Community-engaged approaches to agricultural mental health outreach: A qualitative study of practitioners and an organizational initiative

by

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Abstract

Farmers and ranchers face continuous occupational and psychological stressors that are often out of their control, placing agricultural populations at an increased risk for mental health challenges. Despite growing attention to farm stress, suicide prevention, and occupational outreach, rural communities often face barriers to help-seeking, including stigma and pride, limited access to care, and a general lack of knowledge about available services. Community-engaged (CE) work, including community-engaged scholarship (CES), offers an approach to addressing these challenges by fostering collaborative, trust-based relationships between researchers, practitioners, and communities. However, little is known about how practitioners of CE work enter agricultural communities to address mental health concerns, or how agricultural organizations design and communicate outreach initiatives addressing these issues.

This thesis consisted of two qualitative stages to address that gap. Stage 1 explored the experiences of practitioners of CE work across the Midwest region as they engaged agricultural communities on mental health topics, examining the strategies they use, the challenges they face, and the practices they identify as essential to effective CE work. Stage 2 examined a Mental Health Initiative (MHI) developed by a large agricultural membership organization (AMO), documenting how the initiative was planned, implemented, and communicated to its membership.

Findings across both stages emphasize the importance of awareness and preparedness before initiating mental health conversations; the value of trust-building through involvement, shared agricultural background, and lived experience; incorporating conversations and mental health content within existing programming; tailoring messages towards agricultural audiences; and barriers faced when conducting and designing this work.

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Dedication

To my guardian angels, the ones who raised me and the ones whose stories raised me from afar, who taught me the value of hard work, faith, and family. I hope I have made you proud.

Edward Loesing & Earlene Loesing

(1927-2005) (1927-2023)

Raymond Brinkmann & Nancy Brinkmann

(1940-1997) (1947-2026)

Chapter 1 - Introduction

This chapter provides an introduction and context to the historical and current state of stressors facing agricultural producers, the systems and resources currently in place to support their mental health and well-being, and the gap and needs for research in these areas. The agricultural industry sits at the intersection of occupation, identity, and way of life, where farming and ranching are a lifestyle and culture in addition to an occupation (Vayro et al., 2020a). However, this deeply rooted vocation carries with it a level of uncertainty and psychological strain that has compounded in recent decades due to volatile markets, mounting debt, extreme weather events, and a declining rural infrastructure that fails to meet the needs of producers and their families (Garner et al., 2025).

Farming and Mental Health

Mental health, as defined by the World Health Organization [WHO] (2026, Overview section, para. 1), encompasses a state of well-being, "that enables people to cope with the stresses of life, realize their abilities, learn and work well, and contribute to their community." Mental health exists on a continuum that connects to one's capacity to function and be resilient against life's circumstances. In agricultural contexts, mental health should be understood in relation to the specific stressors, cultural values, and occupational demands that accompany farm and ranch life (Iwinski et al., 2026).

Farming and ranching are consistently ranked among the most stressful occupations in the United States, with many occupational stressors contributing as key risk factors affecting farmers' mental health (Donham & Thelin, 2016; Yazd et al., 2019). Studies have consistently found that farmers experience elevated rates of psychological distress, depression, anxiety, and suicide compared to the general population (Peterson et al., 2020; Yazd et al., 2019). Despite this

elevated risk, help-seeking behavior remains low because of barriers created by both practical and cultural influences (Cheesmond et al., 2019; Ferris-Day et al., 2021; Komiti et al., 2006).

Geographically, many rural areas lack sufficient mental health providers, with numerous counties across Federal Region 7 of Iowa, Kansas, Missouri, and Nebraska (Federal Emergency Management Agency [FEMA], 2026) designated as Mental Health Professional Shortage Areas (Health Resources Services Administration [HRSA], n.d.). Even when services are available, the distance required to travel, the cost of care, and the time away from farming operations can create significant barriers for many farmers to access mental health resources (Ferris-Day et al., 2021). Rural norms of self-reliance, independence, and stoicism often deter rural community members from seeking help (Cheesmond et al., 2019), as well as a lack of mental health professionals who understand the farming or ranching lifestyle (Becot et al., 2025; Inwood et al., 2019).

Background & Context

The Farm Crisis of the 1980s illustrated the fragility of the agricultural industry and has left lasting negative impacts on producers, families, and rural communities (Ortega et al., 1994). During the 1980s, a combination of falling commodity prices, rising interest rates, declining land values, and high rates of bank failures and foreclosures created an economic crisis and increased distress among rural America (Ortega et al., 1994). Researchers documented an increase in farm family stress, depression, domestic conflict, and suicide rates across agricultural regions (Belyea & Lobao, 1990; Ortega et al., 1994). The impact of the 1980s crisis has extended beyond the decade, influencing decision-making and resulting in intergenerational trauma and pressure to uphold family legacy (Morris & Arbuckle, 2025).

Farmers and ranchers continue to deal regularly with stressors that are beyond their control (Yazd et al., 2019). Economic uncertainty remains one of the most significant stressors, with commodity price fluctuations, rising input costs, and mounting debt burdens placing significant psychological strain on farmers and their families (Waldman et al., 2021). Additionally, producers are navigating a natural environment that is unpredictable, uncontrollable, and increasingly erratic. Drought, flooding, late freezes, early frosts, hailstorms, and high winds can quickly destroy months of labor and hundreds of thousands of dollars worth of crops, livestock, equipment, and land. This results in not only immediate financial consequences, but psychological ones for producers who define their identity in their land and occupation (Linder et al., 2025). In addition to financial and environmental pressures, farming and ranching occupations are inherently physical, demanding, and can be dangerous (Johnson et al., 2021). Producers commonly work long, intense hours seven days a week during peak periods. This can translate to a psychological burden, isolation, and increased stress (Chengane et al., 2021). For many producers, the farm is a workplace, a home, and in many cases a family legacy spanning multiple generations. This blurring of boundaries between professional and personal life means work stress is rarely left at the office and is often shared among farm families (Dreby et al., 2017; O'Connor et al., 2025; Sprung, 2022).

The Federal Region 7 of the United States, encompassing Iowa, Kansas, Missouri, and Nebraska (FEMA, 2026), includes some of the most agriculturally productive states in the country. In this region, agriculture is a vital part of many rural communities, shaping land use, cultural identity, and local economies. Iowa leads the nation in corn and soybean production and is home to substantial hog and cattle industries (United States Department of Agriculture National Agricultural Statistics Service [USDA NASS], n.d.). Nebraska ranks among the top

states for cattle, corn, and soybean production, and Missouri's diversified agriculture sector spans from rice and soybeans to cattle and hay (USDA NASS, n.d.). Kansas is known as the wheat capital of the United States and is also a major beef producing state. Agriculture ranks as one of Kansas' largest industries, with more than 100,000 farmers and ranchers contributing more than $62 billion directly to the state's economy (Kansas Department of Agriculture, n.d.). Yet, mental health support in Region 7 remains limited, with many counties designated as Mental Health Professional Shortage Areas by the Health Resources Services Administration (HRSA, n.d.).

Mental Health Programs & Connection to Community-Engaged Work

In recognition of the growing agricultural mental health crisis, a number of national and state-level initiatives have emerged in recent years aimed to improve awareness, reduce stigma, and connect producers to support resources. At the national level, the Farm and Ranch Stress Assistance Network provides funding to establish and support a network of stress programs across the country including hotlines, counseling services, and educational programming (National Institute of Food and Agriculture [NIFA], 2026). The North Central Farm and Ranch Stress Assistance Center serves as the regional program for the North Central region of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin and houses a collection of farm stress and resiliency online resources ("About Us," 2024). The AgriSafe Network offers educational resources and trainings on occupational health and safety topics ("About," 2026) and supports the AgriStress Helpline, a free crisis and support helpline available 24/7 and staffed by specialists who "have extra training to know the culture, values, stressors, and lived experiences of agriculture, forestry, and fishing workers" ("AgriStress Helpline," 2026, "How Is the AgriStress Helpline Different Than 988?"

section). The American Farm Bureau's Farm State of Mind campaign works to build awareness and reduce stigma and provide information and resources to farmers and ranchers (American Farm Bureau Foundation, n.d.).

At a state level, large agricultural membership organizations have launched mental health initiatives to raise awareness, provide resources, and reduce stigma surrounding mental health. To achieve these goals, state-level initiatives provide educational resources, webinars, professional trainings, and highlight topics on social media, while also recognizing community members who are outstanding mental health advocates in rural communities.

Despite national, regional, and state efforts, significant challenges limit the reach and effectiveness of agricultural mental health research and programming. Geographic barriers continue to limit access to programs, as the distance required to travel, the cost of care, and the time away from farming operations can create significant barriers for many farmers to access mental health resources (Ferris-Day et al., 2021). Mental health providers working in rural farming communities have also noted a struggle to reach agricultural clients due to stigma, geographic barriers, and the practical constraints of farm schedules, but emphasize the importance of meeting farmers where they are both physically and culturally, stressing the value of partnerships with trusted agricultural organizations and networks as entry points for mental health outreach (Purc-Stephenson et al., 2024). This suggests that reaching producers depends not only on the availability of resources, but also on who brings and provides those resources into communities and how. Extension professionals, agricultural organization staff, and other community-based practitioners can serve as these trusted intermediaries between producers and mental health resources (Brown et al., 2024; Hossain et al., 2010; Stanley-Clarke, 2019).

Community-engaged (CE) work offers an approach to address these challenges and a way to understand how intermediaries work. The Centers for Disease and Control [CDC](1997) define community engagement as:

> The process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people. It is a powerful vehicle for bringing about environmental and behavioral changes that will improve the health of the community and its members. It often involves partnerships and coalitions that help mobilize resources and influence systems, change relationships among partners, and serve as catalysts for changing policies, programs, and practices. (p. 4)

On an academic level, community-engaged scholarship (CES) is a research-based form of community engagement that fosters collaborative, trust-based relationships between researchers and communities (Grimmett et al., 2018; Hammersley et al., 2023), and links the research, teaching, and service missions of universities to community needs (Kansas State University, n.d.; Colorado State University, n.d.). Models of engaged scholarship can be customized to meet specific societal health care needs, including mental health (Grimmett et al., 2018). According to the Kellogg Foundation, CES in a health-related context includes "a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings" (Milton et al., 2023, p. 1). CES models emphasize collaboration with community partners and building long-term trusted relationships (Grimmett et al., 2018; Korzun et al., 2014; Milton et al., 2023; Teti et al., 2021). This thesis uses CE work to describe the practice of planning and delivering this kind of work with agricultural communities, whether by university researchers, Extension professionals, or organizational staff.

Need for Study

The mental health crisis facing agricultural producers is a widespread, global concern (Yazd et al., 2019). The human cost of the agricultural mental health crisis demands serious attention from researchers, practitioners, and policymakers to move towards meaningful action to reach producers and create purposeful support (Younker & Radunovich, 2022).

Understanding the experiences of practitioners who carry out CE work, including CES researchers, Extension professionals, and agricultural organization staff who design and deliver programming for farm and ranching populations, is particularly needed at this moment (Inwood et al., 2019). Extension and outreach professionals have a unique position in agricultural communities as trusted educators and community members with a thorough understanding of the local context (Brown et al., 2024). While they are not mental health professionals, they are often placed in a position to serve as an intermediary and provide support to those in their communities (Hossain et al., 2010; Stanley-Clarke, 2019). Researchers who may be outsiders to a community may struggle with participation when trying to engage on sensitive topics related to mental health (Minkler, 2004). Research documenting how practitioners of CE work understand their roles, build connections, navigate challenges, and implement programming can inform more effective preparation, support, research, and program design for rural mental health.

This thesis focuses first on individual practitioners carrying out CE work across the North Central region, then examines the organizational level, analyzing how one agricultural organization has turned mental health communication into a sustained initiative. The Mental Health Initiative (MHI) represents an example of a large agricultural organization taking a positive stance on member and rural mental health. The MHI is a statewide outreach effort of a large agricultural membership organization (AMO), launched in response to widespread mental

health challenges in agriculture. The MHI's goals are to raise awareness of mental health, provide resources to farmers, ranchers, and other rural residents, and reduce stigma surrounding help-seeking in rural communities. The MHI operates primarily as a communication and awareness effort, rather than a direct service program, but includes an online resource hub for individuals experiencing stress, educational content and resources, and annual recognition of individuals who advocate for mental health in their communities. It represents a valuable case for inquiry, as a mental health initiative operating in a heavily agricultural state with significant service gaps. Documenting how the initiative was conceptualized and is operationalized contributes to the literature on organizational approaches to agricultural mental health. Other agricultural organizations may also benefit from the lessons captured in this case study, offering valuable insights and models for such an initiative.

Purpose

This thesis examined agricultural mental health outreach from both the practitioner and organizational levels to provide a multi-level view of agricultural mental health outreach. It first explored the experiences of practitioners engaging in CE work, including CES, with agricultural communities on topics of agricultural mental health. It then examined the MHI as a case study to explore how a large agricultural organization has designed, implemented, and communicated a rural mental health outreach program.

Stage 1: Cultivating Care: Community-Engaged Approaches to Agricultural Mental Health in Rural Communities

Little is known about how practitioners of CE work enter agricultural communities to address agricultural mental health concerns. Stage 1 sought to fill this gap by exploring how

practitioners of CE work approach the topic of mental health while working with rural communities. Research questions included:

RQ1) How do practitioners of CE work prepare for and tailor their engagement with rural communities on mental health topics?

RQ2) What practices do practitioners of CE work identify as essential to engagement on agricultural mental health topics in rural communities?

RQ3) What challenges do practitioners face when conducting CE work in rural communities on mental health topics?

Stage 2: Exploring a Mental Health Initiative: A Case Study of Rural Mental Health Outreach

The purpose of Stage 2 was to explore and document how a large, agricultural membership organization, which will be referred to as (AMO), has planned, executed, and communicated a rural mental health outreach program, which will be referred to (MHI) in this paper. Research questions guiding this project included:

RQ1) How has the MHI been developed and sustained?

RQ2) How does the MHI communicate about mental health to its audience?

