



2018

# Behavioral Health in Rural America: Understanding Citizen Perceptions and Willingness to Respond to Community Needs

John M. Keesler

*Indiana University Bloomington*

Helen Johnston

Jonah Simon

Taegan Anthony

Meagan Barnhart

*See next page for additional authors*

Follow this and additional works at: <https://digitalcommons.murraystate.edu/crsw>

 Part of the [Social Work Commons](#)

## Recommended Citation

Keesler, John M.; Johnston, Helen; Simon, Jonah; Anthony, Taegan; Barnhart, Meagan; Bartlett, Madison; Delong, Janet; Galloway, Sharon; Kilpatrick, Melissa; Laucella, Jonathan; Moreland, Hope; Ryan, Gaby; and Shannon, Valerie (2018) "Behavioral Health in Rural America: Understanding Citizen Perceptions and Willingness to Respond to Community Needs," *Contemporary Rural Social Work Journal*: Vol. 10 : No. 1 , Article 5.

Available at: <https://digitalcommons.murraystate.edu/crsw/vol10/iss1/5>

This Feature Article is brought to you for free and open access by Murray State's Digital Commons. It has been accepted for inclusion in Contemporary Rural Social Work Journal by an authorized editor of Murray State's Digital Commons. For more information, please contact [msu.digitalcommons@murraystate.edu](mailto:msu.digitalcommons@murraystate.edu).

---

# Behavioral Health in Rural America: Understanding Citizen Perceptions and Willingness to Respond to Community Needs

## **Cover Page Footnote**

The authors are grateful to the community members who participated in this research and to the Indiana University Center for Rural Engagement for their financial support.

## **Authors**

John M. Keesler, Helen Johnston, Jonah Simon, Taegan Anthony, Meagan Barnhart, Madison Bartlett, Janet Delong, Sharon Galloway, Melissa Kilpatrick, Jonathan Laucella, Hope Moreland, Gaby Ryan, and Valerie Shannon

## **Behavioral Health in Rural America: Understanding Citizen Perceptions and Willingness to Respond to Community Needs**

John M. Keesler  
Helen Johnston  
Jonah Simon  
Taegan Anthony  
Meagan Barnhart  
Madison Bartlett  
Janet DeLong  
Sharon Galloway  
Melissa Kilpatrick  
Jonathan Laucella  
Hope Moreland  
Gaby Ryan  
Valerie Shannon

*Indiana University Bloomington*

**Abstract.** Amid nationwide efforts to address behavioral health needs, rural communities often face unique challenges and a lack of resources. This study presents a bottom-up approach used by one rural community in the Midwest to respond to their needs regarding mental health and substance use. A survey instrument was developed from interviews with community stakeholders and disseminated in both online and paper formats. The survey sought to understand citizen perspectives regarding quality of life, barriers to treatment, and willingness to engage in efforts to address the community's needs. Data from 1,303 respondents (71.5% women, 54.7% income <\$42,000) were analyzed using descriptive statistics and chi-square analyses. Results indicate that cost of treatment, shame, and lack of privacy were a barrier for most citizens' treatment-seeking behavior. In addition, many citizens were willing to engage in strategies to address the community's needs, including increased county spending, forming a neighborhood watch, and donating money. Differences associated with gender and income emerged across perceptions and willingness to support efforts. Implications for community efforts are discussed.

**Keywords:** behavioral health, bottom-up approach, mental health, substance use

Across the United States, the opioid epidemic has become an impetus for increased attention to the broader issues of mental health and substance use, collectively referred to as behavioral health (Center for Disease Control and Prevention, 2018). Despite a context of improved societal attitudes and expanded utilization of behavioral health services, barriers to treatment continue to exist (Alang, 2015; Lang & Rosenberg, 2017; Mojtabai, 2007). Although efforts to address the complexity of behavioral health needs have emerged across the nation, they are often centralized to populous urban areas (Centafont & Centafont, 2017). As such, rural communities continue to struggle with a lack of treatment accessibility due to a dearth of providers, fiscal restraints, and distance to providers, and require strategies that are culturally-sensitive to be successful (Bischoff et al., 2014; Longenecker & Schmitz, 2017; Young, Grant, & Tyler, 2015; Keyes, Cerda, Brady, Havens, & Galea, 2014; Knopf, 2018; Robinson et al., 2012).

## **Barriers and Challenges**

According to the United States Census Bureau (2016), rural areas are those outside of designated urban areas (i.e. at least 50,000 people) and urban clusters (i.e. densely developed territories with at least 2,500 people). Research has highlighted challenges associated with quality of life in rural communities. Some of these challenges include: fewer employment opportunities that provide health insurance (Lavelle, Lorenz, & Wickrama, 2012); poverty and the chronic strain of economic hardships, as well as smaller social networks (Amato & Zuo, 1992); a gap in health literacy and health disparities associated with poverty (Bice-Wigington & Huddleston-Casas, 2012); and lack of formal or informal community supports (Notter, MacTavish, & Shamah, 2008).

The Center for Disease Control noted that rural communities, in contrast to urban settings, were prone to higher incidence of mental, behavioral, and developmental disorders in childhood and poor mental health among parents (Robinson et al., 2017). In 2017, the North Carolina Rural Health Research Program published a rural health report that highlighted disparities in health and health care. Notably, rural areas had 55.1 primary care physicians and 135.1 mental health providers per 100,000 people, in contrast to 79.3 primary care physicians and 213.1 mental health providers per 100,000 people in urban settings. The lack of providers often results in lack of treatment received or the need to travel long distances for health care (Warshaw, 2017).

