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SPECIAL ISSUE

Mental health first aid training for Extension agents in rural communities

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Abstract

Objective: The goal of the current study is to evaluate the effectiveness of Mental Health First Aid (MHFA) in broadening the network of gatekeepers in rural communities.

Method: Extension agents in Mississippi who completed MHFA training were recruited via email to participate in a 22-item, web-based, quantitative and qualitative, six-month follow-up survey that measured demographic characteristics, which MHFA skills agents used post-training, barriers to skill use, and confidence in ability to use those skills (n = 80).

Results: Over 60% of the agents reported using the skills learned from the MHFA training, and nearly 15% of agents reported having an encounter with someone in crisis since completing the MHFA training. Agent participants reported using the skills learned from the training with farmers, 4-H youth, volunteers, and parents, family members, colleagues, and friends. One agent commented that the training, "has been very helpful in speaking with various people and has increased confidence when encountering someone with mental health challenges."

Conclusion: MHFA trainings appear to increase the confidence and competence of Extension agents as community gatekeepers and may greatly enhance the reach of the mental health network of rural areas by increasing identification and referral of those requiring mental health services.

1 | **INTRODUCTION**

For over the last decade, the suicide rate has increased significantly in the United States, with more than 48,000 individuals lost annually at a rate of 14.8 per 100,000 individuals (Drapeau & McIntosh, 2020). Although Mississippi is currently slightly below the national average with a rate of 14.1 per 100,000, it has not been immune to the increase, as Mississippi has shown a 9% increase in rates of suicide over the last five years (CDC, 2020). Given the significant increase in suicide deaths within Mississippi and across the United States, it is imperative to continue to investigate and understand this phenomenon in order to implement outreach protocols that are effective for decreasing risk for suicide, particularly in at-risk populations. One such population at risk includes rural communities, especially farmers (Milner et al., 2013).

1.1 | Rural communities, farmers, and suicide risk

Rural communities, which are prevalent across Mississippi, are often particularly affected by suicide. In addition to

having higher suicide rates on average (Hirsch, 2006), there are fewer mental health providers, which results in fewer mental health care visits than those who live in urban areas (Kirby et al., 2019). In fact, data from the American Psychological Association suggest that Mississippi has the fewest psychologists per capita of any state, 11.9 per 100,000, which is roughly one-third of the national average. Given the significant lack of mental health resources, rural communities are particularly vulnerable to mental health difficulties and suicide (Cherry et al., 2017). In fact, within these communities, farmers have shown an elevated risk for suicide in particular (Milner et al., 2013). Farmers may demonstrate this increased risk due to rural residents having fewer touch points with mental health care and the overall lack of rural mental health providers. Both of these factors may negatively impact the odds of those at risk being identified and referred to treatment.

Suicide can also carry a higher burden of stigma for rural residents, including farmers, which may serve as an additional barrier to seeking treatment (Kennedy et al., 2018; Monteith et al., 2020). Although gatekeeper programs have their limitations (Holmes et al., 2019), gatekeeper programs may be particularly well-adapted for rural communities. Gatekeeper trainings allow for the training of lay individuals to broaden the safety net for rural communities and help to address the stigma around visiting a mental health professional which can serve as a barrier to seeking out mental health services (Hossain et al., 2009, 2010; Mendenhall et al., 2013). Although gatekeeper programs cannot replace mental healthcare, gatekeeper programs help extend its reach to touch those who would either have otherwise been missed or not have sought out services without support and encouragement. Therefore, these trainings can serve to help facilitate support for individuals within these communities who may not have access to mental health professionals, or who may be less inclined to seek out these resources. One such training is Mental Health First Aid (MHFA; Mental Health First Aid[™] USA©, 2015).

