

**A Helpful, Trusted Resource: Extension's Role in the Rural Mental Health Crisis**

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## Introduction and Theoretical Framework

In rural, agrarian communities, depression, anxiety and other mental illnesses slowly, and often silently, claim lives at a rate of almost two times that of the general working-age population (Peterson et al., 2018). Research has shown that a variable mediating poor mental health and suicide risk is positive help-seeking behavior and higher levels of social capital (Magson et al., 2014). This study aimed to address research priority six of the American Association for Agricultural Education (AAAE), which focuses on building resilient communities—an outcome which hinges on a community's ability to meet the basic needs of its population (Roberts et al., 2016). Two basic needs of any vibrant, resilient community are the health and human capital of community members (Roberts et al., 2016). Addressing these facets of mental health in agricultural communities, this study sought to understand the role of Extension in addressing the rural mental health crises. Specifically, we aimed to identify how likely agricultural producers would be to seek help in times of distress, their level of social capital and who in their social groups they would be most likely to turn to for help. Using results from this study, we aimed to develop recommendations for Extension education and programming to increase awareness for rural mental health and improve health behaviors in producers—action items deemed by AAAE's National Research Agenda as critical infrastructure for resilient communities (Roberts et al., 2016). We used the theory of reasoned action (TRA)—a widely accepted framework within public health research—as the theoretical framework for this study (Fishbein & Azjen, 1975). This theory states that intention plays a key, influential role in an individual's likelihood of engaging in certain behaviors.

## Methodology

We adhered to Dillman et al.'s (2014) tailored design method for survey research design to conduct this descriptive, quantitative study. We purposively sampled agricultural producers, between the ages of 18 and 89 in predominately rural-designated counties in Texas, using databases provided by Texas A&M AgriLife Extension Service. We operationally defined “agricultural producers” by using verbiage in the Code of Federal Regulations (U.S. Government Publishing Office [GPO], 2011). In total, we sent recruitment emails to 5,045 potential participants. Of those, we achieved a sample size of 429 participant responses, equating to a response rate of 8.50%. We deferred to Linder et al. (2001) and compared early to late respondents to control for nonresponse error. We found no statistically significant differences in their responses (Linder et al., 2001). The cross-sectional survey developed for this study measured five variables, using four adapted, pre-existing scales, and a demographic construct. This manuscript focuses primarily on the descriptive results from two of those constructs—the General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005) and the Personal Social Capital Scale (PSCS; Chen et al., 2009). Through an ex-post facto analysis, we were able to deem the PSCS ( $\alpha = .94$ ) and GHSQ ( $\alpha = .89$ ) reliable measures. We analyzed data using descriptive statistics, calculating grand means for each of the constructs and individual items, to determine levels of social capital, likelihood of help-seeking and the sources from which agricultural producers would be likely to seek help.

## Results and Findings

To measure social capital, we calculated grand means for responses on the PSCS and found that agricultural producers reported scores which indicated they had relatively high social capital. Producers scored social contacts on routine interaction, trustworthiness, dependability and possession of resources, where 1 represented 'all' and 5 represented 'none.' The calculated mean suggested 'most' of their connections contributed to their social capital in these ways. The GHSQ measured help-seeking for personal or emotional problems and for suicide ideation, including the sources from which agricultural producers might be likely to help. We calculated means to identify top help-seeking sources for personal or emotional problems and for suicide ideation. The top source identified by the sample as being the most likely to be sought out when experiencing personal or emotional problems was intimate partner ( $M = 5.50$ ,  $SD = 1.85$ ). The top source for suicide ideation reported by respondents was again, intimate partner ( $M = 5.06$ ,  $SD = 2.26$ ). Within the context of Extension, agricultural producers reported that they would be 'unlikely' to seek help directly from Extension professionals for personal or emotional problems. Additionally, producers reported that of all sources, they would be least likely to seek direct help from county Extension agents ( $M = 2.18$ ,  $SD = 1.61$ ) and specialists ( $M = 2.07$ ,  $SD = 1.54$ ) if they were experiencing thoughts of suicide. However, when scored on the PSCS, agricultural producers recognized Extension agents ( $M = 2.11$ ,  $SD = 1.11$ ) and specialists ( $M = 2.36$ ,  $SD = 1.23$ ) as sources that they can trust and ones they could rely on to help upon request.

