Investigation and response for farming-related stress among male farmers and their families

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Abstract

Farming is one of the most stressful occupations due to its unpredictable nature, physical demands, management complexities and connection to global markets. There are several factors that are outside of the farmer's control including the economy, weather, and machinery breakdowns. The significant increase in depression and suicide among male farmers is a cause for national concern. The 2019 Farm Bill has developed a Farm and Ranch Assistance Network (FRSAN) Competitive Grants Program intended to address farm and ranching-related stress and associated behavioral health issues by providing farmers with increased regional and state resources for support during times of need. However, high levels of stress, mid-west "boot strap" culture, stigma and customary masculine identity can prevent male farmers from seeking resources to increase their coping skills. Although customary resources of help, such as telephone helplines and mental health treatment are considered to be important helping resources, they have been shown to be ineffective since farmers do not typically access them. In this report, the author explores the economic, social and family-related issues confronting mid-west male farmers, and in response recommends a social marketing campaign to: a) improve the awareness of farmers and their families of the need for increased coping skills during tough farming-related times and b) motivates the male farmer to view the act of seeking help as an act of courage instead of an act of personal weakness. Though a social marketing campaign provides an essential step towards connecting farmers to external support, the limitations of a social marketing campaign are discussed.

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Acknowledgements

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Dedication

To those struggling with the stresses of running a farm or ranch operation, your perseverance and dedication to providing for the world has not gone unnoticed. Your hard work, sacrifice, and battles are appreciated. Thank you for all you do.

To those struggling with depression and other mental illnesses, it is okay to seek help. You do not have suffer in silence and handle everything all on your own. There are several of us, including myself, who face this daily struggle. Together, we can overcome the stigma of seeking help whether that help is informal support from friends and family or formal support in the form of a professional.

Chapter 1 - Introduction

A speech that ABC radio broadcaster, Paul Harvey, gave in 1978 to the Future Farmers of America (FFA) in Kansas City, Missouri says a great deal about the farmer in the United States at that time. The last paragraph of the speech in particular states:

> "It had to be somebody who'd plow deep and straight and not cut corners; somebody to seed, weed, feed, breed and rake and disc and plow and plant and tie the fleece and strain the milk and replenish the self-feeder and finish a hard week's work with a five-mile drive to church; somebody who would bale a family together with the soft strong bonds of sharing, who would laugh, and then sigh, and then reply, with smiling eyes, when his son says that he wants to spend his life doing what dad does. So God made a Farmer," (Eidenmuller, n.d., p. 2)

This quote provides a glimpse of the amount of rigorous work that a farmer does on a daily basis and how proud they are of the work that they do to provide for their family.

In the United States, 99% of the 2.1 million agricultural crop farms spread throughout the country are family-owned operations with each one of these farms producing enough to food to feed 165 people every year (Farm Bureau, 2017). With acreage and farm machinery costing a significant amount of money, many people assume that farmers have a substantial amount of income. However, today's farmers and ranchers only receive fifteen cents out of every dollar that the average American spends on food (Farm Bureau, 2017). Back in the 1980's before the national downturn in the farm economy called the "farm crisis" hit, farmers were receiving thirty-one cents per dollar (Farm Bureau, 2017). In the state of Kansas, family farms play an important role in the state's economy. The 2015 U.S. Department of Agriculture's National Agricultural Statistics has shown that family-owned farms are the leaders of the agriculture

industry and the most significant economic driver in Kansas accounting for almost half of the total state's economy. Specifically, there are 58,569 farms, 84.6% of which are family-owned operations, that generate $18.7 billion in agricultural output (Kansas Department of Agriculture, 2017). The impact that farmers and ranchers have on the lives and livelihoods of others is tremendous. Due to the decrease in the farm income over the past several decades, there has been a decline in the number of family farms (USDA ERS, 2018) and with it, a significant increase in suicide among farmers (Riggenberg, Peek-Asa, & Donham, & Ramirez, 2017).

Recently, there is a section in the 2019 Farm Bill that is trying to address the issue of farm stress related to economic and global market changes. The National Institute of Food and Agriculture (NIFA) developed a Farm and Ranch Stress Assistance Network (FRSAN) Competitive Grants Program for the 2019 fiscal year. An anticipated $1,952,000 in grant funds are to be awarded throughout the nation to state departments, cooperative extension, and other nonprofits to address the issue of farmer stress and suicide (Farm and Ranch Stress Assistance Network, 2019). The type of programs that are to be supported through the federal funding are telephone helplines and websites, training programs and workshops, support groups, and outreach. However, this author contends that most of these programs already exist, and still the issue of farm stress and despair continue.

Purpose of Report

This report has two purposes. First, to investigate, through the lenses of the Stress Process model (Pearlin, Menaghan, Lieberman, & Mullan, 1981) and Family Stress model (McCubbin & Patterson, 1983), the impact that contemporary farming-related stress has on farm families and specifically, the primary male farm family member. Second, is to investigate how social and coping resources can be made more beneficial through an evidence-informed social

marketing campaign (DiCliemente, Salazar, & Crosby, 2019) tailored to help male farmers experiencing farm-related stress. It is proposed that making social and coping resources intended to reduce stress more accessible to farmers through a targeted social marketing campaign will benefit entire farm families and their agricultural communities. The target audience of the campaign is to be the male farmer since the majority of production farms in the Midwest are managed by male farmers who want to keep the farmland in the family, and pass it on the next generation (Gasson and Errington, 1993; Lobley Errington, McGeorge, Millard, & Potter, 2002).

Definitions

It is necessary to define what is meant by "farm" and "farmer" for this report since many may have a vague concept of what a "farm" may look like but may not understand the stressful aspects of producing food, fiber and other goods for America and the world. A farm is defined as any place from which $1,000 or more of agricultural products were produced and sold during the year (USDA Economic Research Service, 2017). However, for this report, farms that produce crops for food and fuel (e.g., corn) consumption will be the focus. A farmer is defined as a person who cultivates land or crops or raises animals (Merriam-Webster, n.d.). However, for this report, the focus will be on males who cultivate crops. Although there is much diversity among farmers and the type of farming they practice, it is important to note that this paper will focus upon the male farmer who cultivates crops as the majority of farmers are male at 86% (USDA National Agricultural Statistics Service, 2014a) and the majority of farmers cultivate crops (USDA NASS, 2014a).

Contexts and Mediators of Farm-related Stress

There are three contexts that influence the relational well-being of the farmer and the farm family. The first is economic and financial "ups and downs" that the farming economy

often experiences. The second is the farm family business and the success of the farming operation. Lastly, the farm culture in the Midwest and how that culture is associated with the identification and meaning that the farmer has for the farming profession.

Economic

The farm economy is not a stable one. It has had a substantial amount of variation throughout the years. This makes it difficult for famers to get ahead in their profession. In 1980, crop farmers received 31 cents per dollar spent on food by US consumers (USDA, 2014). Today, they only receive 15 cents, while operational expenses rose by 36% (Farm Bureau, 2017; USDA, 2014). Farm income has been cut in half since 2013, and many farmers have not had a positive cash flow for several years causing many farmers to struggle to make payments on equipment, land, and other personal debts (Lowe, 2017). In 2017, farm incomes were expected to drop another 8.7%, resulting in a 50% drop from 2013, and the lowest levels since 2009 (Harvie, 2017).

