

Investigating the mental health of agriculture teachers in the Midwest

by

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Abstract

Mental health awareness has increased throughout the last decades. What used to be seen as a negative connotation, mental health is evolving to be less stigmatized by society. Mental health illnesses can be mild or extreme and can be a multitude of different illnesses. Identifying and addressing mental health illnesses is important to the overall lifestyle of a person.

There has been a historical rise in teachers exiting the classroom creating a nationwide teacher shortage. In agricultural education, there has been a constant shortage and need for quality teachers in the profession. Agricultural education teachers have job duties that go beyond the classroom and have unique stressors in their profession. This study investigates: (1) areas within the school environment that impact the mental health of agricultural education teachers, (2) the individual experiences that have caused the most stress and/or anxiety to teachers in the agricultural education profession, and (3) how personal feelings and/or emotions are impacted by the school environment and experiences in the profession.

This study involved survey methods to disseminate a survey to agricultural education teachers in the Midwest. Of the random sample, 57 complete questionnaires were returned. The responses included both male and female agriculture teachers of different ages and career lengths. The instruments used in this survey investigated the school environment, daily stressors, and depression symptoms of teachers. Agriculture teachers have roles and responsibilities beyond the classroom and the workload is causing increased levels of stress and depression. It is important for the future of the agricultural education profession to identify stressors impacting the mental health of the agriculture teacher.

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Dedication

Mental health is a serious illness. The effects of the illness and challenges it introduces to people in their daily lives is important to bring attention too. As an agricultural education teacher that has been diagnosed with a mental health illness, I am proud of where I am in my journey and the steps, I have taken to address my illness and remain in the classroom.

This thesis is dedicated to all agricultural education teachers for their resilience and dedication to the profession. If you are ever doubting yourself as a professional or feeling like you are defeated and alone, know that you have a community of support. If you are ever questioning your mental health and realize it is being affected by your career don't be afraid to seek help because in the end YOU MATTER!

Chapter 1 - Introduction

Mental health is the foundation for emotions, thinking, communication, learning, resilience, hope and self-esteem (American Psychiatric Association, 2022). There are numerous reasons to be educated on mental health and different illnesses associated with mental health. As of 2020, one in five (nearly 21%) of U.S. adults experience some form of mental illness (National Alliance on Mental Health, 2022). Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community (World Health Organization, 2022).

Mental illnesses have become a popular buzzword in society, but they are not a recent medical discovery. According to the American Psychiatric Association, “a public stigma involves the negative or discriminatory attitudes that others have about mental illness” (American Psychiatric Association, para. 4, 2022). Mental health has been stigmatized over the last several decades for many reasons, but one reason is due to the lack of resources and education on mental health (Gosser, 2021).

When research on mental illness began during the Civil War, there was not much knowledge on the topic (Mandell, 1995). As the illness became more common, the research continued and the importance of education on or about the illness became more important. The need for education and research led to the establishment of the World Health Organization (WHO) in 1946 (Bertolote, 2008).

Millions of people in the U.S. are affected by mental illness each year (National Alliance on Mental Health, 2022). When looking at the demographics of the U.S. population that experienced mental illness in 2020, 37.4% of males and 51.2% of females received mental health services (Duszynski-Goodman, 2023). Females are diagnosed with serious mental health

conditions at higher rates than males, seven percent to four-point two percent (Duszynski-Goodman, 2023). According to the National Alliance on Mental Health, as of June 2022, one in five U.S. adults experience a mental illness each year and one in 20 U.S. adults experience serious mental illness (National Alliance on Mental Health in June of 2022). Young adults, ages 18-25, have a higher rate of experiencing any mental health issues compared to adults ages 26-49 (Duszynski-Goodman, 2023).

People who live in rural versus urban areas encounter unique obstacles when managing mental health (National Alliance on Mental Illness, 2020). In 2020, 21% of U.S. adults in nonmetropolitan areas experienced mental illness and six percent experienced serious mental illness (National Alliance on Mental Illness, 2020). One of the six largest employers in rural America is agriculture (Davis et al., 2022). In the last 20 years, farmer suicide rates have increased by 40% (Ringwalt, 2023).

Rural areas are not always considered small but defined as an area that is not urban or metropolitan (Monk, 2007). There are stressors to teaching in any school district, no matter the size, but in a rural school district an extra stressor may be that there are less teachers (Monk, 2007). Having less teachers within a district can cause core subject teachers to teach all levels, such as a science teacher teaching all science related courses (Monk, 2007). Teachers in rural school districts are often found taking on the roles of hallway or lunchroom monitor, bus driver, custodian, nurse, coaches, etc. (Randall, 2019). The changing work demands in roles in rural schools create a unique set of stressors to the rural education teacher (Randall, 2019).

Teachers are pivotal to public education and the next generation (Randall, 2019). It has been found that relationships with students, staff, administration, and communities can help retain teachers or cause them to leave the profession (RAND, 2023). Some of the attributes of

teaching in a small school is “the strength of relationships, including those with students, colleagues and administrators, as well as the community members” (Ingersoll & Tran, 2023, p.5) The RAND Corporation reported that 77% of teachers decided to stay in the profession because of the relationships with students in the classroom (RAND, 2023). How we treat our teachers and foster relationships with them is important to their overall mental health.

In another study, 23% of teachers mentioned that lack of morale, stress, and disappointments of teaching were reasons why they were considering leaving the classroom (Doan et al., 2023). Agriculture teachers alone reported that 18.1% decided to leave the classroom due to stress (Harrell, 2022). The stress of the workload in addition to the extra roles and responsibilities beyond the classroom have played an important role in a teacher’s decision to leave the classroom (Solomonson, 2017).

The nationwide teacher shortage has been ongoing. As of August 2022, there were 36,000 teacher vacancies in the United States (Povich, 2023). In agricultural education specifically there were 674 position openings after the 2021-2022 school year (Smith et al., 2021).

There is a need to investigate the current situation through a mental health lens in an effort to identify strategies to aid teachers and encourage them to remain in the profession.

Purpose of Study

The purpose of this study was to investigate the current mental health condition of agricultural education teachers and identify experiences and/or tasks that have contributed to their mental health. By investigating the mental health condition, the goal is to identify ways to support or help agricultural education teachers.

Research Objectives

1. Describe the areas within the school environment (e.g., Instruction and materials, student engagement and behavior, teacher involvement, and communication) that impact the mental health of agricultural education teachers.
2. Determine the individual experiences that have caused the most stress and/or anxiety (e.g., time management, students' discipline, task delegation, salary, extra duties, respect of peers, educational resources, peer support) to teachers in the agricultural education profession.
3. Determine how the personal feelings and/or emotions (e.g., depression) of the agricultural education teacher is impacted by the school environment and stressors in the profession.
4. Describe the differences between the final depression score and professional demographics (Ag Teacher's Life Cycle and certification type).
5. Describe the differences between the personal demographics of the agricultural education teacher and their mental health.

Key Terms

The following key terms were used throughout the study:

Mental Health - Mental health is the foundation for emotions, thinking, communication, learning, resilience, hope and self-esteem (American Psychiatric Association, 2022). Mental health is also a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community (World Health Organization, 2022).

School Environment - The climate of a school based on peer relationships, curriculum and learning, and the physical attributes of a school.

Stress - Stress can be described as a body's emotional and physical response to outside stimuli (Graber, 2018).

Anxiety - Anxiety is "persistent, excessive worries that don't go away even in the absence of a stressor." (American Psychological Association, 2022, para. 2)

Depression - "Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest" (Mayo Clinic Staff, 2022, para. 1). The cause of depression is not exactly known, but The Mayo Clinic identifies some factors as biological differences, brain chemistry, hormones, and inherited traits (Mayo Clinic Staff, 2022).

Agricultural Education - An education program focused on educating others about agriculture and related subjects (Talbert et al., 2022).

Ag Teacher Life Cycle - A model adopted by the NAAE to encompass the stages of an agriculture teacher's career and what they experience in each stage.

Alternative Teacher Certification - A teaching certificate obtained by one who did not go through a teaching certification program. An alternative teacher certification is achieved by going through the state department of education (Landreth, 2016).

Traditional Teacher Certification - A teaching certificate achieved by attending a teacher education program and completing the required teacher certification requirements (Landreth, 2016).

Chapter 2 - Literature Review

Mental Health

The information known today about mental health has been a continuous learning process dating back to the Civil War. Discussion about mental health continued into the twentieth century and in 1908 the first society for mental hygiene met in Connecticut (Mandell, 1995). This society paved the way for the mental hygiene movement that continued through the early to mid-twentieth century.

In 1946, the World Health Organization (WHO) and a Mental Health Association was founded in London (Bertolote, 2008). Since the establishment of the WHO, the term and definition of mental health and mental hygiene have changed to be more holistic. “Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (Bertolote. Pg. 115. 2008). As a society, it is important to realize that according to the WHO, the definition of health refers to dimensions of a state and not a specific domain or discipline (Bertolote, 2008).

Mental Health Demographics

In the United States in 2020, it was found 37.4% of the male and 51.2% of the female population were seeking treatment for mental health symptoms (Duszynski-Goodman, 2023). On average, the delay between onset and mental illness symptoms and treatment is 11 years (National Alliance on Mental Health, 2022). Mental health may impact a person’s life, but eventually it will have a ripple effect and impact their family and community (Duszynski-Goodman, 2023).

During 2022, one in five U.S. adults experienced a mental illness and one in 20 adults experienced serious mental illness (National Alliance on Mental Health in June of 2022). According to Forbes, young adults have a higher rate of experiencing any mental health issues compared to older adults (Duszynski-Goodman, 2023). Jamie Rosenberg (2019) stated, “the results suggest that cultural trends in the last 10 years may have had a larger effect on the mood disorders and suicide-related outcomes among younger people compared with older people” (para. 2).

Aside from cultural trends like social media, emerging into adulthood also causes extra stress on a young adult's life that could cause mental health issues. In an article written in the Journal of Clinical Medicine it stated, “emerging adulthood is a critical period of life that entails many life transitions in living arrangements, relationships, education and employment, which can generate stress and psychological distress in the emerging adult” (Matud et al. 2020, para. 1). The World Health Organization (2023) stated, “stress is defined as a state of worry or mental tension caused by a difficult situation” (What is stress section, para. 1). The Journal of Clinical Medicine listed several stressors that emerging adults can face, but more specific events that were named were discrete events such as: moving out of the family home, entering college, or beginning paid work (Matud et al. 2020).

Across the United States people who live in areas with less resources, or rural areas, encounter unique obstacles when managing mental health (NAMI, 2020). According to the United States Census Bureau the term rural refers to “areas that are sparsely populated, have low housing density, and are far from urban centers” (America Counts Staff, 2017, para. 3). As of 2020, the Economic Research Service, a branch of the United States Department of Agriculture reported 46 million U.S. residents living in rural areas, or 14 percent of the U.S. population

(Economic Research Service, 2021). The rural population of 46 million people showed that 21% of the adults experienced mental illness and 6% experienced serious mental illness (NAMI, 2020). U.S. citizens in rural areas face more mental health issues. “Rural areas have unique health problems, resource shortages, demographic characteristics, cultural behaviors, and economic concerns that combine to impact on the mental health of its residents.” (Rural Mental Health, 2012, p. 5).

Mental Health in Agriculture

Like emerging adults, Americans who work in the agriculture sector encounter countless life transitions, but for these Americans the transitions are continuous. There are several factors to consider when investigating mental health in agriculturalists including economic uncertainty, vulnerability to weather events, and isolation (Rural Health Information Hub, 2021). Some of the factors that impact agriculturalists are completely out of their control such as input prices, commodity prices, and weather (Forrest, 2022).

