need theory directs that human behavior is driven by three needs: affiliation, achievement, and power. Motivation theory has been used in recent studies, specifically, using CTE students in FCSE, agricultural education, and business education and computer science.

The results of these studies have shown differences in motivational needs regarding gender, grade level, race/ethnicity, and CTSO membership.

3. METHODOLOGY

3.1. Purpose of the Study

This descriptive survey study used McClelland's (1987) theory of human motivation to examine the influence of the independent variables of gender, grade level, race/ethnicity, GPA, and membership in FCCLA on the perceived need for affiliation, achievement, and power of secondary FCS students.

3.2. Research Questions

The following research questions guided the study:

1. What is the perceived motivational need for achievement, need for affiliation, and need for power of students enrolled in secondary FCSE programs?
2. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on gender?
3. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on grade level?
4. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on race/ethnicity?
5. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on FCCLA membership?
6. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on GPA?

3.3. Research Design

The goal of descriptive research is to gather data at a single point in time. The purpose is to study a situation by describing important factors associated within the situation (Kelly, Clark,

Brown and Sitzia, 2003). This descriptive study explored the influence of the independent variables of gender, grade level, race/ethnicity, GPA, and FCCLA membership on the dependent variables of motivational needs of achievement, affiliation, and power (McClelland, 1987) specific to the chosen population. The study used an online questionnaire where high school students were surveyed one time to identify their need for achievement, affiliation, and power. To accurately account for student perceptions, the questionnaire used was chosen because of prior use in similar studies (Rutter et al., 2002; Turner & Herren, 1997).

3.4. Participants

The six participating high schools were chosen based on a) the school's population size and ethnic diversity within that student population, b) the number of junior and senior students currently enrolled in FCS classes at each school, c) the FCSE instructor being CTE certified, d) the program receiving state and federal funding, and e) the presence of an FCCLA chapter. Richland 44 High School had 16 participating junior and senior FCS students and employed one full-time teacher. Kindred High School had nine participating, junior and senior, FCS students and employed one full-time teacher. West Fargo High School had 60 participating, junior and senior, FCS students and employed two full-time teachers. West Fargo Sheyenne High School had 43 participating, junior and senior, FCS students and employed one full-time teacher and one part-time teacher. Mt. Pleasant High School District #4 had 26 participating, junior and senior, FCS students and employed two part-time teachers. Langdon Area High School had 21 participating, junior and senior, FCS students and employed one full-time teacher. A total of 175 students participated in the survey.

3.5. Instrumentation

The compiled instrument, the questionnaire, described herein is found in this thesis as Appendix A. This study focused on perceived motivation beliefs by a specific population of high school students. The questionnaire for this study was originally designed by Leonard Chusmir (1986) using McClelland's (1985) motivational theory to be used with adult employees. Turner & Herren (1997) revised the questionnaire to be used with high school agricultural education students. Data collected identified participant's needs for achievement, affiliation, and power.

Fifteen questions with Likert-type items were directed at collecting information based on students' perceptions as to what motivates their behavior in terms of the dependent variables achievement, affiliation, and power in the classroom. Five demographic type questions were directed at delineating the variables of achievement, affiliation, and power by gender, grade, race/ethnicity, GPA, and involvement in FCCLA.

3.6. Validity Procedures

The questionnaire was reviewed by a group of higher education experts and evaluated for wording and readability. Adjustments were made, including elimination and rewording of some of the questions, based on recommendations.

3.7. Reliability Procedures

The questionnaire (Rutter et al., 1998; Turner & Herren, 1997) was used because it measured McClelland's (1987) three motivational need constructs (achievement, affiliation, and power) and provided scores to be reliable and valid for similar samples. "Based on Litwin (1995) and Nunnally (1978) estimations, a score of .70 or higher on the Cronbach's alpha suggests good reliability. For this, the overall instrument showed a Cronbach's alpha score of .78, well above the .70 recommended" (Rutter et al., 2002).

3.8. Procedures

Participating teachers were provided an hour information session in August 2017, during the annual NDCTE in-service conference. Teachers were apprised of what the study entailed, which students would be participating, what non-participating students would do if the situation presented itself, and the need for signed consent forms from all involved parties: teachers, students, and administration. Students signed the consent form for themselves; however, parents were notified via a prepared school email and could opt their child out of the study. Teachers were provided a script to share with their students to promote the upcoming study (see Appendix B). At the information session, the scripts needed to promote the study to the select students were provided to participating teachers. Participating teachers also received a participation information letter and were required to sign a consent form (see Appendices C and D).

Following the in-service, each school's administration was contacted via email and was required to sign a consent to participate form (see Appendix E). Parents of potential participants were notified by each individual school (see Appendix F). Parents were only to respond if they wanted their child to opt out of participation.

Each participant was provided with a participant consent form describing that their answers on the questionnaire would be confidential. The form provided a detailed explanation of the study. Based on Internal Review Board (IRB) requirements, non-participation in the study occurred in one of three ways: the student chose not to participate, the student's parents chose for him or her not to participate, or the student was absent from school the day the questionnaire was administered. Because the questionnaire was only administered on one day in each school, students absent from school were not included. No follow-up was conducted. Students who

opted out of the survey but were present at school on the day of administration were allowed to work on homework during survey time.

On the day the questionnaire was administered the researcher attended all classes in which it was administered. She gave the questionnaire instructions to students participating in the research while the classroom teacher monitored students who didn't participate. Each participant was provided with a participant consent form (see Appendix G). The form provided a detailed explanation of the study. Respondents were required to sign the consent form to be eligible to participate. All signed consent forms from teachers, administration, and students were kept in a locked file cabinet. The data gathered were stored on a secure server through Qualtrics. The survey was confidential for all participants as no identifiable information was collected.

3.9. Data Collection

Data were collected from six North Dakota high schools that offer comprehensive school-based FCSE programs during the fall semester of 2017. The questionnaire was administered to junior and senior high school students currently enrolled in a FCSE class or a member of FCCLA at Richland 44 High School, Kindred High School, West Fargo High School, West Fargo Sheyenne High School, Mt. Pleasant School District #4, and Langdon Area High School. Students completed the online questionnaire using school-provided computers or their own electronic device. The questionnaire was presented through Qualtrics web-based survey software.