Riding out changes in the farm economy, tight debt to profit margins, unpredictable weather and implementing new innovations in production agriculture are routine issues that farmers must confront in order to stay in production. This author has experienced first-hand that, when farmers have a positive or excess amount of cash flow, they buy more of what they need to increase their production or replace older or worn out equipment. This increases their debt, but this practice typically creates minimal worry for the farmer because they think prices will stay relatively stable enough for them to make the payments. When the market plummets a couple of years later, farmers may be unable to make payments on their loans (S. Brotherson, personal communication, September 20, 2019).

Farmers also do not have any control over the weather, which also plays a role in the fluctuations of income. A season with very little rain or heavy amounts of rain during can decrease the number of bushels of crop they are able to produce. This in turn, impacts their income. Many farmers, approximately 52%, typically have other employment to ensure that they can pay their loans (USDA NASS, 2014a).

The Farm Family Business

For many farmers, the farm is a family business. For some farmers, it is a small family affair, and for others, it is a multi-generational, large-scale operation. The USDA states that a family farm must be a farm that is organized as a sole proprietorship, partnership, or family corporation (USDA National Institute of Food and Agriculture, n.d.). The USDA census distinguishes family farms by their gross profits. A very large family farm has a gross for over $500,000, a large family farm has a gross between $250,000 and $500,00, and a small family farm has a gross of less than $250,000 (USDA NIFA, n.d.). It is not known how many farms are multigenerational. However, a study by Zulauf (2004) found that 39% of farmers reported that their farm has been in the family three or more generations.

Both positive and negative aspects come with living where one works and having a family business (Paskewitz & Beck, 2017). One challenge for farmers is balancing work and family life. It can be difficult to leave work when it is right outside your front door and your income relies solely upon things you cannot control like the weather, machinery break downs, Environmental Protection Agency (EPA) Regulations or an ill animal. Within an instant, these things can make or break your operation and impact the welfare of the whole family.

One research study found that farm families usually use four strategies for keeping their farm business going through economic hardship which include diversifying the business,

maximizing debt, sacrificing family needs, and comprising (Glover & Reay, 2015). All of these have consequences for the family and for business.

Farm Culture in the Midwest

Cowboy, humorist, Will Rogers (1879-1935) said that, “The farmer has to be an optimist or he wouldn't still be a farmer,” (Rogers, n.d.) which illustrates the positive outlook and persistence of the Midwest farmer. The key to understanding farm culture in the Midwest is to understand that for farmers, farming is more of a lifestyle than a job. The term Midwest is used to describe the states in the middlemost region of the United States and include Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North and South Dakota, Wisconsin and Ohio (US Department of Labor, 2019) where expanses of land support large farming operations for families. Rosmann (2010) proposed an explanation for why individuals and generations of families have the desire to farm and called it the Agrarian Imperative. The Agrarian Imperative is based on historical and psychological evidence that humans need to cultivate crops and domesticate animals. To quote Rosmann (2010), "To farmers, land means everything. Ownership of a family farm is the result of the struggles of multiple generations. Losing the family farm is the ultimate loss - bringing shame to the generation that has let down their forbearers and dashing the hopes for successors” (p. 71).

As someone who grew up on a small family farm in southern Illinois and continues to immerse themselves in the lifestyle now but in Kansas, I personally understand and have experienced these difficulties and rewards first hand. I recall when my family sold off the cattle and hogs and how devastating it was to our family, even at such a young age. When I visit the farm today it is not the bustling and flourishing operation that I remember as a child. There is only an overgrowth tall grasses, with large barns and other outbuildings slowly disintegrating as

the years pass without repair. Cobwebs cover the tractors and other equipment inside. With a heavy heart, I can only hope one day my grandmother leaves the operation to a family member that wants to breathe life back into it. I can only hope that I am that person. Today, my husband works a full-time job and have two part time jobs to continue growing our small cow/calf operation. Once a week, I update the bookkeeping so at the end of the year I can print off a statement documenting our losses for that year and hope for the best. However, even through the financial hardships and the stress, nothing makes me happier than sitting on the porch overlooking a field of grazing cattle and their calves knowing I played a part in their prosperity. Nevertheless, at the end of the day, I can honestly say that to me it is always worth it, and I couldn't be prouder – even when I see the negative equity because of how far we have come and how little we began with.

In the upcoming section, I will discuss the relevant and important concepts and literature surrounding the farmer and their family. This literature review will provide insight into the farming lifestyle and will include an overview of the sources of stress associated with farming, the dynamics of the farm as a family business operation and the culture surrounding the farming lifestyle.

Chapter 2 - Review of Literature

Farming-Related Stress

Farming, which is defined as the action of cultivating land (Meriam-Webster n.d.), is a widespread profession across the United States. With forty percent of the country being farmland, the majority of farms are found in the Midwest (USDA Census of Agriculture, 2012), which are comprised of twelve contiguous states including Kansas (US Dept of Labor, 2019). Due to the unpredictable nature of the farming profession, it is ranked among the top ten most stressful occupations in the United States (Pish & Kantrovich, 2017). The farming profession is unpredictable as there are several factors that are outside of the farmer's control including weather, commodity prices, and machinery breakdowns. In 2017, the National Institute for Occupational Safety and Health found that farmers have the highest rate of stress-related deaths (Pish & Kantrovich, 2017). Some constant stressors in the life of the United States farmer are mostly things that the farmer cannot control such as the weather, machinery breakdowns, and market changes. Ramesh & Madhavi (2009) found that financial, weather, work overload, social interaction, and farm hassles (traveling long distances for products, sickness in livestock, and loss of farm harm help) produced either a high or medium level of stress for farmers. However, financial stressors such as low commodity prices, rising expenses, high debt loads, lack of regular cash flow, and not enough money for necessities were found to cause the highest level of stress (Ramesh & Madhavi, 2009). A recent study found that 52% of Nebraska farmers are financially stressed (Brooks, Walters, Parsons, Ramirez, & Van Tassell, 2018). As stated previously, farmers have not had a positive cash flow over several years (Lowe, 2017). This lack of income can significantly impact the family structure and have adverse effects on the farm family business.

Financial strain is just one cause of stress that the farmer can experience. As previously stated, there are a number of things that could go wrong that impact whether the farm makes a profit for that year, continue at the financial margins, is financially unsalvageable or "takes a dive". This stress not only impacts the farmer but can impact the entire family because the farm operation is often a business that the entire family participates in.

Farm as a Family Business

For many farm families, the farm business has been a family enterprise for generations. In the United States, 99% of the 2.1 million farms are family-owned operations (Farm Bureau, 2017). The USDA Climate Hubs (2017) states that a family farm is a production agriculture enterprise organized as a family corporation. Having a farm family business can have its own unique set of stressors in that the farmer lives where they work and work-related stress can cause spillover from the farm business to family relationships as well as the other way around. When the farm business experiences tough times such as a drought, the family is significantly impacted. Although the entire family is involved in the farm business, there are differences in priorities and business stressors among spouses. One study found that in the farm business operation, husbands placed a higher priority on making a profit, while wives placed a higher priority on having good family relationships (Danes & Lee, 2004). The same study also found that husbands believed they experienced more stress and a main source of tension was keeping the farm business in the family (Danes & Lee, 2004).