Significance

The American Association for Agricultural Education (2023) has identified fostering healthy living as a priority research value, recognizing that "achieving optimal health includes acknowledgement of the interconnection among people, animals, plants, and their shared environment" (p. 12). This research aligns with and contributes to this value by illustrating how community-engaged approaches can strengthen the connections between agricultural producers, mental health resources, and the environments and communities in which they live and

work. This thesis extends AAAE's vision of healthy living beyond an individual level, to include community and organizational level approaches.

At the practitioner level, this research showcases the knowledge of individuals at the frontlines of agricultural mental health work. By documenting what practitioners have found effective, as well as the structural, relational, and cultural barriers they navigate, these findings offer practical knowledge that other practitioners may draw on as they design, adapt, or sustain their own research and programming.

At the program level, findings from this thesis can inform the preparation, design, delivery, and evaluation of mental health programming and research initiatives. By documenting practitioner experiences, identifying barriers and challenges, and recording the strategies that practitioners of CE work find effective, this research can provide guidance for program administrators, Extension professionals, and other practitioners engaged in CE work.

At the scholarly level, this research contributes to the growing body of literature on rural and agricultural health and safety by applying a community-engaged, qualitative approach. This study models how community engagement and CES frameworks can be applied within agricultural mental health research, offering guidance for future scholars working at the intersections of these fields.

Key terms in this thesis are defined below.

Key Terms

Mental health: "A state of well-being that enables people to cope with the stresses of life, realize their abilities, learn and work well, and contribute to their community" (WHO, 2026, Overview section, para. 1).

Community engagement: "The process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people. It is a powerful vehicle for bringing about environmental and behavioral changes that will improve the health of the community and its members. It often involves partnerships and coalitions that help mobilize resources and influence systems, change relationships among partners, and serve as catalysts for changing policies, programs, and practices" (CDC, 1997, p. 4).

Community-engaged scholarship (CES): "Community-engaged scholarship involves mutually beneficial partnerships between professional/college/university researchers and members of the public or nonprofit sectors at the local, regional/state, national, and global levels. The purpose of these collaborations is to share resources and general knowledge that advances community-driven efforts to address pressing societal issues" (American Sociological Association, 2025, p. 1).

Practitioner: "One who practices or is regularly engaged in a skillful activity" (Merriam-Webster, n.d.).

Practitioner of Community-Engaged Work: For this study, 'practitioner of community-engaged work' is defined broadly to include individuals who design, lead, or support collaborative efforts within the communities they serve. This includes university faculty, Extension professionals, center staff, and outreach professionals.

Chapter 2 - Literature Review

Introduction

This chapter reviews existing literature relevant to understanding the current context of mental health and community-engaged approaches within agricultural communities. This literature provides a foundation for this thesis by identifying existing knowledge, highlighting gaps in the research, and examining how community engagement and CES can support mental health initiatives in agricultural communities.

Occupational Stressors in Farming and Ranching

Agricultural work in the United States is a demanding occupation shaped by biological, economic, and environmental forces that are often beyond an individual farmer's control. Agricultural work encompasses the production of food, fiber, and fuel through the cultivation of crops and raising of livestock (Lewandowski et al., 2017; Swinton et al., 2006). The U.S. Bureau of Labor Statistics (2026) classifies farming, fishing, and forestry together under a broad industry umbrella, but scholars working in agricultural health recognize and distinguish the diversity of the industry by "the people, products, and places that participate" (Rudolphi, 2020, p. 1). Researchers have identified several physical and mental health risks related to agricultural occupational stressors. Stressors described include financial, weather and climate, work demand, family dynamics, social isolation, injury rates, and physical hazards. These stressors can often lead to an increase in mental disorders and psychological distress such as depression and anxiety (McShane et al., 2016). Stressors described include financial, weather, climate, work demands, family dynamics, and social isolation.

Financial Stressors

Financial stressors represent one of the most consistently documented sources of psychological distress among farmers and ranchers (Armstrong & Schulman, 1990; Paskewitz et al., 2023; Rudolphi et al., 2025; Sprung, 2022; Waldman et al., 2021). Farmers and ranchers are faced with unpredictable markets, rising input costs, compounding debt loads, and narrowing profit margins that exacerbate financial instability and vulnerability. In a 2019 survey of Indiana soybean and dairy farmers, Waldman et al. (2021) found that many farmers view long-term economic issues such as steady price declines and industry consolidation as more significant threats than environmental shocks like flooding or high heat. The psychological consequences of these financial pressures can impact more than just the farmers themselves, but also their spouses and broader farm family members. Sprung (2022) found that personal economic stress has spillover and crossover effects, directly increasing their family distress and the family distress of their spouses.

Weather and Climate-Related Stressors

Uncontrollable weather events serve as another key source of stress, as drought, flooding, frosts, hail, and wind can destroy months of labor and investment. Berman et al. (2021) found that drought during the growing season led to a significant increase in stress among Midwestern farmers, while Howard et al. (2020) found that 74% of respondents in a study on farmer and rancher perceptions of climate change and mental health in Montana reported feeling moderately to very anxious when thinking about the effects of climate change on their agricultural business. The researchers also identified a significant positive correlation between respondents' perception of climate risk and their levels of anxiety and distress. Additionally, Weatherly and Doherty (2025, p. 2) concluded that climate change and weather-related stressors act as a "stress

multiplier," interacting with other key stressors such as financial instability, market volatility, and animal diseases.

Work Demands, Family Dynamics, and Social Isolation

The farm often acts as both a workplace and a residence, resulting in occupational pressures transcending into daily home and family life. Fraser et al. (2005) note that the blurring of roles between work, home, and family can significantly impact mental health for farming families. Additionally, a study in Iowa demonstrated how economic stress can lead to elevated work-family conflict through spillover, when a person's experience in one domain affects their experience in another, and crossover, when stress is transferred to another person (Sprung, 2022). In upstate New York, Dreby et al. (2017) found that the way farm families organize and distribute their work and family boundaries varies significantly, categorizing into four distinct strategies: lifestyle, small business, community-oriented, and market-oriented. Multi-generational farm families may also face tensions related to a lack of shared vision, influence, and generational pressure (Dreby et al., 2017; O'Connor et al., 2025). While many farms are already geographically isolated, modern farming practices like increased mechanization have also led to more social isolation, as farmers have fewer shared tasks (Gregoire, 2002). While research notes that social isolation is a psychological risk factor for farmers (Gregoire, 2002; Yazd et al., 2019), Yazd et al. (2019) described isolation as not only a cause of stress, but as a consequence as well, as farmers experiencing mental health distress may withdraw from social or community activities.

Injury Rates and Physical Hazards

Agriculture is consistently ranked among the most dangerous industries in the United States. According to the National Safety Council (2026), agriculture, forestry, fishing, and

hunting account for one of the highest rates of workplace fatalities of any industry sector. Farm workers face a range of daily physical hazards including heavy and complex machinery, large livestock, pesticide and chemical exposure, extreme heat and cold, and the physical demands of sustained manual labor. Perceived economic problems, poor safety habits, and the interaction between stress symptoms and safety checks can significantly predict the risk of occupational farm accidents (Glasscock et al., 2006). Research has found that vehicles, machinery, and interactions with livestock account for most injuries related to agricultural work (Johnson et al., 2021; Li et al., 2024). When exploring an additional physical hazard through a scoping review on the relationship between agrichemical exposure and mental health outcomes, Khan et al. (2019) highlight a well-established link between high-dose acute organophosphate (e.g. Malathion, Chlorpyrifos, Diazinon) poisoning and psychological distress. They do, however, note that evidence regarding chronic low-level exposure is more inconsistent and there are several factors throughout the literature that hinder definitive conclusions.

Relationship Between Physical Injury and Psychological Burden

Research has noted a bidirectional and reciprocal relationship between physical injury and psychological distress in agricultural populations, where each can act both as a cause and a consequence of the other (Ramos et al., 2016; Simpson et al., 2004). Stress and mental health conditions often precede and increase the likelihood of experiencing a traumatic injury (Cameron et al., 2006; Gelleta, 2020; Thu et al., 1997). Symptoms of depression and anxiety can impair attention, concentration, memory, motivation, and decision-making, which can lead to workplace accidents and failures (Hilton & Whiteford, 2010). Depression has been linked to a reduction in safety behaviors and knowledge (Stallones & Beseler, 2004) and Beseler and Stallones (2010)

found that depressed farm residents with low safety knowledge had nearly four times the risk of injury compared to those without such conditions.

Conversely, sustaining a physical injury can lead to resulting psychological difficulties. Injuries can trigger a natural depressive response and post-traumatic stress disorder (PTSD) symptoms, with over half (64%) of injured reporting moderate to severe post-traumatic symptoms and 49.9% of participants reporting symptoms of depression in a study of 85 injured workers in Italy (Buodo et al., 2012). Additionally, Beattie et al. (2018), and Murray et al. (2019) add that the social and economic repercussions of an injury, such as financial threats, chronic pain, and a perceived loss of independence, intensify mental distress. Dembe (2001) describes this relationship as a vicious cycle or a web of reciprocal determinants, in which stress acts as a cause, effect, and modifier in the relationship between physical and mental health. Understanding this bidirectional relationship is essential for designing interventions that address both dimensions of farmer well-being.

Mental Health in Agricultural Populations

Stress Connection to Poor Mental Health

These occupational stressors described do not operate alone. Mental health concerns in agricultural populations are less frequently linked to a single stressor and more to the accumulation of pressures, with research suggesting that overlapping stressors worsen anxiety, stress, and psychological well-being (Deegan & Dunne, 2022; Hagen et al., 2021; Yazd et al., 2019). In agricultural contexts, the occurrence of a single, isolated stressor is rare, as these stressors often interact and intersect. Kessler (1997) notes that exposure to stressful life events or the culmination of chronic stressors can often lead to a depressed state. Similarly, Onwuameze et al. (2013) identified stress including the seasonal nature of farming, pesticide exposure, previous

farm injury, and additional off-farm employment often indicating financial instability were primary risk factors of a depressed mood. These findings illustrate how an injury, traumatic accident, or the continued occupational stressors associated with farming and ranching can have negative impacts on mental health. McShane et al. (2016) developed a Farming Family Stressor scale and found a significant positive correlation between farming stressors and distress, noting that farming is a high-stress working environment with stressors that often fall outside of an individual's control. Their work confirms Kessler's (1997) conclusion that chronic stress can have a considerable impact on both psychological and physical health.

Barriers to Help-Seeking

A consistent finding across agricultural mental health literature is that farmers are reluctant to seek professional help for mental health concerns, often being categorized as a "hard to reach" population (Hammersley et al., 2022). Help-seeking behavior is shaped by both practical and cultural influences, and in rural agricultural communities, both sets of factors can create significant barriers.

Mental health support in the North Central region consisting of of Iowa, Kansas, Missouri, and Nebraska, also remains limited, with many counties designated as Mental Health Professional Shortage Areas by the HRSA (n.d.). Even when services are available, the distance required to travel, the cost of care, and the time away from farming operations can create significant barriers for many farmers to access mental health resources (Ferris-Day et al., 2021). Cost is a significant barrier to seeking mental health care (Roy et al., 2014), with 32.5% of farmers in North Carolina describing health care costs as "very stressful" (Kearney et al., 2014). The logistical constraints of farm schedules, particularly during peak agricultural seasons, mean

these periods of increased occupational stress may also be the most practically difficult times to seek outside help.

In addition to practical and physical barriers, cultural factors may be equally or more powerful. When examining the role of rurality and rural identity in mental health help-seeking, Cheesmond et al. (2019) found that norms of self-reliance, independence, and stoicism were consistently associated with delayed or avoided help-seeking. Komiti et al. (2006) similarly note there is often a negative stigma surrounding mental health in rural communities, where seeking support may be seen as a sign of weakness and contradictory of the self-sufficient identity associated with farming culture.

Additionally, there is a large gap of mental health professionals who understand what it is like to be a farmer or rancher (Becot et al., 2025; Inwood et al., 2019). When farmers or ranchers do seek help, they may encounter practitioners who are unfamiliar with the daily stressors of farm life, the grief of losing livestock or a harvest, or the unique pressure of sustaining a family operation across generations. This misunderstanding can undermine and discourage continued engagement with mental health services. Mental health providers working in rural farming communities have echoed this concern, and note a struggle to reach agricultural clients due to stigma, geographic barriers, and the practical constraints of farm schedules. Providers emphasize the importance of meeting farmers where they are both physically and culturally, while stressing the value of partnerships with trusted agricultural organizations and networks as entry points for mental health outreach (Purc-Stephenson et al., 2024). Palomin et al. (2023) further documented the challenges of delivering mental health care in rural communities, including provider burnout, limited referral networks, and the difficulty of maintaining confidentiality in tight-knit communities where everyone knows each other. Cumulatively, this shows that effective mental

health outreach for rural agricultural populations requires a culturally sensitive, community-embedded approach that addresses both stigma and access.

Facilitators of Help-Seeking in Rural Communities

Despite the barriers described, researchers have also identified a range of factors that can help facilitate mental health help-seeking and support among farming populations. Studies consistently show that the "farm credibility" of mental healthcare providers is crucial to successfully engage farmer clients (Cheesmond et al., 2020; Hull et al., 2022; Purc-Stephenson et al., 2024; Vayro et al., 2020b). Farm credibility refers to the ability for providers to understand the realities of agricultural life, including the physical demands, financial volatility, unpredictable weather, seasonal work cycles, and the cultural values tied to farming and agricultural life. Cheesmond et al. (2020) report that rural residents in New South Wales, Australia, expressed a strong preference for flexible and informal meeting settings. Research also notes the use of language and framing of approaches (King et al., 2023; Roy et al., 2014). Roy et al. (2014) found that while traditional masculine ideals like self-reliance and pride are barriers, utilizing masculine strengths such as the desire to be a 'good father' or 'responsible provider' can be used to encourage male farmers to prioritize their well-being.

King et al. (2023) emphasize that traditional 'one-size-fits-all' approaches to mental health interventions are often ineffective for agricultural communities. After 21 telephone interviews and a focus group with individuals in the Scottish farming community, the King et al. (2023, p. 14) encourage individuals developing new intervention strategies to "meet farmers where they are," use indirect language and appropriate wording, engage and collaborate with trusted intermediaries in the community, and to integrate mental health conversations into other trainings, courses, or sessions on agricultural topics.