## Conclusions and Recommendations

Texas producers noted that though they would not turn to Extension agents or specialists directly, their recognition of Extension as a helpful and trusted source, suggests that AgriLife Extension may be viewed as a credible, indirect resource for struggling producers (Catty et al., 2007). We concluded that rather than placing Extension in crisis response roles, the focus should be on resource provision and service activation. Results indicate that one way to achieve this would be through the producers' social capital. From responses to the PSCS, we concluded that Texas agricultural producers have a relatively healthy social capital, driven heavily by family or close loved ones. This is beneficial with regard to mental health intervention, as higher levels of social capital have been found to correlate with improved mental health (Magson et al., 2014). With this in mind, we recommend intervention efforts focus on enhancing social capital and sustaining support networks already in existence. We recommend AgriLife Extension provide customized intervention education and referral resources, to spouses and immediate family members of agricultural producers. Results indicate these individuals will likely find themselves on the frontlines of offering support to someone in crisis or otherwise struggling with their mental health. In rural areas, it is not likely these individuals have not been previously trained to do so. We recommend these intimate partners be provided training to facilitate interventions, but also be given resources to assist them and alleviate burdens they may feel as a primary supporter. Given the overlap of social capital in rural Texas areas, we also see need for community-level programming. Future research should be conducted to better understand Texas agricultural producers' perceived barriers and motivators for help-seeking, preferred mental health resources and appropriate communication channels for relaying related information and resources. We recommend similar studies be conducted in other states to identify ways in which other state Extension services can support the mental health of their agricultural producers.

## References

- Catty, J., Winfield, H., & Clement, S. (2007). The therapeutic relationship in secondary mental health care: A conceptual review of measures. *Acta Psychiatrica Scandinavica*, *116*(4), 238–252. <https://doi.org/10.1111/j.1600-0447.2007.01070.x>
- Chen, X., Stanton, B., Gong, J., Fang, X., & Li, X. (2009). Personal social capital scale: An instrument for health and behavioral research. *Health Education Research*, *24*(2), 309–317. <https://doi.org/10.1093/her/cyn020>
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed). John Wiley & Sons, Inc.
- Fishbein, M & Azjen, I. (1975). *Belief, attitude, intention and behavior*. Addison-Wesley.
- Government Publishing Office. (2011). *7 CFR À 4284.902 – Definitions*. <https://www.govinfo.gov/content/pkg/CFR-2012-title7-vol15/pdf/CFR-2012-title7-vol15-sec4284-902.pdf>
- Linder, J., Murphy, T., & Briers, G. (2001). Handling nonresponse in social science Research. *Journal of Agricultural Education*, *42*(4). <https://doi.org/10.5032/jjae.2001.04043>
- Magson, N. R., Craven, R. G., & Bodkin-Andrews, G. H. (2014). Measuring social capital: The development of the Social Capital and Cohesion Scale and the associations between social capital and mental health. *Australian Journal of Educational & Developmental Psychology*, *14*, 202–216. <https://www.newcastle.edu.au/ajedp>
- Peterson, C., Stone, D., Marsh, S., Schumacher, P., Tiesman, H., McIntosh, W., Lokey, C. N., Trudeau, A. T., Bartholow, B., & Luo, F. (2018). Suicide rates by major occupational group—17 states, 2012 and 2015. *Morbidity and Mortality Weekly Report*, *67*(5), 1253–1260. <http://dx.doi.org/10.15585/mmwr.mm6745a1>
- Roberts, T. G., Harder, A., & Brashears, M. T. (Eds). (2016). *American Association for Agricultural Education national research agenda: 2016-2020*. Department of Agricultural Education and Communication. [http://aaaeonline.org/resources/Documents/AAAE\\_National\\_Research\\_Agenda\\_2016-2020.pdf](http://aaaeonline.org/resources/Documents/AAAE_National_Research_Agenda_2016-2020.pdf)
- Wilson, C., Deane, F. P., Ciarrochi, J. V., & Rickwood, D. (2005). Measuring help seeking intentions: Properties of the General Help Seeking Questionnaire. *Canadian Journal of Counseling*, *39*(1), 15–28. <https://pdfs.semanticscholar.org/d31b/e74288542a115e6cc61cd33b8367a5ed1fc6.pdf>