1.2 | Mental health first aid

Mental Health First Aid (MHFA) is an 8-h curriculum that teaches individuals how to better understand, identify, and respond to signs of mental health disorders and crises, such as suicidal thoughts and behaviors, depression, anxiety, psychosis, and substance use disorders (Kitchener & Jorm, 2002). Developed in Australia in 2001 by Betty Kitchener, a mental health consumer and educator, and Tony Jorm, a mental health researcher, MHFA is designed to equip individuals with the skills to help a person who is experiencing or developing a mental health problem or crisis until appropriate professional help is received. MHFA teaches individuals how

to be expert "noticers" not "diagnosers," and how to connect individuals in distress to appropriate professional help. The National Council for Behavioral Health adapted and modified the program for the United States in 2008. The course is summarized using the "ALGEE Action Plan:" assess for risk of suicide or harm, listen non-judgmentally, give reassurance and information, encourage appropriate professional help, and encourage self-help and other support strategies (Mental Health First Aid[™] USA©, 2015). MHFA is wellsupported as an effective curriculum for increasing the following: individuals' knowledge of signs, symptoms, and risk factors of mental illnesses, ability to identify multiple types of professional and self-help resources for individuals who have a mental illness, and confidence in and likelihood to help an individual in distress (Banh et al., 2019; EL-Amin et al., 2018; Morgan et al., 2018). "First aid" level information includes accurate information about mental illness and suicide and available resources and tools.

Given previous research demonstrating the benefits of MHFA, this training is potentially useful to help increase mental health support among rural communities by relying on community members as opposed to only mental health professionals to identify those who are in need of treatment. One potential outreach organization that may be beneficial is the Cooperative Extension, which is an education-based organization that employs several people as outreach individuals into rural communities. Cooperative Extension was established in 1914, expanding knowledge through education with a particular focus on rural communities. Extension agents help farmers and ranchers achieve greater success, assist families with nutrition and home economics, and prepare today's youth to become leaders tomorrow. Considering that Cooperative Extension has been providing education for over a century, Extension agents have built lasting relationships and trust within their communities. Extension agents may help broaden the network of gatekeepers through MHFA. Cooperative Extension is also known for collaborating with psychologists and other mental health professionals to provide mental health education (Halpert & Sharp, 1991; Wiens et al., 2007). Therefore, Mississippi State University Extension Service administrators mandated that all Extension agents in Mississippi be trained in MHFA. A total of four MHFA trainings were hosted across the state specifically for Extension agents.

1.3 | Purpose of the study

Given the lack of mental health professionals and access to mental health care within rural populations along with the elevated rates of suicide among farmers, it is important to investigate the applicability of gatekeeper trainings such as MHFA for decreasing potential risk for suicide among this population. Therefore, the purpose of the current study is to investigate the use of skills trained via MHFA within rural communities among Cooperative Extension agents. Specifically, we predicted that a majority of Extension agents who came across someone who was demonstrating mental health symptoms and/or at risk of suicide would report having utilized the skills they learned, and also that a majority of these agents would report having successfully made a referral for mental health assessment or treatment.

2 | METHOD

2.1 | Research design

This mixed methods study was designed as an evaluation study to assess Extension agents' perceptions and use of MHFA.

2.2 | Participants and procedure

Over a one-month period, 145 Extension agents completed Mental Health First Aid training. Approximately six months following the final training, all Extension agents were requested via email to participate in a follow-up, web-based survey to assess Extension agents' perceptions and use of Mental Health First Aid (n = 145). Five Extension agents did not participate in Mental Health First Aid; therefore, they are not included in this report. Fifty-five percent of Extension agents completed the survey (n = 80). Participation was voluntary and without compensation. The survey was developed in Qualtrics (Provo, UT). Once the survey closed, survey responses were exported to IBM SPSS version 26.0 for univariate analyses.

2.3 | Measures

The researchers developed the 22-item mixed methods survey to measure demographic characteristics, which MHFA skills agents used post-training, barriers to skill use, and confidence in ability to use those skills. *Demographic information* included sex, race, birth year, agent type, and county. *MHFA skill use* was assessed by asking participants to mark all skills used from the training (i.e., assess for risk of suicide or harm, list non-judgmentally, give reassurance and information, encourage appropriate professional help, encourage self-help and other support strategies, approach someone who may be experiencing a mental health crisis, and have a conversation about mental health). *Barriers to skill use* were assessed by asking participants to rank 5 items—time, severity of situation, level of comfort, confidence in ability, and other—1-greatest