There has been an increase in the suicide rate and mental health illness among farmers and ranchers (Ringwalt, 2023). Farmers and ranchers face an inconsistent lifestyle that poses new threats or challenges daily. The inconsistent work schedule, fluctuating commodity prices, shrinking labor pools, government policies, and unpredictable environmental conditions often impact their mental health (Miller & Rudolph, 2022). Some people might think they chose the farming and ranching lifestyle, but that isn't always the case. Many farmers and their families feel that they must return to the farm and take on the operation (Braun, 2019). Family farms make up 98% of all farms in the United States and provide 88% of commodities (Whitt, 2020).

Aside from obligation, there are healthy and unhealthy reasons to return to the family farming operation (Woodbury, 2021). According to the Progressive Farmer, there are three

healthy reasons for one to return to the family farm: passion for agriculture, opportunity, and sense of stewardship (Woodbury, 2021). The unhealthy reasons include a sense of obligation, unclear of what they want to do, and unsuccessful elsewhere (Woodbury, 2021). Unfortunately, there are times when the unhealthy reasons are why people return to the farm. When one returns for unhealthy reasons, those reasons can lead to larger stressors in their personal life or spread to impact their families (Woodbury, 2021).

Agriculturalists are known to be hardworking and highly independent. They don't always express themselves or reach out for help when they need it. Across the United States there are areas of mental health care shortages, meaning there aren't enough mental health care services (Forrest, 2022). For most farmers, they need to have a source of off-farm employment to have health insurance (Braun, 2019). When a farmer has trouble getting regular health insurance, they do not see mental health care as a necessity for an extra expense (Forrest, 2022). "They are self-reliant, independent and can be unlikely to ask for help... They work long, hard days and may de-prioritize their own health and well-being to get a job done" (Farmaid, pg. 1. 2019).

Josie Rudolphi is a professor at the University of Illinois Urbana- Champaign who conducts research on mental health needs of people who live and work on farms. Rudolphi, alongside Cristina Miller, published a study in 2022 on the characteristics of suicide in farmers and ranchers. From her study, she found that female farmer and ranchers who pass from suicide were younger than males. They also had a higher rate of suicidal thoughts and attempts compared to the male. The male farmers and ranchers had a higher suicide rate if they were 46-64 years old and had financial problems (Miller & Rudolphi, 2022).

Rudolphi published a different study in 2023 about the mental health of agricultural adolescents and adults. This study was conducted with Richard Berg and was a five-year study.

In their research, they found that 60% of the parents experienced at least mild symptoms of depression and that number was the same among the adolescents (Rudolphi & Berg, 2023). They also discovered 45.1% of youth and 54.9% of adults met the criteria for anxiety disorder (Rudolphi & Berg, 2023). This study showed that among farm parents and youth there is a correlation with depression and anxiety symptoms.

Mental Health in Education

An article on Talkspace.com, investigated teacher burnout and it was defined as, “Teacher burnout is more than just a frustrating day with distracted students, helicopter parents, or glitchy technology. It’s caused by chronic stress due to unrelenting workplace demands” (Chapple, 2022, para. 5). In February of 2022, Gallup conducted a survey asking workers in the United States how often they experience burnout (Marken & Agrawal, 2022). The survey showed K-12 workers experienced the highest rate of burnout among workers in the U.S. with 44% or four in 10 workers (Marken & Agrawal, 2022).

Since 2020, the COVID-19 pandemic has also played a part in teacher burnout or mental health among educators. Education has never been known as an easy career field, but since the nationwide pandemic, the statistics of teachers leaving education, suffering from teacher burnout, or facing mental health illnesses have increased. Before the pandemic 36% of K-12 workers were experiencing burnout (Marken & Agrawal, 2022). There have been several studies conducted to identify stressors, factors, and experiences to investigate the increase. In a study conducted by Megan Brooke Thomas that investigated the mental health effects of teachers in the United States during the pandemic, she found that the most common mental health symptom was exhaustion. Other common symptoms were stress, fear, and worry (Thomas, 2022). During her research she broke up the pandemic time frame for stressors into three sections: beginning

phase of COVID-19, middle phase of COVID-19 and the ending phase of COVID-19. Thomas reported that the top stressors during the ending phase of COVID-19 included: difficulties adjusting back to the way they were before, staffing shortages, learning loss, long workdays, expectations, and responsibilities in the workplace (Thomas, 2022).

It is no secret that there is a nationwide teacher shortage. Between 2019 and 2021, it was estimated that public education lost 7% of its total teaching population (Jones, 2023). In February of 2023, three-fourths of the United States were still experiencing teacher shortages (Jones, 2023). One of the reasons for this teaching shortage is the lack of attention to poor mental well-being of teachers in the classroom (Jones, 2023). As research and survey data has shown, there is a growing need to address teacher mental health as one in four teachers experienced symptoms of depression (Will & Superville, 2022). A researcher from the Center for Research in Education & Social Policy at the University of Delaware found that when teachers battle symptoms of depression, they put less focus on lesson planning and curriculum in the classroom (Will & Superville, 2022). There are ways to support teachers who face mental health symptoms, and some school districts are focusing on getting help, but some teachers are leaving the profession before the school district secures that help.

School Environment

School districts and administration continuously look for ways to address student mental health, but district leaders tend to overlook the adults in their school district (Will & Superville, 2022). The school environment plays an important role in the mental health of the students, teachers, and staff. In a mixed methods study conducted by Jacquelyn Williams on the teacher mental health, school environment, and school leader practices, Williams interviewed teachers of different demographics on three different scales: workplace PERMA (positive emotion,

engagement, relationships, meaning, accomplishment) scale, school environment, and depression anxiety stress scale (Williams, 2022).

After one of Williams' interviews, she found a participant that had a distress score that fell within the severe range. This participant was a 64-year-old female with over 21 years of teaching experience. What stood out about this participant was her low school environment and high distress scores. In her interview she mentioned that her school was going through an administration change and with that change came new ways of doing things. Something that caused additional stress from the new administration was observations were not friendly or positive. As a result of these observations there was a lot of turnovers within the staff (Williams, 2021). This participant also mentioned that the new administration created impersonalized teacher development and played favoritism to different educational areas. As the interview continued, she mentioned coping strategies she used to manage her frustrations. She "defined mental health as the management of stressors" (Williams, 2021. p. 133). To cope with these stressors, the participant said, "having a place to vent about stressors, so they don't burden you" (pg. 133). To cope with her mental health, she focused a great deal on needing to build relationships for emotional and professional support and needing a school leader who acknowledged the teacher and their needs. At the end of the interview the participant stated that the "accumulating stress she physically felt in her body..." would lead to her decision to retire after 24 years in education (Williams, 2021, p. 137).

In the next interview conducted in Williams' study, she had a participant who had average scores on all three instruments. The participant was a 28-year-old female who had been teaching for five years and in her current school for three years. This participant said, "mental health was the ability to find balance between stress and coping" (Williams, 2021. p. 138). The

school environment scores of this participant were average, but she felt that the environment was poor. The top stressors for the school environment for this participant was teacher inclusion within the district leadership, relationships between administration, staff, and students, and compassion and respect from administration. Something unique about this participant was that she introduced the concept of “school environment internalization and the effect internalizing one’s school environment can have on an individual” (Williams, 2021. p. 144).

The last participant to highlight from this study was a 37-year-old female who had been teaching for 14 years, and in her ninth year at her current school. This participant recognized her school environment as positive. She received a score of 4.48 on the school environment instrument. To receive such a high positive score for her school environment she recognized her administration as positive leaders that prioritized instructional leadership, professional development, and positive school culture and climate. This participant focused on the little things that her administration did that made a huge impact on the positive atmosphere for the school. The administration would do “little things” such as bring lunch, put snacks in the lounge, and leave positive notes of encouragement (Williams, 2021, p. 148). This participant pointed out that “small acts of consideration towards Helena and colleagues enacted by school leaders, showed daily support for teachers and fostered a positive school environment” (Williams, 2021, p. 149). When the teachers feel a positive environment, then that has the power to filter into the students and create a positive environment for them too.

Stress

The amount of stress a teacher is under affects their physical, mental, and emotional well-being (Davidson, 2009). Stress can be described as a body’s emotional and physical response to outside stimuli (Graber, 2018). Teaching is known to be a stressful profession and stress can end

up taking loyal and gifted teachers out of the teaching profession (Goncharova, 2022). Research shows that the top job stressors for educators include student misbehavior, poor relationships with colleagues, principals and parents, time management, lack of influence, lack of professional recognition, salary received, poor school climate and environment, work overload, changes in education, staff shortages, and job insecurity (Davidson, 2009).

People believe that teachers have a lot of extra time on their hands (Goncharova, 2022). Teachers spend a lot of “off the clock” time grading papers and preparing for classes (Goncharova, 2022). When looking at the relationship between teacher workloads and the Perceived Stress Scale, teachers who have a larger workload, tend to have a moderate level of perceived stress (Davidson, 2009). Course preparation demands can depend on the grade level or courses taught. Elementary teachers prepare course material for multiple content areas and sometimes for a grade level or subject area that they are not as familiar with (Graber, 2018). Aside from the tasks defined in the job description, there is a continued increase in the job expectations (Graber, 2018). Specifically, teachers find stress in having to change their teaching methods to include multiple instruction styles for students (Graber, 2018). One teacher stated that “When we were in school, you had to adapt to the teacher. The teacher had a style, [and] you had to adapt to the teacher. Now they don't have to adapt to us. We must adapt to each of them.” (Graber, 2018, p. 136-137).

Establishing relationships with students while focusing on student behavior is a large task for teachers (Goncharova, 2022). Teachers fear that when a student is not on task, not using their time wisely, or not completing their work which reflects poorly on them as a teacher (Graber, 2018). While teachers are trying to be effective in the classroom for students, they also must tend to discipline or behavior of the students. In 2022, 47% of teachers spent up to one hour a day

addressing behavior in the classroom (McShane, 2022). Teachers identified that the top reason for class time interruptions is student discipline issues (McShane, 2022). “Students are becoming more and more rebellious; they are more eager to cause conflicts, objecting to anything that is said by the teacher” (Goncharova, 2022, p. 148). Teachers need to feel respected and appreciated in the classroom (Graber, 2018).

The State of the American Teacher and State of the American Principal Surveys in 2022 found that zero percent of teachers are never stressed and that 51% of teachers feel stressed often (Doan et al., 2022). From this survey, reasons for stress in the classroom was the loss of educational instruction from the COVID-19 Pandemic and implementing COVID-19 mitigation measures in the classroom (Doan et al., 2022). Separate from the COVID-19 Pandemic, the top stressors for teachers in the classroom were supporting student mental health and wellness, taking on extra tasks due to staff shortages, and managing student behavior (Doan et al., 2022). From the stressors of teaching 43% of teachers somewhat agreed that “the stress and disappointments involved in teaching aren’t really worth it” (Doan et al., 2022, p. 28).

Anxiety

There is a difference between stress and anxiety. Stress is often caused by an external factor (American Psychological Association, 2022). Anxiety is “persistent, excessive worries that don’t go away even in the absence of a stressor” (American Psychological Association, 2022, para. 2). Forty million adults, or three percent, of the population in the United States are affected by anxiety disorder every year (Anxiety & Depression Association of America, 2022). For teachers, anxiety disorder can lead to low teaching self-efficacy, increased burnout and absenteeism, poor student-teacher relationships, and reduced student wellbeing (McMillian, 2021).

