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BRIEF REPORT



Preferred Sources and Senders of Mental Health Information Among FFA Youth Residing on Farms

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ABSTRACT

Introduction: Agricultural youth may be at greater risk for poor mental health than their non-farm counterparts. While mental health resources exist for agricultural populations, they are typically adult-focused and not tailored to the needs of youth. Additionally, the preferred sources and modes for mental health information among agricultural youth are not well known. The objective of this pilot study is to identify the sources of mental health information of most interest among agricultural youth and the methods of which they prefer mental health information.

Methods: A cross-sectional survey using a short questionnaire was administered to youth (ages 14–18) attending the National FFA Convention. A convenience sample of convention attendees completed a paper-based or online survey measuring demographics, preferred mental health information sources, and mental health information delivery modes. Descriptive statistics and independent samples t-tests were used to examine the research question.

Results: Of 386 youth surveyed (mean age = 16.13, SD = 1.15), nearly half (46.89%) reported living on a farm or ranch at least 50% of the time. Compared to their non-farm-residing peers, farm-residing youth were significantly less interested in receiving mental health information from medical doctors ($p = .019$) and mental health specialists ($p < .001$). Among farm-residing youth, females showed significantly greater interest than males in receiving information from teachers ($p = .040$), sport coaches ($p = .034$), spiritual leaders ($p = .039$), medical doctors ($p = .009$), and mental health specialists ($p = .005$).

Discussion: Results from this study suggest youth who live on farms might be more interested in receiving mental health information from youth leaders and spiritual coaches than individuals in more traditional medical roles. Additional research should examine whether this is due to preferences or barriers to accessing more traditional mental health services in agricultural communities. These findings can inform the development of mental health programming for agricultural youth.

KEYWORDS

Agriculture; mental health; resources; youth

Introduction

The stress experience and mental health status of farmers and ranchers has been a priority among researchers, agricultural safety and health professionals, and Cooperative Extension Services in the US.^{1–4} Research findings have underscored the need for agricultural-specific programs and resources, which have since been developed and evaluated among various agricultural populations including farmers and ranchers, and farmworkers.^{5–7} In response, intervention and educational programs for agricultural producers and rural community members have been implemented, telephone help-lines and hotlines have been expanded, and opportunities for low or no-cost behavioral health services have been provided.^{5,8–10}

However, youth residing on farms are also at increased risk of poor mental health. It is estimated

that agricultural youth experience symptoms of anxiety and depression more frequently than the adolescent general population in the US.¹¹ Despite this, agricultural youth-focused mental health services remain limited compared to those available for agricultural adults.^{5,7,9,12} There may be opportunities to deliver mental health programming to agricultural youth through existing youth-centered organizations in the US, such as the National FFA Organization, a career and technical student organization prevalent in rural, suburban, and urban high schools and middle schools. The organization emphasizes career, personal, and leadership development under an agricultural umbrella, and may provide opportunity for mental health education. However, agricultural youths' interest in receiving mental health information from these organizations is unknown.

Identifying preferred sources and delivery methods of mental health information may improve uptake among agricultural youth. While similar preferences have been studied in adults engaged in agriculture,^{13,14} youth perspectives are largely unexplored. The objectives of this pilot study were to identify the sources of mental health information agricultural youth are most interested in and the modes of mental health information of most interest among agricultural youth.

Methods & materials

Ethics approval was obtained by the Institutional Review Board at the University of Illinois Urbana-Champaign.

Methods

Adolescents attending the National FFA Convention were invited to complete a brief survey at a farm safety booth. The National FFA convention, hosted annually by the National FFA Organization, attracts over 60,000 high school students, advisors, and agricultural educators from across the United States. While FFA is rooted in agricultural education, its membership includes students from rural, suburban, and urban backgrounds who pursue a range of career and extracurricular interests, including science, education, business, and government. Attendance at the convention often reflects a subset of highly engaged and motivated youth from high school chapters across the U.S. and most student travel to the convention is subsidized by schools and donors to reduce financial barriers to participating.