Additionally, Purc-Stephenson et al. (2024, p. 11) developed the 3-ACORNS framework (Figure 2.1) based on practices performed by "healthcare service providers who offered agriculturally informed services and successfully engaged with farmers."

Figure 2.1.

Evidence-based 3-ACORNS framework

	The 3-ACORNS Framework
A	Work to **accommodate** farmers' seasonal and daily work schedules (e.g., have a flexible cancellation policy).
A	Be **accessible** by offering services outside of regular work hours or on weekends.
A	Offer services that allow for **anonymity** (e.g., offer virtual options, consider office locations and signage).
C	**Combine** or embed mental health support with other programming that do not have stigma attached (e.g., recreational programs).
O	**Offer** programs that provide ongoing support.
R	Improve your understanding of farm culture to **relate** better to farmers and their stresses.
N	**Network** and engage with the community.
S	**Share** information about your services through various communication channels beyond social media.

Note. (Purc-Stephenson et al., 2024)

Rural Mental Health Landscape

Studies have consistently found that farmers experience elevated rates of psychological distress, depression, anxiety, and suicide compared to the general population (Arif et al., 2021; Norrod et al., 2023; Peterson et al., 2020; Rudolphi et al., 2019; Yazd et al., 2019). Yet, the landscape of mental health services in rural United States presents significant challenges as rural communities across the United States face shortages of mental health providers. As of March, 2026, 285 providers were needed to remove the Health Professional Shortage Area designation from Region 7 (Iowa, Kansas, Missouri, Nebraska) of the United States (Health Resources Services Administration, Bureau of Health Workforce, 2026).

Mental Health Programs and Initiatives

In response to the documented need, a number of agricultural mental health programs have been developed at the national and state levels in the past decade. A study examining the evolution of mental health resources for the agricultural population in Minnesota, South Dakota, and Wisconsin between 2019 and 2022 (Becot et al., 2025) documented the number of organizations providing mental health resources more than quadrupled, and the number of specific programs and resources more than tripled. This increase represents the identified need and importance for agricultural mental health support and resources.

At the federal level, the Farm and Ranch Stress Assistance Network (FRSAN) was established through the 2018 Farm Bill and reauthorized in the 2023 Farm Bill to fund state and regional programs addressing agricultural mental health. FRSAN has supported the development of farm stress hotlines, training programs for agricultural professionals, and community outreach initiatives across multiple states and regions (NIFA, 2026). The AgriStress Helpline, funded by various state departments of agriculture, is a crisis response helpline staffed by trained professionals who understand the "culture, values, stressors, and lived experiences of agriculture, forestry, and fishing workers" ("AgriStress Helpline," 2026, "How Is the AgriStress Helpline Different Than 988?" section).

The North Central Farm and Ranch Stress Assistance Center (NCFRSAC) represents a regional effort, serving the twelve-state North Central region of Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, South Dakota, and North Dakota. When documenting the outcomes and recommendations from the first three years of the NCFRSAC, Rudolphi et al. (2024) highlight the importance of culturally responsive training and the need to reach underserved populations. Becot et al. (2025) also note that while the funding

for these networks and centers has led to an increase in programming, they share concern for the long-term sustainability and coordination of funding. These concerns illustrate a need for ongoing funding, program evaluation, and advocacy for investment and program development in agricultural mental health resources.

Extension services have also designed mental health resources and materials. Michigan State University Extension designed two programs: Communicating with Farmers Under Stress, a program designed for individuals who support farmers, focusing on recognizing signs of distress and effective communication; and Weathering the Storm, a program designed for farmers and their families specifically focusing on stress identification and management (Eschbach et al., 2022). Similarly, Washington State University Skagit County Extension partnered with behavioral health and suicide prevention experts to tailor a suicide prevention program specifically for agricultural audiences (McMoran et al., 2021). Additionally, McMoran et al. (2021) adapted programming to meet cultural needs and leveraged the Extension platform to include suicide prevention education into existing agricultural workshops.

Conceptual Framework

This thesis draws on two complementary frameworks: social marketing and community engagement models, including CES. Farmers and ranchers are often described as a "hard to reach" population (Hammersley et al., 2022), and reaching them depends on how messages are designed and received as well as who delivers them and the method used to do so. Social marketing and the Co-create-Build-Engage (CBE) framework offer a way to examine how mental health outreach is designed, delivered, and promoted to encourage voluntary behavior change such as help-seeking (Grier & Bryant, 2005; Rundle-Thiele et al., 2021). It is applied primarily in Stage 2 to understand how the AMO has designed and communicated the MHI.

Community engagement and CES describe the collaborative, trust-based relationships through which practitioners enter and work within communities (Centers for Disease Control and Prevention [CDC], 2025; Cheney et al., 2002). They serve as an interpretive lens in Stage 1 for how practitioners describe their engagement work.

Social Marketing

Designing effective mental health outreach for agricultural populations requires attention not only to what messages are communicated, but also how they are designed, delivered, and received. Social marketing provides a useful framework for this work. Grier and Bryant (2005) define social marketing as a program-planning process designed to promote voluntary behavior change. In exploring how commercial marketing principles can be applied to improve health promotion, Hastings and Haywood (1991) conclude that promoters must understand the needs, motivations, and perceptions of the audience to create effective communication; should communicate the benefits of the healthy behavior in a way the consumer receives value; and must integrate the product, price (physical or psychological), place (distribution channels), and promotion (communication methods) to create successful campaigns. Hastings and Haywood (1991) emphasize the importance of the promoter understanding the audience's point of view to avoid messaging that comes across as patronizing or confusing. In an agricultural context, those working to promote mental health awareness should understand agricultural life and address the specific stressors, cultural values, and communication norms to tailor messaging that best resonates with agricultural audiences.

The Co-create-Build-Engage (CBE) framework outlined by Rundle-Thiele et al. (2021) offers guidance on implementing social marketing activities to aid in voluntary behavior change. Their framework moves through phrases where programs are designed with people rather than

for them, with stakeholder orientation, segmentation, competition, and theory. Step two focuses on developing an exchange while using the marketing mix (product, price, place, promotion) so that behavior change is voluntary and feels beneficial. Finally, the last phase involves implementing and promoting the program to raise awareness and initiate participation, maximizing reach to encourage behavior change.

Social marketing framework has previously been used in the design and implementation of a suicide and mental health campaign for farmers in Kentucky (Ward & Witt, 2023). The campaign utilized diverse marketing platforms including both print and digital media, events, and trainings to promote help-seeking. The campaign was developed with attention to message development, imagery, and the product (website), price (confidentiality and zero cost), place (geographically targeted to counties in Kentucky with rural suicide indicators), promotion (various media outlets featuring representative Kentucky farmers), and people (culturally relevant resources that serve farmers).

In this context, social marketing and the CBE framework apply to how mental health messaging for the MHI is designed and delivered rather than only what it says. This focuses not only on the content of the messages, but the decisions behind them to describe who helped shape the initiative, how messages are framed to reduce the perceived costs of seeking support, through which channels messages are shared, and how they are promoted. Social marketing and the CBE framework therefore provide a structure for examining the planning, implementation, and communication efforts of the MHI.

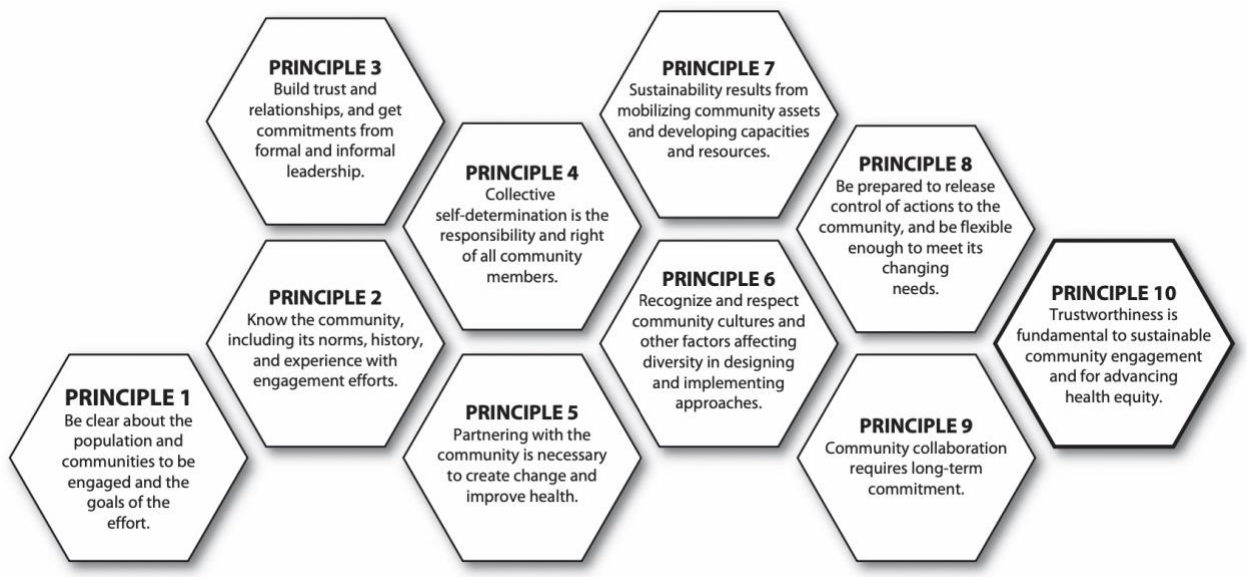
Community-Engaged Work

Community Engagement.

Community engagement has been commonly used to strengthen local health systems and promote public health interventions (Brunton et al., 2017; Michener, et al., 2025). The CDC refined their definition of community engagement to emphasize the importance of partnerships, stating that "community engagement builds sustainable relationships through trust and collaboration, strengthening community well-being. The process should be enduring, equitable, and culturally sensitive to all participants, with a shared goal of addressing the concerns of the community" (CDC, 2025, p.11). The CDC also identifies 10 principles of community engagement work (Figure 2.2) that include building trust and relationships, respecting community cultures, flexibility, long-term commitment, and the importance of trustworthiness (CDC, 2025). After a systematic review aimed at identifying community engagement approaches in public health interventions, Brunton et al. (2017) recognized two perspectives that explain why community engagement might improve people's health: a utilitarian perspective, which views community engagement as a tool or strategy to make health interventions more acceptable and efficient by involving communities; and a social justice perspective, which is grounded in civil rights and democratic participation and seeks to improve empowerment and community control. Additionally, Schiavo (2021) emphasizes that communities themselves should be the primary recipient of community engagement, which requires the empowerment of the community to lead decision-making.

Figure 2.2

The 10 Principles of Community Engagement



Note. (Michener et al., 2025)

Principles of CES.

Community-engaged scholarship (CES) has been an increasingly popular topic among universities as institutions promote their continuum of engaged scholarship (Kansas State University, n.d.; Colorado State University, n.d.). CES has been defined as "mutually beneficial partnerships between universities and communities designed with the intention to collaboratively develop and apply knowledge to address consequential public issues" (Gordon da Cruz, 2018, p. 148). Kelly and Given (2024) identify three ways in which researchers position themselves relative to communities in CES work: 'with' community, 'for' community, and 'to' community. These operational styles connect directly to the levels of involvement, goals, and range of partnership outlined by university continuums (Kansas State University, n.d.; Colorado State University, n.d.). Chupp et al. (2021) note that authentic engagement should involve reciprocity while addressing the specific needs of the community, meaning that community partners are more than subjects or recipients of academic research; they are active co-contributors involved in the academic process who bring with them a new set of knowledge, priorities, and perspectives

that shape the research. Successful partnerships with community partners require mutual trust, shared power, clear communication, and flexibility by the practitioner (Strand et al., 2003). Similarly, Cheney et al. (2002) outline 10 strategies for engaged scholarship that include getting involved in the community, addressing issues that matter to the community, and establishing connections with all members of the community.

CES in Public Health and Agricultural Contexts.

Models of engaged scholarship can be customized to meet specific societal health care needs, including mental health (Grimmett et al., 2018). According to the Kellogg Foundation, CES in a health-related context includes "a collaborative approach to research that equitably involves all partners in the researcher process and recognizes the unique strengths that each brings" (Milton et al., 2023, p. 1). Milton et al. (2023) outline a guide for radiologists using community-based participatory research (CBPR), a widely used model of CES, that involves community members in every stage of the research process. Milton et al. (2023) describe a research cycle that involves four key steps, including establishing a partnership, defining a community-driven question, designing and executing research together, and translating the results into social action. When working with farmworkers using CBPR methods to investigate and change physical and social environments to improve health, Arcury et al. (2001), identify the importance of investing time to build and maintain trust and utilizing multiple engagement approaches to reach various stakeholders. Additionally, researchers note challenges related to engaged work including the time required to build trust, potential researcher burnout, power imbalances, and the need for institutional support for non-traditional research methods (Cargo & Mercer, 2008; Milton et al., 2023; Weerts & Sandmann, 2008).

Principles of community engagement and CES served as an interpretive lens for how practitioners of CE work recount their own engagement work, rather than as a design shaping the study itself. This study was not conducted as a CBPR project, so CES was not used to structure the research process. Instead, the principles of CE work and CES served as concepts for interpreting Stage 1. The two frameworks are complementary, as the community engagement framework was applied across both stages. Community engagement and CES guided the interpretation in Stage 1 of the relationships and practices practitioners of CE work describe as central to their work. While social marketing guided the analysis in Stage 2 of how the MHI was designed and communicated, community engagement provided a lens for how the AMO's partnerships, trust-building, and community involvement shaped the MHI.

Chapter 3 - Methods

Introduction

This chapter describes how this research was designed, executed, and evaluated. The purpose of this thesis was to examine how research, programming, and initiatives are being designed around mental health topics for agricultural populations. To achieve this purpose, two stages of data collection and analysis were completed, both of which followed qualitative designs. Both stages were reviewed and approved by Kansas State University's Institutional Review Board prior to data collection (See Appendix A and B). Stage 1 explored how practitioners of CE work approach the topic of mental health while working with rural communities, while Stage 2 examined a mental health initiative to understand how a single agricultural mental health program is designed, implemented, communicated, and sustained.