Teachers who are in the early stages of their career have a greater chance of showing anxiety disorder symptoms (Jones-Rincon & Howard, 2019). Early career teachers can have lower supervisor support, more work pressure, and less control over their curriculum (Jones-Rincon & Howard, 2019). When one feels anxious, they can feel unsupported and/or isolated (Blackwood, 2023). For some early career teachers, they start to feel the symptoms of anxiety (emotional exhaustion and depersonalization) at 15 months into their career (Jones-Rincon & Howard, 2019).

Having a low physical quality of life and higher perceived stress can also prove to increase a teacher's anxiety disorder (Jones-Rincon & Howard, 2019). People who engage in two to two and half hours of physical activity a week can reduce their chance of a chronic disease (Anderson & Shivakumar, 2013). When exercising your body is decreasing tension in the body, specifically the muscles, which decreases the body from feeling anxious (Ratey, 2019). Teachers who are physically active report that they have less symptoms of feeling necrotic, ill, and exhausted (Jones-Rincon & Howard, 2019).

Anxiety disorder can have many different physiological and physical symptoms in people (Blackwood, 2023). The anxiety disorder symptoms of a teacher can be impacted by their gender, the grade level taught, years taught, class sizes, job involvement and job control (Jones-Rincon & Howard, 2019). Teachers in elementary, middle/junior high, and high school have different teaching environments which can add different factors to consider when investigating anxiety in teachers (Jones-Rincon & Howard, 2019). It is important for employers to recognize anxiety disorder stressors in their employees as they can impact the teacher turnover rate, low student morale, and unhappy staff members (Blackwood, 2023). Anxiety is a serious mental

health disorder and can prove to be costly to both teachers and school districts (Jones-Rincon & Howard, 2019).

Depression

“Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest” (Mayo Clinic Staff, 2022, para. 1). The cause of depression is not exactly known, but the Mayo Clinic identifies some factors as biological differences, brain chemistry, hormones, and inherited traits (Mayo Clinic Staff, 2022). When identifying depression within an individual, a few symptoms include feelings of sadness, having angry outbursts, loss of interest or pleasure in most activities, sleep disturbances, tiredness and lack of energy, reduced appetite, anxiety, feelings of worthlessness or guilt (Mayo Clinic Staff, 2022).

In 2022, an article was published on Education Week focusing on the mental health of educators and the impact mental health has on the rest of the school environment. This article stated that “teacher well-being is incredibly important, not only for them but their students’ learning experience as well.” It was expressed that when teachers have depression, they spend less time focusing on whole class instruction. (Will & Superville, 2022).

In 2010, Jessica McLaughlin conducted an online survey focusing on teacher depression symptoms in relation to personality of the teacher and the school environment. This study included educators in K-12 from all different demographics based on age, gender, ethnicity, grade level taught, and household income (McLaughlin, 2010). The survey on depression used The Center for Epidemiological Studies Depression Scale (CES-D). This scale asks the participants 20 questions regarding how they feel and ranks them on a four-point-scale. Once completed, the participants receive a score from zero to 60 (high scores indicate a presence of depressive symptoms). The findings in this study indicated that 34% of the teachers were

depressed based on the CES-D. At the time of this study the general population depression rate in the United States was nine percent. Some of the hypothesis testing within the study found that when comparing years of teaching to the CES-D scale teachers who taught less time had more depression symptoms and teachers with lower Principal Openness and Other Teachers' Openness had more depression symptoms (McLaughlin, 2010. p. 26). The survey was conducted at the end of the school year, which could be an explanation for a higher rate of depression (McLaughlin, 2010).

In 2013, Jessica McLaughlin went on to conduct further research on depression in early childhood teachers. For this study, McLaughlin studied the relationship of personality, social support, and school climate on depression. To survey depression among the participants, McLaughlin used The Center for Epidemiological Studies Depression Scale (CES-D). When comparing the CES-D scores to different demographics of participants, she discovered that teachers who were older or who had higher salaries had higher CES-D scores. She also learned that teachers in the state of Ohio had a higher CES-D score too. The five demographics that related to higher depression scores were: age, salary, education, location, and level taught (McLaughlin, 2013).

As the research and data analysis continued, McLaughlin reported 32% of the early childhood teachers in her study were high in depression symptoms. She compared that percentage to the general United States rate of nine percent at the time. This percentage shows that there is a higher rate of depression in early childhood teachers than the general United States population. The study found that depression was more likely if early childhood teachers were older, had a higher salary, had furthered their education, taught in Ohio, or taught the low primary grades. Depression was correlated with personality, social support, and school climate. It

was found that early childhood teachers were less likely to have depression if they were outgoing, sociable, stable, and calm. When correlating depression with social support, the study focused on administrative support and relationships outside of the school and found that having administrative support caused less depression symptoms in teachers. Between the correlation of school climate and depression, teachers that have support, are involved, and feel that their co-workers know them had fewer depressive symptoms (McLaughlin, 2013).

This study on depressive symptoms in early childhood teachers showed there is a high rate of depression in early childhood educators and the factors that impact the rate of depression are related to demographics, relationships, and support. Teachers need the support of their administration and co-workers to have a lower rate of depression (McLaughlin, 2013).

Agricultural Education Profession

Agricultural education is a teaching profession that goes beyond the classroom. Agricultural education focuses on a three-circle model that connects classroom instruction, experiential learning (SAE), and leadership education (FFA) (NAAE, 2023). Agricultural education courses that take place at the middle and high school level are also referred to as school-based agricultural education (SBAE) (Talbert et al., 2022). There are many diverse roles in teaching agriculture (Talbert et al., 2022). The Foundations of Agricultural Education identified several roles of an agriculture teacher including planning and developing an agricultural education program, preparing and delivering instruction, evaluating student progress, advising the FFA chapter, supervising student SAE projects, managing resources (greenhouse, shop, money, etc.), establishing relationships with the public, and participating in other community organizations (Talbert et al., 2022).

Secondary agriculture teachers have numerous roles, which has led occupational stress to being one of the biggest setbacks to the career (Lawver & Smith, 2014). It is averaged that an agriculture teacher works 55 to 60 hours a week (Moser & McKim, 2020). Outside of the normal duties of a teacher, agriculture teachers spend a large amount of time advising students in FFA competitions and award programs (Torres et al., 2009). The duties and job responsibilities, also known as occupational stress, of an agriculture teacher has been a common research topic for several decades (Lawver & Smith, 2014). In a research study conducted to identify the high stress items of agriculture teachers in Missouri and North Carolina, it was found that seven duties caused the most stress: excessive paperwork, working overtime, meeting deadlines, frequent interruptions, insufficient personal time, fellow workers not doing job, and on the spot decisions (Torres et al., 2009). With all the expectations of agricultural education teachers, negative psychological strains can exist as a result (Traini et al., 2019).

Agricultural Education Teacher Shortage

The shortage of agricultural education teachers in the United States is a significant problem, but not a new problem (Eck & Edwards, 2019). Documented shortages exist in states across the country (Wilkin & Nwoke, 2011). The agricultural education teacher shortage has been ongoing for centuries and is considered the greatest challenge facing agricultural education (Eck & Edwards, 2019). In the most recent National Agricultural Education Supply & Demand Study, 674 agricultural educators that taught in 2020-2021 were not returning to the classroom during the next school year. Of the 674 leaving the agriculture classroom, only 29.4% were due to retirement (Smith et al., 2021).

There have been seven consistent themes in research that identify why agriculture teachers are leaving the profession (Thomsen, 2018). The seven themes include: work-life

balance, workload, time management, student discipline, administrative support, salary, and student motivation (see Table 2.1). According to the research, there are other reasons listed as to why agriculture teachers are leaving the profession, but they can be categorized into one of the seven main themes.

Table 2.1. Themes and Definitions

Theme	Definition
Work-Life Balance	Balances the needs and responsibilities of professional life with the needs and responsibilities of personal life.
Workload	Meets the professional demands of teaching high school agriculture (classroom, FFA, SAE).
Time Management	Allocates time effectively and productively in order to maximize professional efficiency.
Student Discipline	Uses effective reinforcement strategies to manage student behavior and maintain a positive classroom environment.
Administrative Support	Secures and maintains intentional support of the agriculture program from school administration.
Salary	Feels fairly compensated for the amount of work required to be an agriculture teacher.
Student Motivation	Exhibits practical application of techniques for fostering both intrinsic and extrinsic motivation among students to promote engagement.

Note. Adapted from Thomsen, 2018.

The seven previously stated themes are important for the research on the current agriculture teacher shortage, but there are other reasons that are less likely to be the subject of research. Each agricultural education teacher and program are unique and represent success in a different way (Traini et al., 2019). Unfortunately, agriculture teachers can be compared based on a predetermined set of parameters that make them effective (Traini et al., 2019). “Agriculture teachers do have excessive roles and responsibilities, continue to place demands on themselves,

and must meet demands placed on them by students, parents, administrators, and peers.” (Torres et al., 2009, p. 108). This leads to an area that is not widely recognized as a component of teacher stress, which is success. Inadvertently, teachers compare themselves to other teachers and programs based on program grants awarded, awards won, number of FFA members, and the number of CDE banners won (Traini et al., 2019). These items were found to add stressful emotions for an agriculture teacher such as: guilt, judgment, fear, and pressure (Traini et al., 2019). Teachers are continuously trying to meet the expectations of the outside parties connected to the agricultural education program, but they must remember the uniqueness of each program and the people involved in it (Traini et al., 2019).

In 2020, research was conducted on the social connectedness of agriculture teachers (Moser & McKim, 2020). Four different levels of connectivity were identified: school connectivity, school-based agriculture educator (SBAE) teacher connectivity, curricular connectivity, and community connectivity. All four areas can impact the overall job satisfaction of an agriculture teacher (Moser & McKim, 2020). A questionnaire was distributed to all SBAE teachers in 2018-2019 and it was found that the strongest predictor of career commitment was school connectivity (Moser & McKim, 2020). This research suggested that having connections and relationships within these four areas is important for SBAE teacher career commitment.

There has been an increase in the amount of research conducted on the job satisfaction, retention, and attrition of agriculture teachers over the last 10 years (Thomsen, 2018). From the evidence discovered through research, it could be said that it is a reason for new professional development and teaching campaigns (Thomsen, 2018). Professional groups such as the National Association of Agricultural Educators (NAAE), are developing programs, professional development workshops, and resources to help with the retention of agriculture teachers. A few

examples are the National Teach Ag Campaign, National Agriscience Teacher Ambassador Program, XLR8 - eXcellence in Leadership for Retention, and Future Agriscience Teacher (FAST) Symposium. The mission of NAAE is to “provide professional development for agricultural educators, and work to recruit and retain agricultural educators in the profession” (NAAE, 2023, Who we are section, para. 6). This organization, like others, are looking at ways to support agricultural educators across the United States.

Professional development workshops and events put on by agricultural education organizations across the country are helpful, but there are continuous needs to help teachers with coping strategies when addressing stress (Lawver & Smith, 2014). “Identifying and understanding the coping strategies used by agriculture teachers allows for an in-depth examination of how agriculture teaching related stressors are managed” (Lawver & Smith, 2014, p. 77). Agricultural educators in Utah identified distancing as the coping mechanism they utilize the most when dealing with stress and least likely to use escape or avoidance (Lawver & Smith, 2014).