A male farmer, which is the focus of this report, cannot just go home to forget about work when he has a rough day like other family members may do who commute to their off-farm professions or activities. It is very common and financially beneficial for either the farmer or their spouse or significant partner, who is female for the purpose of this report, to have off-farm

employment to support the operation and the family. One study found that 91% of farmer's have income that comes from off-farm employment (Brown & Weber, 2013) and this income increases the likelihood that the farmer will be able to repay their agriculture loans (Cling, 2017). For the farmer, their job is more than a way to make a living, it is a passion and for many farmers, it is a legacy that they were born into and want to keep it going onto the next generation. The relationships between the farmer and the family are ultimately impacted by communication among family members and the success of the farm business to the benefit of the family (Paskewitz & Beck, 2017). The family relationship can also be impacted when there is a lack of boundaries between the farm business and the family. When the two systems merge, a boundary violation can occur and cause work-family conflict and interfere with satisfaction (Hunter, Clark, & Carlson, 2019).

Farm Culture in the Midwest

Although farmers and their families are much like other families in the United States, there are some significant differences to take note of. Due to the large amount of land required to operate a successful crop-producing farming operation, farmers primarily live in rural areas, which are typically characterized by smaller populations and geographic isolation (USDA ERS, n.d.). In rural areas, one out of every ten workers are employed in agriculture (US Census Bureau, 2019).

In rural areas, it is not unusual for people to know one another (Slama, 2004). A recent study found that those who live in rural areas are more likely to know their neighbors than those who live in suburban or urban areas where people are in closer proximity to one another (Parker et al., 2018). This custom of rural "neighborliness" can be both positive and negative. On the one hand, everyone knows who each other are and they have friends that are willing to help out in a

time of need. One example of this is rural residents are more likely than urban residents to give their neighbor a key to their home (Parker et al., 2018). This demonstrates not only the wiliness to help out but also a deeper level of trust. On the other hand, if farmers are going through a hard time, the assumption is often that the entire community knows about it. This can cause the farmer to hide or cover up any problems they may be facing due to embarrassment (Rural Health Information Hub, 2018).

According to Wagenfeld (2003), there are eight values that are typically shared among rural people which include self-reliance, conservatism, distrust of outsiders, religion, work orientation, emphasis on family, individualism, and fatalism. These can prevent the farmer from seeking formal help for mental health problems such as that from psychiatrists, psychologists, and social workers when they need it (Wagenfeld, Murray, Mohatt, & Debruyn, 1994). Rural areas have been said to have several challenges when it comes to delivering mental health services including accessibility, availability, and acceptability (Rural Health Information Hub, 2018). Mental health services are often not easily accessible for farmers. They may have to travel long distances and pay out of pocket for services due to lack of adequate health insurance (USDA ERS, 2019). This is only after they find a provider that is available and if they are able to overcome the stigma associated with receiving mental health services. According to Rural Health Information Hub (2018), some factors that may contribute to the lack of help seeking in farmers are, "lack of understanding and knowledge of mental illness, sometimes even among healthcare staff; prejudice or stigma towards people with mental health disorders, often based on fear and unease; secrecy about mental illness in the community and general hesitancy to seek care and perception of a lack of confidentiality and privacy in small towns with closely-tied social networks" (Stigma section, para. 1).

Significance

In the United States, males make up 70% of farmers and 86% of principle farm operators while females make up the remaining 30% of farmers and 14% of principle farm operators (USDA NASS, 2014b). Of those 30% of female farmers, the majority (90%) are the spouses of the male principle farm operator (USDA NASS, 2014b). The majority of farms where females are the principle operator are located in the Southwest and Northeast (USDA NASS, 2014b). Since 2007, female farmers have been declining at a rate higher than that of males (USDA NASS, 2014b). Studies have shown that male farmers are more at risk for depression and less likely to seek help (Hoyt, Conger, Valde, & Weihs, 1997; Roy, Tremblay, & Robertson, 2014). With such a large majority of farmers being males and acknowledging that males often have strong self-concepts associated with their work identities, the focus of this report will be on farmers who are male. Consequently, this report will benefit not only the male farmers, which is the focus for the rest of this report and campaign proposal, but their families and communities as well.

The mental health and well-being of America's farmers, especially during times of chronic farm economy stress, is of national concern. During the 1980's, The National Farm Medicine Center tracked farm suicides in the Upper Midwest and found differences in suicide rates between the agricultural community and the general population. Male farmers and ranchers were nearly twice as likely as the general population to commit suicide. When compared to the recent study by the Center for Disease Control, current suicide rates for those working in agriculture are now the highest of any other occupation (McIntosh et al, 2016) and 50% higher than they were in at the peak of the farm crisis in 1982 (McIntosh et al., 2016). Farm-related suicide is not unique to the United States. Andersen, Hawgood, Klieve, Kolves and DeLeo

(2010) conducted a study among occupational suicide from 1990-2006 in Australia and also found that farmers had a higher risk for suicide than those in other professions.

Recent studies found geographic differences within the United States as to farm suicide rates. Farmers in the West were 43% more likely to commit suicide, followed by the Midwest at 37%, the South at 13%, and the Northeast at 6% (McIntosh et al., 2016). Similar to the 1980's farm crisis, financial issues caused by the economy or weather continue to be contributors of suicide, but farmers also face other stressors such as financial losses, social and physical isolation, pain from strenuous farm work, and unwillingness to seek mental health services, which may also be unavailable in rural areas (Jannsen, 2016). The American Foundation for Suicide (AFSP) emphasizes that suicide most typically occur when stressors including economic challenges, social problems, or significant life events exceed a person's coping ability (Janssen, 2016). A contribution to the high rate in suicide among males is the higher depression symptoms. One study found that the smaller the town that a male resides in, the higher the depression symptoms were (Hoyt et al., 1997). The authors also found that smaller towns had higher levels of stigma toward mental health care, which impacts the likelihood that the male will seek help. Farm-related stress and suicide are not unique to the United States,

Another indicator of the significant need to bolster farmer mental health and well-being, is the Farm and Ranch Stress Assistance Network Competitive Grants Program developed by U.S. Department of Agriculture and National Institute of Food and Agriculture. Intended to address farmer stress and suicide (Farm and Ranch Stress Assistance Network, 2019), this grants program acknowledges the stressful nature of the farming occupation and the impact that long-term stress can have on the farmer. The program identifies that lack of access, availability of resources, and the stigma associated with mental health issues can influence whether a farmer

chooses to seek help or not (Farm and Ranch Stress Assistance Network, 2019). The program provides funds for connecting farmers and ranchers to resources, support, and training to decrease farm stress and suicide (Farm and Ranch Stress Assistance Network, 2019). While this potentially addresses the challenge of access and availability, it does nothing to reduce the cultural stigma that Midwest male farmers have for mental health and therefore is not sufficient (Mead, 2019).