Stage 1: Cultivating Care: Community-Engaged Approaches to Agricultural Mental Health in Rural Communities

Research Design

This stage followed an exploratory qualitative design, informed by principles of community engagement and community-engaged scholarship. Exploratory research in social sciences is a methodological approach that allows researchers flexibility in looking for data while focusing on under-researched social phenomena (Stebbins, 2001). Qualitative methods are well-suited for exploring complex phenomena in which meaning is constructed through lived experience and context (Creswell & Poth, 2018). This approach is appropriate for this study because it sought to understand the experiences, challenges, and strategies of practitioners who engage directly with agricultural communities on sensitive topics such as mental health, rather than measure outcomes across the population. In mental health services research, qualitative

methods provide a thick description and are particularly effective for eliciting the perspectives of participants in their own voices, exploring under-studied issues, and evaluating the processes behind interventions (Palinkas, 2014).

Population and Sample

The population for this stage consisted of practitioners of CE work who have or are actively working with agricultural communities in the North Central region of Iowa, Kansas, Missouri, and Nebraska to address mental health topics. For the purpose of this study, 'practitioners' is defined broadly to include university faculty, Extension professionals, center staff, and outreach professionals. This expansive definition reflects the broad nature of CE work in agricultural settings and ensures a diverse range of perspectives is captured.

Participants were recruited using purposive sampling, a non-probability sampling technique when researchers seek individuals with specific characteristics or experiences relevant to the study's aims (Patton, 2015). Purposive sampling allowed the research team to intentionally identify potential participants who had direct experience with CE work in mental health within agricultural communities. Potential participants were identified by conducting a review of recent journal articles and publications related to agricultural mental health and CES to identify and locate authors who conducted their research within the North Central region. Google Scholar and journals related to agricultural health and safety or CES, such as the Journal of Agromedicine, Journal of Extension Education, Community Mental Health Journal, and the Journal of Participatory Research Methods, were searched using key terms such as "rural mental health" and "farmer wellness." The review was considered complete when additional searches yielded previously identified authors. The research team additionally consulted expert Extension professionals working in this area to generate a list of potential participants. To reach

participants who may not be identified through initial recruitment channels, chain referral, or snowball sampling, was used. This technique is especially useful for accessing participants embedded in professional networks (Spickard, 2017), as is the case in this example of tightly connected professional communities working in a similar subject area. The original recruitment of potential participants from Federal Region 7 of the United States, encompassing Iowa, Kansas, Missouri, and Nebraska (FEMA, 2026), was expanded to the North Central region, as defined by the Farm and Ranch Stress Assistance Network Program (NIFA, 2026), to additionally include Illinois, Indiana, Michigan, Minnesota, North Dakota, Ohio, South Dakota, and Wisconsin, due to snowball sampling referrals. 49 potential participants were recruited via email (See Appendix C), and 19 participated in semi-structured interviews. Recruitment ended when no new themes emerged and no additional participants responded. Each participant who completed an interview was offered a $20 Amazon gift card for their time. Participant demographic information is summarized in Table 1.

Table 1

Stage 1 Participant Demographics

Participant letter	Gender	Age range	State	Position focus
A	Male	28-46	Iowa	Researcher
B	Female	47-58	Missouri	University Faculty
C	Female	47-58	Kansas	Extension
D	Female	28-46	Nebraska	University Faculty
E	Female	59-77	Nebraska	Center Staff
F	Female	47-58	Iowa	University Faculty
G	Female	59-77	Missouri	University Faculty & Extension
H	Female	59-77	Iowa	University Faculty
I	Female	59-77	Nebraska	University Faculty & Center Staff
J	Female	28-46	Iowa	University Staff

K	Female	47-58	Kansas	Extension
L	Female	47-58	Kansas	Extension
M	Female	28-46	Kansas	Extension
N	Female	59-77	Kansas	Extension
O	Male	59-77	Kansas	University Faculty & Extension
P	Male	47-58	Kansas	Center Staff
Q	Female	28-46	Nebraska	University Faculty
R	Female	28-46	Wisconsin	Center Staff
S	Female	28-46	South Dakota	University Faculty

Data Collection

Data were collected through semi-structured interviews conducted remotely via Zoom. Semi-structured interviews were well-suited for this study because they provided a consistent framework for exploring the research questions while allowing the researcher the flexibility to explore unexpected lines of inquiry and the participants to share experiences and perspectives not anticipated by the researcher (Merriam & Tisdell, 2016). The use of Zoom enabled participation across a wide geographic region while minimizing travel burden for both the researcher and participants.

The interview protocol (See Appendix D) was developed by the larger project team prior to the researcher's involvement. The interview protocol was adapted from a study with a similar focus on CES within agricultural communities (Wegley et al., 2026), and explored background information and demographics, the participants' personal experiences with CE and CES in agricultural mental health and safety topics, as well as perspectives on resources, challenges, and opportunities in the field. Other members of the project team led the first four interviews, during which the researcher observed and co-facilitated, allowing for the testing of the interview protocol. The remaining 15 interviews were conducted by the researcher independently. All

interviews were recorded with participant consent using Zoom's recording services. Zoom transcription services transcribed the first five interviews. Audio recordings for the remaining 14 interviews were uploaded and transcribed by MaxQDA.

Data Analysis

The researcher edited the interview transcripts against audio recordings for accuracy. Inductive data analysis was performed using open, axial, and selective coding procedures. Five interview transcripts were coded by hand and the remaining fourteen were coded using MaxQDA. Open coding involved a line-by-line review of each transcript to identify and label meaningful segments of data. These initial codes were then organized into broader conceptual categories during axial coding. Selective coding was used to identify overarching themes and integrate categories (Corbin & Strauss, 2008). The researcher used ongoing analysis, as data collection was happening simultaneously, allowing for the comparison, organizing, and refining of codes and themes (Tisdell et al., 2025). Peer debriefing was used throughout the data analysis process to enhance reliability (Creswell & Creswell, 2018).

Trustworthiness & Reliability

To ensure reliability, emerging codes and themes were discussed with another member of the project team, aligning with Creswell and Creswell's (2018) recommendations for peer debriefing. Rich, thick descriptions were used to convey findings, while discrepant information was also presented.

While Stage 1 explored how practitioners of CE work approach mental health topics when working with rural communities, Stage 2 shifts to the organizational level, examining how a single mental health initiative is designed, implemented, communicated, and sustained.

Stage 2: Exploring a Mental Health Initiative: A Case Study of Rural Mental Health Outreach

Research Design

This stage utilized an exploratory qualitative case study design. Qualitative methodology is appropriate for this study because the research questions seek to understand the meanings, perceptions, and experiences of stakeholders engaged in a complex organizational initiative, rather than to measure outcomes or test hypotheses (Creswell & Poth, 2018). The case study approach is specifically suited to this inquiry because it allows for an in-depth examination of a bounded phenomenon, defined as the MHI, within its real-world context (Yin, 2018).

Participants

Participants were purposively selected to represent the range of roles involved in producing and maintaining the MHI. Purposive sampling allows for participants to be strategically selected based on their relevant knowledge and experience with the initiative (Patton, 2015). Specifically, participants were selected to represent AMO program leadership involved in the conceptualization and launch of the initiative, coordinators responsible for initiative management, communications staff responsible for developing and managing content, and committee and board members who are supporters of the initiative. This purposive approach allowed for multiple perspectives on the initiative, creating a more complete understanding of how the program operates across organizational levels.

To be eligible for participation, individuals must have been 18 years of age or older, must currently or previously have had a formal role in the planning, implementation, communication, or evaluation of the MHI, and must be able to participate in a 45 to 60 minute semi-structured interview. Five participants were recruited via email (See Appendix E), and all recruited

participants participated in semi-structured interviews. The sample was bounded by the case study design of a single initiative with a small number of individuals holding roles that met the eligibility criteria. Sample sufficiency was judged by information power rather than a numerical requirement (Malterud et al., 2016). Five participants were considered sufficient because of the study's narrow focus, dense sample specificity, and strong quality of dialogue.

Informed consent was obtained prior to conducting all interviews. Participant demographics are described in Table 2.

Table 2

Stage 2 Participant Demographics

Participant number	Gender	Position focus
1	Female	Communications Staff
2	Female	Staff Liaison
3	Female	Communications Staff
4	Female	Board Member
5	Male	Board Member

Data Collection

Before designing the interview protocol and conducting interviews with participants, the researcher completed a review of the initiative's publicly available digital content to build a foundational understanding of the MHI. This review included the MHI and AMO's webpage(s), social media accounts, and relevant media coverage. The digital content review allowed the researcher to develop a working knowledge of the initiative's scope, messaging, and public presence, providing a point of reference to further discuss the initiative with participants during data collection.

Data were collected through semi-structured interviews. Semi-structured interviews are guided by a pre-developed interview protocol but allow the researcher flexibility to probe emerging themes, follow unexpected lines of inquiry, and tailor questions to the specific knowledge and experience of each participant (Merriam & Tisdell, 2016). This format is well suited to the exploratory nature of the study, as it balances structure with responsiveness to the unique insights of each participant. See interview protocol questions in Appendix F. Interview questions were designed and organized around core components of social marketing: product (Question 6), price (Question 2), place (Question 13), and promotion (Question 11), while capturing participants' roles within the initiative, the process of developing and implementing the program, perceived challenges and successes, and perspectives on the initiative's impact on its target audience.

Two interviews were conducted in person at the AMO's headquarters, and three on Zoom, based on participant location and availability. Interviews ranged in length from 38 minutes to 1 hour and 8 minutes. All interviews were audio-recorded with participant consent using Zoom's recording option. Audio recordings were transcribed using Zoom transcription services and the transcripts were reviewed against the audio recordings for accuracy prior to analysis. Field notes were taken during and immediately following each interview to capture non-verbal observations, contextual information, and the researcher's immediate reflections on the interview.

Data Analysis

Data were analyzed using MaxQDA. Qualitative data was analyzed using thematic analysis, following the six-phase approach described by Braun and Clarke (2006). Thematic analysis is a qualitative method that involves systematically identifying, analyzing, and reporting

patterns across a dataset. It is particularly appropriate for exploratory research with a relatively small sample as it is flexible, accessible, and capable of generating rich, complex interpretations of qualitative data (Braun & Clarke, 2006). Analysis proceeded through the following six phases. In phase one, the researcher familiarized herself with the data by reviewing interview transcripts and field notes while noting initial patterns and impressions. In phase two, initial codes were generated by labeling segments of the data relevant to the research questions. Phase three involved identifying patterns and sorting codes into broader themes across the dataset. In phase four, the themes were reviewed and refined to ensure an accurate reflection of the data. Phase five involved defining and naming each theme. In phase six, the analysis was written and integrated into the findings of the study.

Trustworthiness and Reliability

Prior to conducting interviews, the interview protocol was reviewed by a doctoral student in the department and a faculty researcher with experience in qualitative interviewing to ensure clarity, appropriateness, and alignment with the study's research questions. This aligns with Creswell & Poth's (2018) recommendation for multiple strategies of validation in qualitative research.

Emerging codes and themes were discussed with an advisor, aligning with Creswell and Creswell's (2018) recommendations for peer debriefing. Additionally, descriptions and themes were shared with participants for member checking to ensure accuracy of representation (Creswell & Creswell, 2018). Member checking was completed by sharing findings with participants, allowing them to review the researcher's interpretations and confirm that their perspectives were accurately conveyed. This process aligns with recommendations to strengthen

the accuracy and credibility of findings by verifying the identified themes and interpretations aligned with participants' intended meanings (Creswell & Poth, 2019; Lincoln & Guba, 1985).

Positionality

Qualitative research features the researcher as the key data collection instrument, and the findings and meanings that emerge from this thesis are shaped by the interaction between the researcher and participants, rather than uncovered as a single fixed truth (Merriam & Tisdell, 2016). As a graduate student researcher with a strong background in the agricultural industry, I come to this research with a particular set of experiences and perspectives that shape how I approach and understand rural mental health programs, research, and initiatives. I recognize that participants' understandings of mental health programming and outreach initiatives are constructed through their own lived experiences, and that my role is to interpret and present these findings as reflexively as possible, while acknowledging that another researcher with a different positionality might find different emphases from the same data. My interest in this topic stems from a personal connection to agricultural producers and rural living, having grown up in and around agricultural communities. In this way, I position myself as an insider to rural culture and the unique challenges producers face. While I have not personally experienced mental health struggles, people close to me have, which has shaped my understanding of and empathy toward this topic. My previous enrollment in a community-engagement graduate class also shapes my understanding of CES. The goal of these projects are to generate findings that are useful and actionable for the communities, organizations, and practitioners involved, positioning this research as less of a measurement or test of what is working, and more towards an understanding of the considerations, barriers, and practical steps that might improve mental health outreach in agricultural communities.

Chapter 4 - Findings

Introduction

This chapter reports the findings from the two stages of this thesis, organized by stage and research question. Findings from Stage 1 are shared through four themes across the three research questions: the need for awareness, training and personal preparation before discussing sensitive topics like mental health with community members (Theme 1); participants navigated stigma by easing into sensitive topics through familiar content, indirect framing, flexible language, and building credibility through shared agricultural identity and personal vulnerability (Theme 2); effective CE work is built on trust, community presence, and community ownership of the work (Theme 3); and participants must navigate structural, resource, and sociopolitical barriers that are often misaligned with the nature of conducting CE work (Theme 4).

Findings from Stage 2 are organized around two research questions and three themes: the MHI was built and is sustained through grassroots member input, board support, and collaboration across internal groups and external partners (Theme 1); sustaining the MHI requires navigating practical constraints on time, money, staff capacity, and the limited ability to measure or quantify success (Theme 2); and the MHI communicates about mental health through intentional choices about where messages appear, how they are framed, and who delivers them (Theme 3).

Stage 1: Cultivating Care: Community-Engaged Approaches to Agricultural Mental Health in Rural Communities

RQ1) How do practitioners of CE work prepare for and tailor their engagement with rural communities on mental health topics?