TABLE 1 Demographic characteristics of survey respondents

	N (%)
Participants	80 (100)
Gender	
Male	30 (37.5)
Female	50 (62.5)
Race/Ethnicity	
Black or African American	22 (27.5)
Caucasian or White	57 (71.3)
Other	1 (1.2)
Age	
21 to 30 years	6 (7.5)
31 to 40 years	19 (23.8)
41 to 50 years	34 (42.5)
51 to 60 years	18 (22.5)
61 to 70 years	3 (3.8)

to 5-least effective, according to one's ability or interest in using the training skills. Participants were also asked to select barriers that have prevented them from using the skills, such as limited time available during client interactions, lack of resources, and lack of confidence or preparedness. Confidence in ability to use training skills was measured using a 5-point Likert-type scale, 1-strongly disagree to 5-strongly agree. Skills included recognize the signs that someone may be dealing with a mental health problem or crisis, reach out to someone who may be dealing with a mental health problem or crisis, ask a person whether s/he is considering killing her/himself, actively and compassionately listen to someone in distress, offer a distressed person basic "first aid" level information and reassurance about mental health problems, assist a person who may be dealing with a mental health problem or crisis to seek professional help, assist a person who may be dealing with a mental health problem or crisis to connect with community, peer, and personal supports, be aware of my own views and feelings about mental health problems and disorders, and recognize and connect misconceptions about mental health and mental illness as I encounter them. Open-ended questions that asked participants to share an experience in which they utilized MHFA skills allowed for qualitative data to be collected.

3 | RESULTS

3.1 | **Demographics**

As demonstrated in Table 1, most participants identified as white, female, and 41 to 50 years of age. Participants worked as a combination of Agricultural and Natural Resources, Community Resource Development, 4H, Family and Consumer Science, County Coordinator, and other Extension agent positions (see Table 1).

3.2 | Use of mental health first aid skills

Table 2 demonstrates the use of the MHFA training skills. Fifteen percent of agents who completed the survey reported encountering someone in crisis since completing MHFA. Participants also reported assessing for risk of suicide or harm (n = 12, 15%), listening non-judgmentally (n = 48, 60%), and having a conversation about mental health (n = 32, 40%). Agents reported using the training skills in both work-related and non-work-related settings. Fifteen percent of agents used MHFA skills with farmers and 4H youth and parents. The majority of agents reported

TABLE 2 Use of mental health first aid (MHFA) skills

	N (%)
Encountered anyone in crisis since completing MHFA	
Yes	12 (15)
No	68 (85)
Skills used from MHFA training	
Assess for risk of suicide or harm	12 (15)
Listen non-judgmentally	48 (60)
Give reassurance and information	21 (26.3)
Encourage appropriate professional help	14 (17.5)
Encourage self-help and other support strategies	14 (17.5)
Approach someone who may be experiencing a mental health crisis	6 (7.5)
Have a conversation about mental health	32 (40)
Setting where MHFA skills were used	
Work-related interactions	24 (30)
Non-work-related interactions	43 (53.8)
Not used skills	30 (37.5)
Groups in which MHFA skills were used	
Community members	29 (36.3)
4H volunteers	9 (11.3)
4H youth	12 (15)
4H parents	12 (15)
Farmers	12 (15)
Family members	38 (47.5)
Barriers preventing use of MHFA skills	
Limited time available during client interactions	19 (23.8)
Clients not willing to discuss mental health-related topics	26 (32.5)
Lack of resources	4 (5)
Lack of confidence or preparedness	17 (21.3)
Other	14 (17.5)

using the training skills with community and their own family members. Agents reported time and clients not wanting to have a discussion about mental health as two key barriers that prevented them from using MHFA skills (see Table 2).

Table 3 depicts the reported confidence levels of participants in using MHFA skills approximately six months following their MHFA training. Approximately 70% of the participants reported an increase in confidence to recognize signs that someone may be dealing with a mental health problem or crisis, actively and compassionately listen to someone in distress, assist a person who may be dealing with a mental health problem or crisis to connect with community, peer, and personal supports, and be aware of my own views and feelings about mental health problems and disorders. Nearly 65% of participants reported an increase in confidence to offer a distressed person basic "first aid" level information and reassurance about mental health problems (see Table 3). "First aid" level information includes accurate information about mental illness and suicide and available resources and tools.