While focusing on the reasons educators are leaving the agricultural education profession, it does need to be noted the reasons teachers stay (Clark et al., 2014). Sometimes, teachers have to change schools and experience a different program to get into “maintenance mode” and learn to enjoy their job (Clark et al., 2014). Agricultural educators in one study noted the following as reasons they stayed in the profession: support of the program (students, parents, administration, community), new facilities, great students, program funding, and community volunteers (Clark et al., 2014).

The professional organizations within agricultural education, colleges and universities preparing the next group of agricultural educators, and current teachers in the profession are important in the recruitment and retention of quality agricultural educators (Eck & Edwards, 2019). Research has stated that within years one to five of an agriculture teacher's career, 30-50% of the teachers will leave the profession (Moser & McKim, 2020). If there is continuous data that shows

why this percentage is so large, then we will be better able to address the problems and retain agriculture teachers (Thomsen, 2018).

Ag Teacher’s Life Cycle

In 2016, The NAAE adopted Michael Huberman’s model of the Teacher Career Cycle Model of 1989 and revealed an adaptation entitled the “Ag Teacher’s Life Cycle” to showcase their focus areas and programming opportunities (National Association of Agricultural Educators, 2017). Within each cycle there are different “concerns” that are identified for that group. The section of the life cycle that an agricultural educator is in, is important to help identify the challenges they may be facing and create a solution for those challenges. Table 2.2 is a representation of the “Ag Teacher’s Life Cycle” adaptation of Huberman’s model.

Table 2.2. Professional Agriculture Teacher Life Cycle Stages

Years of Teaching	Stage	Sub-stage	Characteristic
1-5	Novice	Early Novice	Surviving in the profession
		Middle Novice	Focusing on the task of teaching
		Late Novice	Concern is impacting students
6-15	Mid-Career	Stabilization	Some professional confidence; Settling into a comfortable and predictable teaching pattern
		Experimentation	Experimenting with innovative approaches and activities in the classroom
		Taking Stock	Reflecting on the decision to become a teacher; Contemplating the worth of past work and anticipating plans for the future.
16+	Late-Career	Serenity	Comfortable with the classroom and their role in education.
		Disengagement	Life beyond the classroom

Note. Adapted from Huberman, 1989; National Association of Agricultural Educators, 2017; Solomonson, 2017.

It is no secret that the longer someone is in a profession or job, the more likely they are to remain. That is why it is imperative that a teacher remains in the classroom past those challenging years (Chenevey et al., 2008). Focusing on mental health illnesses in agriculture teachers, the Ag Teacher's Life Cycle can help identify where they are in their career and possible solutions to help with their illness.

Chapter 3 - Methodology

Purpose of the Study

The purpose of this study was to investigate the current mental health condition of agricultural education teachers and identify experiences and/or tasks that have contributed to their mental health. By investigating the mental health condition, the goal is to identify ways to support or help agricultural education teachers.

Research Objectives

For the purpose of this thesis, I suggest the following research objectives:

1. Describe the areas within the school environment (e.g., Instruction and materials, student engagement and behavior, teacher involvement, and communication) that impact the mental health of agricultural education teachers.
2. Determine the individual experiences that have caused the most stress and/or anxiety (e.g., time management, students' discipline, task delegation, salary, extra duties, respect of peers, educational resources, peer support) to teachers in the agricultural education profession.
3. Determine how the personal feelings and/or emotions (e.g., depression) of the agricultural education teacher is impacted by the school environment and stressors in the profession.
4. Describe the differences between the final depression score and professional demographics (Ag Teacher's Life Cycle and certification type).
5. Describe the differences between the personal demographics of the agricultural education teacher and their mental health.

Conceptual Framework

The conceptual framework that will guide this study is based on the Organisation [sic] for Economic Co-operation and Developments' research on teachers' occupational well-being (Viac & Fraser, 2020). The framework focuses on how policy settings, working conditions, and school environments shape the four components of teachers' occupational well-being: cognitive well-being, subjective well-being, physical and mental well-being, and social well-being (see Figure 3.1.). The four components of teachers' well-being create two inward outcomes: stress and burnout or motivation to leave the classroom (Viac & Fraser, 2020). There are two outward outcomes created by the teachers' well-being: classroom processes and students' well-being (Viac & Fraser, 2020). This framework identifies "how a broad range of working conditions impacts and shapes each dimension of teachers' occupational well-being" (Viac & Fraser, 2020, p. 20).

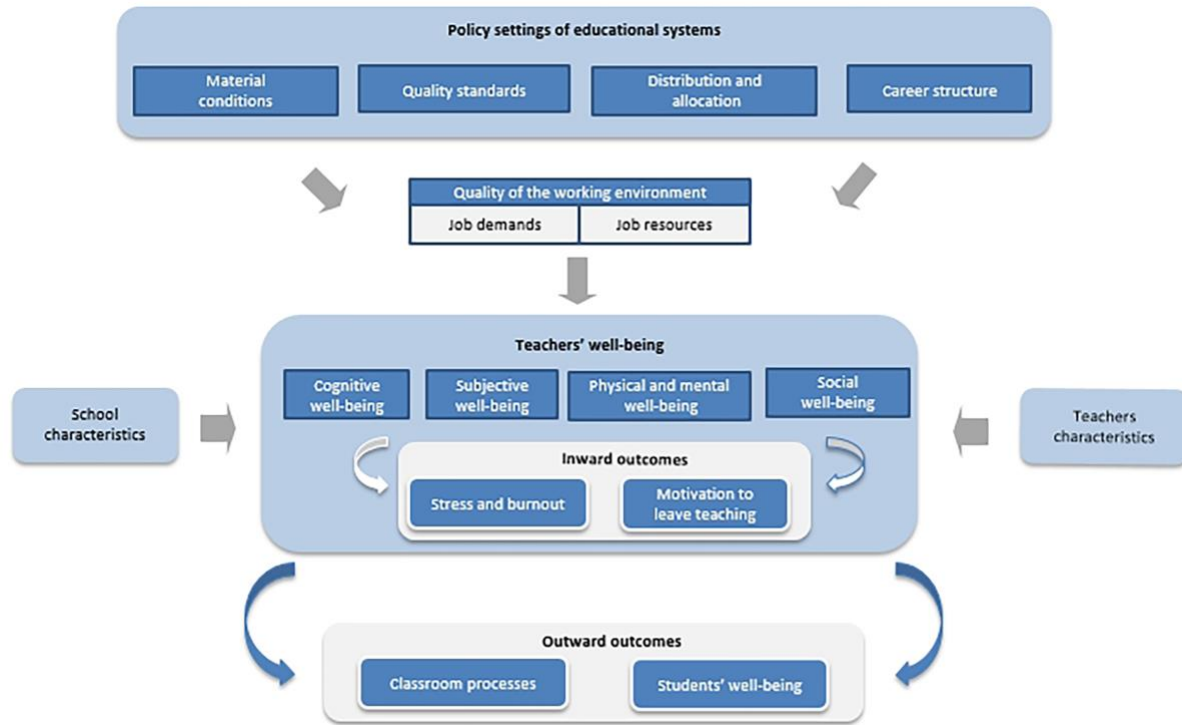


Figure 3.1. Conceptual framework for teachers' occupational well-being (Viac & Fraser, 2020).

The Organisation [sic] for Economic Co-operation and Development (OECD) designed this framework from their findings through literature reviews and existing studies conducted at OECD (Viac & Fraser, 2020). The teachers' occupational well-being framework was selected for this study due to the use of the working environment as the overlying factor on the teachers' well-being. Figure 3.2 creates a closer look at the quality of the working environment determinants used in the framework.

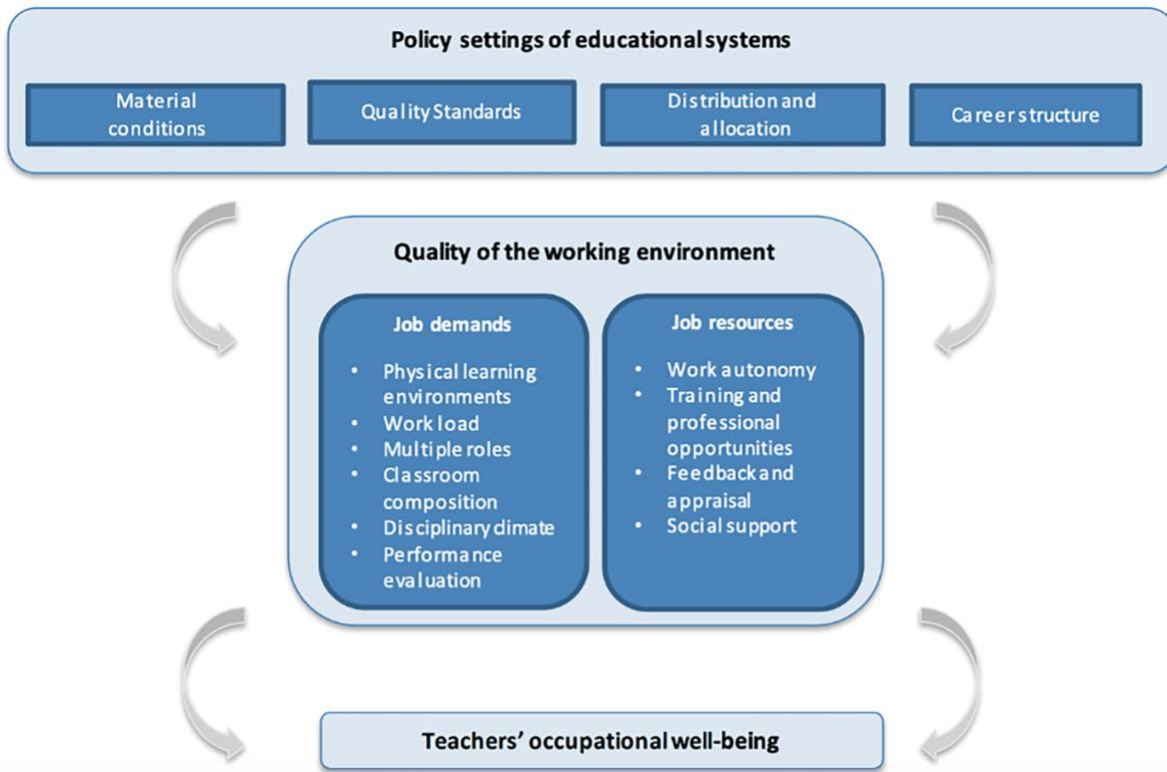


Figure 3.2. Quality of working environment associated with teachers' occupational well-being (Viac & Fraser, 2020)

Research Design

This research project was a causal-comparative study. Causal-comparative research focuses on a subject group and the consequences of something that already exists among them. Causal-comparative research is research that explores the cause for, or consequences of, existing differences in groups of individuals (Fraenkel et al., 2015). This type of research is often referred to as *ex post facto* because it can happen “after the fact” (Fraenkel et al., 2015, p. 364). This study focuses on the mental health of agriculture teachers in the Midwest.

Institutional Review Board

Approval to conduct this study was granted by the Kansas State University Institutional Review Board (KSU IRB) on July 25, 2022 (IRB- IR 11247) (Appendix B).

Population and Sample

The target population of this study was agriculture teachers of all ages, genders, and teaching experience who faced mental health symptoms or illness. The accessible population for this study was agriculture teachers regardless of their mental health. For this study I focused my frame on agriculture teachers in the states of Indiana, Illinois, Iowa, Missouri, Nebraska, and Ohio. These states were the focus of this study as they are all located within the Midwest.