Furthermore, it has been found that not only are male farmers in rural areas less likely to seek help than are female farmers, but male farmers also "have an increased emphasis on practices that demonstrate pride, independence, and self-reliance" (Roy et al., 2014, p. 461). Farmers see their work as a significant part of their identity, not just a job, so when the farm faces difficulties, many see it as a sign of personal failure (Ringgenberg, Peek-Asa, Donham, & Ramirez, 2017). A study conducted by Armstrong and Schulman (1990) revealed that the relationship between farm financial strain and depression is mediated by perceptions of economic hardship and personal control. Similarly, Belyea and Lobao (1990) found that beyond economic vulnerability, a negative cognitive appraisal of one's situation and ineffective coping mechanisms are related to more severe depression. Although this research is dated, it relates to the Stress Process Model (Pearlin, Menaghan, Lieberman & Mullan, 1981), and demonstrates the need for contextually relevant and relatable resources and coping skills.

Concepts/Theories

There are five concepts/theories that aid understanding of the male farmer and the stress of the farm family. These five theories, from broad social contextual issues to specific focus on the male the farmer and his ability to adapt and cope, are discussed next.

Social Ecological Model

The socio-ecological model that was first introduced by Bronfenbrenner (1977) described how the settings and contexts around a person can impact them positively as well as negatively. The original model had five systems (microsystem, mesosystem, exosystem, and macrosystem) that surrounded the individual, with those who are closest to the person, typically family members, having the most significant impact and influence (Bronfenbrenner, 1977; Kilanowski, 2017).

The closest system to the individual is the microsystem and involves the relationships and interactions that the individual has in their immediate surroundings such as at home or at work (Bronfenbrenner, 1977; Kilanowski, 2017). For example, the family relationships of the farmer such as that with their spouses, children, parents, or siblings is a microsystem, as well as any coworker relationships or friendships that may form if they have off-farm employment. When there are interactions between microsystems, a mesosystem is formed.

The mesosystem involves interactions are between settings where the individual has direct contact such as work, school, church, friends, or the community in which he resides (Bronfenbrenner, 1977; Kilanowski, 2017). For the farmer, the mesosystem includes the home and workplace that are interconnected since the home is typically located on the farm land. Farmers typically work long hours, and often family members are expected to assist with the farm chores and contribute to the family business. These close interactions can have positive or negative relational and emotional results. Close interaction between family members working together to accomplish a mutual task can be positive and supportive. However, in times of financial stress, physical and emotional strain, and feelings of loss of control the close interactions between family members doing work together can provoke more stress (Davis-Brown & Salamon, 1987; Weigel & Weigel, 1990).

The exosystem consists of any other social structures in a society that does not involve the individual but still has an impact on them such as the community (e.g, farmer's coop, sale barns), banks, media and government (e.g, USDA farm programs, tariffs) (Bronfenbrenner, 1977; Kilanowski, 2017). The government impacts farmers as they play a role in the farm economy. The government can influence land prices, commodity prices, farm input costs, technology costs, transportation infrastructure, trade market access, fiscal and monetary policy, and the farm safety net, which refers to farm policies in the federal Farm Bill designed to protect farmers (NC Soybean Producers Association, 2014). As previously mentioned, the 2019 Farm Bill, which is an exosystem factor in farm stress, includes funding for the development of a network of resources to address the high rate of farmer stress and suicide. Following the exosystem is the macrosystem.

The macrosystem involves the structures of a society such as cultural values, laws, beliefs, and religion (Bronfenbrenner, 1977; Kilanowski, 2017). The beliefs and culture surrounding farmers and their values fit into this system. As previously discussed, a farmers' values of self-reliance, family, and a distrust of outsiders can hinder them from seeking help (Wagenfeld, 2003).

The systems that will be focused on in this report, are the microsystem interaction between family members and their interaction with the multiple systems (ie., mesosystems between the family, the farming operation, and the community). It is this interaction between systems and levels that have the most detrimental or beneficial impact on the male farmer who is experiencing high farm-related stress and despair. It is the family systems and its processes, away from the business of operating the farm, that is the first level of negative or positive influence for the farmer. Consequently, the Socio-Ecological Model (Bronfenbrenner, 1977)

enhances our understanding of these multiple economic, relational, family and community stressors.

Stress Process Theory

The stress process theory (Pearlin, et al., 1981) helps explain the process of stress, what factors can mediate stress, and what manifestations can occur from stress within an individual and how that stress effects the family microsystem and associated mesosystems.

According to Pearlin, et al., (1981), the stress process can be observed through the combination of three factors that include sources of stress, mediators of stress, and manifestations of stress. For example, stress can be traced back to two primary sources, either a critical experience or chronic strain. Those two sources can vary, especially if it diminishes the individual's self-concept of mastery and self-esteem (Pearlin et al., 1981). A critical experience or chronic strain for a farmer could include drought or flood, machinery breakdowns, or economic market changes.

Studies have also shown that there are differences among farmers regarding stress. For example, the National Agricultural Safety Database found that younger farmers, especially those younger than 50, report more stress than older farmers; farmers in dairy or mixed operations such as grain and livestock, report higher stress than those in single product operations; and farmers employed in off-farm jobs report more stress than full-time farm operators (Reynolds, n.d.). Associated with self-concept, the stoicism of farmers is what keeps them going through tough times and challenging weather conditions such as heat and snow (Judd et al, 2006).

Mediators of stress include social support and coping (Pearlin et al., 1981). In rural areas, access to social support can be limited due to living in areas where there are fewer people. With fewer people come fewer local services, especially mental health centers and services. This

leaves the family as the prime social support farmers need to cope with the stress of farming. Without social support, the farmer may be less likely to cope and manifestations of stress such as depression and suicide increase (Hoyt et al., 1997; McIntosh et al., 2016). With a better understanding of how the stress process works, leads to a better understanding of how stress impacts a family, and specifically a farming family over time.

Family Systems Theory

Family Systems Theory provides an understanding of the functioning of individuals through their family relationships. Systems theory proposes that the individuals' actions are interconnected with the behaviors and attitudes of those within the family (Bowen, 1966; Gilbert, 2011). There are eight concepts of Family Systems Theory that build upon one another (Gilbert, 2011), however for the purposes of this report three key concepts are focused on which include the nuclear family emotional concept, differentiation of self, and emotional triangles.

The nuclear family emotional concept explains the relationship patterns that contribute to problems within a family (Bowen, 1966; Gilbert, 2011). The family is considered an emotional unit, meaning “whatever affects one, affects each one in the system” (Gilbert, 2011, p. 5). For example, if a farmer is experiencing a great deal of stress from a piece of machinery breaking down or the weather, the whole family is likely to be impacted. The family can be negatively impacted by the farmers’ high levels of stress if his reaction to the stress includes unhealthy coping mechanisms such as alcohol and opioid abuse, chronic isolation, and self-harm.

The next concept, Differentiation of self, is an individuals' sense of identity and their ability to function without being a part of group (Bowen, 1966; Gilbert, 2011). An individual's differentiation of self can range from low to high depending upon how much confidence they have and how much validation is needed from other people such as family and friends (Gilbert,

2011). As stated earlier in this report the cultural view that, as a group, mid-west farmers are independent and self-sufficient is sometimes an inaccurate portrayal of a individual farmer. Later in this report, the farmers' identity will be discussed in greater detail.