Theme 1: Participants emphasized the need for awareness, training, and personal preparation before discussing sensitive topics like mental health with community members.

Participants continuously emphasized the importance of awareness and intentional preparation when introducing mental health topics in agricultural communities. Participants described **working with mental health professionals** or university departments when designing programs and research projects. Participant K shared, “When I created my program, I worked with the psychology department. And they were open to giving me resources and going through everything just to make sure I had all the details correct.” Similarly, Participant A described working with behavioral health experts who work with farmers to learn strategies on discussing sensitive topics: "Working with experts who work with these communities before I started talking to the actual farmers about mental health made the design of the research better and safer."

In addition to working with experts, participants explained the need for intentional personal preparation before having sensitive conversations with community members. Many participants have completed **formal training** to be equipped to recognize and respond to someone in crisis. Participant P said,

> “A couple of our staff have done QPR [Question, Persuade, and Refer] as a mental health training. I’ve done mental health first aid, and there’s a youth-focused version of that. We

do have staff who we try and keep aware of best response tactics or methods if they do encounter somebody who's having a crisis."

Participant H added that trainings and response preparedness should be more than just a recommendation; it should be a requirement, "Your research staff should be trained on how to respond, and I would make it a protocol."

Furthermore, participants emphasized the importance of maintaining an **updated resource list** and being prepared to share resources and information through research consent forms, flyers, handouts, and other materials. Participant K shared, "If I'm going to be a trusted resource, I need to do the work behind the scenes to get that information so that they can trust me." Sharing these resources in several locations that farmers and rural community members frequent was described as useful to increase exposure and reduce pressure. Participant L added, "There's card stands at the local sale barns, at the local feed stores, at the co-ops, and you're just putting them out in front of them so they can nonchalantly pick it up."

Participants also acknowledged the emotional weight of this work. Serving as a trusted intermediary on sensitive topics can be both rewarding and taxing. Participants emphasized the importance of **self-awareness, self-care, personal preparation, and strong support structures** to sustain effective community engagement work over time. Participant E added, "Well, you gotta know yourself, right? Be comfortable speaking about this topic. Initially it was not easy either for myself. I had to work through some of that stigma. So educate yourself. Sometimes that might mean even speaking to a behavioral health professional."

Theme 2: Participants navigated stigma by easing into sensitive topics through familiar content, indirect framing, flexible language, and building credibility through shared agricultural identity and personal vulnerability.

Participants described the need to be aware of the stigma that still surrounds mental health topics in agricultural communities. Participant G explained, “When you’re talking ag, there are certain areas that have a tendency to be taboo because there’s this huge stigma.” However, participants noted a shift over the past decade, where community members are increasingly willing to engage with mental health topics publicly, have become open to sharing their own personal experiences, and have expressed a recognized need for continued rural mental health programming. Participant K explained,

> “The first couple times I gave the program, I will say no one looked at me. I don't want to say it was awkward, but you could tell it was uncomfortable. And over the years, I will see producers take photos of the resources page, or they will come talk to me afterwards, thanking me for doing the program. So even in the past ten years, it feels like it's shifting a little bit more.”

While some participants have experienced success with increased interest and participation, others continue to experience challenges due to stigma surrounding mental health topics. To address this, participants described adding **mental health content into existing programming**, such as soil fertility, crop management, succession planning, or financial planning workshops, where participants are more likely to engage with the material when it is not the primary focus. Participant P explained this integration process,

> “Incorporating that in bite-sized chunks in other programs was actually a lot more effective. If you have a workshop and you say, ‘we're just going to talk all day about mental health,’ you might not get that many people to show up, but if you have a workshop on, insert other topic, writing a grant for your farm or something else, but incorporate mental health into that, that can be successful.”

Participant E elaborated on the importance of less formal programming that is tailored to fit the audience,

> "For me to say, 'we're going to talk about mental health for three hours,' yeah, they'll blow you off. But if there's another reason and you can slip it in and not have it be so structured...but then also giving them the information in a way that's digestible and easy for them to understand."

Participants also described deliberate approaches to entering mental health conversations. Participant G explained this strategy,

> "You have to make sure that folks know that you're not just going to go in there and say, 'hey, let's talk mental health.' Number one, we have to talk about the weather...you have to talk about the corn prices. You have to talk about wheat. You have to talk about soil health and soil. You talk about the health of the soil, water quality, water quantity. You have to talk about the health of the animals. When you start moving down those paths and you're talking about soil health and water quality, you can start transitioning and can start using those little buzzwords. Well, how do you take care of the health of your crops? And then you can immediately start making that little transition because they've now started opening up the platform for you. And then I will say, 'well, if you don't take care of your health, how are you going to take care of your crops? How are you going to take care of your animals? How are you going to take care of your family?' Because it gives you that perfect in."

Beginning conversations with weather, commodity prices, soil and water health and livestock concerns allows for a natural and more culturally resonant transition to topics of personal and mental wellbeing. After **moving through familiar subjects farmers value**, the

introduction of health topics can feel more relevant than forced, while allowing for the building of rapport and shared experiences between the practitioner and audience.

Rural communities are often tight-knit, with strong norms of mutual support that participants described leveraging when introducing mental health topics. Participants **framed conversations as a way to help their neighbor** or friend to help reduce personal pressure or stigma an individual might feel in accepting support for themselves. Participant K explained, “It's not about them. It's about always helping someone else. And it's always about them feeling good about helping someone else. Because when they're helping someone else, they're also helping themselves.” This reframing allowed participants and community members to engage with sensitive topics indirectly, positioning topics as hypothetical situations to reduce defensiveness and avoid direct confrontation or intervention. Participant F described, "We try to frame it hypothetically when we ask the question. So no, what did you do, but what would you do in this case?"

Variance was noted in preferred terminology as “mental health,” “stress resiliency,” “emotional wellbeing,” and “health awareness” were all described. Participants agreed that **language choices and labeling can invite or deter engagement** depending on the community and context. Regardless of framing, information should be delivered in a trustworthy and culturally appropriate manner.

Participants also noted that there is a lack of providers who understand agricultural life, which can hinder help-seeking behavior. Participant D described, “There is a whole culture to agriculture that many providers, they just don't get right. Maybe you can't come into a weekly appointment, you have animals to attend to, or it's harvest time. So their recommendations and their suggestions and their treatment plans just aren't congruent with

people's lifestyles or livelihoods." Participants explained that beginning conversations with familiar topics or **sharing their own agricultural background** was used to establish credibility and build rapport. Participant O described,

"I started off every presentation by telling people that I had raised hogs and so they could, you know, and I, I said, I'm telling you this so that you can all feel better about yourselves. You know, I said, it's the hardest job in the world."

Participants also described establishing personal credibility by **openly sharing their own mental health experiences**, including therapy, medication use, and family and personal struggles, as a way of building trust and modeling vulnerability. Participant M shared,

> "I usually start with sharing my story. My story is never pretty. But I do feel like once it's out in the open and they understand that I've been through something, if not similar, something that also affected me in a similar way, that they trust me a little bit more because of it."

Sharing personal experiences helped participants build trust with their audience and demonstrates that it's okay to be open as Participant K explained,

> "I am more than happy to talk about my own struggles because I know how important it is. Not everybody's comfortable talking about their struggles. And so having to be vulnerable and say, 'I have a therapist,' or 'I'm on medication,' that's important, and we need to continue to be vulnerable to allow other people to be vulnerable to us."

Additionally, participants noted that once conversations start, and as more individuals share their story, the more others start to speak up and continue to progress conversations. Participant P described, "There have been a number of pretty vocal farmers who have shared

their struggles openly, which I think has gone a decent way towards destigmatizing mental health."

RQ2) What practices do practitioners of CE work identify as essential to engagement on agricultural mental health topics in rural communities?

Theme 3: Participants emphasized that effective CE work is built on trust, community presence, and community ownership of the work.

Participants consistently emphasized that trust is foundational to effective community engagement. Participant G said, "First of all, you, they have to trust you. And if they don't trust you, they are not going to come on board." Without established trust, community members are less likely to participate, and programming and research are less likely to advance, be effective, or succeed.

Participants noted that **trust takes time to earn** and can quickly be lost. Cultivating trust requires sustained reliability, follow-through, and a demonstrated commitment to the community. Participant K described,

> "As they got to know me and they realized I was here to stay and that I did give them good information; I was prompt on everything that I gave them; I didn't drop the ball; more and more people would talk to me. And so I built a good reputation in the county; being able to be somebody that they felt was a good resource that they could come to."

Sustaining engagement long-term was identified as equally important as initiating it, especially for university scholars conducting research. Participant D explained, "You've got to be in this kind of work for the long haul. Communities know when you come to them for a specific purpose or when you come because you actually care." Participant H added, "You have to

cultivate those relationships. You have to show that you're not just here to do the research. You really need to come in and get to know the community first." Participants continued to explain that involvement in the community in which they are working needs to extend beyond the immediate project, funding cycle, or research timeline. **Long-term engagement, presence, and visibility in the community are evidence of genuine investment and help build the trust required for these projects and programs**.

Agricultural communities are often close-knit and may be difficult for 'outsiders' to enter and build relationships and trust. Participants described using connections and collaborating with trusted individuals or organizations in the community as entry points into the community. Participant H explained, "you need to find that person from the community who's going to be your champion," while Participant L added,

> "I think every project I've worked on, I've collaborated with somebody. Be that another extension agent, a business, a member of the community, or somebody that is interested in it or has knowledge about it or is passionate about it. I think you can find collaboration in everything that we do. And if you get that collaboration and buy in, you'll be more successful."

Participant N elaborated that collaboration in these subjects is needed for continued success, "You've got to collaborate in order to make this happen, which kind of goes all back to community engagement. You've got to all work together."

Additionally, participants stressed the importance of **going where community members already are**. Participant G described, "I will go to 4-H events, FFA events, church events, rodeos, the farmer's market. I'm going to go to the livestock barn. I'm going to go to where the intended audiences hang out at the coffee shop." Participant N further emphasized, "I think the

biggest thing to remember is you have to go where the people already are." However, this type of engagement takes significant time and effort. Participant D shared, "We've got to be available when communities are available. So if that means nights, weekends, early mornings, you name it, we make ourselves available."

Participants also emphasized the need to understand the culture of the community when entering and establishing trust and relationships. Participant I explained, "It's understanding that population that you're working with to understand where they are. Otherwise, don't do the research if you don't understand the population." When describing the importance of ensuring a research or engagement team is culturally aware, Participant D shared,

> "It's to your benefit to really dot your I's and cross your t's and make sure everybody's on the same page. That's how you build trust. That's how you continue to foster relationships. And really, that's what it takes to have long-term sustainability and be able to have the impact that I think everybody wants us to have."

Beyond trust and presence, participants emphasized the value of CES is its ability to **include community voice throughout the research and programming process**. Participant Q shared, "I think always making sure that the community controls where you go with this work and what is shared and how they're represented." Qualitative and CES work often add depth to the research and the ability to record stories and perspectives of community members themselves. Participant A noted, "Doing qualitative research is a huge benefit just because you get such rich data to work with. You really get the stories of individuals." Participant F similarly elaborated, "The key benefit is that you sometimes learn things that you otherwise would not know, and you get that information in their words." Participants shared that they appreciate the value of this work and hope that future work involving people and communities incorporates

CES. However, when involving members, participants noted the importance of community control over how data is collected, how findings are represented, and what is shared publicly, particularly when working with vulnerable communities. Participant Q explained,

> "[I make] sure that any outsiders that I bring in know that I'm very blunt with them about my expectations for publications, collecting data, sharing anything, putting anything online. I am not the keeper of what gets to go up. It needs to go through [the council]. If you send it to me, I will forward it to them and CC you so that you're aware, but I am not going to blanket approve anything on their behalf."

After involving community members, participants emphasized the importance of **returning information and deliverables to the community**. Participant I shared the importance of giving something of value back after partnering or collaborating with a community,

> "It is to be a give and take. I think a lot of times we make the mistake of being hungry...We make the mistake of going in and asking and never giving a dang thing back. And that's a mistake. That's a huge mistake. And as far as our research goes, one of the tenets of our research is if you are going to be going in and working with a population, you are always going to report back to that population."

A key concept echoed across interviews was that **community members must identify the need and have buy-in** for the research or programming to gain traction and succeed. Participant L explained, "If I identify it and try to force it down their throats, they probably wouldn't take that initiative. But if they identify it and say, we need to do a program about this, they're more apt to be involved." When communities can name, identify, and be involved in solving the problem, they are more likely to trust the practitioner and engage more meaningfully as opposed to when practitioners impose agendas. Participant H added, "I think

listening to what the issue is, and trying to figure out what they need...if it doesn't align, it's never going to happen." The most effective engagement begins with listening to community concerns and needs and connecting them to broader research goals. Without alignment and buy-in, programming simply does not move forward.

Participants also emphasized that there is no single model or strategy that fits all communities, which requires **flexible and adaptive approaches**. Participant K noted, "I think each community is different. So I think it needs to be tailored depending on your region and who, what you have, what your situation is, and, how you can reach your community." Participant L described the importance of adapting programming or presentations to best fit the audience, "You may get into a room and you realize that, oh, this group's not going to take it quite the way I thought they would. And we have to be adaptable." The appropriate level of engagement also varies by project and community and must be adjusted accordingly. Participant D added,

> "Obviously not every project is going to be a CBPR project, right? Not every project needs to be that way. So you need to think through the strategy for each individual project. There's got to be some sort of checking in, and there's got to be some sort of partnership along the way. There are times when informing is perfectly okay. But there are times when you need real deep collaboration to be able to make the changes that are needed. So I think knowing which one is going to fit comes through conversation and discussion with community partners."

RQ3) What challenges do practitioners face when conducting CE work in rural communities on mental health topics?

Theme 4: Participants must navigate structural, resource, and sociopolitical barriers that are often misaligned with the nature of conducting CE work.