Across communities, stigma and alienation can be barriers for people seeking treatment, however, their impact may be more extensive in rural areas where communities are small and often lack sufficient resources (Alang, 2015; Lang & Rosenberg, 2017). As such, confidentiality and anonymity are considerable concerns that prevent people from entering treatment as they fear being identified or seen by others in the community (Robinson et al., 2012). This is exacerbated by an underlying culture that is highlighted by independence and self-reliance (Bice-Wigington & Huddleston-Casas, 2012). However, a sense of belonging has been linked with the ability to overcome stigma and is critical to individuals' sense of agency and healing (Treichler & Luchsted, 2017). This cycle is often perpetuated and can have a lasting impact on the family system (Ingram, Lichtenberg, & Clarke, 2016). For example, Williams and Polaha (2014) noted that parents who experienced higher levels of public and self-stigma, in contrast to parents who experienced lower levels of stigma, were less willing to seek mental health services for their children.

Gender is an additional factor to consider when discussing the complexity and challenges of behavioral health in rural communities. Research suggests that women, in comparison to men, experience increased barriers to treatment due to limited financial and educational resources (Staton-Tindall, Webster, Oser, Havens, & Leukefeld, 2015). Divorced or separated women are at a higher risk of being uninsured (Lavelle et al., 2012). The centrality of child caregiving, competing work demands, and stressors of parenting can increase women's vulnerability to stress and poorer health outcomes (Reschke & Walker, 2006; Wijnberg & Reding, 1999). Cost restraints frequently prevent women from accessing treatment and thus result in unaddressed health needs (Alang, 2015). Women, especially those who are pregnant or have children, who are seeking treatment for substance use may be disproportionately impacted

by factors related to confidentiality (Hall & Skinner, 2012). Howard (2015) noted that mothers with histories of opioid dependence not only experienced shame and self-stigmatization, but they also experienced stigma from providers that resulted in guilt and low self-esteem.

### **Responding to Current Needs**

Across the nation, efforts to address behavioral health have emerged from the federal to local levels. For example, in 2016 Congress passed the 21<sup>st</sup> Century Cures Act which allocated \$1 billion to fund state efforts to address the opioid epidemic. Similarly, states bolstered prescription drug monitoring programs and established medication-assisted treatment programs (Barlas, 2017). Additional efforts have included: training programs for physicians regarding addiction treatment and alternative approaches to pain management; the development of syringe exchange programs; and collaborations between recreation departments and community leaders to offer programming and coalition building (Centafont & Centafont, 2017; Scully & Strout, 2017; Paynich, 2018).

Strategies have often employed top-down approaches where officials determine the allocation of revenue and direct decision-making. However, this type of approach often fails to consider the potential strengths, skills, and contributions of community members (Hawk, 2015). In contrast, bottom-up approaches work from a grassroots level to build upon community strengths and stimulate collaboration between the community and its leadership (Wessells, 2015). Kelly and Caputo (2005) noted that many communities, even those with deficits, have strengths and capacities which can be used as leverage to support the community in identifying its needs and acting to respond. Bottom-up approaches can provide leadership with a diversified understanding of community perceptions and produce solutions that emerge from the community that lend to success and sustainability (Goodwin & Young, 2013; Hawk, 2015; Kelly & Caputo, 2005; Wessells, 2015). As such, bottom-up strategies may be preferred in rural areas given their lack of resources and the need for efforts that are sensitive to the local culture (Bischoff et al., 2014; Knopf, 2018; Longenecker & Schmitz, 2017; Robinson et al., 2012; Young et al., 2015).

In addition, collaboration and pooling of resources are often necessary to counter the lack of resources. Collaboration between primary care and mental health providers, clients, families, and church members, can be critical in reducing barriers to treatment (Robinson et al., 2012; Sullivan et al., 2014). Universities can be an additional source of collaboration for communities. University-community partnerships provide opportunities that foster synergy between research, practice, and an exchange of information that promotes growth (Dulmus & Cristalli, 2012; Keesler, Green, & Nochajski, 2017; Lundgren, Krull, Zerden, & McCarty, 2011). University-community partnerships can bolster rural communities with the resources necessary to accomplish goals that might otherwise be hindered by a dearth of resources.

### **Purpose**

In 2017, a rural community in the Midwest engaged in a university-community partnership to survey citizen perspectives regarding mental health and substance use. The present study utilizes data from that survey to answer the following questions: (a) What are citizens' perceptions regarding quality of life in the county regarding behavioral health? (b)

What are the perceived barriers to treatment for behavioral health? (c) How willing are residents to support strategies to address the community's needs related to behavioral health? In addition, the study sought to identify any differences by gender and income regarding perceived barriers and willingness to support strategies given previous research findings.

## **Method**

### **Background**

In 2017, a midwestern university launched a community-based initiative in which the university was to work with a nearby county for one year to foster community wellbeing. This collaborative effort invited community members to submit project proposals with which they wanted assistance. The list of projects was to be shared with university faculty who were requested to consider participation, along with their students, in any project that coincided with their interests, expertise, and courses.

The first county with which the University partnered was rural as identified by the United States Census Bureau with a total population of approximately 45,000 people (United States Census Bureau, 2016). Community members identified more than 30 projects, one of which one was a community survey regarding mental health and substance use to help inform the decisions of community leaders amid the nation-wide opioid epidemic. This project complemented the mental health and addiction focus of the graduate program in the University's School of Social Work and is the foundation of the present study.

### **Instrument Development**

In August, 2017, the lead author interviewed 12 community stakeholders who were members of a county mental health and addiction taskforce. They included representatives from criminal justice, government, hospital administration, social services, mental health services, and lay residents. Interviews were guided by a single open-ended question: "What would be helpful for you to know about the community regarding mental health and substance use?" Interviews were conducted at a time and location convenient to the stakeholder, most often at their place of employment, and ranged in length from 30 to 90 minutes. Notes were taken by the interviewer during each interview and resulted in 1 to 3 pages of handwritten notes per interview. The notes were coded for major themes through an open-coding process in which codes were created as themes emerged from the content of the interviews (Charmaz, 2006).