An emotional triangle is a relationship between the individual and two other people (Bowen, 1966). Within the family, emotional triangles are always there whether there is conflict between family members or not (Gilbert, 2011). However, once a conflict does arise, a triangle can intertwine with others involved such as the triangles with extended family members that become involved through taking sides (Gilbert, 2011). Intergenerational conflict can be evident in farm families due to the generational nature of the farm operation and ownership of the land (Paskewitz & Beck, 2017). For example, in the case of a generational family farm, there can be conflict among family members who disagree on how an aspect of the farm business should be ran and multiple emotional triangles can be formed.

Owning a family business, especially a farming business, has a unique set of stressors for the family. Therefore, an understanding of how a farm family experiences stress is critical.

Family Stress Theory: Double ABCX Model

Though general stress processes (Pearlin, et al., 1981) were discussed earlier in this report, the unique factors related to farming stress need to be investigated in more depth using the Double ABCX Model.

All families experience some form of stress in their daily lives. However, some families have better coping abilities than others. The original Family Stress Theory: ABCX model that was first developed by Hill (1958) and expanded to Double ABCX by McCubbin and Patterson (1983) provides an understanding of family stress and coping over time (Weber, 2011). A relevant example that demonstrates this theory is the 1980's farm crisis in the United States

where some farm families were able to pull through hard times and continue farming while others did not. When faced with downturns on the farm, research has shown that farm families who demonstrate resilient perceptions about their situation, seek out and expand their resources and coping skills (Caldwell & Boyd, 2009).

In the ABCX model, A (the stressor) interacts with B (resources of the family), which interacts with C (how the family perceives the event) to produce X (the outcome or crisis) (McCubbin & Patterson, 1983; Weber 2011). When expanded to Double ABCX, the initial crisis leads to Aa (pile up of stressors), that interacts with Bb (existing and new resources) and the Cc (perception of the stressors and pile up) which potentially results in despair. This impacts how the family ultimately copes and functions (ie., Xx), which can be nonadaptation, adaption, or maladaptation (McCubbin & Patterson, 1983; Weber 2011).

The model helps explain why a farmer who does not take action to ask for help or to seek social and coping resources is at most risk of maladaptation during times of high stress. Especially problematic are the multiple stressors impacting the farmer, farm family and farming operation are the same stressors that negatively impact other farmers, the local farm economy, rural community services, and agriculture lending institutions and businesses. As the multiple stressors pile-up in the community, the farm family is likely to attempt to become more self-reliant and work harder due to the belief, associated with the Midwest mind-set of individualism and privacy, that there are few to no resources outside the family available to them or that they can trust (Rural Health Information Hub, 2018).

Past research published around the time of the 1980's farm crisis used Family Stress Theory: Double ABCX to better understand farmers undergoing stress and how to effectively help them. Weigel & Weigel (1990) examined how the influence of stressors and resources

impact satisfaction in multi-generational farm families. The authors emphasize the importance of educational resources and programs that focus on stress management, family strength building, and family communication enhancement.

Davis-Brown & Salamon (1987) developed an instrument based on this theory to assist professionals in counseling farm families who have lost or are in the process of losing their farm. The authors stated, "Programs addressing families affected by the farm crisis have concentrated on providing financial counseling, often neglecting the crisis experienced by a family faced with losing a farming operation," (p. 373). In other words, to effectively help farmers and their families, professionals need to understand that the farming operation is more than a job and a source of income but also a large part of their identity.

Identity Theory

When the farm family system experiences multiple stressors during times of diminished community resources, the farmer himself may begin to "double down" on work, believe in self-reliance, and attempt to solve the problems of the farm alone. This behavior and belief system can lead to his isolation from family members who may be able to provide social and coping resources. The values that Wagenfeld (2003) reported (self-reliance, conservatism, distrust of outsiders, religion, work orientation, emphasis on family, individualism, and fatalism) that are protective factors in good-times become risk-factors in times of economic stress and hardship. The likelihood of self-blame and shame is high if the farmer believes that his is the only farm in the community experiencing economic struggle. The failure of the farm operation can be viewed as a personal failure. The identity of the male farmer also complicates the situation between family members and within the family system.

When discussing identity, two separate but distinct identity theories stand out: identity theory and social identity theory. In social identity theory, it is suggested that a person's identity is based on the social group they are a part of and this sense of belonging typically brings the individual a sense of pride and self-esteem (Tajfel & Turner, 1979). However, in identity theory, "the core of an identity is the categorization of the self as an occupant of a role, and the incorporation, into the self, of the meanings and expectations associated with that role and its performance" (Stets & Burke, 2000, p. 225). For farmers, the land they own and their farming operation fills them with pride and identity. For some, the land has been in their family for generations. According the USDA NASS (2014a), three-quarters of farmers have been in business for a minimum of ten years. The land and the farm provide them with income that helps them provide for their family and provides a context for identity.

The stress and adversity that farmers experience can have an impact on their identity. Adversity has been shown to have a positive or negative impact on health and wellbeing. Linley and Joseph (2004) reviewed 39 empirical studies and found positive outcomes following varying degrees of adversity. The authors concluded that struggling through adversity can contribute to higher levels of functioning. If this is true, the assumption is farmers who have been overcoming adversity for decades, especially those whose farm operation survived the 1980's farm crisis, will have great attributes of resilience which become incorporated into their individual identities and the historical identities of their farming families (Rosmann, 2010).

When the farmer and their family begin to experience difficulties, whether they are financial, physical, or emotional, they need to be able to access appropriate resources that provide them with assistance and guidance to help them develop coping skills. One study which focused on masculinity and help-seeking among male farmers found that informal strategies for

emotional support help were more commonly used than formal ones which highlighted the need for role models who can help farmers overcome stigmas and barriers to accepting help which were associated with masculine identity (Roy et al., 2014).

Roy et al., (2014) concluded that once the farmer had the courage to seek help he then would access the resources necessary to increase his coping skills. Unfortunately, given the current farm economy and the associated challenges in rural areas, there are few, easily available resources that farmers can turn to.

In Kansas, the resources available to farmers and their families include long-distance crisis and suicide hotlines located in other states, some local extension agents, or agriculture mediation services when conflicts exist between lenders and producers. As per Riggenberg et al (2017), though there has been increased awareness surrounding the issue of farm stress and suicide since the 1980's, available resources vary and are typically underutilized by the farmers most in need.

Since relatively few farmers use customary resources such as helplines, support groups local extension resources and/or farm management assistance, there is a need to adapt the promotion of those services to the farmer's perspective about seeking help. These promotional adaptations should to take into account the mid-west farmer's identity, contexts and help-seeking strategies.

Chapter 3 - Response and Application

In response, I propose an awareness-to-action campaign that uses a Social Marketing approach which will increase the likelihood that male mid-west farmers will seek out existing services and resources when struggling with farm-related stress. This approach incorporates the principles of marketing and promotion to improve coping in times of stress. In social marketing, "the health promotion goal is to have people voluntarily adopt the health behavior or health technology, because they come to view the behavior as in their interest" (Edberg, 2007, p. 60). Ideally, if seeking help is marketed and promoted as an act of courage instead of being often viewed as an indicator of weakness, male farmers are more apt to seek help to improve their coping skills (Roy et al, 2014).