Survey participants were recruited from a convenience sample of convention attendees at the National FFA Conference Expo. Conference attendees that were visiting safety and health-related booths were asked if they were interested in participating in a short survey. Participants could scan a QR code to complete the survey online or fill out a paper version and submit it in a sealed box. Informed consent was obtained prior to completing the survey, the survey took less than 5 min to complete, and all participants received a prize bag valued at approximately \$5.

Measures

The questionnaire included the following demographic and agricultural questions (and *response options*): What is your age? (*13 or less, 14, 15, 16, 17, 18 or older*); What is your gender? (*male/man, female/woman, non-binary/non-conforming*), Are you Hispanic/Latino? (*yes, no*), What is your race? (*White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, other*), Do you reside on a farm or ranch at least 50% of the time? (*yes, no*), Have you received educational information about mental health in the past year? (*yes, no*). Participants who indicated they were 13 or younger were directed to the end of the survey and did not complete additional items.

Participants rated their interest in receiving mental health information from eight different sources typically present in high school settings and rural communities: parent/guardian, teacher/educator, FFA advisor, 4-H leader (the director of a 4-H club. 4-H is a youth development organization prevalent in rural and urban communities for youth aged 8–18), sport coach, spiritual leader (priest, pastor), medical doctor, and mental health specialist. Responses were recorded on a 3-point Likert scale (0 = Not at all interested, 1 = Somewhat interested, 2 = Very interested). A 3-point scale was selected to reduce cognitive burden for adolescent respondents and to keep the overall survey length short. We intentionally did not offer a neutral midpoint to encourage participants to indicate a direction of preference; this “forced choice” approach avoids “escapism” in responses on socially sensitive topics¹⁵ improving validity to obtain actionable insights.¹⁶ Although Likert-type responses are technically ordinal, methodological research demonstrates that when categories are symmetric and evenly spaced – as in this 3-point scale – aggregated responses can approximate interval properties. This approximation is further supported by the robustness of parametric tests to violations of normality and interval assumptions, particularly with a sufficient number of categories and adequate sample sizes^{17–20} Accordingly, mean scores were generated for each source, where higher scores indicate greater preference for receiving mental health information from that source, allowing for the application of more powerful and interpretable parametric analyses.

Participants were also asked to indicate how they preferred to receive mental health information by checking the box next to various delivery modes. The delivery modes included: online, alone; online, in person (with friends or peers); in person, alone; in-person, in a group (with friends or peers); videos (YouTube, etc.); social media (TikTok, Instagram, etc.).

At each prompt, mental health information was defined as: *Mental health information includes information about mental health conditions, signs and symptoms, mental health management, stress and coping, etc.*

The online and paper questionnaires were identical. Consent was implied if FFA members completed the survey (on paper or online) after reading the informed consent page. Information included the objectives of the study, the types of questions that would be asked, that all questions are voluntary, that the responses will never be tied to their identity, as well as a list national youth mental health resources. The informed consent page and questionnaire were read, and pilot tested by three high-school aged students (aged 13, 14, and 14) for comprehension and clarity.

Data analysis

All analyses were conducted using STATA v.18.0. Descriptive statistics (means, standard deviations,

frequencies, and percentages) were calculated for participant demographics, farm residency status, and prior exposure to mental health information. Farm residency was used to categorize participants as either farm-residing or non-farm-residing.

To examine differences in source preferences, independent samples t-tests were used to compare farm-residing and non-farm-residing youth. Subsequent gender-based analyses were restricted to farm-residing youth only. Due to the small number of participants identifying as non-binary, gender comparisons were limited to male and female respondents to ensure analytic stability. Normality was assessed using visual methods, descriptive statistics, and the Shapiro – Wilk test. Homogeneity of variance was evaluated using Levene’s test. Student’s t-test was applied based on Levene’s results. Statistical significance was set at $p < .05$. Internal consistency of the eight scored source-preference items was assessed using Cronbach’s alpha.