During the fall semester, the lead researcher and a cohort of 11 graduate social work students developed the survey instrument within a research course required for the degree program. Survey items were developed based on the themes identified in the interview notes and informed by the scholarly literature (Alang, 2015; Bischoff et al., 2014; Robinson et al., 2012; Young et al., 2015). Items were revised through an iterative process to increase precision and minimize redundancy. The survey was sent electronically to the stakeholders for their review to ensure accuracy, readability, and face validity with interview themes. Approximately one-third of the stakeholders responded and requested minor revisions (e.g. inclusion of a community resource that was accidentally excluded). The final survey was comprised of 50 items across

nine domains: demographics included 10 items, quality of life included seven items, personal behavioral health included five items, community resources included 10 items, barriers to treatment included seven items, community solutions included six items, beliefs about behavioral health included four items, and a single open-ended item for respondents to provide additional thoughts they might have regarding mental health and substance use. Examples of survey items are “People in my community are judged for receiving help for mental health/addictions” and “I have used substances such as cocaine, marijuana, heroin, or meth to change how I feel.” Response options were categorical or Likert-type responses (e.g. 1 “strongly disagree” to 5 “strongly agree”). The survey took approximately 12 minutes to complete.

The survey was uploaded to an online platform, Qualtrics, to facilitate dissemination and was also available through paper copies at designated community locations (eg public libraries, city hall, and county court). Information about the survey was disseminated once through community utility bills and weekly through community social media pages (ie Facebook). In addition, paper surveys were shared occasionally with community members through various gatherings (e.g. a parent support group and church services). Inclusion criteria required respondents to be at least 18 years old and county residents. The study was approved by the institutional review board at the primary researcher’s university. Data collection lasted for four months, from January through April 2018.

## Data Analysis

A total of 1,365 surveys were completed (61% online, 39% paper), representing a 3% response rate from county residents. Data from the online surveys were downloaded from Qualtrics and uploaded into IBM SPSS Statistics for Windows (version 25.0) for analysis. Paper surveys were entered manually into the dataset, of which 10% were randomly cross-checked to ensure accuracy of data entry. Sixty-one surveys from the total dataset were excluded from analysis either because the respondents’ zip codes were outside the designated county (n=52) or a zip code was not provided (n = 9). In addition, one respondent identified their gender as non-binary and was excluded from data analysis given the inability to make reasonable comparisons due to the disproportionality of men and women. The final dataset included 1,303 respondents.

Given the specificity of the survey to the community, not all data is presented in this study. Responses to items assessing quality of life, barriers to treatment-seeking behavior, and willingness to support efforts to address community needs were collapsed to compare those that agreed (i.e. *agree-strongly agree*) with those who were unsure and those who disagreed (i.e. *disagree-strongly disagree*). Data analysis included descriptive statistics (i.e. frequencies) and inferential statistics (i.e. chi-square) according to the research questions. On average, less than 5% of data was missing and addressed through pair-wise deletion given the uniqueness of each item. No adjustments (i.e. Bonferroni correction) were made for family-wise error in analyses given the exploratory nature of the study and the desire to identify preliminary trends.

## Results

### Demographics

Demographic data are presented in Table 1. Most respondents identified as women (71.5%) and in committed or married relationships (72.3%). More than half of respondents had less than a 2-year college degree (57.1%) and an individual annual income less than \$42,000 (54.7%). There was a significant association between gender and income [ $X^2(7, N = 1212) = 93.15, p = .001$ ] such that 40.5% of women, as compared with 18.5% of men, had an annual income less than \$27,000. Data regarding other demographics such as ethnicity and religious affiliation were not solicited given the homogeneity of the county (i.e. 97% white and Christian).

### Behavioral Health

The survey queried respondents about their current self-reported mental health and substance use. Although 66.3% of respondents self-reported that their mental health was generally good, approximately 34% of respondents ( $n = 433$ ) indicated that they struggled with their mental health, of which 17.6% indicated that they had a mental health diagnosis. About 16% of respondents ( $n = 208$ ) indicated that they had used illegal substances (e.g. cocaine, marijuana, heroin, or methamphetamines), and, 14% ( $n = 181$ ) indicated they had used medications more often than prescribed by their doctor or that were not prescribed for them. Roughly 8% of respondents ( $n = 104$ ) were in recovery for addiction and most (63.8%) had a close relationship with someone who had an addiction. Significant associations were noted for mental health and income [ $X^2(7, N = 1204) = 116.47, p = .001$ ], as well as substance use and income [ $X^2(7, N = 1197) = 64.33, p = .001$ ]. More than half of respondents with self-reported mental health challenges (51.8%) had an income less than \$27,000 as compared to 25% of those with “generally good” mental health. Similarly, 56.4% of respondents who used illegal substances had an income less than \$27,000, compared with 29.8% of those who did not use illegal substances.

### Community Quality of Life

Respondents were queried about the quality of life in their community. As displayed in Table 2, a majority (69.8%) agreed that the county was a great place to live but nearly all (96.1%) recognized the growing substance use problem within the county. The complexity of the county’s needs was reflected in the percentage of respondents who believed that the county lacked resources (55.1%), the pervasiveness of stigma/judgement toward those seeking help for mental health and substance use (62.3%), and the perceived failure of leadership to effectively address the community’s mental health and substance use needs (48.4%).