Participants consistently described the **extensive time commitment** required to build and maintain meaningful relationships with community partners. Participant P explained, "Building trusting relationships with communities can take a long time. It proceeds at different rates, which makes project planning really challenging because it proceeds at different rates with different people or different communities." Trust-building occurs gradually and at varying rates, which can make **project or program planning and implementation difficult when faced with university or grant deadlines**. Participant D added, "It might take me a few years to develop relationships before I'm able to write that grant." The time and energy it takes to build and maintain those relationships can also be taxing on the individual. Participants noted that CES often **extends beyond traditional work expectations**, requiring personal time and energy commitments that are not frequently recognized by institutions. Participant D expanded,

> "I would tell people to understand the time commitment, to know that this is not just a 9 to 5 kind of job, that this is a lifestyle and it's a commitment on your time....I've put in a whole heck of a lot of time into building relationships, maintaining relationships that goes unseen and uncompensated by the institution."

In addition to the time it takes to build trust and relationships, participants also described the time it takes to yield results and sometimes the unknowns in the nature of this work. Participant L explained,

> "I don't think we can always see the results the next day or even a year down the road. It may be five years down the road. It may be the next generation. So, I don't think we can measure it the same as we do our research. When we provide research information, we can provide results and measure that stuff. Not always can we do that with mental health, with emergency management, with those types of things. We don't know. We won't know

that. We won't know the impacts that we might have on a 4-Her until way down the road. So you just kind of have to, I guess, believe in the process."

Several participants described not knowing the full impact of their work, but shared that even if just one person sought help as a result, their effort was worthwhile. **Quantitative results in CE work on mental health topics are difficult to provide** and showcase the impact of the work.

Funding presents additional challenges, as financial resources are essential for supporting personnel, programming, and long-term engagement. Participant L emphasized, "The number one thing is always going to be funding. It takes funds to put together programs." Participants noted, however, that **grant timelines often do not align** with the pace of relationship development and community work, posing additional challenges. Participant D explained,

> "Maybe that means you have to adjust timelines, which can be a challenge. Funding comes, and when you've got it, you've got it. And if you have to extend the program and you can't get a no cost extension, then what? Because you didn't hit the objectives or the aims of the project. And it creates a whole nightmare as a researcher, as a principal investigator, to try to think about now how do I restrategize that?"

Beyond time and funding, participants described broader institutional and structural barriers, including managing **limited staff capacity** across multiple communities. Maintaining relationships in communities across various states, or within a singular state or county takes significant time and energy. Participant P shared,

> "There are so many communities out there, and as a small organization, trying to engage with a lot of them, staff time is always a critical resource. How do we get work done, but also get people out to engage and learn more about the needs of various communities?"

Participants also noted that **sociopolitical factors** and the sensitive nature of mental health topics can hinder outreach and engagement efforts by limiting funding opportunities and the willingness of communities to engage or participate. Participant D explained, "The socio-political climate is a big challenge, and just the topic area of stress and mental health are just challenging topics to be able to promote." Some participants also discussed how personal characteristics such as **gender or cultural background may influence credibility** in agricultural settings. Participant M shared, "I specifically have one [challenge] being a female in the ag industry. We have that stipulation a lot that, especially with the older generation that we don't know anything." Participants cautioned about entering an agricultural community without understanding the culture, norms, social dynamics, and identity of that community first. Participant B noted,

> "That's been a challenge that I have seen a lot of different entities face throughout this work...they maybe don't have a real solid grasp on what people in agriculture are like. They don't know that community from the inside, and that sometimes can contribute to some real missteps."

Stage 2: Exploring a Mental Health Initiative (MHI): A Case Study of Rural Mental Health Outreach

RQ1) How has the MHI been developed and sustained?

Theme 1: The MHI was built and is sustained through grassroots member input, board support, and collaboration across internal groups and external partners.

The MHI was developed through a combination of **multiple groups within the Agricultural Membership Organization (AMO) working in the mental health space** after recognizing a need for conversations and awareness on the topic, as shared by Participant 5, "We

recognize that our members are hurting. Some of them are having some very real mental health issues. So we formed [a sub-committee].” In the early stages of the initiative, individual groups pursuing independent projects, programming, and messaging resulted in unintentional initial misalignment and siloing that slowed the initiative's momentum. Participant 4 explained the dynamic, “You can accidentally silo yourself, even within the organization.” Early challenges were described as unawareness that others were working towards the same goal, resulting in duplicated efforts and missed opportunities for coordination. Participants consistently described this as something the organization has since worked to correct, noting that communication and collaboration across groups has improved considerably as the initiative has matured. Participant 2 explained this progress, “I think we’re now better aligned.” Participant 4 elaborated that this shift is not a criticism of how the initiative started, but as a recognition of the learning curve of building something new within a large organization, “I think we’re still learning what works and what doesn’t.” Looking forward, participants described a desire to be more intentional with the initiation of any future expansion.

Participants viewed AMO’s organizational structure as necessary to launch and sustain the initiative. Participant 1 shared about the collaborative nature, “It has been a true team effort.” The grassroots effort of the initiative is only successful when **members identify mental health as a need**, volunteer to share their stories, recommend speakers, bring programming back to their counties, and continue to support mental health conversations. As Participant 1 explained, “It needs to start with the members.” Programming or ideas that originate at the staff level require **member and board investment** before moving forward. Participant 4 shared, “You have to be careful it’s not a staff-down approach, and it’s still a grassroots approach.” The AMO’s board of directors was consistently described as supportive of the initiative, with participants noting that

this level of institutional backing has been essential to the initiative's growth. Participant 1 added, "Our board is very supportive of these initiatives." Board members are not only required to approve funding for major efforts such as the digital campaign, but also guide the direction and priorities of the organization. Participant 2 expanded on this point, "It will really depend on what the board sees as valuable." Additionally, individual member champions, or people who are deeply passionate about the topic and willing to advocate for the issue within their own networks, were described as influential in driving the initiative forward. Participants noted that without member support, board recognition, and staff commitment and capacity, continuation of the initiative would simply not be possible. Participant 3 described this necessary combination stating, "I think if we were missing one of those things [involved staff, passionate members, board support], we wouldn't have been able to do as much as what we've done."

Beyond internal collaboration and support, the AMO has begun to develop **external partnerships** that extend the initiative's reach. Participant 3 shared, "[The initiative has] helped us find partners we hadn't necessarily thought of before." Partnerships with various groups and organizations have enabled access to new training opportunities and resources, including QPR (Question, Persuade, and Refer) and COMET (Changing Our Mental and Emotional Trajectory) trainings, webinars, and meeting presentations. Participants viewed these collaborations as evidence of a broader recognition that mental health is a shared concern across the agricultural industry and shared eagerness about the potential for expanded coordination and collaboration in the future. Participant 1 described, "It takes all of us in this industry to make change. It's really encouraging to see all of the different ways that people are implementing well-being, resiliency, mental health work in agriculture." Participant 2 added, "I think if we want to get any bigger and

broader with our goals for [MHI], we're definitely going to need some of that other collaboration to expand our network."

Theme 2: Sustaining the MHI requires navigating practical constraints on time, money, staff capacity, and the limited ability to measure or quantify success.

Participants also discussed the practical realities of designing and sustaining an agricultural mental health initiative. Although participants were reluctant to frame the initiative's work in financial terms, **cost emerged as an unavoidable reality** when sustaining existing programming and pursuing new opportunities for growth. Participant 5 described this tension,

> "Every bit of this stuff costs money. While we are blessed financially as an organization, we also have a lot of other initiatives and things we do. This stuff all costs money, and, like anybody else, we're on a budget. It would be really nice if money was not object, but money's always an object."

Participants expressed gratefulness that the AMO's membership and board have recognized the need to allocate funds towards addressing this issue, as Participant 2 explained, "The campaign was made possible because the board put up additional funds for that. In order for those campaigns to continue, we would have to go back to the board and ask for that money." Still, this programming is not immune to budgetary limitations as Participant 4 shared, "Unfortunately this year we're having to put a pause on [special event] due to budget constraints and availability of the venue."

Additionally, participants noted the **time and staffing requirements** to sustain such an initiative. Participant 5 discussed the gradual nature of this work, stating, "Some of this stuff is tough, and we're in a work that takes time. It just takes time." This time investment is reflected in the work of building partnerships, securing organizational approval, and moving new ideas

from concept to reality. While board and membership support is crucial, Participant 3 also explained that "making sure you have staff that have the ability to implement the work" is imperative to the initiative's success. Participant 3 explained this can be a challenge due to the large nature of AMO's various programming, focuses, and workload: "We've spent a lot of time on [the initiative], but it's a very small part of everything that we do. We've given it a lot of attention, but also have so many things that need our attention as well."

Participants also noted the **difficulty of measuring the success** or impact of mental health initiatives. While tangible outputs may be trackable, true impacts on individuals are often not measurable. Participant 5 described this gap in understanding real outcomes,

> "We can count how many sticker pads we give out, we can count how many air fresheners, we can count how many brochures we've handed out, we can count how many times our public service and our commercials and our stuff air on various media. But as far as actual lives that someone says, 'Hey, I'm in a point of crisis, or I'm headed to a point of crisis, this helped me,' we have no way of knowing that."

Participant 4 elaborated on the limits of quantifying this work,

> "A lot of things we do in life we want to quantify it. Whether that's through monetary-type means or statistics of some sort. I think this one is hard to quantify. A lot of things we're probably never going to hear."

While measurement may be difficult, participants shared that statistics and quantifiable evidence do not define the success of the initiative. Participant 4 shared the organization's adopted definition of impact, "We agreed that if we saved one life, that would be a success." Participant 2 echoed that the initiative's goal is to increase awareness and conversations, redefining success as the value membership has placed in the initiative, "It's hard to measure

success of. But our board has been willing to make the investment because if this even saves one person, it's well worth it."

RQ2) How does the MHI communicate about mental health to its audience?

Theme 3: The MHI communicates about mental health through intentional choices about where messages appear, how they are framed, and who delivers them.

The MHI uses **multiple platforms to share information**, maximizing reach across a geographically and demographically diverse membership audience. Because no single channel reaches everyone, the initiative has made an effort to create as many touchpoints as possible through social media, the AMO website, weekly newsletter emails, radio spots, podcast, magazine, air fresheners, women's retreats, meeting workshops or speakers, and county networks to amplify awareness and increase salience around mental health topics. Participant 2 described this approach of employing multiple channels: "I think it's just really being thoughtful about getting the message out in all of our platforms," because, as Participant 4 explained, "every little conversation, every little pamphlet, magnet, whatever it is, can start a conversation." Participants acknowledged the difficulty of measuring which channels are most effective, but emphasized the importance of utilizing different platforms to reach individuals' varying needs. Participant 2 shared, "Maybe the person that you reached at the annual meeting workshop, maybe they're not on social media. Or maybe the person that saw the social media thing didn't even know [AMO] existed." Participant 5 similarly reflected on this strategy and shared the rationale behind this approach: "While it sounds disjointed, it boils down very simply to trying to raise awareness."

The AMO introduced a recognition level to the initiative, through advocate awards, highlighting individuals who are fostering discussion and supporting mental health in rural

communities. Participant 1 described the award as a way of reframing the mental health conversation around helpers and supporters rather than crisis and struggle alone, “It’s a different way to think about the problem and offer a solution. It’s highlighting the people who are cultivating wellness in the state’s communities.” Other programming, like radio spots, podcast discussions, and branded air fresheners have been designed to reach farmers in the spaces where they are most often alone, like the tractor, combine, or feed truck, providing a consistent reminder without any public exposure or vulnerability. Participant 2 explained the reasoning behind the messaging and design choices, “We wanted it to be something that was at the places where you're normally alone, so in the feed truck, in the combine, the places where even though you're physically alone, you're not.”

Participants described the **tension of how mental health topics are named, framed, and introduced** to agricultural audiences. Participant 1 explained,

> “We've had conversations about [terminology], about, before it gets to mental health, because a lot of people like, have a connotation with that term. So a lot of times we'll talk about resiliency, and the ‘check on your neighbor’ sound bite that we use.”

While there is value to directness, there are also risks that terminology may trigger defensiveness, shame, or disengagement. The agricultural membership organization’s task force was named intentionally to encompass a broad set of concerns, including physical health, economic stress, and family wellbeing in addition to mental health. The phrase “check on your neighbor” was also described as a tactic to reduce stigma while creating conversations and capitalizing on shared cultural values.

Participants described the initiative’s commitment to expanding focus beyond crisis intervention and response to prevention strategies and communication. Participant 1 explained,

“We want to be able to protect our well-being before it gets to a point that we have to bring in a mental health aspect to the conversation.” While participants validated the importance of crisis support, they expressed a desire to invest more in the practices that sustain and support well-being before crisis develops. Promoting communication within families, building awareness of the early signs of stress, and encouraging peer check-ins were described as prevention-oriented communication the initiative is working to support and emphasize. Participant 4 reinforced this priority, “I think we've got to continue to work on that prevention component.”

Participants showed intentionality by emphasizing that the credibility and effectiveness of mental health programming in agricultural communities **depend significantly on who is delivering it**. Participant 1 explained, “Anybody who doesn't understand farm and ranching cannot tell farmers and ranchers how to protect their mental health.” **Understanding the realities of farm life and agricultural work** was described as crucial to connecting with agricultural audiences and building the trust necessary for engagement. The initiative has addressed this by prioritizing speakers and mental health professionals with agricultural backgrounds or experience who understand agricultural life and language and relate to farmers’ lived experiences. Participant 5 explained the organization’s attention to this, “We’ve had a workshop [about mental health], and in that case, trying to bring in a speaker who is knowledgeable of the industry, a specialist in this area.” Participant 3 further emphasized this importance for anyone discussing mental health topics with rural audiences, “If we're going to talk about this, we have to get people to understand what farmers' lives are like.”

Participants also credited much of the initiative’s effectiveness to the “atmosphere of trust” (Participant 4) AMO has created over time. While participants noted that stigma surrounding mental health topics in agricultural communities still exists, they credit a shift within

the organization to members who have publicly shared their own mental health struggles. Participant 5 shared, “We actually had some of our members who have suffered from or have had mental health-type issues, and had a panel saying ‘these are your friends, peers, and they’re willing to stand up and talk about it.” Additionally, the initiative has **utilized personal storytelling** as a tool for destigmatization by featuring video testimonials of members to showcase member stories, demonstrating that it is okay to ask for help. Participant 1 reflected on the impact of this approach,

> “We got videos of members who are really passionate about mental health, who have shared their own personal stories of struggles with mental health themselves. It’s really special that we get to utilize people for campaigns like this, and we can point to the people who are authentic, who are farmers and ranchers, and can be the face of this conversation.”