3.10. Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) software version 18. One-way ANOVAs were completed with the level of significance established at .05. Tukey's HSD tests were completed to determine which group's means were different.

3.11. Summary

This descriptive survey study used McClelland's (1987) theory of human motivation to examine the influence of independent variables of gender, grade level, race/ethnicity, GPA, and membership in FCCLA on the need for affiliation, achievement, and power in secondary FCS students. A total of 175 junior and senior high school students from six North Dakota schools of various sizes in school population and representative diversity made up the participants. The study used an online questionnaire in which high school students were surveyed one time to identify their need for achievement, affiliation, and power. Data were analyzed using SPSS software.

4. DATA ANALYSIS

4.1. Purpose of the Study

This descriptive survey study used McClelland's (1987) theory of human motivation to examine the influence of the independent variables of gender, grade level, race/ethnicity, GPA, and membership in FCCLA on the perceived need for affiliation, achievement, and power of secondary FCS students.

4.2. Research Questions

The following research questions guided the study:

1. What is the perceived motivational need for achievement, need for affiliation, and need for power of students enrolled in secondary FCSE programs?
2. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on gender?
3. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on grade level?
4. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on race/ethnicity?
5. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on FCCLA membership?
6. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on GPA?

4.3. Research Question 1: Motivational Needs of FCS Students

The first research question was designed to identify the motivational needs of FCS students currently enrolled in at least one FCSE class. The fifteen questions designed to identify

the need for achievement, need for affiliation, and need for power were grouped for each motivator and averaged. The overall mean results show that FCS students expressed the greatest motivational need for achievement ($M=3.78$) and the motivational need for power was the lowest ($M=3.31$). These data are presented in Table 1.

Table 1

FCS Students and the Need for Achievement, Affiliation, and Power

	<i>n</i>	<i>M</i>	<i>SD</i>
Achievement	172	3.77	.59
Affiliation	167	3.38	.57
Power	170	3.31	.77

4.4. Research Question 2: Motivational Needs Based on Gender

The second research question was designed to determine differences in the need for achievement, need for affiliation, and the need for power among FCS students based on gender. Each motivational need (achievement, affiliation, and power) had five associated questions. The means of the five questions were summed and averaged to create a mean composite score for each variable ranging from 1-5 where 1 was strongly disagree, 2 was disagree, 3 was undecided, 4 was agree, and 5 was strongly agree. The three motivational needs and the demographic variable of gender were examined with a one-way ANOVA with statistical significance set at .05. Results of the ANOVA revealed statistically significant differences in achievement showing that female FCS students have a greater need for achievement than males ($p=.032$). While there was no statistical significance in regard to affiliation or power, females also showed a slightly greater need for affiliation and power than males. These data are presented in Table 2.

Table 2

FCS Students and the Need for Achievement, Affiliation, and Power Based on Gender

		<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Achievement						
	Male	57	3.62	.62	3.51	.032*
	Female	113	3.86	.56		
Affiliation						
	Male	56	3.31	.544	1.02	.361
	Female	109	3.42	.585		
Power						
	Male	55	3.21	.798	.82	.440
	Female	113	3.36	.763		

4.5. Research Question 3: Motivational Needs Based on Grade Level

The third research question was designed to determine differences in the need for achievement, need for affiliation, and the need for power among FCS students based on grade level. The three motivational needs were summed to create a composite score as described in Research Question 2. The three motivational needs and the demographic variable of grade level were examined with a one-way ANOVA with statistical significance set at .05. The overall mean results show that there are no statistically significant differences for the three motivational needs between the two grade levels. However, junior FCS students have a slightly greater need for achievement and power than senior FCS students. Senior FCS students have a slightly greater need for affiliation than junior FCS students. These data are presented in Table 3.

Table 3

FCS Students and the Need for Achievement, Affiliation, and Power Based on Grade Level

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Achievement					
Junior	72	3.81	.63	.36	.548
Senior	100	3.75	.56		
Affiliation					
Junior	70	3.35	.51	.33	.564
Senior	97	3.40	.61		
Power					
Junior	71	3.35	.74	.35	.551
Senior	99	3.28	.79		

4.6. Research Question 4: Motivational Needs Based on Race/Ethnicity

The fourth research question was designed to determine differences in the need for achievement, need for affiliation, and the need for power among FCS students based on race/ethnicity. A composite score was summed for each motivational need as described in Research Question 2. The three motivational needs and the demographic variable of race/ethnicity were examined with a one-way ANOVA with statistical significance set at .05. Tukey's HSD tests were completed to adjust for multiple comparisons of the same data. The overall mean results show that there were no statistically significant differences, but white FCS students have a slightly greater need for achievement and power than other races/ethnicities. Also, Asian FCS students and those that preferred not to reveal their race/ethnicity have a slightly greater need for affiliation. These data are presented in Table 4.

Table 4

FCS Students and the Need for Achievement, Affiliation, and Power Based on Race/Ethnicity

		<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>		
Achievement								
	White	121	3.8314	.61047	.905	.493		
	Black or African American	20	3.65	.56				
	American Indian or Alaska Native	8	3.65	.54				
	Asian	5	4.00	.46				
	Native Hawaiian or Pacific Islander	2	3.70	.42				
	Two or more Races	12	3.56	.54				
	Prefer not to answer	4	3.50	.47				
Affiliation								
	White	119	3.35	.57			.66	.675
	Black or African American	20	3.49	.53				
	American Indian or Alaska Native	8	3.35	.31				
	Asian	4	3.70	.52				
	Native Hawaiian or Pacific Islander	2	3.60	.56				
	Two or more Races	10	3.30	.82				
	Prefer not to answer	4	3.70	.38				
Power								
	White	121	3.41	.76	1.97	.072		
	Black or African American	19	3.16	.70				
	American Indian or Alaska Native	8	2.90	.79				
	Asian	5	2.96	.81				
	Native Hawaiian or Pacific Islander	2	3.70	.42				
	Two or more Races	11	2.80	.81				
	Prefer not to answer	4	3.40	.43				

4.7. Research Question 5: Motivational Needs Based on FCCLA Membership

The fifth research question was designed to determine differences in the need for achievement, need for affiliation, and the need for power among FCS students based on membership in FCCLA. A composite score was summed for each motivational need as described in Research Question 2. The three motivational needs and the demographic variable of

membership in FCCLA were examined with a one-way ANOVA with statistical significance set at .05. Results of the ANOVA revealed statistically significant differences in regard to achievement and power. FCS students who are also members of FCCLA show a greater need for achievement ($p=.018$) and power ($p=.000$). These data are presented in Table 5.