Table 1

*Sample Demographics*

Demographic	<i>n</i>	%
Gender <sup>a, b</sup>		
Men	370	28.5
Women	928	71.5
Relationship Status <sup>a</sup>		
Single	176	13.6
Married	819	63.1
Divorced/Widowed	183	14.1
Committed Relationship	119	9.2
Education <sup>a, c</sup>		
High School/GED	323	24.9
Some College/Technical Certificate	372	28.7
Associate Degree	192	14.8
Undergraduate Degree	221	17.1
Graduate Degree	143	11.0
Income <sup>a, d</sup>		
Below \$12,000	185	15.2
\$12,000-\$27,000	228	18.8
\$27,001-\$42,000	252	20.7
\$42,001-\$57,000	183	15.1
\$57,001-\$72,000	151	12.4

*Note.* (*N*=1303). <sup>a</sup> Item totals do not equal 1303 due to missing data. <sup>b</sup> One respondent identified as non-binary. <sup>c</sup> 3.5% (*n* = 45) had less than a high school degree. <sup>d</sup> Three income brackets beyond \$72,000 were each represented by less than 10% of respondents: \$72,001-\$87,000 (6.7%, *n* = 81); \$87,001-\$102,000 (4.7%, *n* = 57); ≥ \$102,001 (6.4%, *n* = 78).

Table 2

*Citizen Perception of Quality of Life*

Characteristic	<i>n</i>	%
County is a great place to live <sup>a</sup>		
Agree	884	69.8
Unsure	115	9.1
Disagree	267	21.1
County has a growing addiction problem <sup>a</sup>		
Agree	1245	96.1
Unsure	47	3.6
Disagree	4	0.3
Leadership effectively addressing mental health/addiction needs <sup>a</sup>		
Agree	268	20.7
Unsure	400	30.9
Disagree	626	48.4
County has resources needed to address mental health/addictions <sup>a</sup>		
Agree	197	15.4
Unsure	377	29.5
Disagree	705	55.1
People are judged for receiving mental health/addiction help <sup>a</sup>		
Agree	805	62.3
Unsure	321	24.8

Disagree	166	12.9
----------	-----	------

Note. (N = 1303). <sup>a</sup> Item totals do not equal 1303 due to missing data.

### Barriers to Seeking Treatment

Respondents were asked to indicate the degree to which seven factors might influence their decision to seek treatment for mental health and substance use if ever needed. These factors included community stigma/judgment, self-stigma/shame, confidentiality/lack of privacy, cost/lack of health insurance, fear of losing one's children, lack of childcare, and lack of transportation. Responses are displayed in Table 3. Most respondents (71.5%) indicated that cost or lack of health insurance was an important factor. In addition, nearly two-thirds of respondents indicated that their decision to get treatment would be influenced by self-stigma/shame (65.4%) and concerns regarding confidentiality (61.4%). Approximately half of respondents indicated that fear of losing their children (49.9%) and public stigma (46.7%) would influence their decision to seek treatment.

Table 3

#### *Citizen Perception of Factors Influencing Likelihood of Seeking Treatment*

Barrier	n	%	Gender		Income	
			X <sup>2</sup>	p	X <sup>2</sup>	p
Cost/lack of health insurance <sup>a</sup>			32.52	.001	52.64	.001
Agree	902	71.5				
Unsure	108	8.6				
Disagree	251	19.9				
Self-stigma/shame <sup>a</sup>			4.70	.096	17.97	.208
Agree	823	65.4				
Unsure	128	10.2				
Disagree	307	24.4				
Confidentiality/lack of privacy <sup>a</sup>			25.62	.001	18.63	.179
Agree	769	61.4				
Unsure	157	12.5				
Disagree	327	26.1				
Fear of losing my children <sup>a</sup>			14.11	.001	14.35	.424
Agree	614	49.9				
Unsure	119	9.7				
Disagree	499	40.5				
Community stigma/judgment <sup>a</sup>			15.56	.001	16.86	.264
Agree	590	46.7				
Unsure	167	13.2				
Disagree	506	40.0				
Lack of childcare <sup>a</sup>			13.49	.001	36.95	.001
Agree	513	41.8				
Unsure	148	12.1				
Disagree	567	46.2				
Lack of transportation <sup>a</sup>			3.98	.136	29.68	.008
Agree	489	39.0				
Unsure	123	9.8				
Disagree	641	51.1				

Note. (N = 1303). <sup>a</sup> Item totals do not equal 1303 due to missing data.

Significant associations were noted for gender and five of the seven factors: stigma [ $X^2(2, N = 1260) = 15.56, p = .001$ ], cost/lack of insurance [ $X^2(2, N = 1258) = 32.52, p = .001$ ], confidentiality [ $X^2(2, N = 1250) = 25.62, p = .001$ ], losing one's children [ $X^2(2, N = 1229) = 14.11, p = .001$ ], and lack of childcare [ $X^2(2, N = 1225) = 13.49, p = .001$ ]. Men were less likely than women to agree that stigma, cost/lack of health insurance, confidentiality, fear of losing children, and lack of child care were concerns. No association was noted between gender and shame [ $X^2(2, N = 1255) = 4.70, p = .096$ ] or gender and transportation [ $X^2(2, N = 1250) = 3.98, p = .136$ ].

There were three factors associated with respondents' income: cost/lack of insurance [ $X^2(14, N = 1185) = 52.64, p = .001$ ]; lack of transportation [ $X^2(14, N = 1177) = 29.68, p = .008$ ]; and, lack of childcare [ $X^2(14, N = 1159) = 36.95, p = .001$ ]. Respondents with income below the federal poverty level most often endorsed lack of insurance, transportation, and childcare as influencing likelihood of seeking treatment if ever needed for mental health and substance use. For example, although 48.4% of respondents with an income below federal poverty level indicated that transportation was an important consideration, less than one-quarter of respondents with income greater than \$87,000 indicated that transportation was a concern. There was no association between respondents' level of income and: stigma [ $X^2(14, N = 1187) = 16.86, p = .264$ ]; shame [ $X^2(14, N = 1181) = 17.97, p = .208$ ]; confidentiality [ $X^2(14, N = 1177) = 18.63, p = .179$ ]; and fear of losing children [ $X^2(14, N = 1161) = 14.35, p = .424$ ].