3.3 | Extension agents' perceptions and use of mental health first aid training skills

Mental Health First Aid is perceived as an effective and valuable training among these Extension agents. As one agent commented, "I think this was a beneficial training, but I wished I could have had it earlier because I needed it before when I had a client to come into my office and tell me he was 'having thoughts of hurting himself and others'." This statement confirms that community members (clients) feel comfortable sharing with their local Extension agents about mental health crises and that MHFA prepares Extension agents to navigate those conversations when a client approaches them. One agent commented that the training, "has been very helpful in speaking with various people and has increased confidence when encountering someone with mental health challenges." Perhaps as perceived by the Extension agent participants, MHFA is an effective training needed among Extension agents. Another agent stated that the training, "has made me more aware of my actions and what others might be dealing with. It has given me the tools to be proactive in situation and not reactive." Nearly all agents provided open-ended comments. The only negative remark received from agents was about the length of the training being too long. As perceived by Extension agents, MHFA equips individuals to notice, approach, and have a conversation with those in distress.

4 | DISCUSSION

The present study aimed to examine the impact of MHFA training on university Extension agents across Mississippi.

TABLE 3 Confidence in use of mental health first aid skills

	Agreed N (%)
s a result of this training, I feel more confident that I can	
Recognize the signs that someone may be dealing with a mental health problem or crisis	56 (70.1)
Reach out to someone who may be dealing with a mental health problem or crisis	50 (62.6)
Ask a person whether s/he is considering killing her/himself	28 (35.1)
Actively and compassionately listen to someone in distress	66 (82.6)
Offer a distressed person basic "first aid" level information and reassurance about mental health problems	51 (63.8)
Assist a person who may be dealing with a mental health problem or crisis to seek professional help	55 (68.8)
Assist a person who may be dealing with a mental health problem or crisis to connect with community, peer, and personal supports	58 (72.6)
Be aware of my own views and feelings about mental health problems and disorders	56 (70.1)
Recognize and connect misconceptions about mental health and mental illness as I encounter them	48 (60.1)

A sample of 80 agents completed questionnaires roughly six months following being trained. A sizable proportion of Extension agents (15%) encountered someone in crisis over the follow-up period, suggesting that Extension agents are likely to encounter mental health emergencies, and thus are an ideal group to provide training. Impressively, all of these agents reported assessing for suicide or self-harm risk, which illustrates that the training is leading to the desired actions in real-world practice. In addition, despite many not having encountered a mental health crisis, a majority endorsed listening without judgment, and a sizable percentage reported having a conversation about mental health issues. Thus, the skills learned in MHFA are being used in practice even outside of emergency situations and are likely increasing the odds of identifying those at risk of suicide so they may be referred for further assessment and treatment. Common barriers reported were a lack of time to engage in the skills, client unwillingness to discuss mental health problems, and a lack of confidence with the skills. Indeed, roughly 70% of participants reported being confident in using Mental Health First Aid. The literature would benefit from future studies examining whether additional training, including follow-up trainings, would result in improved confidence in using Mental Health First Aid and increased engagement in using the skills.

These findings have notable implications for suicide prevention in rural communities. Extension agents are among the most trusted people in these communities, as they commonly grew up in the communities in which they serve, and they are among the first that are consulted when there is a problem. Thus, Extension agents are ideal for extending the reach of the mental health network because Extension agents can provide rural community members with trusted support in connecting with a mental health professional through their vast networks and by providing valued encouragement to engage in help-seeking behavior. Further, we found that Extension agents are confident in their skills following MHFA training, and all of those who encountered a crisis were able to use the skills to assess for suicide and self-harm risk. This is a notable finding, as having these agents actively involved as gatekeepers may greatly enhance the identification, assessment, and referral of those at risk in rural communities (Kirby et al., 2019).

Considering feedback from Extension agents and the rise of mental health challenges in rural communities, MHFA may be an effective resource for helping to address the mental health concerns across the United States through increasing the reach of the mental healthcare network.