Table 5

FCS Students and the Need for Achievement, Affiliation, and Power Based on FCCLA Membership

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Achievement					
Member	48	3.95	.70	5.71	.018*
Non-Member	124	3.71	.53		
Affiliation					
Member	48	3.39	.66	.02	.870
Non-Member	119	3.37	.53		
Power					
Member	49	3.64	.70	13.22	.000*
Non-Member	121	3.18	.76		

4.8. Research Question 6: Motivational Needs Based on GPA

The sixth research question was designed to determine differences in the need for achievement, need for affiliation, and the need for power among FCS students based on GPA. A composite score was summed for each motivational need as described in Research Question 2. The three motivational needs and the demographic variable of membership in FCCLA were examined with a one-way ANOVA with statistical significance set at .05. Tukey’s HSD tests were completed to adjust for multiple comparisons of the same data. Results of the ANOVA revealed statistically significant differences in achievement and power. Students with GPAs of 3.5-4.0 have a greater need for power ($p=.000$) and achievement ($p=.000$) than those with GPAs of 2.5-2.99 as well as a greater need for achievement ($p=.003$) than those with GPAs of 2.0-2.49. These data are presented in Table 6.

Table 6

FCS Students and the Need for Achievement, Affiliation, and Power Based on GPA

		<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Achievement	1.0-1.49	2	3.60	.28	6.35	.000*
	1.5-1.99	33	3.46	.80		
	2.0-2.49	12	3.38	.58		
	2.5-2.99	27	3.44	.45		
	3.0-3.49	44	3.77	.56		
	3.5-4.0	65	4.04	.57		
	Total	153	3.79	.60		
Affiliation	1.0-1.49	2	3.30	.14	.40	.845
	1.5-1.99	3	3.66	.41		
	2.0-2.49	11	3.52	.46		
	2.5-2.99	26	3.41	.60		
	3.0-3.49	43	3.39	.50		
	3.5-4.0	63	3.33	.63		
	Total	148	3.38	.56		
Power	1.0-1.49	2	2.30	.14	5.69	.000*
	1.5-1.99	3	2.66	.80		
	2.0-2.49	12	3.03	.86		
	2.5-2.99	26	2.87	.60		
	3.0-3.49	43	3.36	.78		
	3.5-4.0	65	3.59	.67		
	Total	151	3.32	.76		

Post Hoc comparisons using Tukey's HSD test were subsequently conducted.

Comparisons resulting in significant differences are listed in Table 7.

Table 7

GPA Groups Showing Significant Statistical Difference

	Higher Scoring Group	Lower Scoring Group	MD	p
Achievement	3.5-4.0	2.0-2.49	.65	.003*
Achievement	3.5-4.0	2.5-2.99	.59	.000*
Power	3.5-4.0	2.5-2.99	.72	.000*

4.9. Summary

This descriptive survey study used McClelland's (1987) theory of human motivation to examine the influence of independent variables of gender, grade level, race/ethnicity, GPA, and membership in FCCLA on the need for affiliation, achievement, and power in secondary FCS students. The study used an online questionnaire where high school students were surveyed one time to identify their need for achievement, need for affiliation, and need for power. Means for each construct were calculated to determine the overall mean for each variable. One-way ANOVAs were completed with the level of significance established at .05. Tukey's HSD tests were completed to adjust for multiple comparisons of the same data.

The fifteen questions designed to identify the need for achievement, need for affiliation, and need for power were grouped for each motivator and averaged. The overall mean results showed that FCS students expressed the greatest need for achievement ($M=3.78$) and the motivational need for power was the lowest ($M=3.31$). Results of the ANOVA revealed statistically significant differences in achievement showing that female FCS students have a greater need for achievement than males ($p=.032$) The ANOVA results showed no statistically significant differences for the three motivational needs between juniors and seniors, or between different races/ethnicities. Results of the ANOVA revealed statistically significant differences in a greater need for achievement ($p=.018$) and power ($p=.000$) for FCCLA members than non-members. The study also showed that students with GPAs of 3.5-4.0 have a greater need for power ($p=.000$) and achievement ($p=.000$) than those with GPAs of 2.5-2.99 as well as a greater need for achievement ($p=.003$) than those with GPAs of 2.0-2.49.

5. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

5.1. Purpose of the Study

This descriptive survey study used McClelland's (1987) theory of human motivation to examine the influence of the independent variables of gender, grade level, race/ethnicity, GPA, and membership in FCCLA on the perceived need for affiliation, achievement, and power of secondary FCS students.

5.2. Research Objectives

The following research questions guided the study:

1. What is the perceived motivational need for achievement, need for affiliation, and need for power of students enrolled in secondary FCSE programs?
2. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on gender?
3. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on grade level?
4. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on race/ethnicity?
5. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on FCCLA membership?
6. Do differences exist in motivational need for achievement, need for affiliation, and need for power of students enrolled in FCSE classes based on GPA?

5.3. Limitations

The researcher identified the following limitations:

1. The subjects selected for the research represent a purposeful sample. This sample was selected based on location, size of school, and the presence of an active FCCLA chapter. The results are not generalizable beyond the respondents.
2. The sample population was limited to only surveying current junior and senior FCS students; juniors and seniors who were not currently enrolled in FCSE classes were not surveyed.
3. The instrument was administered and collected in one sampling at one point in time.
4. There was no follow-up for FCS students not in attendance on the day of data collection and for non-respondents.
5. Students reported their own GPAs. All six of the participating schools for this study have access to PowerSchool, a computer application that allows students access to their grade point averages. Although students have access to their GPAs online, they may not have checked, or they may not have reported accurately.