### Willingness to Get Involved

Respondents were asked to indicate the degree to which they were willing to support six possible responses to the community's challenges with mental health and substance use. As displayed in Table 4, more than half of respondents were willing to support five possible responses, with most supporting an increase in county spending on mental health needs (79%) and forming a neighborhood watch (71%). However, 53.2% of respondents were either unsure or unwilling to volunteer with community mental health organizations. Four of the six responses to the community's challenges were associated with gender, including willingness to: volunteer [ $X^2(2, N = 1258) = 12.23, p = .002$ ]; donate money [ $X^2(2, N = 1258) = 20.17, p = .001$ ]; support a tax increase [ $X^2(2, N = 1264) = 14.88, p = .001$ ]; and, support increased county spending for mental health services [ $X^2(2, N = 1264) = 34.27, p = .001$ ]. Although most respondents supported these initiatives, men were more likely than women to not support increased taxes and county spending on mental health needs. In addition, women were more likely than men to be willing to volunteer and more likely to indicate "unsure" when asked about willingness to donate money. There was no significant association between gender and willingness to support increased county spending on criminal justice [ $X^2(2, N = 1261) = 5.16, p = .076$ ] or willingness to support a neighborhood watch [ $X^2(2, N = 1270) = 2.68, p = .263$ ].

Four of the six responses to the community's challenges were associated with respondents' level of income: volunteering [ $X^2(14, N = 1183) = 32.08, p = .004$ ]; donating money [ $X^2(14, N = 1182) = 30.12, p = .007$ ]; increased county spending on mental health [ $X^2(14, N = 1186) = 29.38, p = .009$ ]; and, increased county spending on criminal justice [ $X^2(14, N = 1187) = 26.15, p = .025$ ]. Respondents with income below the poverty level were most

likely to agree with volunteering. Although one-third of respondents with income less than \$42,000 were unsure about donating money, two-thirds of respondents with income over \$87,000 were willing to donate money. Regarding county spending on mental health services, more than 70% of respondents in each income bracket were willing to support an increase in county spending and those with incomes between \$42,001–\$57,000 were least likely to be “unsure” about an increase. The greatest percentage of respondents willing to support an increase in county spending on criminal justice had an income between \$72,001 and \$102,000. Respondents’ willingness to get involved with a neighborhood watch and to support a tax increase was unassociated with their level of income [ $X^2(14, N = 1193) = 18.02, p = .206$ ;  $X^2(14, N = 1187) = 9.25, p = .815$ ], respectively.

Table 4

*Citizen Willingness to Support Efforts to Address Community Needs*

Strategy	n	%	Gender		Income	
			$X^2$	p	$X^2$	p
Increase county spending on mental health <sup>a</sup>			34.27	.001	29.38	.009
Agree	1002	79.0				
Unsure	156	12.3				
Disagree	110	8.7				
Form neighborhood watch <sup>a, b</sup>			2.68	.236	18.02	.206
Agree	902	71.0				
Unsure	268	21.0				
Disagree	104	8.2				
Increase county spending on criminal justice <sup>a</sup>			5.16	.076	26.15	.025
Agree	846	66.9				
Unsure	227	17.9				
Disagree	192	15.2				
Increase in taxes <sup>a</sup>			14.88	.001	9.25	.815
Agree	776	61.2				
Unsure	224	17.7				
Disagree	268	21.1				
Donate money <sup>a</sup>			20.17	.001	30.12	.007
Agree	682	54.0				
Unsure	367	29.1				
Disagree	213	16.9				
Volunteer with providers <sup>a</sup>			12.23	.002	32.08	.004
Agree	590	46.8				
Unsure	437	34.6				
Disagree	235	18.6				

Note. (N=1303). <sup>a</sup> Item totals are less than 1303 due to missing data. <sup>b</sup> Sum of percentages is greater than 100 due to rounding error.

## Discussion

County leaders sought to understand citizens’ beliefs and experiences with mental health and substance use to inform the direction of their efforts to address the community’s needs. Through a university-community partnership, a community survey was developed based upon input from county stakeholders and administered across the county. The present study focused on citizens’ perception of factors that might influence their decisions to seek treatment for mental

health and substance use if ever needed, and their willingness to support plausible efforts to address the county's needs.

Survey respondents were characteristic of the county and the nation. For example, 13% of the sample had an income below the poverty level and 19.1% were retired. This compared well with county census data that indicated 13.7% of persons lived below the poverty level and 19.7% of residents were senior citizens. In addition, the sample was characteristic of national data for those with a diagnosed mental illness (17.6% sample vs. 18.3% nation) and living in recovery ([9% sample vs. 10% nation]; National Institute of Mental Health, 2017; New York State Office of Alcoholism and Substance Abuse Services, 2012). However, the county may have greater substance use (17%) than at the national level (10.2%), although national level data reflected persons 12 years of age and older (Substance Abuse and Mental Health Services Administration, 2015).

Findings indicate that several factors might influence the decisions of community members to seek treatment if needed for behavioral health. These factors included both intrapersonal factors like shame and systemic factors such as confidentiality and cost. Sivalogan et al. (2018) noted the importance of understanding individuals' perception as fundamental to their decisions to seek treatment. Likewise, Robinson et al. (2012) indicated that "perceived barriers [might] play a more significant role in help-seeking behaviors than tangible barriers" (p.318). In the present study, cost of treatment and lack of insurance, shame, and lack of privacy were significant concerns for more than half of the sample. Many feared losing their children and being judged by others in the community. In addition, for more than a third of respondents, lack of childcare and lack of transportation were also important considerations.