Chapter 5 - Discussion and Conclusions

Introduction

This chapter discusses the findings of this thesis and its implications and significance. This chapter also includes study limitations and recommendations for future research. The purpose of this thesis was to examine agricultural mental health outreach by exploring how practitioners of CE work approach the topic of mental health while working with rural communities, and to describe how AMO has planned, executed, and communicated the MHI as a rural mental health outreach program.

Discussion from Stage 1

Participants emphasized the importance of awareness and preparation before discussing sensitive topics like mental health in agricultural communities. Completing formal trainings like QPR or Mental Health First Aid, consulting with mental health professionals, and preparing a list of resources in advance can help practitioners approach conversations responsibly and confidently. While participants acknowledged the stigma surrounding mental health that research has previously documented (Komiti et al., 2006; Purc-Stephenson et al., 2024), many also noted a recent shift, where community members have become more willing to engage in these topics.

Consistent with the "combine" element of the 3-ACORNS framework (Purc-Stephenson, 2024), participants described incorporating mental health content into existing programming to help reduce stigma and encourage community members to engage in conversations. Incorporating brief mental health content into other events and programming allows farmers to receive the information without becoming overwhelmed, keeps the topic top of mind, and takes advantage of a captive audience to encourage engagement.

Previous research shows that a lack of providers who understand the agricultural way of life hinders farmers and ranchers from seeking help (Becot et al., 2025; Inwood et al., 2019). In response, participants shared that sharing their personal background in agriculture or starting conversations with familiar agricultural topics like weather or commodity prices helped build rapport and garner trust before introducing sensitive topics. This practice connects to literature identifying the importance of farm credibility to successfully engaging farmer clients (Cheesmond et al., 2020; Hull et al., 2022; Purc-Stephenson et al., 2024; Vayro et al., 2020b).

Providers with lived experiences of mental distress are also more effective at facilitating help-seeking (Cheesmond et al., 2020). Some participants noted that sharing their own mental health experiences facilitated trust-building and modeled vulnerability for others to open up about their struggles. When working in communities, especially with more vulnerable populations, it is crucial to understand the culture of the community before entering to build relationships (Purc-Stephenson et al., 2024).

Research has documented that some farmers are put off by the term "mental health" and respond better to terms that are framed as "stress," "wellbeing," or "responsible provider" (King et al., 2023; Roy et al., 2014), and participants described various terminology preferences. Some noted the importance of "calling it what it is," while others frame it as "health awareness" and "resiliency." This variance indicates that practitioners must adapt language and approach to best fit the community, culture, and need.

While CE work in agricultural mental health can be rewarding, it can also be taxing on the practitioners themselves, with literature documenting the emotional toll and risk of burnout associated with CE work in sensitive topic areas (Cargo & Mercer, 2008; Palomin et al., 2023).

Several participants acknowledged this self-strain and recommended taking the time to build support systems and emphasized taking time for self-care to be better prepared.

Trust is a key element of CE work (CDC, 2025; Chupp et al., 2021; Strand et al., 2003). Without trust, research and programming are less likely to be effective. Participants emphasized the need for long-term engagement and involvement in the community itself. This work, however, takes significant time, which does not always align with grant or institutional timelines (Cargo & Mercer, 2008). Utilizing existing connections and collaborating with trusted individuals or organizations in the community can serve as expedited entry points into the community (King et al., 2023; Purc-Stephenson et al., 2024).

In addition to the time commitment, CE work poses challenges related to economic, institutional, and structural barriers. Funding is needed to complete CE research and programming, but the programming may not align with grant timelines (Cargo & Mercer, 2008). Participants described that building and maintaining relationships with multiple communities is challenging due to time, staff, and geographic limitations. While not frequently mentioned in these findings, research discusses the challenge of promotion and tenure in CES work (Kelly & Given, 2024; Weerts & Sandmann, 2008). Participants noted additional challenges due to the sensitive nature of mental health topics that often hinder engagement.

The value of CE work lies in its ability to partner with communities throughout the research and programming process (Brunton et al., 2017; Gordon da Cruz, 2018; Schiavo, 2021; Strand et al., 2003). Participants emphasized the importance of having community buy-in and a recognized need for the project by community members, while taking the time to meet community members where they already are, aligning with existing research (Cheesmond et al., 2020; King et al., 2023). Qualitative work allows for the storytelling of individuals (Creswell &

Poth, 2018; Palinkas, 2014) and CES specifically allows for community involvement and control of the data (Milton et al., 2023). Reciprocity is a key element of CE work (Chupp et al., 2021; Schiavo, 2021), and participants cautioned against only taking from a community without giving something in return. Participants described giving the community the tools to be successful long-term. It is also crucial to recognize that each community, research project, and program is unique. Practitioners must be flexible in their work and adapt approaches to fit each individual community (Arcury et al., 2001).

Practical Implications and Recommendations

Findings from Stage 1 suggest several practical implications for practitioners, institutions, and funders of CE work in agricultural mental health outreach. Effective research and programming require dedicated practitioners who are trained, culturally aware, well-supported, and take the time to build lasting relationships with communities. These characteristics require intentional investment from the individuals doing the work, the organizations that employ, partner, and support them, and the funders that contribute to the feasibility of the work. The recommendations below are organized around these levels to better support CE work on mental health topics in rural communities.

Practitioners should complete formal mental health trainings before engaging in sensitive conversations with agricultural communities. Existing programs such as Mental Health First Aid, and QPR provide a strong foundation for recognizing signs of distress, responding to an individual in crisis, and connecting individuals to professional care; however, these general trainings are not specifically designed for the realities of farm and ranch life. Organizations offering these trainings should consider developing versions tailored specifically for agricultural audiences with scenarios and examples drawn from agricultural contexts such as financial

volatility, weather and market uncertainty, isolation, and seasonal workloads. Tailored trainings should also formally address stigma and how self-reliance and privacy norms influence help-seeking, as well as language and framing on how to discuss stress and well-being in terms that resonate with agricultural audiences. Practitioners could also benefit from guidance on culturally aware communication tactics. Extension services and other agricultural organizations such as state commodity groups or Farm Bureaus, ideally working in partnership with mental health organizations or professionals, would be best suited to deliver these trainings to discuss both agricultural credibility and mental health expertise. While formal training is valuable and practical, practitioners should also take the time to build farm credibility and cultural understanding, which includes learning the local agricultural economy, showing up consistently to community events, and demonstrating a genuine commitment over time. Both formal training to prepare for difficult conversations and building credibility showing up consistently and learning the local agricultural context are needed for practitioners to engage with communities in impactful ways.

Universities, Extension services, health centers, and other community organizations should pursue further collaboration to expand the reach of mental health programming across agricultural communities. These partners bring various strengths that complement one another while sharing resources, best practices, and connections, and strengthening mental health-related messaging across platforms and channels.

Funding organizations should be mindful of CE work time requirements and structure grant timelines and reporting requirements to reflect the slow, relationship-based nature of CE programming in agricultural communities. Because trust is built gradually, short timelines and outcome measurements focused only on immediate participation may overlook the groundwork

or broader impact that makes the programming effective. Multi-year funding, flexibility to adapt programming, and recognition of relationship-building would better align with how CE work actually happens.

Because communities depend on reliable, committed practitioners, institutions and organizations should also support the individuals doing this work. Sustaining engagement and discussing oftentimes difficult topics can be emotionally and personally taxing on the practitioner (Cargo & Mercer, 2008; Palomin et al., 2023). Peer support networks, professional development workshops, supervision and mentorship opportunities to advance work in the field, and recognizing CES work in promotion and tenure decisions can help practitioners sustain their commitment and be recognized for the value of the work.

Limitations

Several limitations should be recognized when interpreting these findings. Participants were recruited from a defined geographic region encompassing Iowa, Kansas, Missouri, and Nebraska. Findings cannot be generalized to practitioners of CE work working in other agricultural regions or with different community cultures, resource landscapes, or institutional contexts.

Findings only reflect the perspectives of practitioners of CE work. This study only captures how practitioners perceive their engagement strategies and their effectiveness, but does not capture whether farmers and rural community members experience and perceive these strategies in the same way.

This study collected cross-sectional data, accounting for participants' perspectives at one point in time. Attitudes towards mental health are constantly changing. Findings therefore should be interpreted as participants' perspectives at one point in time.

Discussion from Stage 2

The MHI is dependent on collaboration among groups, staff, and members within AMO. While the design and implementation of this initiative is not explicitly a CE project, many of its core elements reflect principles of CE work. The grassroots, member-driven structure of the initiative illustrates that programs are most sustainable when concepts emerge from the community or organization they intend to serve, rather than top-down approaches (Chupp et al., 2021; Rundle-Thiele et al., 2021). Board support, member need recognition, and individual champions were described as essential to the initiative's success, findings that align with CE recommendations that institutional backing and community buy-in are required to support engagement (Cargo & Mercer, 2008; Strand et al., 2003; Weerts & Sandmann, 2008). The grassroots foundation and member support also reflect the first stage of the CBE framework outlined by Rundle-Thiele et al. (2021, p. 180), which involves stakeholder orientation and "puts the people served by the organization or network at the heart of generating solutions." This illustrates the importance of co-creating board- and task force-driven ideas rather than a staff-down approach. The CBE framework also encourages partnership-building to extend program reach, support, and funding — work AMO has already started in their partnerships to deliver QPR training and connect members with mental health resources.

To reach AMO's wide membership, participants described how the initiative uses a wide range of communication channels, including social media, radio segments, magazines, in-person workshops, and even air fresheners to create as many touchpoints as possible. This multi-platform approach reflects Hastings and Haywood's (1991) social marketing framework that emphasizes effective health promotion requires attention to the distribution channels (place) and communication methods (promotion) used to reach an audience. This also aligns with the

"engage" stage of the CBE framework that emphasizes maximizing promotion to increase awareness and encourage behavior change (Rundle-Thiele et al., 2021), and connects to the "share" element of Purc-Stephenson et al.'s (2024) 3-ACORNS framework, which emphasizes that information should be shared through various communication channels. Participants recognize that no single platform reaches every member and shared, deliberate integration of mental health workshops into multiple of the agricultural membership organization's conferences, further aligning with the "combine" element of the 3-ACORNS framework (Purc-Stephenson et al., 2024). This multi-platform strategy is consistent with comparable state agricultural mental health campaigns (Ward & Witt, 2023), as participants described intentionality in creating multiple touchpoints to "meet farmers where they are," as King et al. (2023, p. 14) describe.

Participants emphasized the importance of speakers and mental health professionals understanding agricultural life to be trusted. This is consistent with literature emphasizing that establishing farm credibility is essential to engaging farmer audiences (Cheesmond et al., 2020; Hull et al., 2022; Purc-Stephenson et al., 2024; Vayro et al., 2020b). This focus and the initiative's use of video testimonials featuring members' stories also aligns with Hastings and Haywood's (1991) emphasis that promoters of successful health campaigns understand the needs, motivations and perceptions of the audience. The Raising Hope campaign outlined by Ward and Witt (2023) also recognized this need, and described routing hotline calls from farmers and farm family members to counselors who had received agriculture-specific training, administering an agriculture-specific QPR training for Extension agents and people working with farmers, and developing a cultural competence training for healthcare providers working with farmers.

While participants recognized the importance and need for crisis-oriented communication and clinical terminology in some cases, they described the initiative's focus on framing mental health topics in a prevention-oriented and strengths-based method. This approach is consistent with strategies used in other agricultural mental health campaigns. Ward and Witt (2023) described the Raising Hope campaign's messaging choices that were tailored and customized for farmer audiences, sharing that "farming is hard," and encouraging farmers to "let it out." Mental health relief was framed as "protect your help" and "take some time to yourself" to specifically resonate with farmer audiences. Similarly, the initiative's framing around stress resiliency, "check on your neighbor," and sharing that "you are not alone" is intended to connect with agricultural audiences and direct them to support.

Practical Implications and Recommendations

Several practical recommendations follow these findings for other agricultural organizations considering similar mental health initiatives. Clear internal communication channels should be developed early in an organization-wide mental health initiative to prevent siloing of groups and promote cross-collaboration within the organization. Mental health programming often touches many parts of an organization at once, including leadership, communications, member services, and education. Without coordination, these groups may duplicate efforts, share inconsistent messages, or remain unaware of resources and expertise available elsewhere in the organization. Establishing an initial cross-departmental working group can help ensure that everyone understands the initiative's purpose and their role in it.

Because grassroots, member-driven buy-in was described as essential to the initiative's conception and growth, organizations should prioritize identifying and empowering member champions who can advocate for mental health programming within their own networks.

Champions are well positioned to speak from lived experiences, normalize conversations around mental health topics, and recruit other individuals to support the initiative. Organizations should provide champions with the appropriate resources and training, while treating their feedback as a guide for how programming develops. If member interest and grassroots support are absent, organizations should reconsider moving forward with programming. Initiatives launched without member demand risk being perceived as top-down, and may undermine the trust on which CE work is built.

Organizations should invest in a multi-platform communication strategy that meets individuals where they are and increases touchpoints, visibility, and salience to reinforce messaging. Members of agricultural communities vary in their preferred sources of information, comfort with technology, and willingness to engage with mental health topics publicly. A strategy that combines a variety of channels, including in-person, print, broadcast, and social media, increases the likelihood that messaging reaches the broader audience. Using multiple platforms also allows individuals to engage privately and at their own pace, where stigma may prevent public engagement with mental health content. Additionally, the repetition of messages across several platforms signals the importance of mental health topics.