5.4. Assumptions

The following assumptions guided this study:

1. The students participating in this study were all high school students in grades 11 and 12 at Richland 44 High School, Kindred High School, Mt. Pleasant High School District #4, Langdon Area High School, West Fargo Sheyenne High School, and West Fargo High School.
2. The students honestly and objectively reflected upon what motivates them to learn.
3. The students honestly reported personal demographic information.

4. The students accurately read and considered the instructions for completing the instrument.
5. The researcher assumes all school teachers want to know what motivates students to achieve, to belong, and to lead.

5.5. Conclusions

This study was designed to describe the motivational needs of secondary FCS students in FCSE programs in six North Dakota high schools. Results varied when compared with similar studies (Craddock, 2011; Rutter et al., 2002; Turner & Herren, 1997). The three studies used to compare results to the present study surveyed students from three different CTE program areas: agricultural education, FCSE, and business and computer sciences. Similarities and differences were identified.

5.5.1. Research Question One

The perceived motivational need for achievement, affiliation, and power of secondary FCS students enrolled in an FCSE course was the focus of research question one. The descriptive results showed that secondary FCS students have a slightly higher need for achievement than for affiliation or power. Turner and Herren (1997) found similar results in their study of motivational needs of agricultural education students. This indicates that the participating FCS students are motivated to achieve. Students with a high need to achieve tend to want to take responsibility for performing tasks, finding solutions to problems, tend to set moderately difficult goals, take calculated risks, and have a strong desire for feedback (Rutter et al., 2002).

FCSE teachers should encourage achievement for all FCS students of all backgrounds. Instructional opportunities for these students could include games incorporated into the classroom, competitive events such as Students Taking Action with Recognition (S.T.A.R.)

Events, service-learning, and open-ended type activities. FCSE teachers could encourage collaboration with the traditional required academics through opportunities such as Math in CTE.

Math that falls naturally within the FCSE curriculum could be enhanced with the help of the math instructor. “CTE has long been a leader in the integration of high-level academics and technology” (ACTE, 2009, p. 3). FCSE courses in nutrition, food preparation, clothing and textiles, and housing and interior design have always contained strong math components. When math concepts are integrated into FCSE, students can better grasp the relevance of math to solving real-world problems. “A study by the Southern Regional Education Board found that “students at schools with highly integrated rigorous academic and CTE programs have significantly higher achievement in reading, mathematics and science than do students at schools with less integrated programs” (ACTE, 2012, p. 4). Ultimately, FCSE teachers have a huge task and professional responsibility to provide meaningful learning activities that promote achievement at its highest level within the FCSE curriculum.

5.5.2. Research Question Two

Question two focused on the need for achievement, affiliation, and power of secondary FCS students enrolled in a FCSE course based on gender. Participants were given the option of identifying as male, female, or prefer not to answer. Females were found to have a significantly greater need for achievement than males. A similar study done by Turner and Herren (1997) found no statistical significance between males and females in their need for achievement, but they instead found statistical significance in both the need for affiliation and the power. Females had a greater need for both power and affiliation than males. The Rutter et al. (2005) study found no statistical significance for the need for affiliation, achievement, and power between males and females.

Female FCS students in this study were especially motivated by achievement. Five questions on the survey instrument solicited information on the need for achievement. An example of a need for achievement survey item was, “I prefer to do my own work and let others do their own work.” According to McClelland (1987), persons with a need for achievement may have a higher desire to win. FCSE teachers might need to consider opportunities for achievement that go beyond the parameters of the regular classroom.

Opportunities include work experiences that expand to job opportunities related to family and consumer sciences education, such as working in a daycare, food service, or retail clothing type business. Experiences such as these would allow FCS students to hone skills needed in the workplace, something all FCS students will need in the future. Membership in the FCSE CTSO, FCCLA, allows opportunities for female FCS students to meet their needs to achieve through leadership, competition, and volunteer events.

5.5.3. Research Question Three

Research question three examined whether differences existed in need for achievement, affiliation, and power based on grade level. No statistical significance was found in need for achievement, affiliation, or power in the present study. However, both Turner and Herren (1997) and Craddock (2011) showed that seniors had a greater need for power than freshmen. Rutter et al. (2005) found that freshmen students have a higher need for affiliation than older students. Older students have a greater need for power than do younger students supporting McClelland’s (1987) belief indicating that as individuals age, their need for power increases. However, the present study did not survey ninth and tenth grade FCS students, thus one could reason that the maturity between juniors and seniors is not measurable.

FCSE teachers should be aware of the importance of offering more learning experiences that promote the opportunity for students to sharpen their leadership (power) skills. FCSE teachers should not overlook the importance of teaching leadership skills within the classroom and should promote the development of these skills in a positive and constructive manner. Inclusion of leadership skills in the multi-grade level classroom should be considered carefully, as younger FCS students are often less interested in power.

It should also be noted that recruiting and retaining older FCS students in the local FCCLA chapter is important. FCCLA offers multiple opportunities for FCS students to build on their leadership skills through holding offices, participating in competitive events, mentoring younger students, and volunteering in the community, thus helping them prepare for leadership opportunities that await them as they get ready to enter society as contributing adults. Leadership opportunities such as these will help FCS students meet their motivational need for power.

5.5.4. Research Question Four

Research question four examined whether differences existed in need for achievement, affiliation, and power based on race/ethnicity. Response categories included white, black or African American, American Indian or Alaska native, Asian, Native Hawaiian or Pacific Islander, two or more races, and prefer not to answer. No statistical significant differences were found among the categories on the need for achievement, affiliation, or power.