Like other states across the U.S., the state in which this research was conducted has a health insurance plan for those not covered by Medicaid or Medicare. However, it has an income ceiling, monthly fees, and a multi-step application process that might be challenging for applicants. Increased community education around behavioral health, treatment, and federal regulations such as Health Insurance Portability and Accountability Act (HIPAA) can help to reduce stigma and provide additional assurance of confidentiality (Curin, Hayslip, & Temple, 2011; Jennings et al., 2015). Further, increasing knowledge in the community may decrease the pervasiveness of stigma, thereby helping individuals to be less concerned about who might see them going for treatment (Booth, Wright, Ounpraseuth, & Stewart, 2015; Jennings et al., 2015; Robinson et al., 2012). Similarly, by recognizing the concerns of losing one's children, along with the need for childcare and transportation, community leaders and providers can collaborate in policy development, education, and innovation to augment community services and bridge any gaps that are barriers to treatment.

Perceived barriers to treatment were often associated with gender and income. Similarly, mental health status and substance use were associated with income. Concerns with cost and lack of insurance, as well as transportation and childcare, were most often represented among people within lower income brackets, particularly income below the poverty level. Women, in comparison to men, may face compounded hardship when seeking treatment for mental health and substance use, particularly given they are associated with lower income and are likely more often the primary caregiver for children. The hardships that women face particularly in rural

communities is supported by previous research (Alang, 2015; Hall & Skinner, 2012; Staton-Tindall et al., 2015).

Rural communities face unique challenges in comparison to urban counterparts, particularly with a lack of resources and services that are exacerbated by limited federal funding (Knopf, 2018; Longenecher & Schmitz, 2017; Robinson et al., 2012; Young et al., 2015). The present study assessed the viability of potential strategies, identified by the community stakeholders in the interviews leading up to the development of the survey, to address the community's behavioral health needs. Most respondents were willing to support various efforts, including: increased county spending, forming a neighborhood watch in collaboration with the police, an increase in taxes, and donating money. However, gender and income were associated with respondents' willingness to support these efforts. For example, women were more willing to volunteer information about donating money, and men were more likely to refuse supporting increased taxes and county expenses. Although support of increased county funding for criminal justice was not associated with gender, men were less supportive than women of increased funding for mental health. Higher levels of stigma and shame have been related with increased negativity toward treatment, however, the findings may suggest an underlying gender difference, with men holding more negative attitudes and less likely to seek help for mental health than women (Currin et al., 2011; Booth et al., 2015).

Some strategies like creating a neighborhood alliance with police to create a safer community were not associated with gender or income and were well-received by community members. Although such community-level responses can be effective, they present with some challenges such as the need for strong leadership and effective planning; however, the smaller size and close-knit communities in rural areas might provide the foundation and context necessary for a successful alliance (Baker, Baker, & Zezza, 1999; Robinson et al., 2012).

### **Limitations**

This study presents with several limitations. The survey was created for a specific county and reflects its unique needs. Although this approach demonstrates cultural sensitivity (Bischoff et al., 2014), the structure of the survey (e.g. multiple unique domains and items) prevents overall analysis of psychometric properties. A standardized instrument would strengthen the generalizability of results but might compromise its utility for the community. Similarly, although the study embraces a bottom-up approach to provide information to guide community efforts, it utilized a structured survey. The bottom-up approach could have been expanded by providing more open-ended questions. In addition, the type of data and statistical analyses limit any inferences. The cross-sectional design limits an understanding of how respondents' perceptions might change over time.

Various strategies were used to disseminate the survey both online and as a paper copy. This resulted in a sample that reflected county demographics except for gender, where women were disproportionately represented in the sample. Other studies have noted similar concerns with research participation (Markandy, Brennan, Gould, & Pasco, 2013; Saleh & Bista, 2017; Smith, 2008). Saleh and Bista (2017) noted that, although men and women may not differ in their willingness to complete a survey if they have an interest in the topic, survey reminders and

structure of survey items may have a differential impact, with men more likely to complete a survey after receiving a reminder and if survey items are short and concise. Future research should consider strategies to increase participation of men and be conducted across rural communities to increase generalizability of the results.

Respondents were asked about the potential influence of barriers on their decisions to seek treatment for behavioral health, if ever needed. It is plausible that perception might differ between barriers to mental health treatment and treatment for substance use but are not captured here. Similarly, the barriers and possible strategies identified in the survey reflect those that community stakeholders wanted to better understand. Barriers and strategies are likely influenced by community context and capacity. Further, although it is possible that asking only people who are presently seeking treatment might provide a more accurate estimate of the impact of factors, it is important to recognize that mental illness and substance use can happen at any point across the lifespan (McKee, 2017). In addition, the survey was intended to gauge the broader community, and, across the sample, many respondents reflected concerns with accessing treatment. This provides an understanding of the environment across the county and the breadth of concern.

## Conclusions

The opioid epidemic has brought increased attention to behavioral health across the nation. Although no region is exempt, rural areas have increased challenges in responding to their communities' needs. The present study used data from a survey that was developed and administered through a university-community collaboration. The results of the survey indicate that community members generally liked where they lived but recognized the challenges that their county faced. Intrapersonal and systemic factors were concerns for many community members regarding accessing treatment. Nonetheless, citizens demonstrated a willingness to be part of the solution, from volunteering to supporting increased county taxes. Although some differences associated with gender and income emerged, understanding these differences can be utilized to create and tailor strategies to increase community engagement. It is evident that many community members were willing to do *something*. Although willingness to do something and doing it are different, understanding the perspectives of citizens is fundamental to creating a successful community plan.

Although the community benefitted from the university-community partnership, the benefits were mutual. Through this effort, social work students were provided with the opportunity for authentic learning, enabling them to apply classroom learning to real-world situations (Pearce, 2016). In addition, it allowed students to learn about behavioral health, the focus of their current program, from a macro-level perspective. Further, faculty were able to build community relations and increase the presence of the university in the community and provide a foundation for subsequent projects that have the potential for reciprocal gains.