Consequently, a case can be made for developing a social marketing campaign tailored to the uniqueness of Midwest male farmers and their families to support courageous actions (e.g, asking for help and using external resources) which improve farmers' coping skills.

Principles of Social Marketing

The social marketing approach (DiCliemente, Salazar & Crosby, 2019) uses four principles of product, price, place, and promotion that work together to influence the desired behavior. For this report, the marketing campaign's goal is to encourage male farmers to view seeking help as courageous, rather than embarrassing, so they will seek and use resources that increase their coping skills to reduce stress, maladaptive behaviors and suicide risk.

Product

Often times, a product is thought of as a physical item that is purchased. A product could also refer to a service, program, practice, or a change in behavior or belief (DiCliemente et al, 2019). As previously discussed, due to the male farmers' identification with personal reliance,

and stoicism they often do not want to admit that there is a problem nor seek-out help to address it (Roy et al., 2014). Therefore, the product marketed is the behavioral practice of courageously seeking and accepting help to cope with the stresses of farming.

Price

Price refers to what the farmer will have to give up in order to get access to the product, whether it is monetary or social (DiCliemente et al, 2019). There may be a social, cultural, identity "costs" to the farmer since they will likely need to overcome attributes of a midwest - *pick-yourself-up-by-the-bootstraps* - masculine identity in order to seek out external resources. The "price" may also include the farmer's willingness to ask for public financial assistance to keep the farm running or if it is seeking mental health support. Other costs that the farmer may have to face to access help are in time and distance because he may have to take off from work to drive to get the distant support he needs.

Place

Place refers to ensure accessibility of the service, its quality and appropriateness for the target audience. If the resource or service are not offered in a manner reflective of understanding the farm economic situation then it's unlikely that farmers will use it. By determining the activities and habits of the target farm audience, as well as their experience and satisfaction with the existing delivery system, a successful and relevant promotion campaign can be developed. Placement of services need to account for where farmers will most likely access the assistance and support needed (DiCliemente et al, 2019). It is important to note that the place must be accessible and conveniently locate, which can be difficult in rural areas. These places could be Farmer's Co-ops, sale barns, coffee shops, Extension offices, bars and cafes.

Promotion

Promotion refers to the communication strategies involved to market or get the word out about the product (ie., encouraging help-seeking among mid-west male farmers) such as through advertising, merchandise, media, mail, and more (DiCliemente et al, 2019).

These four principles are all interconnected and when implemented through a well-designed campaign can impact and enhance each other (DiCliemente et al, 2019). For example, if a farmer has to drive two hours each way to get to the location where he will receive the support he needs, then the price he must pay goes up. On the other hand, working for two-hours in a tractor cab can be an ideal opportunity for accessing pod-casts and telehealth resources. It is important to thoroughly think through relevant communication strategies and opportunities for the campaign to be effective for the target audience.

Communication Attributes of the Campaign

A well-planned and effective social marketing campaign should be designed using key communication strategies in order to produce an effective "short but powerful message" to be distributed to groups of farmers in Kansas (DiCliemente et al, 2019). These attributes include accuracy, availability, balance, consistency, cultural competence, evidence based, reach, reliability, repetition, timeliness, and understandability (DiCliemente et al, 2019). For this report, the focus will be on four of the eleven features. Though all attributes are important to successful campaigns, the proposed social marketing campaign has the following elements especially developed for male Midwest farmers.

For the Midwest farmer, **availability** is a crucial component. Availability means that the content is delivered or placed where the audience can access it (DiCliemente et al, 2019). By educating the families of farmers and those who interact with farmers (e.g. co-op members, agriculture lenders, extension agents, etc.) information about helpful resources and developing

coping skills should be easily available to farmers in distress through people they trust and interact with daily. A comparison of two methods, helplines and on-the-farm consultations, concluded that on-the-farm consultations are more available and consequently more effective for farmers because consultation brings the help and support to the farmer and their families, and engages the family system which decreases the farmer's sole responsibility for the family operation (Mead, 2019). Another crucial component is **cultural competence,** which means the campaign's design, implementation, and evaluation should be tailored to male farmers and the Midwest culture (DiCliemente et al, 2019). Specifically, the design should be straight forward and to the point, the implementation should be done in areas that farmers trust such as local cafes, churches, sale barns, and grain facilities. Additionally, a social marketing campaign must be culturally competent with relationship to the Midwest male farmer. Cultural competences includes valuing the clients' cultural beliefs, involving the community in defining and addressing service needs, collaborating with other agencies (National Prevention Information Network, 2015). Another crucial component is being **evidence-informed**, which includes a theory of change. This means that the campaign is based on sound scientific understanding of behavior, social services, communication and family systems (DiCliemente et al, 2019). Through the use and incorporation of multiple theories and models, we gain a better understanding of farmers and can design the campaign materials, products, and delivery channels to effectively promote the change in attitude and behavior (Rural Health Information Hub, n.d.). Finally, the last crucial component is **understandability** and refers to the reading level and format being appropriate for farmers (DiCliemente et al, 2019). The campaign will take into consideration that the majority of farmers only have a high school diploma or equivalent (Bureau of Labor Statistics, 2019). As previously the mentioned, the multimedia format that is used to deliver the content should also

be taken into consideration. The average age of farmers has steadily increased since 1982 and is currently 58.3 years old (USDA NASS, 2014b). The proposed social marketing campaign, which uses these four attributes, is described below.

Methods

The proposed social marketing campaign, titled "*Courage to Ask*: Motivating farmers to seek help", will require the combined effort of volunteers, community members, and local businesses to effectively promote the campaign to create awareness of farm stress and the need for motivating farmers to seek coping resources. Male farmers need to view seeking help as courageous rather than a sign of weakness (Roy et al, 2014).

Campaign Development and Details

The long-term goal of the social marketing campaign is to reduce the risk of suicide, self-harm and mental health distress among Midwest, male farmers experiencing farm-related mental distress. The strategies used to reach this goal include outreach and information that increases awareness and individualized guidance targeted to family members to encourage male farmers of the need for: a) increased coping skills, b) the courage to seek help and c) take action to get help. The four communication attributes of availability, cultural competence, evidence-based information and understandability will inform the development of the campaign products and activities.

The logic model attached (Appendix A) which is in the format used by national Cooperative Extension systems (Taylor-Powell & Henert, 2008), describes:

- the problem or situation that the campaign will address;
- inputs (ie., stakeholders, media outlets, funding) which are the resources necessary to conduct the campaign;

- outputs which are the activities completed, products developed, and participants reached by the campaign; and
- the short-term outcomes (ie., gain in knowledge, skills developed and attitude change) and mid-term outcomes (ie behaviors changed and actions taken) to be achieved that contribute to the long-term goal of the campaign.