Results

The full sample included 386 youth aged 14–18 years (mean = 16.13, $SD = 1.15$) who attended the National FFA Convention. The majority identified as female (71.99%) and white (92.19%). About 46.89% of respondents reported living on a farm or ranch at least 50% of the time and were categorized as *farm-residing youth* for the purposes of subgroup analysis (Table 1).

Table 1. Demographic characteristics of the sample.

Demographic		Mean (SD) or N (%)
Age	14–18 years old	16.13 (1.15)
	14 years old	34 (9.52%)
	15 years old	74 (20.73%)
	16 years old	99 (27.73%)
	17 years old	112 (31.37%)
	18 years old	38 (10.64%)
Gender	Man/male	99 (25.77%)
	Woman/female	257 (71.99%)
	Non-binary, gender fluid	8 (2.24%)
Race	American Indian or Alaska Native	3 (0.78%)
	Asian	4 (1.04%)
	Black or African American	6 (1.56%)
	Native Hawaiian or Pacific Islander	0 (0%)
	White	354 (92.19%)
	Other	17 (4.43%)
Farm resident (at least 50% of the time)	No	188 (53.11%)
	Yes	166 (46.89%)
Received information about mental health in past year	No	81 (22.88)
	Yes	273 (77.12%)

Note: The total number of respondents varies by characteristic due to missing data.

Table 2. Differences in preferred sources of mental health information by farm residency.

Source	Farm Mean (SD)	Non-Farm Mean (SD)	p-value	Cohen's d
Parent/guardian	0.95 (0.73)	0.94 (0.67)	.93	−0.01
Teacher/educator	0.84 (0.69)	0.93 (0.66)	.21	0.14
FFA advisor	1.06 (0.70)	1.16 (0.71)	.22	0.14
4-H leader	0.70 (0.69)	0.61 (0.71)	.26	−0.13
Sport coach	0.74 (0.70)	0.86 (0.74)	.13	0.17
Spiritual leader (pastor, priest)	0.82 (0.77)	0.92 (0.80)	.24	0.13
Medical doctor	0.97 (0.77)	1.18 (0.77)	.02*	0.26
Mental health specialist	1.05 (0.79)	1.39 (0.71)	<.001**	0.45

* $p < .05$ ** $p < .01$.

Table 3. Gender differences in preferred sources of mental health information among farm youth.

Source	Males Mean (SD)	Females Mean (SD)	p-value	Cohen's d
Parent/guardian	0.79 (0.72)	1.01 (0.73)	.08	−0.31
Teacher/educator	0.64 (0.64)	0.91 (0.69)	.04*	−0.39
FFA advisor	0.92 (0.70)	1.12 (0.69)	.13	−0.29
4-H leader	0.55 (0.69)	0.76 (0.68)	.11	−0.30
Sport coach	0.54 (0.68)	0.81 (0.69)	.03*	−0.40
Spiritual leader (pastor, priest)	0.61 (0.75)	0.90 (0.76)	.04*	−0.39
Medical doctor	0.69 (0.73)	1.06 (0.76)	.01**	−0.49
Mental health specialist	0.73 (0.77)	1.15 (0.77)	.004**	−0.55

* $p < .05$ ** $p < .01$.

Internal consistency for the eight scored source-preference items was good (Cronbach's $\alpha = 0.84$), exceeding the 0.80 benchmark for research instruments.²¹ Higher scores indicate greater interest in receiving mental health information from that source.

Assumptions for parametric testing were satisfied (Shapiro – Wilk $p > .05$; Levene's $p > .05$). Comparative analyses revealed significant differences between farm-residing and non-farm-residing youth

(Table 2). Farm-residing youth expressed less interest in receiving mental health information from medical doctors ($p = .019$) and mental health specialists ($p < .001$) compared to their non-farm-residing peers. Effect sizes (Cohen's d) ranged from negligible ($d \approx 0$) to moderate ($d \approx 0.45$), with the largest observed for willingness to receive information from mental-health specialists.