The present study provides a preliminary foundation for subsequent exploration and discussion regarding the viability of a bottom-up approach in developing a strategic response to behavioral health needs in rural communities. Despite the allocation of federal and state resources to addressing the current needs illuminated by the nationwide opioid epidemic, rural

communities remain hard-pressed for viable solutions. Although the small communities that highlight rural areas are often challenged by their size and familiarity, their close-knit nature might be a strength to pulling residents together and responding to their needs.

### References

- Alang, S. M. (2015). Sociodemographic disparities associated with perceived causes of unmet need for mental health care. *Psychiatric Rehabilitation Journal*, 38(4), 293-299. doi:10.1037/prj0000113
- Amato, P.R., & Zuo, J. (1992). Rural poverty, urban poverty, and psychological well-being. *The Sociological Quarterly*, 33(2), 229-240. <https://doi.org/10.1111/j.1533-8525.1992.tb00373.x>
- Andrilla, C. H. A., Coulthard, C., & Larson, E. H. (2017). Barriers rural physicians face prescribing buprenorphine for opioid use disorder. *The Annals of Family Medicine*, 15(4), 359-362. doi:10.1370/afm.2099
- Baker, T. E., Baker, J. P., & Zezza, R. (1999). Neighborhood watch. *FBI Law Enforcement Bulletin*, 68(2), 12-18.
- Barlas, S. (2017). U.S. and states ramp up response to opioid crisis: regulatory, legislative, and legal tools brought to bear. *P & T*, 42(9), 569-592.
- Bice-Wigington, T., & Huddleston-Casas, C. (2012). Influencing self-reported health among rural low-income women through health care and social services utilization: a structural equation model. *Journal of Family Social Work*, 15, 417-434. <https://doi.org/10.1080/10522158.2012.719183>
- Bischoff, R., Allison, M., Reisbig, P., Springer, P., Schultz, S., & Robinson, W.D. (2014). Succeeding in rural mental health practice: being sensitive to culture by fitting in and collaborating. *Contemporary Family Therapy*, 36, 1- 16. doi:10.1007/s10591-013-9287-x
- Booth, B. M., Wright, P. B., Ounpraseuth, S. T., & Stewart, K. E. (2015). Trajectory of substance use after an HIV risk reduction intervention. *The American Journal of Drug and Alcohol Abuse*, 41(4), 345-352. doi:10.3109/00952990.2015.1043437
- Centafont, D., & Centafont, J. G. (2017). Compliance issues a concern in opioid epidemic response. *Journal of Health Care Compliance*, 19(6), 37-59.
- Center for Disease Control and Prevention. (2017). *Opioid overdose*. Retrieved from <https://www.cdc.gov/drugoverdose/epidemic/index.html>
- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Thousand Oaks, California: SAGE.



- Curry, J. B., Hayslip, B., & Temple, J. R. (2011). The relationship between age, gender, historical change, and adults' perceptions of mental health and mental health services. *International Journal of Aging & Human Development*, 72(4), 317–341. doi:[10.2190/AG.72.4.c](https://doi.org/10.2190/AG.72.4.c)
- Dempsey, S. E. (2010). Critiquing community engagement. *Management Communication Quarterly*, 24, 359-390. doi:10.1177/0893318909352247
- Dulmus, C. N., & Cristalli, M. E. (2012). A university-community partnership to advance research in practice settings: The HUB research model. *Research on Social Work Practice*, 22(2), 195-202. doi:10.1177/1049731511423026
- Goodwin, S., & Young, A. (2013). Ensuring children and young people have a voice in neighborhood community development. *Australian Social Work*, 66(3), 344-357. doi:[10.1080/0312407X.2013.807857](https://doi.org/10.1080/0312407X.2013.807857)
- Hall, M., & Skinner, D. (2012). Perceptions and experiences of drug use among women in rural North Carolina. *Contemporary Rural Social Work*, 4(1), 1-14.
- Hawk, M. (2015). The girlfriends project: evaluating a promising community-based intervention from a bottom-up perspective. *American Journal of Evaluation*, 36(2), 179-190. doi:[10.1177/1098214014540789](https://doi.org/10.1177/1098214014540789)
- Howard, H. (2015). Reducing stigma: Lessons from opioid-dependent women. *Journal of Social Work Practice in the Addictions*, 15(4), 418-443. doi:10.1080/1533256X.2015.1091000
- Ingram, P. I., Lichtenberg, J. W., & Clarke, E. (2016). Self-stigma, personality traits, and willingness to seek treatment in a community sample. *Psychological Services*, 13(3), 300-307. doi:10.1037/ser0000086
- Jennings, K. S., Cheung, J. H., Britt, T. W., Goguen, K. N., Jeffers, S. M., Peasley, A. L., & Lee, A. C. (2015). How are perceived stigma, self-stigma, and self-reliance related to treatment-seeking? A three-path model. *Psychiatric Rehabilitation Journal*, 38(2), 109-116. doi:10.1037/prj0000138
- Keesler, J. M., Green, S., & Nochajski, T. (2017). Creating a trauma-informed community through university-community partnerships: an institute agenda. *Advances in Social Work*, 18(1), 39-52. doi:10.18060/21298
- Kelly, K., & Caputo, T. (2005). Case study of grassroots community development: sustainable, flexible and cost-effective responses to local needs. *Community Development Journal*, 41(2), 234-245. doi:[10.1093/cdj/bsi052](https://doi.org/10.1093/cdj/bsi052)
- Keyes, K. M., Cerda, M., Brady, J. E., Havens, J. R., & Galea, S. (2014). Understanding the rural-urban differences in nonmedical prescription opioid use and abuse in the United States. *American Journal of Public Health*, 104(2), e52-e59.