The sample for this study was conducted via random sampling. With help from the National FFA Organization a list of FFA advisors from Indiana, Illinois, Iowa, Missouri, Nebraska, and Ohio was obtained (Appendix A). By utilizing the National FFA Organization, the list of emails obtained were people identified as FFA advisors within The National FFA Organization. The three-circle model of agricultural education identifies FFA advisors as the local agriculture teacher to guide the leadership component of the model. The list obtained by The National FFA Organization cannot guarantee that all the names on the list include all agriculture teachers in those states, because it is a list of FFA advisors.

The National FFA Organization has email addresses of FFA advisors in the United States and provided the email addresses for all teachers in the six selected states. From the list of 2,463 email addresses of agriculture teachers, a RAND Function was used in Excel to determine a random sample of 500 agriculture teachers to include in the study.

The Qualtrics questionnaire was emailed out to the sample via email and recruitment letter. The email was distributed twice within a three-week period. The email was successfully

delivered to 488 agriculture teachers. Twelve emails were unreachable. Of the 488 whose email did work, there were 78 participants who started the questionnaire. After reviewing the results of the data collection process, a usable sample of 57 responses remained and were analyzed to investigate the research objectives. Therefore, the response rate for this study was 11.68%. Johnson & Shoulders (2017) cautioned researchers against generalizing results to a population when the response rate is low, instead they suggested “meaningful results appropriately limited to only the respondents are more valuable than results inappropriately generalized to the population” (p. 311).

Limitations

Within the research completed in this thesis there were two limiting factors. The first limiting factor identified was the response rate. Of the 488 recipients of the survey, there was a usable population of 57. Within the 57 participants, there were five who were incomplete and were not usable in some data analysis. Therefore, generalizing to the entire population is not achievable due to the low response rate.

The second limitation was the time of year the survey was sent to the participants. The survey was emailed out on December 1 and the participants were given two weeks to respond. The month of December is the end of the first semester for most teachers, which could have been a reason why the responses were lower than expected.

Instrumentation

The instrument was composed of four parts: school environment, career stress and anxiety factors, depression, and demographics (Appendix C).

School Environment

The first section of the instrument collected data on the school environment in which the participant worked. The Revised School-Level Environment Questionnaire (SLEQ) was designed by Johnson et al. (2007) and based on The School-Level Environment Questionnaire designed by Fisher and Fraser (1990). The revised version took the original 56 question instrument and reduced it to focus on 21 specific questions in five constructs; collaboration, decision making, instructional innovation, student relations, and school resources (Johnson et al., 2007). The 21 question Revised School-Level Environment Questionnaire assessed participants on their school environment utilizing a five-point Likert type scale. A one indicated that the participant “strongly disagreed” and a five indicated they “strongly agreed.” During data analysis, seven of the questions were reverse coded.

A 2007 validity study confirmed that the Revised SLEQ is “a good tool for studying teachers’ perceptions of school climate” (Johnson et al., 2007, p. 833). They reported an overall Cronbach’s alpha score of .90 (Johnson et al., 2007). Cronbach’s alpha scores for each of the constructs were reported to communicate the reliability of each construct. Construct one, collaboration, had six items with an *alpha coefficient* of .82. Construct two, student relations, had four items with an *alpha coefficient* of .86. Construct three, decision making, had three items and an *alpha coefficient* of .78. Construct four, instructional innovation, had four items and an *alpha coefficient* of .79. Construct five, school resources, had four items and an *alpha coefficient* of .77

(Johnson et al., 2007, p. 841). These reliability scores are all at an acceptable level (Cortina, 1993).

Career Stress and Anxiety Factors

The instrument used to measure career stress and anxiety factors was based on a study focusing on coping mechanisms of agriculture teachers in Utah (Lawver & Smith, 2014). The instrument used in this study was the *Ways of Coping Questionnaire* developed by Folkman and Lazarus (1988). This questionnaire asked an open-ended question for participants to recall a stressful event that occurred in the last week and identify the level of occupational stress it created (Lawver & Smith, 2014). The responses from the open-ended question were then compiled and analyzed by independent researchers into themes used to describe stressful teaching events (Lawver & Smith, 2014). The instrument used to indicate the stressful teaching events was based on the *Teacher Stress Inventory* (Fimian, 1984). The five themes listed were: time management, work-related, professional, discipline and motivation, and professional investment (Lawver & Smith, 2014).

For this section of the questionnaire used to collect data in the current research study, questions one, two, three, five, six, 10, and 11 came from the Teacher Stress Inventory in Lawver and Smith's (2014) study. Questions four, seven, eight, nine, 12, 13, 14, and 15 were added based on previous research conducted on the topic of occupational stress (Thomsen, 2018).

The Stress/Anxiety Questionnaire (see Appendix C) assessed participants on occupational stressors. A Likert type scale of one to five was used with one being "not at all" and five being "a large amount." During data analysis a total stress score variable was computed. This variable was used in objective three to identify if a relationship exists between the personal emotions and feelings of the participant and their stress score.

Depression

Teachers' depression symptoms were measured using the Center for Epidemiological Studies Depression Scale (CES-D). This scale was developed by Laurie Radloff in 1977 to identify people who might suffer from clinical depression (Radloff, 2011). This instrument contains 20 questions participants answer to help assess if they face symptoms associated with depression. Participants were asked how often they might have faced each symptom throughout a week's duration and rank it on a four-point scale. The scale ranged from less than 1 day to 5-7 days. The responses from the scale were totaled up to assign each participant a score of 0-60 (zero being no depression symptoms and 60 representing a high amount of depression symptoms) (Radloff, 2011).

For data analysis purposes, the final depression scores were divided into three groups based on their score. Level one scores ranged from zero to 20 and were considered to have a low depression score, result of 21 to 40 reported a moderate depression score, and a score of 41 to 60 resulted in a high depression score.

Previous literature reported a Cronbach's alpha coefficient of 0.90 for the CES-D indicating a high reliability (Cosco et al., 2017).

Demographics

The last section of the instrument collected information on the demographics of participants in the study. There were five demographic questions asked. The items included: gender, age, years of teaching experience, marital status, and teaching certification type. These variables were collected to help identify mental health trends between participants.

Data Collection

Data collection began on December 1, 2022, when the Qualtrics Survey was distributed via email to 500 participants selected by random selection method (see Appendix D). There were 12 emails that were undeliverable. Following Dillman et al.'s (2014) tailored design methodology, follow up emails were sent on December 7, 2022, to increase response rate. On December 14, 2022, the survey was closed (see Table 3.1).

Table 3.1. Data Collection Timeline

Date	Action
December 1	Survey Distributed
December 7	Follow up email sent
December 14	Survey Closed

Data Analysis

After closing the Qualtrics survey, the data was exported to SPSS for more rigorous data analysis. Efforts were made to clean the data to remove incomplete responses which yielded a usable number of responses of 57. Data was analyzed using the Statistical Package for Social Science (SPSS) Version 29. A significance level of $\alpha = .05$ was set *a priori*. Objectives one and two were analyzed using measures of variability and central tendency (frequency, mean, and standard deviation). A one-way ANOVA was used for objective three to identify the differences between the five school environment constructs and the depression score levels. A bivariate correlation was run in objective three to compare the relationship between the total stress scores and the final depression score. In objectives four and five, a one-way ANOVA was used to identify the differences between the personal demographics (gender, age, and marital status) and

professional demographics (teaching certificate type and Ag Teachers' Life Cycle Stage) and the final depression scores.

Chapter 4 - Findings

Purpose and Objectives

1. Describe the areas within the school environment (e.g., Instruction and materials, student engagement and behavior, teacher involvement, and communication) that impact the mental health of agricultural education teachers.
2. Determine the individual experiences that have caused the most stress and/or anxiety (e.g., time management, students' discipline, task delegation, salary, extra duties, respect of peers, educational resources, peer support) to teachers in the agricultural education profession.
3. Determine how the personal feelings and/or emotions (e.g., depression) of the agricultural education teacher is impacted by the school environment and **stressors** in the profession.
4. Describe the differences between the final depression score and professional demographics (Ag Teacher's Life Cycle and certification type).
5. Describe the differences between the personal demographics of the agricultural education teacher and their mental health.

Demographics

Respondents of the questionnaire included male ($n = 21$) and female ($n = 31$) teachers. Most participants were between the ages of 21-30 ($n = 25$) with the remaining participants between the 31-61+ age range. More than half of respondents were married ($n = 37$). The sample population for the length of teaching career indicated that Twenty-three participants had six or fewer year of teaching experience. The vast majority of respondents ($n = 42$) received their

teaching certificate from a traditional teacher education program. See table 4.1 for all demographic data.

Table 4.1. Agriculture Teacher Demographics

Demographic Variable	<i>n</i>
Gender	
Male	21
Female	31
Age	
21-25	5
26-30	20
31-35	8
36-40	4
41-45	1
46-50	5
51-55	4
56-60	3
61 and older	2
Marital Status	
Single	15
Married	37
Number of Years Teaching	
Less than one	1
One to Six	22
Seven to 15	15
16 or more	15
Teacher Certificate	
Traditional	42
Alternative	5
Other	4

Objective One

Objective one determined the areas within the school environment (Instruction and materials, student engagement and behavior, teacher involvement, and communication) that contribute to the mental health of agricultural education teachers.

The item with the highest mean was *digital equipment, computers, and internet access are readily available* ($M = 4.58, SD = 0.59$). The next item, *most students are helpful and cooperative with teachers* ($M = 3.75, SD = 0.92$), had a reported mean that was 0.83 lower. Items relating to instruction, appeared to have a higher mean score (see Table 4.2). The items with the lowest mean score included *I seldom discuss the needs of individual students with other teachers* ($M = 2.14, SD = 1.05$) and *decisions about the school are made by the principal* (reverse coded) ($M = 2.40, SD = 0.91$). See Table 4.2 for all school environment responses.

Table 4.2. Teachers' Perception of School Environment Factors

Item	<i>f</i>	<i>M</i>	<i>SD</i>
Digital equipment, computers, and internet access are readily available. (C)	57	4.58	0.59
Most students are helpful and cooperative with teachers. (B)	57	3.75	0.92
We are willing to try new teaching approaches in my school. (E)	57	3.67	1.01
New and different ideas are always being tried out. (E)	57	3.51	1.14
New courses or curriculum materials are seldom implemented. * (E)	57	3.49	1.08
The supply of equipment and resources are not adequate. * (C)	55	3.44	1.25
Teachers in this school are innovative. (E)	56	3.41	0.86
Most students are well mannered or respectful of the school staff. (B)	57	3.40	1.25
Students in the school are well-behaved. (B)	56	3.36	1.16
Instructional equipment is not consistently available. * (C)	57	3.28	1.20
There is good communication among teachers. (A)	57	3.23	1.09
The school library has sufficient resources and materials. (C)	57	3.19	1.32
Good teamwork is not emphasized at my school. * (A)	57	3.16	1.27
I have regular opportunities to work with other teachers. (A)	56	3.04	1.25
Teachers are frequently asked to participate in decisions. (D)	57	2.91	1.17
Classroom instruction is rarely coordinated across teachers. (A)	57	2.77	1.03
Teachers design instructional programs together. (A)	57	2.75	1.27
Most students are motivated to learn. (B)	57	2.68	1.14
I have very little say in the running of the school. * (D)	57	2.53	1.22
Decisions about the school are made by the principal. * (D)	57	2.40	0.91
I seldom discuss the needs of individual students with other teachers. (A)	57	2.14	1.05

Note. Scale 1 “Strongly Disagree” - 5 “Strongly Agree”. * These items were reverse coded. A = Collaboration, B = Student Relations, C = School Resources, D = Decision Making, E = Instructional Innovation

Items from the School Environment section of the questionnaire were grouped into constructs based on previous research conducted by Johnson et al. (2007). The school resources construct ($M = 3.62, SD = 0.88$), the instructional innovation construct ($M = 3.53, SD = 0.77$), and the student relations construct ($M = 3.30, SD = 0.96$) created the least amount of stress for teachers. The constructs of collaboration ($M = 2.85, SD = 0.76$) and decision making ($M = 2.61, SD = 0.76$) caused the most stress for teachers. The range of Likert type responses on this item was 1 = “Strongly Disagree” to 5 = “Strongly Agree”. See Table 4.3 for all constructs.