Among farm-residing youth ($n = 166$), females expressed significantly greater interest than males in receiving mental health information from teachers/educators ($p = .0402$), sport coaches ($p = .0341$), spiritual leaders ($p = .0389$), medical doctors ($p = .009$), and mental health specialists ($p = .0046$) (Table 3). Although females reported higher mean scores than males for all other sources, these differences did not reach statistical significance. Effect sizes (Cohen's d) ranged from small ($d = -0.29$ to -0.40) to medium ($d = -0.49$ to -0.55), with the largest differences observed for medical doctors and mental health specialists.

Among farm-residing youth, private settings were the most preferred modes of receiving mental health information. Specifically, 43.4% preferred receiving information in person, alone, and 36.1% preferred accessing it online, alone (Table 4). Only 10.8% of farm-residing youth selected videos such as YouTube.

Table 4. Preferred mode of mental health information among FFA youth.

Description	Farm-residing Youth (n=166)		Non-farm-residing Youth (n=188)	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Online, alone	60	36.1%	81	43.1%
Online, in a group (with friends or peers)	29	17.5%	41	21.8%
In person, alone	72	43.4%	88	46.8%
In person, in a group (with friends or peers)	53	31.9%	62	33.0%
Videos (YouTube)	18	10.8%	26	13.8%
Social media (TikTok, Instagram)	43	25.9%	51	27.1%

Note: Total number of selections exceeds the total number of respondents due to the "select all that apply" format of the survey question.

Discussion

This pilot study provides preliminary insights into the preferred sources and delivery modes of mental health information among farm-residing youth – defined as those living on a farm or ranch at least 50% of the time as well as a profile of youth based on their preferences. While the overall sample was recruited from a national youth agricultural event, only 46.89% of respondents identified as living on a farm, underscoring the diversity within youth agricultural programs such as FFA. Subgroup analysis revealed meaningful differences in preferences for mental health information that can guide the development of a larger, more representative survey of the full National FFA membership.

Farm-residing youth reported significantly lower interest in receiving mental health information from medical doctors and mental health specialists compared to their non-farm-residing peers. This is a notable finding, particularly given that these professional sources are often regarded as the most credible and effective for mental health support among youth broadly.^{22,23} These professionals are often viewed as welcoming, trustworthy, useful, and reliable sources of information,^{24,25} which likely explains their strong appeal. These results may reflect unique barriers faced by farm-residing adolescents, such as geographic isolation, limited access to healthcare services, or cultural factors such as stigma and self-reliance that can shape attitudes toward professional mental health support.^{26–28} Prior research has highlighted that rural populations, including farm families, experience greater challenges in accessing behavioral healthcare²⁹ and may rely more heavily on, and even prefer, informal networks or self-management strategies.^{30,31}

Gender differences among farm-residing youth further illuminate the variation in how mental health information is perceived. Female farm youth consistently expressed greater interest than their male counterparts in receiving mental health information across multiple sources, with statistically significant differences for teachers/educators, sport coaches, spiritual leaders, medical doctors, and mental health specialists. These findings are consistent with established literature showing that adolescent girls are more likely than boys to seek help and engage with mental health services,

possibly due to lower stigma and stoicism, as well as greater emotional openness.^{32,33} While interest among young men was lower across the board, the role of coaches and FFA advisors may represent promising avenues for engagement, especially if paired with mental health literacy training for these figures.

Importantly, farm-residing youth demonstrated the most preference for private, self-directed modes of receiving mental health information. The most endorsed methods were in-person, alone (43.4%) and online, alone (36.1%), though neither were of overwhelming interest and of interest to less than half of farm-residing youth. Further research should examine agricultural youths' attitudes, barriers, and potential opportunities towards mental health information to further inform the most appropriate delivery methods.