These findings aligned with previous literature suggesting that Mental Health First Aid can be effective broadening the safety net for rural communities as well as helping to address the stigma that may be present with visiting a mental health professional (Hossain et al., 2009, 2010; Mendenhall et al., 2013; Shanahan et al., 2019). These findings suggest that Mental Health First Aid served as a tool to help facilitate support for individuals within these communities who may not have access to mental health professionals, or who may be less inclined to seek out these resources. Agents need to be equipped to have difficult conversations about mental health with clients and connect them to appropriate help. MHFA is effective in teaching and improving the confidence of agents to notice signs and symptoms of suicide and have conversations around mental health with their clients; this may be applicable with similar groups, such as church or community groups. Although agents are not mental health professionals, they can be trained to be "expert noticers" and bridges to care. Training agents and similar groups in MHFA may increase the mental health care network as well as help overcome stigma for high-risk populations, such as agricultural producers (Kennedy et al., 2018; Monteith et al., 2020).

Overall, there is a great need to train non-mental health professionals to recognize the signs and symptoms of mental health difficulties, such as suicidal thoughts and behaviors. These results demonstrate that when you train non-mental health professionals, such as Extension agents, to recognize those signs and symptoms, 15% of participants reported utilizing these skills. Therefore, individuals who may not have been referred otherwise have been referred to appropriate mental health professionals, which helps support the need to continue gatekeeper trainings and equipping non-mental health professionals with the skills to notice and connect individuals to appropriate professional help. Although some research has demonstrated that the gatekeeper trainings are not beneficial and helpful, notably a recent review showed that the trainings have a minimal effect on changing behavioral intention or actions. Further, the current study suggests that gatekeeper trainings are worthwhile and can lead those trained to engage in the targeted behaviors (Holmes et al., 2019). Despite the fact that not as many participants increased their confidence to ask a person whether s/he is having suicidal thoughts, the participants' confidence in providing basic "first aid" level care to individuals experiencing mental health difficulties did increase.

This study contributes to the literature by examining the impact of training a trusted and committed group of professionals in rural communities as gatekeepers. Extension Agents stand in key positions to both help identify those at risk of suicide and provide them with support and information around mental health. Early results suggest that 15% of respondents reported using Mental Health First Aid skills with farmers. Farmers are a unique population who are often overlooked by society (Allan et al., 2011). Therefore, these early results highlight the importance of reaching unique populations such as rural and agricultural communities.

4.1 | Limitations and future directions

There are a few notable limitations to the present study that warrant discussion. First, although the sample represents a majority of Extension agents who were invited to participate, 45% of those invited chose not to participate. It is possible that those who had a better experience with the Mental Health First Aid training were more likely to participate in the study. Despite this limitation, our response rate is still very high for a survey-based study, and still represents a majority of those who were trained. Second, our study exclusively took place in Mississippi with Extension agents employed by a major land-grant university and thus the findings may not generalize to other rural communities or other types of agents. The literature would benefit from replication studies in other states with land-grant universities and similar, large rural populations. Third, this study is based on self-report. Self-report can be subject to biases which is why additional research measuring actual behaviors and whether referrals are made is so important to build upon the literature base started here. Fourth, our study relied upon retrospective self-report and did not track the use of MHFA skills. That said, the literature would be enhanced through future studies tracking the use of MHFA over time. For example, the literature would benefit from future studies examining whether additional training, including followup trainings, would result in improved confidence in using Mental Health First Aid and increased engagement in using the skills. Lastly, agents were not asked to report in the survey how often they made referrals to mental health services, but they did report confidence and ability to engage in key MHFA skills, including knowing what resources are available in their respective counties to refer an individual. Therefore, implications demonstrate both the value of these trainings in potentially increasing the number of rural community members connected with services and in providing direction for future research which can focus on determining the relationship between MHFA trainings for Extension agents and any increases in referrals to mental health providers in rural communities.

5 | CONCLUSION

In sum, the present study found that MHFA training of Extension agents results in a high proportion of those agents feeling confident in their ability to use the skills, a majority using at least some of the skills taught, and in the present study, all Extension agents who endorsed encountering a crisis indicated that they assessed for risk of suicide based on their training experience. Thus, these trainings appear to increase the confidence and competence of Extension agents as community gatekeepers. Mental Health First Aid may increase the number of trusted gatekeepers in rural communities prepared to provide support, information, and resources to farmers and agricultural workers at risk for suicide.

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