While Turner and Herren (1997) found statistical significance in need for achievement based on race/ethnicity, this study did not. Turner and Herren (1997) found that African-American and Caucasian agricultural education students had a higher need for power than those students who identified as “other.” Turner and Herren (1997) also found that Caucasian students had a higher need for affiliation than African-American students. The current study had an

overwhelming number of white respondents as compared to all other identified races/ethnicities. However, it should be noted that the sample population mirrors that of the general population of the locations in which the study took place.

5.5.5. Research Question Five

Research question five examined the independent variable of secondary FCS students' membership in FCCLA and their need for achievement, affiliation, and power. Members were found to have a significantly greater need for achievement and power than non-members. Statistical significance was also found in the need for power based on membership in a CTSO in the studies conducted by Craddock, (2011), Rutter et al., (2002), and Turner and Herren, (1997).

Based on the findings of these four studies, it seems likely that CTSOs are attractive to students who have a high need for power and are effective in providing those opportunities for power. "With more than 1.5 million student members combined, CTSOs provide a unique program of career and leadership development, motivation and recognition for secondary and postsecondary students enrolled, or previously enrolled, in career and technical education programs" (ACTE, 2011, p. 1). FCCLA chapters can give members the opportunity for growth experiences through goal setting, critical thinking skills, group work, and exploring skills in three areas: leadership, competition, and community involvement (Smith, Jones, & Hall, 2006). Activities such as running for office, serving the needy, or competing in the Job Interview competitive event allows students the chance to meet their needs for achievement and power.

FCSE teachers and FCCLA advisers have a huge role in helping students who are FCCLA members meet their needs for achievement and power. As previously stated, there are numerous opportunities within the FCSE curriculum and within FCCLA for accomplishing this task. It is especially important for the local FCCLA chapter to retain all members but especially

juniors and seniors. This can be done by providing a variety of activities that promote involvement beyond the local level in both leadership development and competitive events.

5.5.6. Research Question Six

Research question six examined the independent variable of GPA of secondary FCS students and their need for achievement, affiliation, and power. GPAs were grouped as follows: 1.0-1.49, 1.5-1.99, 2.0-2.49, 2.5-2.99, 3.0-3.49, and 3.5-4.0. Results indicate that students with GPAs of 3.5-4.0 showed a greater need for achievement and power than those with GPAs of 2.5-2.99, and a greater need for achievement than those with GPAs of 2.0-2.49. No other related studies examined the need for achievement, affiliation, or power in relation to GPA. However, one would expect that those students who have a high need for achievement would achieve A's and B's on a regular basis. Grades might be one indicator of meeting the need for achievement. However, the need for achievement cannot be entirely defined by GPA. Students achieve in a variety of ways, hence the need for differentiation in classroom activities is important. In FCSE, many students excel because classroom activities are varied, as they do not depend solely on a test or written assignment. For example, in a sewing class, the emphasis is placed on the skill of sewing, and grades are determined by projects completed.

Teachers have access to students' GPAs. Teachers can develop learning opportunities for specific grade point average ranges based on the information learned from this study knowing that students with GPAs of 3.5-4.0 have a greater need for achievement and power than those students with GPAs ranging from 2.0-2.99. Further research is necessary to determine the importance that a student's GPA has on meeting the need for power, achievement, and affiliation.

5.6. Discussion

McClelland's (1987) need theory provided the framework for this study. If applied to the educational process, need theory allows for teachers to actively practice differentiation in the learning environment. Differentiation allows students to engage in activities that will ultimately allow them to be motivated to succeed through what McClelland (1987) believes are innate human needs: the need to achieve, the need for affiliation, and the need for power.

In this study, all respondents showed a higher need for achievement than the other two needs of affiliation and power. Females showed a significantly higher need for achievement than males. Additionally, FCCLA members showed a higher need for power and achievement than non-members. Respondents with GPAs of 3.5-4.0 showed a greater need for power ($p=.000$) and achievement ($p=.000$) than students with GPAs of 2.5-2.99 as well as a greater need for achievement ($p=.003$) than those with GPAs of 2.0-2.49. Of all the motivational needs, achievement is believed to be the most important, as evidenced by McClelland's (1987) devotion to decades of research.

The need for building relationships has been found to be key in school success. Students who feel like they belong are happier and more likely to enjoy school. This study found no statistically significant results with the dependent variable of affiliation based on any of the independent variables of gender, grade level, race/ethnicity, GPA, or FCCLA membership. In retrospect, the reason for this could be attributed to the fact that all respondents were juniors or seniors in high school. Younger students are still making friends and identifying with others. Therefore, they could have a higher need for affiliation. Although older students may still have some need for affiliation, they are more motivated by power and achievement as they are preparing to go out in the world on their own.

Finally, it is important for FCSE teachers to be able to reach all students from diverse backgrounds, gender, grade levels, GPAs, and FCCLA membership or non-membership. It is also important for FCSE teachers to know how students differ with respect to the motivational needs of achievement, affiliation, and power because “today’s CTE is on the cutting edge of connecting students to their futures through relevant education” (Hyslop & Imperatore, 2013, p. 17).

5.7. Recommendations/Implications for Research

The following recommendations for additional research were developed based on the findings presented in this study.

1. This is the only study in North Dakota that describes the motivational needs of FCS students. A study of motivational needs of all FCS students in the state of North Dakota should be conducted to determine if the findings of this study are consistent with that of the state of North Dakota. Additional studies would provide support for the limited body of literature on the motivational needs of FCS students.
2. Conducting a pilot study with a sample of FCS students to test for question reliability and validity could have identified potential problems. The questionnaire has been used in three similar studies. However, more than 20 years has passed since the first group of students were surveyed. With the increased use of personal electronic devices and the advancement of social media, a student’s perception of what motivates him/her may have changed.
3. Additional studies should look at the differences in the need for affiliation, achievement, and power based on GPAs. This study found statistical significance in students with GPAs of 3.5-4.0, showing a greater need for power than those with GPAs of 2.5-2.99, and a greater need for achievement than those with GPAs of 2.0-2.49 and 2.5.-2.99. Turner and Herren

(1997), Rutter et al. (2002), and Craddock (2011) did not consider GPA in their studies.

Further research should be conducted with CTE students in all program areas to determine if the findings in this study would be similar.