Throughout a year and a half period (18 months) from August 1st, 2020 through December 31st, 2021, the social marketing campaign will aim to accomplish the following:

1. Short-term Outcome: By December 2021, improve the awareness of farmers and their families of the need for increased coping skills during tough farming-related times.
2. Short-term Outcome: By December 2021, motivate male farmers to view the act of seeking help as an act of courage instead of an act of personal weakness.
3. Mid-term Outcome: By December 2021, increase the number of farmers and their families accessing resources to cope with stress and depression.
4. Mid-term Outcome: By December 2021, increase the number of farmers using positive coping skills to help overcome stress and depression.

The 18 month period of time was chosen based upon the Kansas crop harvest season, which can start as early as August 9th for corn, October 4 for soybean, and September 20th for sorghum and end as late as October 25th for corn and November 15th for soybean and sorghum (Griffin, Ciampitti, & Torrez, 2016).

The targeted area of the campaign will be the state of Kansas with the goal of reaching 15,000 farmers and farm families. This campaign is being designed as a pilot that will inform the development and implementation of others after one year. So to develop an effective campaign, the first step will be to conduct focus groups of farmers and family members of farmers in order

to gain insight into the mental health needs of farmers, how asking for help is viewed, what messages would motivate a farmer to seek and accept help and acceptable ways to craft and deliver the key messages of the campaign. Focus group participants will sign a written informed consent form prior to participation and have the ability to revoke consent at any time.

Research suggests that farmers are more likely to seek informal support than formal support (Kutek, Turnbull, & Fairweather-Schmidt, 2011; Furey, O'Hara, McNamara, Kinsella, & Noone, 2016). Therefore, based on focus group results, information about the non-formal supports in Kansas will be included in advertising at sale barns, churches, cooperative extension, farm businesses and through social media. The breadth of advertising outlets ensures that the campaign reaches as many farm families and the farmers in them as possible.

Campaign Logic Model (see Appendix A for graphic of logic model)

Inputs

An estimated budget needed to successfully implement the campaign listed in Appendix C breaks down the combined costs that will be incurred over the 18-month time period of the campaign.

Outputs

Products/Resources Developed

- 5,000 posters in public areas throughout the state
- 25,000 postcards in public areas throughout the state
- 50,000 advertisement on the back of sale barn buyers'cards (sample in Appendix B)
- KFB and BCBS-sponsored media exposure: Television, Radio, Newspapers, Newsletters, Social Media

Table 3.1Activities and Participation

Activities/Events Conducted	Participation (Who and How Many were Reached)
Conduct a break out session during Women Managing the Farm Conference.	100 family members of male farmers
Booth set up at three conferences for farmers and their family members	300 farmers and family members of farmers
Booth at Kansas State Fair in Hutchinson	1,000 farmers and farm families

Campaign Distribution and Partnerships

There are multiple ways that the campaign will be distributed and build partnerships. The first will be the Kansas Cooperative Extension system, which consists of 105 county and 17 district offices, will be the main resource for farmers and their families due to Extension's familiarity with the county or district. Kansas State Research and Extension (KSRE) agents are the experts about the communities they serve. They would distribute flyers and other advertising materials around the community such as at grain facilities, sale barns, and churches. They also have access to email and mailing lists of farmers and their families for survey distribution.

There will be three conferences that target farmers and their families. The first is the Kansas Rural Center's Food and Farm Conference. This conference is held annually in November and has approximately 200 participants annually. The second is the Kansas Women Managing the Farm Conference, which is co-sponsored by K-State Research and Extension. This conference is held annually in February and has approximately 200 participants. The last conference is the Kansas Farm Bureau's Young Farmers and Ranchers Conference that is held annually in February for farmers and ranchers aged 18-35 and has approximately 450 participants. The campaign will have breakout sessions and/or booths at each of these three conferences to promote the campaign message through advertising materials such as pens, magnets, bump stickers, etc.

Campaign Messages and Products

Based on the initial focus group results, campaign messages will be developed to encourage help seeking behaviors. An outline of the focus group results and the campaign's goal, objectives, audience, geographic area and key messages will be given to campaign designers. Those designers will create a set of campaign posters, flyers, table tents, and window stickers

appropriate and acceptable to the target audience (farmers and family members of farmers). Focus groups will re-convened to review the designs and offer recommendations before materials are produced. The purpose of this is to gain feedback and insight into which messages and materials are more likely to have the desired reaction with the target audience. This method is cost effective so money is not wasted on the production of materials that will be ineffective and ensures the campaign will have more success.

Campaign Activities and Events

Since farmers prefer local sources of support, activities and events for the campaign should be done through local avenues in the prospective communities. For example, the county fairs in August and the state fair in September are prime locations for the campaign's activities and events due to the large number of farmers and farm families that attend due to 4-H project showing. Additionally, other local activities and events should be taken advantage of such as "piggy-backing" off of church, extension, and other community gatherings.

Dissemination Plan

There are multiple ways that the campaign will be disseminated. The first will be the Kansas Cooperative Extension Network, which consists of 50 counties and 17 districts, will be the main resource for farmers and their families due to the familiarity with the county or district.

There will be three conferences that target farmers and their families. The first is the Kansas Rural Center's Food and Farm Conference. This conference is held in November has approximately 200 participants annually. The second is the Kansas Women Managing the Farm Conference, which is co-sponsored by K-State Research and Extension. This conference is held in February and has approximately # of participants. The last conference is the Kansas Farm

Bureau's Young Farmers and Ranchers Conference that is held annually in February for farmers and ranchers aged 18-35 and has approximately 450 participants.

Finally, there is also the potential to distribute information through the North Central Region Extension Farm Stress Task Force led by Dr. Sean Brotherson at North Dakota State University.

Evaluation of Short-term and Mid-term Outcomes

The evaluation of the campaign will include three surveys to farmers and family members of farmers in Kansas, who may have been focus group participants, in order to gather information before the campaign is implemented, during implementation and after the campaign is over. Evaluation data will be collected via post mail, email and/or phone survey from the survey respondents and will be compared to surveys completed in the state of Nebraska, which has similar characteristics to Kansas. This allows for a comparison of the change that is expected to occur in Kansas. The chance to win one of five $500 gift cards will be used as an incentive to complete all three surveys. Mailed and/or phone surveys will be distributed July 2020 to get a baseline before the campaign gets underway. The second surveys will be collected Spring 2021 for a mid-campaign evaluation, and the final survey information will be collected in January 2022 as the post evaluation.

Survey respondents will share their perceptions about increased awareness of farm-related stress, need for coping skills and improved attitude towards seeking help. These are measures of short-term outcomes. Survey respondents will also be asked questions based on the four communication attributes to determine whether the campaign was understandable, available, and relevant (ie., culturally competent use of evidence-based information).