This pilot study has several limitations. The sample was drawn from attendees at the National FFA Convention, a convenience sample that is not generalizable to the larger National FFA membership or agricultural youth population. Importantly, FFA members that attend the National FFA Convention may differ from FFA members that do not attend the convention, in ways that may impact mental health and/or preferences for mental health information. In addition, self-reported data are subject to recall and social desirability biases, particularly for sensitive topics such as mental health. The study's cross-sectional design also limits causal interpretation. Furthermore, although the preference items were measured on a 3-point Likert-type scale, and such data are technically ordinal, we analyzed them using means and independent-samples t-tests. Methodological reviews^{17,18} and recent simulation studies³⁴ indicate that parametric tests are robust to the ordinal nature of Likert-type data when categories are evenly spaced and sample sizes are large and balanced, as in our study. Nevertheless, readers should consider the ordinal scaling when interpreting these findings. Finally, both the methodological approach and survey design may introduce additional bias. Finally, while the consent materials and survey were pilot tested among youth (aged 12–14) for comprehension and clarity, we cannot assume the information was clear to all youth that attempted to participate, which would have led to

recruitment bias. Despite these limitations, the findings offer novel insight into the specific needs and preferences of agricultural youth and present actionable pathways to improving mental health outreach for this underserved group.

Despite these limitations, this pilot offers valuable, preliminary insight into the preferences of farm residing youth associated with FFA. These findings should be interpreted as an initial step toward understanding mental health information needs in this population, and they underscore the importance of conducting a larger, more rigorous survey of the full National FFA membership to validate and expand upon these results.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