Organizations should prioritize speakers, trainings, and messaging that align with agricultural backgrounds and the lived experiences associated with agricultural life. Speakers and messengers who understand the realities of farm life, financial pressures, and culture of rural communities may be more effective at garnering trust from farmers and ranchers. When facilitating trainings for farmers and agricultural communities, they should be tailored to farmers and fit their needs, considering informal formats, and centering content around practical, everyday stressors to emphasize preventative measures (King et al., 2023). When creating

messaging, language should be selected that resonates with the intended audience to avoid further stigmatizing or deterring engagement with mental health topics. Messaging should be tailored to best fit and relate to agricultural audiences and the realities of agricultural life (Hastings & Haywood, 1991; Ward & Witt, 2023).

Limitations

This study has several limitations that should be considered when interpreting its findings. The small sample size and inquiry of a single site limit the transferability of findings to other agricultural mental health initiatives or organizations with different structures, resources, or contexts. Perspectives of the initiative's intended audience were not included, and findings therefore can only speak to how the initiative is designed, implemented, and communicated rather than how it is perceived and interpreted. The cross-sectional design of this study limits the ability to display how the initiative continues to evolve.

Integration of Findings

Together, findings from these projects convey the importance of trust in creating conversations around agricultural health and safety, aligning with CE literature that describes trust as a requirement for engagement (Chupp et al., 2021; Strand et al., 2003). Participants from Stage 1 explained building trust by disclosing their own mental health experiences, sharing their personal agricultural backgrounds, and beginning conversations with familiar topics. Stage 2 participants echoed the need for speakers and mental health professionals to understand agricultural life, consistent with recommendations for professionals to have "farm credibility" to engage farmers successfully (Cheesmond et al., 2020; Hull et al., 2022; Purc-Stephenson et al., 2024; Vayro et al., 2020b). While practitioners of CE work often build trust through intentional and consistent involvement in the communities with which they work, the MHI relies on the trust

that the AMO has built with its members. Both strategies reflect the time required to build this trust (Arcury et al., 2001; Cargo & Mercer, 2008), and the importance of understanding the needs, motivations, and perceptions of the audience (Hastings & Haywood, 1991).

Throughout both stages, participants discussed including mental health content within existing programming rather than presenting it as a singular topic, which aligns with previous literature (King et al., 2023; McMoran et al., 2021; Purc-Stephenson et al., 2024). Practitioners of CE work described incorporating mental health content into presentations and programming that focuses on other topics to reduce stigma and take advantage of a captive and already engaged audience. Participants from Stage 2 explained how the mental health initiative included workshops on mental health-related topics at AMO's conferences. This integration aligns with the "combine" element of the 3-ACORNS framework (Purc-Stephenson et al., 2024) and King et al.'s (2023) recommendation to integrate mental health conversations into existing agricultural trainings, courses, and sessions on other topics.

Participants in both stages described the weight of terminology when discussing mental health with agricultural audiences. Participants from Stage 1 shared mixed approaches, with some choosing to "call it what it is" and others reframing conversations as "health awareness" or "resiliency" to avoid the stigma often associated with the term "mental health" in rural communities (Komiti et al., 2023; Roy et al., 2014). Similarly, Stage 2 participants described sharing messages encouraging members to "check on your neighbor," and focusing on prevention-oriented messages. These accounts illustrate that terminology and framing of mental health topics should be tailored to best fit the intended audience, as King et al. (2023) suggests.

Finally, both stages revealed that without the buy-in and recognized need among participants, communities, and members, programming does not move forward. Stage 1

participants emphasized that programming is only effective when community members themselves recognize a need for it and buy into the effort, aligning with CES literature that highlights addressing issues that matter to the community as a strategy for engagement (Cheney et al., 2002). The board support, staff and member recognition of need, and individual champions described as necessary for the MHI's success also align with Rundle-Thiele et al. (2021) and Hastings and Haywood's (1991) recommendations for promoters to understand the audience's point of view and utilize stakeholder orientation to co-create programs with organization members.

Future Research

Continued research should explore the perspectives and experiences of practitioners of CE work in agricultural health and safety-related contexts. Expanding to additional regions would help determine if the findings from this study are consistent across different agricultural communities, economies, and cultural contexts. Participants noted that no single approach fits every community, and factors such as gender and cultural background can influence credibility. The structural barriers described, including funding timelines that do not match the pace of relationship-building, may look different in regions with different institutional support. Research in other regions, including areas with different production systems or more culturally diverse agricultural populations, would expand on these findings and present a promising line of inquiry.

Future research should incorporate the perspectives of community members themselves to complement this study and determine whether the engagement strategies described in this study are perceived as effective, trustworthy, and culturally appropriate by the farmers and rural community members. This thesis captured how practitioners of CE work understand and describe their own engagement, but does not capture whether farmers and rural community

members experience those strategies in the same way. Because CE work depends on trust, reciprocity, and community ownership (CDC, 2025; Chupp et al., 2021; Schiavo, 2021), the community's perspective of the work is key to judging engagement success. Including community members would also align future work more closely with CES principles which emphasize involving community partners as active contributors rather than subjects or recipients of research (Chupp et al., 2021; Milton et al., 2023). Their perspectives could validate, refine, or dispute practices practitioners identified, further strengthening evidence of what works in agricultural mental health outreach.

Longitudinal research is also needed to examine the long-term outcomes of CE agricultural mental health programming to determine if the trust-building and relationship-centered strategies described by participants produce continued help-seeking behavior, reduced stigma, and improved mental health outcomes over time. This thesis collected cross-sectional data that illustrates what practitioners and organizational staff believe is effective. Participants consistently described trust as slow to build and quick to lose, and community engagement literature similarly describes that meaningful engagement happens over extended periods of time (Arcury et al., 2001; Cargo & Mercer, 2008). Tracking communities over time could help distinguish a reduction stigma, an increase in help-seeking behavior, and the influence of long-term engagement.

Additionally, future research should explore practitioner well-being and burnout. Understanding what contributes to the burnout of practitioners involved in agricultural mental health, as well as what forms of support practitioners prefer, could help inform and encourage the development of support systems and institutional supervision and policies to encourage and support practitioners' long-term work. Stage 1 participants described CE work as both rewarding

and taxing, and several participants emphasized the importance of self-awareness, personal preparation, self-care, and strong support structures, aligning with literature that discusses the emotional toll and risk of burnout for practitioners working on sensitive topics (Cargo & Mercer, 2008; Palomin et al., 2023). While this thesis did not examine the strain on practitioners, CE work depends on dedicated and reliable practitioners. Understanding factors that may contribute to practitioner burnout and practitioners' preferences for support would strengthen recommendations for stronger institutional supports.

Future research should continue to explore the specific language and terminology farmers and ranchers prefer when discussing mental health. Research has established that many farmers respond better to framings such as "stress," well-being," or being a "responsible provider" (King et al., 2023; Roy et al., 2014). The findings from this study emphasize the need to determine which framings work, for whom, and in what circumstances. There was dissonance between Stage 1 participants on terminology, as some participants advocated for "calling it what it is," while others framed conversations around "health awareness" or "resiliency." Stage 2 participants described messages such as "check on your neighbor" and an emphasis on prevention-focused communication. Participants emphasized that no single strategy fits every community and that programming must be adapted and tailored to meet the specific needs of the community. This is consistent with community engagement literature that stressed flexibility and the ineffectiveness of a one-size-fits-all approach to mental health programming for agricultural audiences (Arcury et al., 2001; CDC, 2025; King et al., 2023). A term that is well received in one community may not be received well in another, and future research therefore should help practitioners decide which terms resonate best with specific communities. Research should also separate language from other factors that shape how messages are received. Participants in both

stages emphasized that credibility depends on who delivers the message, where it appears, and whether the presenter understands agricultural life. Future research should examine the influence and importance of additional factors that may be influencing how messages are perceived.

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Appendix A - Stage 1 IRB Approval

KANSAS STATE UNIVERSITY | Office of Research Integrity, Compliance and Security

TO: Jacqueline Aenlle
Communications & Ag Education

Proposal Number: IRB-13159

FROM: Lisa Rubin, Chair
Committee on Research Involving Human Subjects

DATE: 09/09/2025

RE: Proposal Entitled, "Partnering for Prevention: Understanding Rural Occupational Health and Safety through Collective Voices."

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 Lisa Rubin on 09/09/2025 4:10 PM ET

203 Fairchild Hall, 1601 Vattier St., Manhattan, KS 66506 | 785-532-3224 | fax: 785-532-3278 | comply@k-state.edu

Appendix B - Stage 2 IRB Approval

KANSAS STATE UNIVERSITY | Office of Research Integrity, Compliance and Security

TO: Jacqueline Aenlle
Communications & Ag Education

Proposal Number: IRB-13778

FROM: Lisa Rubin, Chair
Committee on Research Involving Human Subjects

DATE: 04/29/2026

RE: Proposal Entitled, "Evaluating [redacted]"

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, Office of Research Integrity, Compliance and Security (ORICS), and if the subjects are KSU students, to the Director of the Student Health Center.

Electronically signed by Lisa Rubin on 04/30/2026 9:12 AM ET

203 Fairchild Hall, 1601 Vattier St., Manhattan, KS 66506 | 785-532-3224 | fax: 785-532-3278 | comply@k-state.edu

Appendix C - Stage 1 Recruitment Email

Hello,

My name is (INSERT), and I am an (Insert position and institution. Ex: Assistant Professor at Oregon State University/ Kansas State University teaching agricultural communications). We are conducting a study to explore how experts like you engage with communities specifically when leading research or designing programs around occupation health and safety and/or mental health. I found your name (Insert how participant was identified EX: when searching through literature about rural health in your community or through chain referral sampling).

We are seeking participants who have engaged in research or program development in agricultural communities who are at least 18 years old. The purpose of this study is to better understand how experts are engaging with communities and what approaches are used. To help us understand this type of practice, we would like you to participate in one virtual one-on-one interview for our research.

- I would like to interview you for **45-60 minutes** on your experience engaging in this type of practice in your community
- I would set up an interview time **via Zoom** that would be convenient for your schedule
- The interview findings will be used to better understand how experts can engage in community engaged scholarship
- After completion of the interview, we will send an email with a $20 Amazon e-gift card as a thank you for your time.

Is this something that you would be interested in participating in?

Please let me know if you have any questions. For more information about this study, please contact by email (jaenlle@ksu.edu). IRB# 13159

Thank you for your consideration,
(Insert researcher name)

Appendix D - Stage 1 Interview Protocol

As a reminder to participants, they do not have to answer questions if they do not want to.

Questions:

Background Questions:

1. What is your gender or what pronouns do you prefer to use?
2. What is your age range? (18-27 years old; 28-46 years old; 47-58 years old; 59-77 years old; 78+ years old)
3. What is your area of work? (e.g., student, faculty, extension, consultant)
4. What states have you worked in?
5. How long have you been involved in the community you work with (e.g., did you live in community before doing community work)
    a. What is your relationship with the livestock industry?
6. How long have you been in your current position?

Personal Experience:

7. What made you focus on this subject/area?
8. Before conducting research/creating a program, how do you identify and connect with a new population (e.g., rural farmers, farm employees, and communities)
9. What are some challenges you have faced with working with rural communities?
10. What are some challenges you have faced when working with community engaged scholarship within communities?
11. What benefits do you see/have you experience with working in community engaged scholarship with the livestock community?
12. How do you involve your community in participating in research? Specifically, when working with sensitive topics, such as mental health?
13. What are the perceptions or reactions of the community about occupational and/or mental health research/programs?
14. Have you incorporated using arts-based methods (or arts) in your work in communities?
    a. What challenges or benefits do you see using the arts in your community? For instance, several people before talked about bringing in music during a community event.

Community Engaged Scholarship:

15. What resources do you need to continue conducting participatory or community-engaged scholarship?
16. How does your work impact community perceptions of the scientific process? (ie., why research takes so long, etc.)
17. What does the future of research with this methodology/these communities look like?
18. What advice would you give to other experts in this area?
19. What support systems do you have for conducting CES?
20. What do you think is the best format (e.g., webinars, conferences, online platforms etc.) for sharing resources on CES?
21. Who do you collaborate with outside of your community/participants? What does collaboration look like?

Appendix E - Stage 2 Recruitment Email

Hello [Name],

My name is Abby Loesing and I am a graduate student in the Agricultural Education and Communications department at Kansas State University. I am conducting a research study exploring the [MHI] as part of my thesis under the supervision of Dr. Jacqueline Wegley.

The purpose of this study is to explore and document the [AMO] [MHI] to better understand how the [AMO] has planned, executed, and communicated a rural mental health outreach program. Your professional experience and involvement with the initiative make you a valuable potential participant, and I would greatly appreciate your willingness to share your perspectives.

Participation in this study involves a one-time interview, lasting approximately 45-60 minutes. Interviews can be conducted in-person or via Zoom at a time and location convenient for you.

If you are interested in participating or would like more information, please reply to this email or contact me at aloesing@ksu.edu or Dr. Wegley at jaenlle@ksu.edu. IRB #13778

Thank you for your consideration,

Abby Loesing

Appendix F - Stage 2 Interview Protocol

Questions:

Universal

1. What is your role at [AMO]?
    a. How did you become involved with the [MHI]?
2. In your experience, what are the most significant barriers that prevent farmers and ranchers from seeking mental health support?
3. Have you noticed any shifts in attitudes toward mental health in the agricultural community since the initiative began?
4. What feedback, if any, have you received from farmers and ranchers about the initiative?

For Leadership Staff

5. How are decisions made about the initiative?
    a. Who is involved in that process?
6. How was [MHI]originally conceptualized?
    a. How has it evolved since its launch?
7. How do you define success for the initiative?
    a. How is that currently measured?
8. What partnerships have been developed through the initiative?
9. What partnerships or resources do you feel are still missing?
10. Where do you see the initiative going in the future?

For Communications/Outreach Staff

11. How are messages developed and tailored to agricultural audiences?
    a. How do you ensure messaging is culturally appropriate for farming communities?
12. Are any topics intentionally avoided?
13. Which channels or platforms have been most effective for reaching your target audience?

For Program Staff/Implementers

14. What does the planning process look like for new campaigns or program components?
15. What has collaboration looked like with individuals or groups outside of [AMO]?
16. What has the initiative done well?
17. Where do you see the most room for improvement?