Table 3.2 Evaluation and Measurement

Evaluation Criteria	Measurement
Campaign Implementation	The extent to which the campaign was carried out as planned to include activities, material distribution and media exposure.
Campaign Promotion	Surveys prior, during, and after campaign about recollection of campaign promotion in the community.
Campaign External Factors	External factors that assisted or hindered the success of the campaign implementation to include competing media stories, weather, economic factors, and other interventions aimed at farmer depression and suicide.
Campaign Recognition • Understandable • Available • Relevant (culturally competent use of evidence-based information)	Follow up survey questions on promotion recognition, specific message recognition, location of campaign materials, and perceptions of campaign objective and target audience.
Short-term Outcome: Change in Perceptions, Attitude of Help Seeking	Baseline and follow up survey questions on perceptions of seeking help.
Short-term Outcome: Change in Coping Skills Knowledge	Baseline and follow up survey questions on coping skills knowledge including how one copes with high levels of stress.
Short-term Outcome: Change in Awareness of Resources	Baseline and follow up survey questions on awareness of resources including locations of specific resources.
Mid-term Outcome: Change in Help Seeking Behavior	Baseline and follow up survey questions on seeking help behaviors including if individual sought help and whether it was formal or informal help.
Mid-term Outcome: Calls to Information, Resource Line(s)	Number of calls to community partners during the campaign compared to before and after the campaign.
Mid-term Outcome: Use of Informal Support	Self-reporting on surveys.
Mid-term Outcome: Use of Formal Helping Professionals	Self-reporting on surveys.
Mid-term Outcome: Other Resulting Behaviors	Self-reported discussions about coping skills and help seeking behavior as a result of the campaign from the follow up survey and focus groups.

The proposed campaign could be a template or guide for other organizations and states that are interested in reducing depression and suicide among Midwest farmers. The results of the campaign will be disseminated through regional work groups such as the North Central Region Extension Farm Stress Task Force led by Dr. Sean Brotherson at North Dakota State University, conferences, publications, and the Extension systems in other Midwest states.

Chapter 4 - Conclusion

As previously discussed, farmers live stressful lives. This statement holds just as true today as it did decades ago to include the 1980's farm crisis. There will always be highs and lows in the market, machinery breakdowns and difficult weather. This "Courage to Ask" campaign is needed because farmers typically seldom seek help, but in times of stress can benefit from assistance and support. However, the recommended campaign is just the first step in addressing the issue of depression and suicide among male farmers.

Limitations

As with any campaign, there are limitations. One limitation of using a social marketing campaign is that measuring its impact can be difficult. Edberg (2007) points out that, "if tracking the behavior change is the goal, tracking exposure to the campaign for those exposed and assessing the degree to which behaviors, or at least attitudes, have changed is not always easy" (p. 62).

Another limitation is not all farmers are men. Although there has recently been a slight decrease in female farmers since the last agriculture census in 2007, women still make up 30% of farmers in the United States with nearly half of those women as the principal operator (USDA NASS, 2014c). Female farmers may also suffer from the same stressors as to male farmers and their stress may be compounded by fewer opportunities to connect with peers for mutual support. Additionally, not all farmers live in households with family members. There are a number of farmers who live alone and do not have a family to help with the farming operation. The exact number is unknown since marital status was not included on the USDA's Census of Agricluture

The next limitation is not all farmers are in agriculture crop farming such as planting and harvesting soybeans, corn, and wheat. There are some farmers who are strictly involved in

animal production such as cattle, sheep, or poultry. There are also farmers who have a mix operation in which they do both crops and livestock. This campaign would have to be adapted to the livestock producers, their unique stressors and their support networks.

There is also the limitation that this type of action campaign will not be effective with all distressed farmers. For example, there may not be adequate social and coping resources available in rural and isolated areas. These resources include, but are not limited to, mental health professionals, health professionals, and cooperative extension agents.

Finally, implementation and reach of a campaign such as this would be limited due to lack of adequate piloting and funding for adequate saturation and sustainment. However, with the new funding opportunity within the 2019 Farm Bill, funding is now available to take advantage of a proposed campaign such as this.

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Appendix A - Logic Model

INTENDED/PLANNED

SITUATION	OUTCOMES* - IMPACT			OUTPUTS			INPUTS
	Long Term	Intermediate	Short Term	Participation	Activities	Products	
What is known: • Farmers have the highest suicide rates compared to other occupations (Riggenberg et al, 2017). • Male farmers are more at risk for depression and less likely to seek help (Hoyt, Conger, Valde, & Weihs, 1997; Roy, Tremblay, & Robertson, 2014).	*What the ultimate impact(s) is/are:* CONDITIONS* • Improve awareness of stress, depression, and suicide among farmers and their families. • Increase coping skills among farmers and their families. • Increase number of farmers and their families accessing resources to help with stress and depression.	*What the intermediate results are:* ACTION* • Accessing resources to cope with stress and depression. • Using positive coping mechanisms when experiencing stress and depression.	*What the short-term results are:* LEARNING* Within 6 months: • Farmers and their families will gain knowledge of the signs/symptoms of stress and depression. • Increase awareness of stress and depression in male farmers • Change farmers' attitudes about seeking help. • Farmers will develop positive coping skills for handling stress.	*Who we reach:* • Adult Male Farmers • Family members of farmers • Community partners	*What we do:* •Develop a survey to be mailed out to farmers and their family members through County and District Extension mailing list. •Develop campaign messages and materials. •Develop and implement campaign. •Conduct focus groups and evaluations.	*What we produce:* •Posters •Flyers •T-shirts •Pens •Bumper stickers •Social media pages and posts.	*What we invest:* • Funding • Focus Groups • Activities

*Outcome statements include indicators

Factors that affect Output and Outcomes:

Theories, premises and/or operating assumptions	Influential factors that impact the organizational environment, context, audiences, staff, etc:
1. Social Ecological Systems Theory 2. Family Stress Process Theory 3. Identity Theory	Competing media stories, weather, economic factors, and other interventions aimed at farmer depression and suicide

Appendix B - Buyers' Card

Front

IN 2017, **544**

KANSANS TOOK THEIR OWN LIFE.

78%

OF SUICIDE VICTIMS IN KANSAS ARE MEN.

U.S. FARMERS ARE

3X

MORE LIKELY TO COMMIT SUICIDE

COURAGE TO ASK: MOTIVATING FARMERS TO SEEK HELP

Contact Your Local Extension Agent for more information
or visit www.couragetoask.com

Back

Manhattan Commission Co.
8424 East Highway 24
Manhattan, KS 66502
Phone # 785-776-4815
Sale Days Fridays

Head	Description	Weight	Price

Appendix C - Sample Budget

Campaign Estimated Budget	Total
Staff	
Director	$75,000
Assistant Director	$50,000
Evaluator	$40,000
Equipment	
1 Laptop	$1500
1 Projector	$500
1 Projector Screen	$200
Travel	
State of Kansas Mileage rate $0.58/mile (5000 miles)	$2900
Hotel Expenses	$5000
Conference Fees	$2500
Outreach Materials & Supplies	
Learning Activity Materials	$10,000
Curriculum Books	$1,000
F. Other Direct Costs	
Graphic Designer	$10,000
Poster Printing: Gloss Laminate (10 per KSRE county/district *67 counties/districts=670 posters)	$50/ea ($33,500)
Other Printed Materials	$15,000
Advertising (PSAs, Radio, Billboards, Shirts, Pens, Bumper Stickers, etc.)	$25,000
Direct Costs Subtotal	**$272,100**
Indirect Costs/Overhead rate of 10%	**$27,210**
Total Estimated Cost	**299,310**