- Kohlbeck S, Quinn K, DeRoos-Cassini T, Hargarten S, Nelson D, Cassidy L. A social ecological analysis of farmer stresses and supports in Wisconsin. *SSM - Qualitative Res Health*. 2023;3:100248. doi: [10.1016/j.ssmqr.2023.100248](https://doi.org/10.1016/j.ssmqr.2023.100248).
- Nichols CE, Davis J. The women farmer stress inventory: examining women farmer stress in the United States Corn Belt. *J Rural Health*. 2023;40(3):457–466. doi: [10.1111/jrh.12808](https://doi.org/10.1111/jrh.12808).
- Montgomery A, Basey S, Baucom L, Scoggins C. Stress and suicidal ideation among first-generation farmers: a cross-sectional study with 1,288 farmers in Georgia. *J Rural Health*. 2024;40(1):75–86. doi: [10.1111/jrh.12764](https://doi.org/10.1111/jrh.12764).
- Rudolphi JM, Cuthbertson C, Kaur A, Sarol J. A comparison between farm-related stress, mental health, and social support between men and women farmers. *Int J Environ Res Public Health*. 2024;21(6):684. doi: [10.3390/ijerph21060684](https://doi.org/10.3390/ijerph21060684).
- Iwinski SJ, Cuthbertson CA, Burcham CA, Belzer KL, Rudolphi JM. Evaluating mental health first aid for Illinois agricultural communities. *Health Promot Pract*. 2024;26(3):422–426. doi: [10.1177/15248399241259687](https://doi.org/10.1177/15248399241259687).
- Eschbach C, Cuthbertson C, Shelle G, Bates R. Expanding effective behavioral health literacy programs to address farm stress. *J Ext*. 2022;60(2). doi:[10.34068/joe.60.02.19](https://doi.org/10.34068/joe.60.02.19).
- Cuthbertson C, Brennan A, Shutske J, et al. Developing and implementing farm stress training to address agricultural producer mental health. *Health Promot Pract*. 2022;23(1):8–10. doi: [10.1177/152483992093.1849](https://doi.org/10.1177/152483992093.1849).
- Cuthbertson C, Brennan A, Shutske J, et al. Developing and implementing farm stress training to address agricultural producer mental health. *Health Promot Pract*. 2020;23(1):8–10. doi: [10.1177/1524839920931849](https://doi.org/10.1177/1524839920931849).
- Rudolphi J, Cuthbertson C, Keller K, Mott R. North central farm and ranch stress assistance center: 2020–2023: outcomes, lessons learned, and recommendations for the future. *OBM Integr Complement Med*. 2024;9(2):1–14. doi: [10.21926/obm.icm.2402037](https://doi.org/10.21926/obm.icm.2402037).
- Hughes-Barton D, Skaczkowski G, Starick H, Gunn KM. Mental health and wellbeing helplines for farmers: a scoping review of usage, acceptability, and effectiveness of those currently in operation around the world. *J Agromed*. 2024;30(3):1–24. doi: [10.1080/1059924X.2024.2418816](https://doi.org/10.1080/1059924X.2024.2418816).
- Rudolphi JM, Berg RL. Stress, mental health, and risk-taking: associations among a sample of agricultural adolescents. *Int J Environ Res Public Health*. 2024;21(7):830. doi: [10.3390/ijerph21070830](https://doi.org/10.3390/ijerph21070830).
- Cuthbertson C, Brennan A, Shutske J, et al. An effective mental health literacy program for farm financial service providers. *J Agromed*. 2022;27(1):1–9. doi: [10.1080/1059924X.2022.2058666](https://doi.org/10.1080/1059924X.2022.2058666).
- Grocke-Dewey M, Brennan A, Freeman B, et al. *Perceived Stress, Stressors, and Preferred Stress Management Strategies Among Western Agricultural Producers*. Educational Publishing Foundation; 2023.
- Rudolphi JM, Berg R, Marlenga B. Who and how: exploring the preferred senders and channels of mental health information for Wisconsin farmers. *Int J Environ Res Public Health*. 2019;16(20):3836. doi: [10.3390/ijerph16203836](https://doi.org/10.3390/ijerph16203836).
- Kankaraš M, Capecchi S. Neither agree nor disagree: use and misuse of the neutral response category in Likert-type scales. *Metron*. 2025;83(1):111–140. doi: [10.1007/s40300-024-00276-5](https://doi.org/10.1007/s40300-024-00276-5).
- Johns R. One size doesn't fit all: selecting response scales for attitude items. *J Elections, Public Opin Parties*. 2005;15(2):237–264. doi: [10.1080/13689880500178849](https://doi.org/10.1080/13689880500178849).
- Carifio J, Perla RJ. Ten common misunderstandings, misconceptions, persistent myths and urban legends about Likert scales and Likert response formats and their antidotes. *J Soc Sci*. 2007;3(3):106–116. doi: [10.3844/jssp.2007.106.116](https://doi.org/10.3844/jssp.2007.106.116).
- Norman G. Likert scales, levels of measurement and the “laws” of statistics. *Adv Health Sci Educ Theory Pract*. 2010;15(5):625–632. doi: [10.1007/s10459-010-9222-y](https://doi.org/10.1007/s10459-010-9222-y).
- Sullivan GM, Artino AR. Analyzing and interpreting data from Likert-type scales. *J Grad Med Educ*. 2013;5(4):541–542. doi: [10.4300/JGME-5-4-18](https://doi.org/10.4300/JGME-5-4-18).