4. A study should be conducted to examine if membership in other CTSO's influences a member's motivational need for achievement, affiliation, and power. This study and Craddock's study (2011) found significant statistical differences in the need for achievement and power, but not for affiliation. Turner and Herren (1997) found statistical significance in the need for achievement, affiliation, and power in CTSO members versus non-members. Rutter et al. (2002) found statistical significance in the need for achievement and power between members and nonmembers of FCCLA. Members had a greater need for achievement and power than nonmembers. There was no statistical difference found between members and nonmembers with affiliation. The reason for the differences in findings could be attributed to the fact that only juniors and seniors participated in this study.

5.8. Recommendations/Implications for Practice

The following recommendations for practice were devised based on the findings presented in this study.

1. The information from this study can be shared with North Dakota FCSE teachers to encourage them to provide more learning opportunities for FCS students to meet their motivational needs for affiliation, achievement, and power.
2. This study showed a statistical significance in the need for achievement among females. FCSE teachers should provide increased opportunities for rigor and relevance in learning activities to meet a female student's need for achievement. FCSE teachers should actively

recruit these students who are motivated by power and affiliation for membership in FCCLA.

3. Providing in-service opportunities for North Dakota FCSE teachers on how to meet the motivational needs for achievement, affiliation, and power in the classroom could aid FCSE teachers in providing competitive, achievement, and affiliation-oriented opportunities to all students.

5.9. Summary

This study was designed to describe the motivational needs of secondary FCS students in FCSE programs in six North Dakota high schools. This study showed that FCS students have a higher need for achievement than for affiliation or for power. Significant statistical differences showed that females have a greater need for achievement than males. Significant statistical differences also showed that FCCLA members have a greater need for achievement and power than non-members. And finally, students with a GPA of 3.5-4.0 have a greater need for power than those with a GPA of 2.5 to 2.99, and a greater need for achievement than those with a GPA of 2.0-2.99.

With respect to further research on motivational needs of FCS students, all North Dakota FCS students and FCCLA members should be surveyed to determine if the findings of this study are consistent across the state. Current teachers should consider learning strategies to meet the three motivational needs: achievement, affiliation, and power. A teacher's effective use of appealing to a student's motivational needs can lead to success in the classroom. The results of this study and others show that "the three [motivational] needs are working together to meet the needs of students" (Rutter et al., 2005. p. 24).

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APPENDIX A. DEMOGRAPHICS AND STUDENT MOTIVATION QUESTIONNAIRE

Questionnaire

1. I would rather compete on a team than compete by myself.
 1. Strongly Disagree
 2. Disagree
 3. Undecided
 4. Agree
 5. Strongly Agree

2. I try to do better (achieve more) than other students.
 1. Strongly Disagree
 2. Disagree
 3. Undecided
 4. Agree
 5. Strongly Agree

3. I tend to organize and direct the activities of others.
 1. Strongly Disagree
 2. Disagree
 3. Undecided
 4. Agree
 5. Strongly Agree

4. I enjoy helping other students set goals and achieve them.
 1. Strongly Disagree
 2. Disagree
 3. Undecided
 4. Agree
 5. Strongly Agree

5. I rely on others to help me with a problem.
 1. Strongly Disagree
 2. Disagree
 3. Undecided
 4. Agree
 5. Strongly Agree

6. I prefer to do my own work and let others do their own work.
 1. Strongly Disagree
 2. Disagree
 3. Undecided
 4. Agree
 5. Strongly Agree

7. I try to win as many awards as I can.
 1. Strongly Disagree

2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

8. In group decisions, I generally go along with the crowd.

1. Strongly Disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

9. I like being known as a hard worker who gets things done.

1. Strongly Disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

10. I am active in the leadership of school activities.

1. Strongly Disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

11. I try to work in a group instead of by myself.

1. Strongly Disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

12. I rely on myself to get a job done.

1. Strongly Disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

13. I like (or would like) to be known as an officer in school organizations.

1. Strongly Disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

14. I enjoy helping other students.

1. Strongly Disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

15. I enjoy teaching other students new ideas.

1. Strongly Disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly Agree

16. Gender

1. Female
2. Male
3. Other
4. Prefer not to answer

17. Grade Level

1. Junior
2. Senior

18. What is your approximate GPA (grade point average)?

19. What is your race?

1. White
2. Black or African American
3. American Indian or Alaska Native
4. Asian
5. Native Hawaiian/Other Pacific Islander
6. Two or more races
7. Prefer not to answer

20. Why do you take courses in Family and Consumer Sciences?

21. Are you a current FCCLA member?

1. Yes
2. No

22. Why did you or did you not join FCCLA?

APPENDIX B. STUDENT ANNOUNCEMENT/RECRUITMENT FORM

Classroom Announcement:

Teacher Reads:

On (DATE), you will have the opportunity to help Mrs. Ann Dietchman, from North Dakota State University in the Family & Consumer Sciences Education Program. You will have the opportunity to help Mrs. Dietchman learn more about what motivates Family and Consumer Sciences Students, both members and non-members of FCCLA. She is working on a research project titled, **Motivational Needs of Secondary Family & Consumer Sciences Students.**

Your participation in this study is entirely voluntary and will not influence any of your grades in any way. The survey will take about 20 minutes and take place during class on (DATE).

Your parents will be notified via _____ . Your participation would greatly assist her in completing my research project.

Before you decide whether to participate in this study or not, please take the time to read the letter she has for you and ask any questions that you might have.

She and I both appreciate your consideration.

APPENDIX C. TEACHER PARTICIPATION INFORMATIONAL LETTER

[DATE], 2017
[TEACHER NAME]
[SCHOOL NAME] High School
Family & Consumer Sciences Education Teacher

Dear [TEACHER NAME]

Thank you for taking time to consider this important research project. I (the researcher) am inviting junior and senior students currently enrolled in your Family & Consumer Sciences classes along with the junior and senior members of your FCCLA chapter to participate in this research study. This letter provides information on the study and what will be asked of your students.

Purpose.