Table 4.3. Teachers’ Perception of School Environment Factors - Constructs

Construct	<i>M</i>	<i>SD</i>
School Resources	3.62	0.88
Instructional Innovation	3.53	0.77
Student Relations	3.30	0.96
Collaboration	2.85	0.76
Decision Making	2.61	0.76

Note. N=57

Objective Two

Objective two determined the individual experiences that have caused the most stress and/or anxiety (e.g., time management, students’ discipline, task delegation, salary, extra duties, respect of peers, educational resources, peer support) to teachers in the agricultural education profession.

Items with the highest means all related to workload and caused the most stress for the participants. *I must try and do more than one thing at a time* ($M = 4.25, SD = 0.90$), *I easily over commit myself* ($M = 4.23, SD = 0.89$), and *I feel that there is too much paperwork to complete* (M

= 3.93, $SD = 1.10$) yielded the highest means. The items with the lowest means were in relation to the support of the participants. *I feel that my community does not provide me with the support I need* ($M = 2.07$, $SD = 1.13$) and *I feel that my coworkers do not provide me with the support I need* ($M = 2.02$, $SD = 1.09$). See Table 4.4 for all responses on teachers' stress factors.

Table 4.4. Teachers' Reported Stress/Anxiety

Item	<i>f</i>	<i>M</i>	<i>SD</i>
I have to try and do more than one thing at a time.	55	4.25	0.90
I easily over-commit myself.	56	4.23	0.89
I feel that there is too much paperwork to complete.	56	3.93	1.10
I become impatient if others do things too slowly.	56	3.71	1.25
I feel frustrated attempting to teach poorly motivated students.	56	3.71	1.25
I become anxious if someone doesn't do things as I would have.	54	3.50	1.24
There is little time to prepare for my lessons.	56	3.48	1.13
I feel that the extra duty salary does not compensate for the amount of excess work that I do.	56	3.16	1.32
I feel frustrated because of discipline problems in my classroom.	56	2.95	1.38
I feel that my administration does not provide me with the support I need.	56	2.70	1.39
I feel that I lack respect from my peers.	56	2.36	1.22
I do not have a long enough extended contract.	56	2.25	1.26
I feel that I do not have access the academic resources that would allow my program to be more successful.	56	2.11	1.11
I feel that my community does not provide me with the support I need.	55	2.07	1.13
I feel that my coworkers do not provide me with the support I need.	56	2.02	1.09

Note. Scale 1 "not at all" - 5 "A large amount".

Objective Three

Objective three determined how the personal feelings and/or emotions (e.g., depression) of the agricultural education teacher is impacted by the school environment and stressors in the profession.

The CES-D score levels were compared to the constructs from the Revised School-Level Environment Questionnaire to determine how the CES-D score levels are impacted by the school environment. The low depression score range was between zero to 20, moderate depression score range was between 21 to 40, and the high depression score range was between 41 to 60. The 29 participants who reported a moderate depression score ($M = 35.72, SD = 3.26$) were compared to the 23 participants who recorded a high depression score ($M = 47.35, SD = 6.06$). A one-way ANOVA was run on the frequency, mean, and standard deviation of the depression score ranges and the five school environment constructs. There was not a statistically significant effect on depression based on any the five constructs (see Table 4.5)

Table 4.5. Depression Score Range in Relation to School Environment Constructs

Construct	Moderate		High		$F (1,50)$	η^2
	M	SD	M	SD		
Collaboration	2.88	0.80	2.75	0.73	0.317	0.01
Decision Making	2.57	0.82	2.58	0.69	0.001	0.00
Instructional Innovation	3.47	0.80	3.59	0.80	0.294	0.01
School Resources	3.70	0.84	3.50	0.97	0.597	0.01
Student Relations	3.47	0.90	3.08	1.04	2.155	0.04

Note. There were no teachers reporting in the low score range.

A bivariate correlation was run on the final depression scores and total stress scores of teachers. There was a moderate association (Davis, 1971) between the total stress score and the

final depression score, $r(49) = 0.326, p = 0.022$. The correlation was significant at the 0.05 level but cannot be generalized to the population due to the low response rate.

Objective Four

Objective four identified the final depression score and relationship of professional demographics (Ag Teacher's Life Cycle and certification type). A one-way ANOVA was run on the frequency, mean, and standard deviation of the life cycles and identified a depression score mean of $M = 43.00$ ($SD = 8.31$) for early-career, $M = 40.40$ ($SD = 7.11$) for mid-career, and $M = 38.20$ ($SD = 7.46$) for late-career. There was not a statistically significant difference on the final depression score based on Ag Teachers' Life Cycle (NAAE, 2016) stages $p < .05$ level for the three conditions [$F(2,49) = 1.957, p = 0.152$]. See Table 4.6.

Table 4.6. Means, Standard Deviations, and One-Way Analyses of Variance in Depression by NAAE Life Cycle Stage

	<i>f</i>	<i>M</i>	<i>SD</i>	<i>F</i> (2,49)	η^2
NAAE Life Cycle Stage				1.957	0.74
Early-Career (pre-service to six years of teaching)	22	43.00	8.31		
Mid-Career (seven to 15 years of teaching)	15	40.40	7.11		
Late-Career (16 years of teaching to retirement)	15	38.20	7.46		

The teaching certification type obtained by the teachers was compared to the final depression score. The mean depression score for a traditionally certified teacher ($M = 41.02, SD = 7.92$) was higher than an alternatively certified teacher ($M = 38.33, SD = 4.89$). The teachers that obtained a teaching certificate through other channels reported the highest mean depression score ($M = 43.67, SD = 7.46$). There was not a statistically significant difference on the final depression score based on certification type [$F(1,50) = 0.557, p = 0.58$]. See Table 4.7.

Table 4.7. Means, Standard Deviations, and One-Way Analyses of Variance in Depression by Certification Type

	<i>f</i>	<i>M</i>	<i>SD</i>	<i>F</i> (1,50)	η^2
Certification Type				0.557	0.02
Traditionally Certified	43	41.02	7.92		
Alternatively Certified	6	38.33	4.89		
Other Certification (Multi-endorsements or other teaching field)	3	43.67	7.46		

Objective Five

Objective five aimed to describe the differences between the personal demographics of the agricultural education teacher and their mental health. The following variables were used: gender, age, and marital status. A one-way ANOVA reported that there was a not a statistically significant difference in depression mean scores based on the teacher's gender [$F(1,50) = 3.189$, $p = 0.08$]. There was also no statistically significant difference in depression mean scores based on the age of teachers [$F(1,50) = 0.806$, $p = 0.60$]. There was a statistically significant difference in depression mean scores based on the marital status of teachers [$F(1,50) = 6.007$, $p = 0.018$]. Although there was a statistically significant difference when examining the means based on the marital status, we caution against generalizing it beyond those who responded to the survey.

Anecdotally it appears that as the teacher gets older the depression score decreases. The mean of the final depression score indicates that females ($M = 42.35$, $SD = 7.83$) have a higher depression score than males ($M = 38.67$, $SD = 6.44$). Data from this research also indicates teachers who are single ($M = 44.67$, $SD = 10.05$) have a higher final depression score than teachers who are married ($M = 39.32$, $SD = 5.58$).

Table 4.8. Means, Standard Deviations, and One-Way Analyses of Variance in Depression by Personal Demographics

Demographic	<i>f</i>	<i>M</i>	<i>SD</i>	<i>F</i> (1,50)	η^2
Gender				3.189	0.06
Male	21	38.67	6.44		
Female	31	42.35	7.83		
Age				0.806	0.13
21-25	5	42.80	10.40		
26-30	20	43.60	7.80		
31-35	8	39.75	7.29		
36-40	4	39.50	5.80		
41-45	1	41.00	-		
46-50	5	37.80	7.98		
51-55	4	37.00	3.92		
56-60	3	37.67	4.04		
61+	2	36.00	4.24		
Marital Status				6.007	0.11
Single	15	44.67	10.05		
Married	37	39.32	5.58		

Note. There were other options for gender and marital status that were not selected which resulted in no data.

Chapter 5 - Conclusions and Recommendations

Purpose of Study

The purpose of this study was to investigate the current mental health condition of agricultural education teachers and identify experiences and/or tasks that have contributed to their mental health. By investigating the mental health condition, the goal is to identify ways to support or help agricultural education teachers.

Research Objectives

1. Describe the areas within the school environment (e.g., Instruction and materials, student engagement and behavior, teacher involvement, and communication) that impact the mental health of agricultural education teachers.
2. Determine the individual experiences that have caused the most stress and/or anxiety (e.g., time management, students' discipline, task delegation, salary, extra duties, respect of peers, educational resources, peer support) to teachers in the agricultural education profession.
3. Determine how the personal feelings and/or emotions (e.g., depression) of the agricultural education teacher is impacted by the school environment and stressors in the profession.
4. Describe the differences between the final depression score and professional demographics (Ag Teacher's Life Cycle and certification type).
5. Describe the differences between the personal demographics of the agricultural education teacher and their mental health.

Discussion on Findings

The Teachers' Occupational Well-Being Framework (Viac & Fraser, 2020) was utilized as a guide for this research study. The basis for this framework is that policy settings, educational systems, and the working environment impact the well-being of a teacher. Findings from this study supported that the working environment creates increased stress for teachers as evidenced from the results for the Revised School-Level Environment Questionnaire (SLEQ) section of the survey.

The SLEQ identified several items relating to the school environment that were impacting a teachers' mental health. From the data collected, the collaboration construct ($M = 2.85$) and decision-making construct ($M = 2.61$) yielded the lower means which more negatively affected the mental health of the participants. School resources ($M = 3.40$), instructional innovation ($M = 3.50$) and student relations ($M = 3.30$) constructs yielded higher means. (The mean scores ranged from 2.61 to 3.50 on a five-point scale with five being the highest.) My data supports previous literature in which the top job stressors for educators include poor relationships with colleagues, principals and parents, lack of influence, poor school climate and environment (Davidson, 2009). The school-environment can be considered a large factor that impacts the stress, anxiety, and depression of a teacher (Williams, 2022), which was identified in this study.

The individual experiences of teachers are all different and can cause different levels of stress. The questions asked in the second section of this study focused on the individual experiences that caused stress to the participants. The questions pertaining to the workload of the participants had the highest mean score (max mean score of 5): *I have to try and do more than one thing at a time* ($M = 4.25$), *I easily over-commit myself* ($M = 4.23$), *I feel that there is too*

much paperwork to complete ($M = 3.93$). The questionnaire asked three additional questions focusing on the workload of an agriculture teacher: *I become anxious if someone doesn't do things as I would have* ($M = 3.50$), *There is little time to prepare for my lessons* ($M = 3.48$), *I feel that the extra duty salary does not compensate for the amount of excess work that I do* ($M = 3.16$). Each question received a mean score above $M = 3.10$. This data shows that the workload of an agriculture teacher causes a great deal of stress and anxiety. The questions that resulted in the least amount of stress for participants related to the support they receive. There were four questions that focused on the amount of respect and support the participants received: *I feel that my administration does not provide me with the support I need* ($M = 2.70$), *I feel that I lack respect from my peers* ($M = 2.36$), *I feel that my community does not provide me with the support I need* ($M = 2.07$), and *I feel that my coworkers do not provide me with the support I need* ($M = 2.02$). Each question had a mean score less than $M = 2.70$. This score shows that the support and respect of the teacher does not cause an excessive amount of stress and anxiety. The findings in objective two in relation to individual stressors of teachers, relates to the seven themes identified (work-life balance, workload, time management, student discipline, administrative support, salary, and student motivation) in this study (Thomsen, 2018).