20. Baran T. Comparison of parametric and non-parametric methods to analyse the data gathered by a Likert-type scale. In: Chkoniya V, ed. *Handbook of Research on Applied Data Science and Artificial Intelligence in Business and Industry*. Hershey, PA, USA: IGI Global Scientific Publishing; 2021: 414–430.
21. Kılıç S. Cronbach's alpha reliability coefficient. *J Mood Disord*. 2016;6(1):47. doi: [10.5455/jmood.20160307122823](https://doi.org/10.5455/jmood.20160307122823).
22. Cohen KA, Stiles-Shields C, Winkquist N, Lattie EG. Traditional and nontraditional mental healthcare services: usage and preferences among adolescents and younger adults. *J Behav Health Serv Res*. 2021;48(4):537–553. doi: [10.1007/s11414-020-09746-w](https://doi.org/10.1007/s11414-020-09746-w).
23. Cunningham CE, Walker JR, Eastwood JD, et al. Modeling mental health information preferences during the early adult years: a discrete choice conjoint experiment. *J Health Commun*. 2014;19(4):413–440. doi: [10.1080/10810730.2013.811324](https://doi.org/10.1080/10810730.2013.811324).
24. Persson S, Hagquist C, Michelson D. Young voices in mental health care: exploring children's and adolescents' service experiences and preferences. *Clin Child Psychol Psychiatry*. 2017;22(1):140–151. doi: [10.1177/1359104516656722](https://doi.org/10.1177/1359104516656722).
25. Bellin LE. The shrinking autonomy of the practicing physician and its impact on quality. *J Community Health*. 1986;11(3):155–164. doi: [10.1007/BF01338796](https://doi.org/10.1007/BF01338796).
26. Villatoro AP, DuPont-Reyes MJ, Phelan JC, Link BG. 'Me' vs. 'Them': how mental illness stigma influences adolescent help-seeking behaviors for oneself and recommendations for peers. *Stigma Health*. 2022;7(3):300–310.
27. Skaczkowski G, Hull M, Smith AE, Dollman J, Jones M, Gunn KM. Understanding farmers' barriers to health and mental health-related help-seeking: the development, factor structure, and reliability of the farmer help-seeking scale. *J Rural Health*. 2024;40(1):64–74. doi: [10.1111/jrh.12768](https://doi.org/10.1111/jrh.12768).
28. Vayro C, Brownlow C, Ireland M, March S. "Don't ... break down on Tuesday because the mental health services are only in town on Thursday": a qualitative study of service provision related barriers to, and facilitators of farmers'. *Ment Health Help-Seeking Adm Policy Ment Health*. 2021;48(3):514–527. doi: [10.1007/s10488-020-01085-4](https://doi.org/10.1007/s10488-020-01085-4).
29. Graves JM, Abshire DA, Koontz E, Mackelprang JL. Identifying challenges and solutions for improving access to mental health services for rural youth: insights from adult community members. *Int J Environ Res Public Health*. 2024;21(6):725. doi: [10.3390/ijerph21060725](https://doi.org/10.3390/ijerph21060725).
30. Edwards MB, Miller JL, Blackburn L. After-school programs for health promotion in rural communities: Ashe County Middle School 4-H after-school program. *J Public Health Manag Pract*. 2011;17(3):283–287. doi: [10.1097/PHH.0b013e318207ce3a](https://doi.org/10.1097/PHH.0b013e318207ce3a).
31. Handley T, Davies K, Rich J, Perkins D. Understanding the mental health of rural young adults: risk and protective factors. *Int J Ment Health Psychiatry*. 2017;3(4). doi: [10.4172/2471-4372.1000154](https://doi.org/10.4172/2471-4372.1000154).
32. Rughani J, Deane FP, Wilson CJ. Rural adolescents' help-seeking intentions for emotional problems: the influence of perceived benefits and stoicism. *Aust J Rural Health*. 2011;19(2):64–69.
33. Judd F, Komiti A, Jackson H. How does being female assist help-seeking for mental health problems? *Australian New Zealand J Psychiatry*. 2008;42(1):24–29. doi: [10.1080/00048670701732681](https://doi.org/10.1080/00048670701732681).
34. Şimşek AS. The power and type I error of Wilcoxon-Mann-Whitney, Welch's t, and Student's t tests for Likert-type data. *Int J Assess Tools in Educ*. 2023;10(1):114–128. doi: [10.21449/ijate.1183622](https://doi.org/10.21449/ijate.1183622).