The goal of this research is: to understand the motivational needs of students enrolled in Family & Consumer Sciences (FACS) programs. A secondary purpose is to determine and compare the motivational needs of FACS students who are members and nonmembers of FCCLA. Finally, the research seeks to understand the motivational differences when grouped by gender, ethnic background, age, and scholastic standings. If we can identify what motivates students to learn, we can provide learning experiences in the FACS classroom to meet those needs.

Procedures.

This research involves each participant completing an electronic-generated questionnaire during a regularly scheduled FACS class period or FCCLA chapter meeting. I will come into your classroom to facilitate this process. Total administration time for this questionnaire is approximately 20 minutes. Your participation, and the participation of your students is voluntary. Responses to all questionnaires will be kept strictly anonymous.

Benefits.

Following completion of this research, you will be given a copy of all combined findings. You may benefit from participating in this research by thinking about ways to meet the motivational needs of your students.

Consents and Safeguards.

I (the researcher) place the highest priority on making sure that participation in the study is a positive experience for all and is minimally intrusive to the program. To accomplish this, I, the researcher, will abide by the following guidelines:

1. You can terminate your involvement in the study at any point you wish
2. All information gathered will be kept strictly anonymous.
3. Risks are minimal. Potential risks are not expected to be greater than those that exist in a typical classroom setting.
4. Questionnaires will remain completely anonymous. Any identifying factors will be removed from any portions utilized or quoted in the final product.

5. Electronic-data will be password protected, once the research study has finalized data collected, results will be destroyed.

Your Participation.

1. If you are willing to allow your students to participate in this study, please return the attached form by [DATE] to me vial email at Ann.M.Dietchman@ndus.edu.
2. If you have further questions you would like addressed please do not hesitate to contact me at (701)361-3722.
3. I will be happy to provide a copy of the survey questionnaire if needed. Should you have questions about your rights concerning the study, you may also contact the North Dakota State University Review Board at (701) 231-8895 or (855) 800-6717.

I am excited about the possibilities of this study and what it will tell us about the motivational needs of our Family and Consumer Sciences students. I hope you are interested!

Sincerely,

Ann M Dietchman &

Dr. Mari Borr, Graduate StudentAssociate Dean & FCSE Associate Professor

APPENDIX D. TEACHER CONSENT FORM

Family & Consumer Sciences Teacher/FCCLA Advisor Consent Forms

You understand that:

1. This study is a part of a research effort to learn about the motivational needs of students of Family & Consumer Sciences as well as members and non-members of FCCLA.
2. This study is examining what types of learning experiences lead to motivate junior and senior Family & Consumer Sciences students as well as members and non-members of FCCLA.
3. Your participation is voluntary.
4. You may terminate participation at any point.
5. The risks associated with this study are minimal.
6. You will be asked to allow the researcher to survey junior and senior students in your Family & Consumer Sciences classes as well as junior and senior members of the local FCCLA chapter.
7. Questionnaires will be kept anonymous.
8. Your participation in this project should not involve risks beyond those faced in typical classroom setting.
9. You will not be identified in any way.
10. You may have a copy of this consent form.
11. You may benefit by thinking about family and consumer sciences education experiences that motivate student participation in class with members and non-members of FCCLA.
12. Electronic-data will be password protected, once the research study has finalized data collected, results will be destroyed.

I further understand that all information provided will be kept confidential and that I may have a copy of the consent form. Any questions about this study may be directed to me, Ann M. Dietchman, at (701) 701-3722 or by email at Ann.M.Dietchman@ndus.edu or you may call my advisor Dr. Mari Barr at 701-231-7968 or by email at mari.borr@ndsu.edu. Questions concerning your rights as a participant can be directed to the North Dakota State University Institutional Review Board (IRB) at (701) 231-8995 or (855) 800-6717.

PLEASE RETURN ALL PAGES OF THIS DOCUMENT REGARDING YOUR PERMISSION TO PARTICIPATE IN THIS STUDY. AN ADDITIONAL COPY OF THESE DOCUMENTS WILL BE PROVIDED FOR YOUR OWN PERSONAL RECORDS.

I choose to: _____ Participate _____ Not Participate

Signature: _____

Please print your full name:

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Return by [DATE] to:
Ann M. Dietchman
Ann.M.Dietchman@ndus.edu

APPENDIX E. PRINCIPAL NOTIFICATION AND CONSENT FORM

[DATE], 2017

[NAME] – [SCHOOL NAME] High School Principal

The North Dakota State University Family & Consumer Science's Education Program and I invite you to take part in a quantitative study describing the motivational needs of high school students enrolled in the Family & Consumer Sciences program. North Dakota State University Family & Consumer Sciences Education Department holds your Family & Consumer Science's Instructor [TEACHER NAME] and the [SCHOOL NAME] Family and Consumer Sciences Education program in high regard, and for that reason students of this program have been identified as potential candidates for my Master's degree research project. The identification of motivational needs of students as juniors and seniors in high school enrolled in family and consumer sciences education will be compared to membership and non-membership in Family, Career & Community Leaders of America (FCCLA), gender, grade level, scholastic standing, and ethnic background.

My name is Ann Dietchman and I am currently a graduate student in Family & Consumer Sciences Education. I will be conducting this research project as partial fulfillment for my master's thesis in curriculum and instruction. Each junior and senior student enrolled in a family & consumer sciences class in your school will be asked to participate in a 22-item questionnaire that will take approximately 20 minutes to complete.

No identifying information will be collected on the questionnaire. Reporting of the findings will be anonymous and will not reflect upon your school in any way. Disruption of class time will be minimized as much as possible, and will be held at a time convenient for the school district, teacher, and students.