The third questionnaire in this research study focused on the individual feelings of the participant. These questions were asked using a depression scale and each participant's score was totaled and then put into a score range. The depression score range with the highest frequency was the moderate level with 29 teachers in that range. There were 23 teachers who had a score that totaled in the high depression score range. There were no teachers that reported in the low depression score range. Although there were low frequencies for the depression score ranges, it shows that all the teachers in this study faced some depression symptoms.

When investigating the five school environment constructs with the depression score ranges, the collaboration ($M = 2.88$), school resources ($M = 3.70$), and student relations ($M = 3.47$) constructs yielded higher depression symptoms for the moderate depression score range than the high depression score range. The decision making ($M = 2.58$) and instructional innovation ($M = 3.59$) constructs reported higher depression symptoms for teachers in the high depression score range, than the moderate depression score range.

The last part of objective three was to determine if a relationship existed between the final depression score and the total stress score of teachers. It was not a surprise to find that there was a statistically significant relationship, but it could not be generalized to the population due to the low response rate.

This study focused on two professional demographics of the participants, the years of teaching experience grouped by The Ag Teachers' Life Cycle (NAAE, 2016) and their teaching certification type. The Ag Teachers' Life Cycle (NAAE, 2016) has been helpful in categorizing the number of years agriculture teachers have been in the profession. It focuses on the important issues impacting teachers at each stage in their career. This study divided the participants into the three stages based on their years of teaching experience demographic and compared it to their final depression score. The goal was to gain better understanding regarding the stage of teaching and their rate of depression symptoms. It was not surprising to find that the early-career teachers had the highest mean score for showing depression symptoms ($M = 43.00$, $SD = 8.31$), but the late-career stage mean score was ($M = 38.20$, $SD = 7.46$). Results from this study indicate teachers are expressing comparable depression symptoms at all stages of their career.

The other professional demographic identified in objective four was the teaching certification type. The frequency for the certification types were traditionally certified teacher $f =$

43, alternatively certified $f = 6$, and other certification $f = 3$. A one-way ANOVA was run to identify the variance in the final depression score and the certification type and revealed the alternatively certified teachers ($M = 38.33$) had a lower average final depression score than the traditionally certified teachers ($M = 41.02$). The uneven nature of the groups should be considered when reviewing this result.

Objective five focused on the personal demographics of the teachers in this study. The gender, age, and marital status of the teachers were compared to the final depression score and the only personal demographic that indicated a statistically significant difference was the marital status of the teachers. Although there was a statistical significance of marital status at the 0.05 level, it cannot be generalized to the population due to the low response rate.

The personal demographics reported did not create any surprises in the data reported. The gender of the teachers reported that the females averaged a higher final depression score ($M = 42.35$) than the males ($M = 38.67$). Teachers who are single ($M = 44.67$) reported a higher final depression score than teachers who are married ($M = 39.32$). And teachers between the ages of 21-25 ($M = 42.80$) and 26-30 ($M = 43.60$) reported a higher average final depression score than other age demographics.

Recommendations for Practice

Agriculture teachers need help. The top reporting stressor from this study was the workload of the teacher. The Nebraska Agricultural Education Association has been conducting research on the need for an assistant or a co-FFA advisor among current teachers (S. Turnbull, personal communication, December 1, 2022). The roles and responsibilities for an agriculture teacher continue throughout the school year and into the summer. That is longer than any sports season. A sports team with a team roster of 15 players will have a coaching staff of two or more,

but a FFA chapter with 100 members could only have a “coaching staff” of one. Even with the amount of stress symptoms reported by agriculture teachers, they are still able to manage the stress and accomplish the tasks at hand but having help would be beneficial to their stress levels and mental health.

Agriculture teachers teach a variety of curriculum. Instead of adapting the curriculum taught to agriculture demographics in the area in which they teach, they are expected to teach about all areas of agriculture. The curriculum taught in a program needs to be reduced and specialized into areas of priority. Agriculture power, structure and technology is a subject that can be moved to the industrial technology department to alleviate curriculum taught by the agriculture teacher. Schools that offer family and consumer science classes can utilize that area to teach the food science course. There is overlap found among the courses taught in agriculture and other subject areas within a school district. Agriculture teachers need to be more purposeful in the curriculum taught and the opportunities offered to the students within the agricultural education programs.

The National FFA Organization promotes the use of alumni chapters within agricultural education programs. Compared to the number of FFA chapters in the United States (8,995) (FFA, 2023), the total number of alumni chapters is low (2,550) (FFA, 2023). Agriculture teachers need to start utilizing alumni members as a resource. By incorporating alumni members into an established agricultural education program and FFA chapter, agriculture teachers and delegate roles to volunteers. Volunteers can help coach contest teams, fundraise for the chapter, and provide learning opportunities and resources.

Teachers, and agriculture teachers specifically, need to be provided with mental health support at all stages of their careers. There are large amounts of resources available to help

address mental health and teachers should have access to them as needed. The school environment impacts the overall mental health of the staff and students (Williams, 2022). As shown in the conceptual framework (Viac & Fraser, 2020), if we do not prioritize the mental health and well-being of our teachers then we are going to see an outcome on the students within our schools.

Little actions of gratitude can have positive effects on the mental health of a person. This research study found that a current area of the school environment causes the least amount of stress for the participants was support from staff, peers, and the community. We need to keep prioritizing the relationships within our school districts. Creating positive relationships with staff can be accomplished by giving little tokens of appreciation in the staff lounge, writing a positive note to a teacher, or stopping by their classroom and praising them for their hard work (Williams, 2022).

Student behavior and motivation reported as a stressor for agriculture teachers in this study. School districts need to do a better job of supporting teachers with student discipline. Teachers have a copious number of responsibilities in the classroom and put in extra time outside of school hours to be successful in the classroom (Moser & McKim, 2020). Addressing discipline issues in the classroom can add unneeded stress to a teacher's workday and cause a level of discouragement to their hard work.

Professional development conferences and workshops are frequently attended by agriculture teachers (NAAE). The topics addressed at the workshops and conferences cover a wide variety of teacher needs. Stress and mental health need to be a topic addressed at professional development events. All agriculture teachers encounter stress and should be educated on different coping mechanisms. National and state agricultural education associations

need to incorporate workshops on stress coping mechanisms into their professional development conferences.

Teacher education programs do a great job of preparing agriculture teachers for the classroom, but it is impossible to prepare them for everything they might encounter in the profession. Agriculture teacher education programs need to incorporate personal planning for their students. Young teachers should be made aware of the mental health risks of teaching and how to positively manage them. By educating teachers on the stressors and mental health risks of teaching, the aspiring teachers might learn how to address them before it deters them from the education profession. Knowing that each school and program is different and that their first job doesn't have to be their "forever" job could prevent teachers from leaving the career and help with teacher retention.

Mental health needs to become a priority in all levels and backgrounds of education. Not all educators take the traditional route to become a teacher. In this study, there were nine participants who obtained their teaching certificate via non-traditional channels. Many states have elected to have alternative teaching certifications to help fill some of the teacher shortages (McPherson, 2023). Teachers who are enrolled in one of those programs are taking on the challenges of teaching while taking classes to become a teacher. The programs that have current educators enrolled to become alternatively certified teachers need to consider all the tasks those teachers are trying to complete at once. These teachers are also not trained to be in the classroom prior to the start of their career and school administration and other staff need to do a better job of supporting them.

By addressing mental health and offering solutions to the daily tasks that increase stress in teachers, the education system could work on a solution to the continuing national teacher

shortage. It was addressed that work-life balance is a top reason why agriculture teachers are leaving the profession (Thomsen, 2018). Preparing pre-service and new teachers on how to create a work-life balance before it becomes a stressor could prevent burnout and teachers leaving the profession.

The Teachers' Occupational Well-being framework proposes two outcomes to the overall well-being of a teacher; inward and outward outcomes. Inward outcomes of the teachers' well-being focus on stress and burnout. The outward outcomes focus on classroom processes and students' well-being. The job demands and job resources of the working environment create outward effects on not only the teachers' well-being, but it eventually will affect the well-being of students. Educational systems and school environments need to become proactive and make the well-being of teachers a priority.

Recommendations for Future Research

This study focused on the school environment, stress, anxiety, and depression levels of agriculture teachers. With the continuing teacher shortage and research in mental health, there are opportunities for future research within this area.

Five constructs within the school environment questionnaire were identified. Those constructs were tested against the final depression score to see if they were significant. The constructs identified in the school environment can be tested against other variables or demographics. Future research can investigate the differences between the five constructs and the stress, anxiety, and/or depression of the genders in the population.

There are many items that cause stress in agriculture teachers (Lawver & Smith, 2014). The questionnaire in this study asked the participants about the stress of individual experiences of teachers. For future studies, research could be done on different agricultural education

programs and the various levels of stress within the program type. Agricultural education programs are all different and can have one or multiple teachers in the program (Torres et al., 2009). Research should be conducted to see if a single teacher program has greater stress scores than a multiple teacher program.

One of the demographics focused on in this study was the certification type of the teacher. Participants were asked if they were traditionally certified, alternatively certified, certified in a different area, or other. There are areas that cause different stress or increase mental health illnesses within each teacher certification type. Further research could be conducted to determine what stressors are more impactful for different teacher certification types.

The population used in this study were advisors located in Ohio, Indiana, Illinois, Iowa, Missouri, and Nebraska. For future research, the population could be changed to focus on one state association, include two state associations in different parts of the country to compare stressors, or be increased to include all the FFA advisors within the National FFA Organization. There are numerous options for the population of this study to further investigate the mental health illnesses in agricultural education. Each set of agriculture teachers are important, and work should be done to gain a better understanding of the current mental health of teachers in this profession.

The Ag Teachers' Life Cycle was utilized in this study to group teachers by their years of teaching experience and compare that with their depression symptoms range. In this study there were more early-career teachers, but there were also 15 mid-career and 15 late-career participants. Future research could be conducted to identify if there are different stressors for each career stage and how to best address them to improve the teaching profession.

Agriculture teachers have a large workload and numerous responsibilities in and out of the classroom. The survey instruments used in this study were sent out in December, which is the end of the semester for most teachers. In future research, sending the survey out to teachers at a different time, or multiple times throughout a year could provide a better picture as to the mental health of agriculture teachers and how the time of year may impact their mental health.

Agriculture teachers have duties year around but investigating the stressors or mental health at the beginning of the year compared to the middle and end of the year could be an area of future research and allow for more focused intervention and support practices.