Active parental consent is not being sought for this study as it is focusing on the student's perceptions of their motivational needs. With the help of the family & consumer sciences education teacher(s), we intend to inform parents of the research via an emailed letter. Parents may choose to opt their children out of the study and students may opt out at any time during the survey. There is no treatment and the topic is not believed to be controversial or of emotional/psychological detriment to the participants. Permission will be obtained from [TEACHER], and consent from the students themselves. These consent letters will provide detailed information on the project. You can gain further information regarding this research project by contacting me, Ann Dietchman at (701) 361-3722 or email me at Ann.M.Dietchman@ndus.edu or you may call my advisor, Dr. Mari Borr, at 701-231-7968 or mari.borr@ndsu.edu. For more information about the student's rights as human subjects please contact the NDSU campus Institutional Review board @ (701) 231-8995 or (855) 800-6717.

This consent form gives permission for your students to participate in the research questionnaire. Please sign and return to me via email at Ann.M.Dietchman@ndus.edu.

I hereby give my permission for Ann M. Dietchman to conduct the research questionnaire to junior and senior students currently enrolled in Family and Consumer Sciences class at the [SCHOOL NAME] School District.

Principal Signature

Date

Sincerely,

Ann M Dietchman &

Dr. Mari Borr, Graduate Student Associate Dean & FCSE Associate Professor

APPENDIX F. PARENT PERMISSION NOTIFICATION

[DATE], 2017

Dear Parent,

My name is Ann Dietchman. I'm a graduate student in the School of Education at North Dakota State University in Fargo. I'm conducting a research study as part of the requirements of a Master of Science degree in Curriculum and Instruction, and I would like to extend an invitation for your child to be part of the study.

I received permission from [SCHOOL NAME] High School Principal [PRINCIPAL NAME] and Family & Consumer Sciences (FACS) Teacher [TEACHER NAME] to conduct a research questionnaire survey study designed by me. The study will survey high school junior and senior students currently enrolled in a Family & Consumer Sciences (FACS) class as well as high school juniors and seniors that are current members of the FCCLA (Family, Career & Community Leaders of America) Chapter about their experiences in the classroom and as participating members of FCCLA.

If you would prefer that your child not participate in this study, please call, or email me (Ann) directly (see contact information at the bottom of this letter) by [DATE]. Or if you prefer, please contact your high school principal, and inform them you would prefer your child not participate in the Motivation Needs of Secondary Family, & Consumer Sciences Students.

Purpose.

The goal of this research is: to understand the motivational needs of students enrolled in Family & Consumer Sciences (FACS) programs. A secondary purpose is to determine and compare the motivational needs of FACS students who are members and nonmembers of FCCLA. Finally, the research seeks to understand the motivational differences when grouped by gender, ethnic background, age, and scholastic standings. If we can identify what motivates students to learn, we can provide learning experiences in the FACS classroom to meet those needs.

Procedures.

This research involves each participant completing an electronic-generated questionnaire during a regularly scheduled FACS class period or FCCLA chapter meeting. Total administration time for this questionnaire is approximately 20 minutes. Students' participation in this survey is voluntary. Your child does not have to take part in the study or can simply just answer the questions they feel comfortable in answering. The survey will not be individually scored; student's data will be combined with all other participant's data to come up with an average. All information will be kept confidential and once all the surveys are evaluated, the survey information will be destroyed.

The results of the study may be published in professional education journals or presented at professional conferences. Participation is once again anonymous and your child's personal

answers to the survey will not be identified. Participation in this study will have no effect on current grades in the FACS classes that your child is presently enrolled in. The student may quit taking the survey at any time.

Benefits.

Participation in this research may benefit your student by challenging them to think about how participation in FACS classes best fit their ability to learn. The results of this research will add to the existing literature on effective secondary education instructional practices.

Consents and Safeguards.

Confidentiality will be maintained throughout this study. All student information will be confidential. The highest priority will be placed on making sure the study is a positive experience for all that take part. To accomplish this, I (the researcher) will abide by the following guidelines.

- 1) All information will be kept confidential and anonymous.
- 2) Participation in this study should not involve risk beyond what is faced in a typical school day.
- 3) Individual answers to survey questions will remain anonymous, and no identifying factors will be used in the study.
- 5) Electronic-data will be password protected, once the research study has finalized data collected, results will be destroyed.

More Information and Opt-Out Procedures.

I am happy to answer any questions that you may have on this research study. You may contact me at 701-361-3722 or email me at Ann.M.Dietchman@ndus.edu or you may call my advisor, Dr. Mari Borr at 701-231-7968 or mari.borr@ndsu.edu. *If you would prefer that your child not participate in this study, please call, or email me (Ann) directly by [DATE]. Or if you prefer, please contact your high school principal, and inform them you would prefer your child not participate in the Motivational Needs of Secondary Family, & Consumer Sciences Students.*

For more information about the student's rights as human subjects, please contact the NDSU campus Institutional Review board at (701) 231-8995 or (855) 800-6717.

Thank you for your consideration. I am excited that the possible outcomes of this study will help to further understand what motivates Family and Consumer Sciences students.

Sincerely,

Ann M Dietchman &

Dr. Mari Borr, Graduate StudentAssociate Dean & FCSE Associate Professor

APPENDIX G. YOUTH INFORMED CONSENT FORM

Youth Informed Consent Form

Motivational Needs of Secondary Family & Consumer Sciences Students

You understand that:

1. This study is part of a reach effort to learn about motivational needs of students.
2. This study is examining your motivational needs in relation to affiliation, achievement, and power.
3. Your participation is voluntary.
4. This survey will take approximately 20 minutes to complete.
5. You may stop participation at any point.
6. You will be asked to complete an electronic questionnaire.
7. Your responses to the questionnaire will be completely anonymous.
8. The risks associated with this study are no more than you face in a typical day participating in a typical classroom setting.
9. You will not be identified in any way.
10. You may have a copy of this consent form.
11. You may benefit by thinking about what motivates you to learn.
12. Electronic-data will be password protected, once the research study has finalized data collection, results will be destroyed.

You further understand that all information provided will be kept anonymous. Any questions about this study may be directed to Ann Dietchman at Ann.M.Dietchman@ndus.edu or Dr. Mari Borr at mari.borr@ndsu.edu. Questions concerning your rights as a participant can be directed to the NDSU Institutional Review Board (IRB) at (701) 231-8995.

Thank you for your consideration and participation!

Your Signature

Print Name

Date