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Appendix A - National FFA Request for Research Proposal

NFFA REQUEST FOR RESEARCH PROPOSALS

Created: 04/2016

Contact Form

DATE: August 25, 2022

RESEARCHER'S NAME: Macie Wippel

AFFILIATED RESEARCH INSTITUTION/UNIVERSITY: KANSAS STATE UNIVERSITY

GRADUATE COMMITTEE CHAIR NAME AND PHONE NUMBER (IF APPLICABLE): Dr. Gaea Hock Phone: 785-532-1166

PHYSICAL MAILING ADDRESS: 443 W. 3rd St. Minden, NE. 68959

EMAIL ADDRESS: mwippel@ksu.edu

PHONE NUMBER: 740-412-7724

RESEARCH STUDY QUESTIONS/OBJECTIVES/HYPOTHESES:

1. Determine the areas within the school environment (e.g., curriculum resources, collaboration among co-workers, student attentiveness, principal support) that contribute to the mental health of agricultural education teachers.
2. Determine the individual experiences that have caused the most stress and/or anxiety (e.g. time management, students discipline, task delegation, salary, extra duties, respect of peers, educational resources, peer support) to teachers in the agricultural education profession.
3. Determine how the personal feelings and/or emotions (e.g. depression, anxiety, stress) of the agricultural education teacher is impacted by the school environment and experiences in the profession.
4. Describe the relationship between the Ag Teacher's Life Cycle in the profession and the amount of stress and/or depression experienced by the educator.
5. Describe the correlation between the personal demographics (e.g. age, gender, marital status) of the agricultural education teacher and their mental health.
6. Describe the relationship between the teaching certification type (e.g. traditional, alternative, multi-endorsement, etc.) of the educator and their mental health.

ANTICIPATED TIME LINE FOR ALL CONTACTS WITH PARTICIPANTS: I am hoping to distribute an email to my participants after Labor Day (September 6, 2022).

QUESTIONNAIRE SOFTWARE: Online via Qualtrics

ANTICIPATED RESEARCH COMPLETION DATE: October 31, 2022

Attach the following items to your submission:

- Brief summary of plans to engage NFFA in your research efforts
- Completed Contact Form
- Research proposal and methods
- IRB approved instrument
- Exact sample frame specifications (if applicable)

- Description of anticipated funding sources and use to provide incentives for participants (for possible NFFA sponsor recognition)

Completed proposals should be sent to See-Trail Mackey and Nina Crutchfield for processing. **Please allow up to 4 weeks for processing your request. Additionally, all requests for research occurring at or during National FFA Convention must be made by June 15 prior to convention** in order to ensure information is included in event orientation packets and parental consent can be obtained by the researcher prior to the event (if applicable).

Research Proposal and Methods: The assessment is a 5-question, Qualtrics-administered, validated instrument, developed by NOT SURE WHO DEVELOPED MINE (see attached documentation). The instrument measures the daily tasks and environment of agricultural education teachers and the impact those tasks and environments have on their mental health. The constructs of interest included support systems, time management, educational resources, employment salary and duties, and student respect. Answers are assessed by using multiple scales ranging from strongly disagree or not at all to strongly agree or all of the time. Responses for the school environment and daily tasks are based on the current school year. Responses for personal feelings are during the duration of the past week of the respondent.

The assessment will be voluntarily administered to agricultural education teachers in Indiana, Illinois, Iowa, Missouri, Nebraska, and Ohio through a Qualtrics survey. Respondents complete the survey instrument assessment and will then be asked to self-report some demographic information about their teaching careers and personal life. It is estimated that respondents will be able to complete the instrument items in 10-minutes or less. Following the three-week data collection period, the data will be evaluated to determine the outcomes for all three research questions.

Participants:

This study will include agricultural education teachers in Indiana, Illinois, Iowa, Missouri, Nebraska, and Ohio. Respondents will self-report their age, gender, marital status, number of years as a teacher, and path to agricultural education. All genders, ages and other self-reported information will be included in the study. There will be no exclusions for these general characteristics.

Recruitment Plan:

Respondents will be recruited to complete the survey through emails provided by the National FFA Organization. Respondents will not be penalized in any way for non-participation. Respondents will not be individually contacted at any time by the researchers, nor will there be any follow-up after the completion of the instrument survey.

This study will be conducted via Qualtrics. Respondents will indicate their consent by clicking on the link to take them to the survey. Respondents will not be contacted following the survey administration. All data that is collected will be kept in an encrypted, cloud-based storage system to ensure the maximum level of privacy for participants.

Summary of plans to engage NFFA in your research efforts: Mental health has been increasing in educators across the United States in the last several years. As an agriculture educator and experiencing mental health issues myself I am looking to research the mental health issues of other agriculture teachers in the United States. Based on my findings, I think the NFFA would be able to engage in the results and coming up with workshops or programs to help agriculture teachers and FFA advisors confront teacher burnout, stress, anxiety, and other mental health issues. The results of this research could help combat agriculture teacher retention in several states.

Sample Frame Specifications: I am asking for a sample of the total population. The population I am focusing on is Indiana, Illinois, Iowa, Missouri, Nebraska, and Ohio. There are about 2,525 teachers total in these states and I am requesting 500 names/email addresses.

Appendix B - Internal Review Board Approval



University Research
Compliance Office

TO: Gaea Hock
Communications & Ag Education
Manhattan, KS 66506

Proposal Number: IR 11247

FROM: Sara Rosenkranz, PhD, Chair
Committee on Research Involving Human Subjects

DATE: 07/25/2022

RE: Proposal Entitled, "Investigating the Mental Health of Agriculture Teachers."

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written – and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, **45 CFR §104(d), category: Exempt Category 2 Subsection ii.**

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.

**Electronically signed by Sara Rosenkranz, PhD on 07/25/2022
11:29 AM ET**

Appendix C - Qualtrics Questionnaire

Investigating the Mental Health of Agricultural Education Teachers

Start of Block: Default Question Block

Q1 Thank you for all your efforts teaching agricultural education during difficult circumstances the past few years. I recognize the many challenges you overcame. (I am also a current agriculture teacher.)

The purpose of this survey is to investigate the mental health of agricultural education teachers in correlation with the work environment and daily tasks of the profession.

The results will be compiled and distributed to education stakeholders across agriculture education institutions in order to better inform decisions regarding preparing and supporting our teachers. Information shared may also be used in future research studies.

Your participation is voluntary. Your responses to these survey questions will be kept confidential and will not be tied to you in the reporting of results. Your responses will be combined with those from other survey respondents.

The survey should take approximately 10 minutes to complete. Your feedback is important, as your responses will contribute to a better understanding about mental health in the teaching profession.

If you have any questions, please contact Ms. Macie Wippel at mwippel@ksu.edu; or by cellphone at 740-412-7724.

You indicate that you voluntarily agree to participate in this research study by submitting the survey.

Thank you,

Macie Wippel - Agricultural Educator - Minden High School - Nebraska
Master's Student - Kansas State University

Q1 School Environment

Please indicate your level of agreement or disagreement with each of the following statements about your **current school environment**.

	Strongly Disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Teachers design instructional programs together. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most students are well mannered or respectful of the school staff. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructional equipment is not consistently available. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers are frequently asked to participate in decisions. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New and different ideas are always being tried out. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is good communication among teachers. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most students are helpful and cooperative with teachers. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The school library has sufficient resources and materials. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decisions about the school are made by the principal. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

New courses or curriculum materials are seldom implemented. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have regular opportunities to work with other teachers. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students in the school are well-behaved. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital equipment, computers, and internet access are readily available. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have very little say in the running of the school. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I seldom discuss the needs of individual students with other teachers. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most students are motivated to learn. (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The supply of equipment and resources is NOT adequate. (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers in this school are innovative. (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Classroom instruction is rarely coordinated across teachers. (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good teamwork is NOT emphasized enough at my school. (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We are willing to try new teaching approaches in my school. (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 Please rank the following statements based on the amount of stress/anxiety they have caused you during your teaching career?

1 being "not at all" and 5 being "a large amount".

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)
I easily over-commit myself. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have to try and do more than one thing at a time. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I become impatient if others do things too slowly. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I become anxious if someone doesn't do things as I would have. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is little time to prepare for my lessons. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that there is too much paperwork to complete. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that the extra duty salary does not compensate for the amount of excess work that I do. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not have a long enough extended contract. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I feel that I lack respect from my peers. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel frustrated because of discipline problems in my classroom. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel frustrated attempting to teach poorly motivated students. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that my administration does not provide me with the support I need. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that my community does not provide me with the support I need? (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that my co-workers do not provide me with the support I need? (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I do not have access to academic resources that would allow my program to be more successful. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q3 Below is a list of the ways you might have felt or behaved.

Please tell us how often you have felt this way during the past week by clicking “1” for rarely or none of the time (less than 1 day), “2” for some or a little of the time (1-2 days), “3” for occasionally or a moderate amount of time (3-4 days), or “4” for most or all of the time (5-7 days).

	Rarely or none of the time (less than 1 day) (1)	Some or a little of the time (1-2 days) (2)	Occasionally or a moderate amount of time (3-4 days) (3)	Most or all of the time (5-7 days) (4)
I was bothered by things that usually don't bother me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not feel like eating; my appetite was poor. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that I could not shake off the blues even with help from my family or friends. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I was just as good as other people. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had trouble keeping my mind on what I was doing. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt depressed. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that everything I did was an effort. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt hopeful about the future. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought my life had been a failure. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I felt fearful. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My sleep was restless. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was happy. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I talked less than usual. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt lonely. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People were unfriendly. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed life. (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had crying spells. (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt sad. (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that people dislike me. (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not get "going". (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

 Page Break _____

Q4 As an agriculture educator, what events, situations, or experiences have increased your stress level or mental health issues throughout your teaching career?

Q5 How would you best describe your gender?

- Male (1)
 - Female (2)
 - Non-binary / third gender (3)
 - Prefer not to say (4)
-

Q5 What is your age?

▼ 21-24 (1) ... 61+ (9)

Q6 How long have you been teaching?

▼ Less than 1 year (1) ... 15+ years (4)

Q7 What is your current marital status?

- Single (1)
 - Married (2)
 - Divorced (3)
 - I prefer not to say (4)
-

Q8 How were you certified to teach agricultural education?

- Traditionally Certified (attend 4 year+ program) (1)
- Alternatively Licensed (3)
- Certified in another teaching field (multiple endorsements) (4)
- Other (5) _____

End of Block: Default Question Block

Appendix D - Email Communication to Participants

Recruitment Email

Subject: Mental Health in Agriculture Teachers

Dear Ag Educators,

Last week you received an email from me requesting your participation in a study to investigate the Mental Health of Agriculture Educators. If you have already taken the survey, thank you! Your response is very important and appreciated!

Agricultural education teachers have tasks and duties that extend their teaching contract past the regular teachers' contract. Those duties include FFA events, contests, and conferences, Supervised Agricultural Experience (SAE) visits, summer projects, and more depending on the program. While agricultural education teachers try and find their work-life balance, there can be ample amounts of stress and anxiety that can lead to mental health issues. I am asking Agricultural Educators in Indiana, Illinois, Iowa, Missouri, Nebraska, and Ohio to help by giving 15 minutes of their time to complete a survey. If you are willing to do so, please go to the link listed below to participate

If you have not completed the survey yet, please do so in order to provide information on the Mental Health of Agriculture Educators and provide professional development to teachers to help them achieve overall job satisfaction and work-life balance in their agriculture education programs.

Please click on the link below to access the online survey.

https://kstate.qualtrics.com/jfe/form/SV_0e0Fd9VwQ3iUEXY

If you have any questions, please do not hesitate to contact me at mwippel@ksu.edu or Dr. Hock ghock@ksu.edu. We will be glad to assist you with questions.

Thank you so much for your time, it is greatly appreciated!

Sincerely,
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