doi:10.2105/AJPH.2013.301709

- Kindred, J., & Petrescu, C. (2015). Expectations versus reality in a university-community partnership: A case study. *Voluntas*, 26, 823-845. doi: 10.1007/s11266-014-9471-0
- Knopf, A. (2018). Fight to keep up the funding. *Addiction Professional*, 16(2), 10–14.
- Lang, B., & Rosenberg, H. (2017). Public perceptions of behavioral and substance addictions. *Psychology of Addictive Behaviors*, 31(1), 79-84. doi:[10.1037/adb0000228](https://doi.org/10.1037/adb0000228)
- Lavelle, B., Lorenz, F. O., & Wickrama, K. A. S. (2012). What Explains Divorced Women's Poorer Health? The Mediating Role of Health Insurance and Access to Health Care in a Rural Iowan Sample. *Rural Sociology*, 77(4), 601–625. <https://doi.org/10.1111/j.1549-0831.2012.00091.x>
- Locke, C., & Werner, D. (2013). Stigma of help-seeking behavior following the Deepwater Horizon oil spill. *Contemporary Rural Social Work*, 5(1) 17-41.
- Longenecker, R. L., & Schmitz, D. (2017). Building a community of practice in rural medical education: growing our own together. *Rural and Remote Health*, 17(1), 4195. <https://doi.org/10.22605/RRH4195>
- Lundgren, L., Krull, I., Zerden, S. L., McCarty, D. (2011). Community-based addiction treatment staff attitudes about the usefulness of evidence-based addiction treatment and CBO organizational linkages to research institutions. *Evaluation and Program Planning*, 34, 356-365.
- Markanday, S., Brennan, S. L., Gould, H., & Pasco, J. A. (2013). Sex-differences in reasons for non-participation at recruitment: geelong osteoporosis study. *BMC Research Notes*, 6(104), 1-7. doi:[10.1186/1756-0500-6-104](https://doi.org/10.1186/1756-0500-6-104)
- McKee, S. A. (2017). Concurrent substance use disorders and mental illness: bridging the gap between research and treatment. *Canadian Psychology*, 58(1), 50-57. doi:[10.1037/cap0000093](https://doi.org/10.1037/cap0000093)
- Mojtabai, R. (2007). Americans attitudes toward mental health treatment seeking: 1990–2003. *Psychiatric Services*, 58(5), 642-651. doi:10.1176/ps.2007.58.5.642
- National Institute of Mental Health. (2017). *Mental Health Information*. Retrieved from <https://www.nimh.nih.gov/health/statistics/mental-illness.shtml>
- New York State Office of Alcoholism and Substance Abuse Services. (2012). *Survey Ten Percent of American Adults Report Being in Recovery from Substance Abuse or Addiction*. Retrieved from <https://www.oasas.ny.gov/pio/press/20120306Recovery.cfm>
- North Carolina Rural Health Research Program. (2017). *Rural Health Snapshot*. Retrieved from

<https://www.shepscenter.unc.edu/product/rural-health-snapshot-2017/>

- Notter, M. L., MacTavish, K.A., & Shamah, D. (2008). Pathways toward resilience among women in rural trailer parks. *Family Relations*, 57, 613-624.  
<https://doi.org/10.1111/j.1741-3729.2008.00527.x>
- Paynich, V. (2018). The OPIOID Crisis. *Parks & Recreation*, 53(6), 42-47.
- Pearce, S. (2016). Authentic learning: what, why and how? *e-Teaching*, 10. Retrieved from [http://www.acer.org.au/acer/ACEL\\_docs/Publications/e-Teaching/2016/e-Teaching\\_2016\\_10.pdf](http://www.acer.org.au/acer/ACEL_docs/Publications/e-Teaching/2016/e-Teaching_2016_10.pdf)
- Reschke, K. L., & Walker, S. K. (2006). Mothers' child caregiving and employment commitments and choices in the context of rural poverty. *Affilia: Journal of Women and Social Work*, 21(3), 306-319. <https://doi.org/10.1177/0886109906288910>
- Robinson, L. R., Holbrook, J. R., Bitsko, R. H., Hartwig, S. A., Kaminski, J. W., Ghandour, R. M.,...Boyle, C. A. (2017). Differences in health care, family, and community factors associated with mental, behavioral, and developmental disorders among children aged 2–8 years in rural and urban areas — United States, 2011–2012. *MMWR Surveillance Summaries*, 66(No. SS-8), 1–11. DOI: <http://dx.doi.org/10.15585/mmwr.ss6608a1>.
- Robinson, W. D., Springer, P. R., Bischoff, R., Geske, J., Backer, E., Olson, M.,...Swinton, J. (2012). Rural experiences with mental illness: through the eyes of patients and their families. *Families, Systems and Health*, 30(4), 308-321.  
<https://doi.org/10.1037/a0030171>
- Rudd R., Seth, P., David, F., & Scholl, L. (2016). Increases in drug and opioid-involved overdose deaths — United States, 2010–2015. *Morbidity & Mortality Weekly Report*, 65(50-51), 1445-1452. doi:10.1111/ajt.13776
- Saleh, A., & Bista, K. (2017). Examining factors impacting online survey response rates in educational research: perceptions of graduate students. *Journal of Multidisciplinary Evaluation*, 13(29), 63-74.
- Scully, A., & Strout, K. (2017). Community health roles in the U.S. opioid epidemic. *ANA Main Journal*, 2, 9.
- Sivalogan, K., Semrau, K.E., Ashigbie, P.G., Mwangi, S., Herlihy, J.M., Yeboah-Antwi, K.,...Hamer, D. H. (2018). Influence of newborn health messages on care-seeking practices and community health behaviors among participants in the Zambia Chlorhexidine Application Trial. *PLoS ONE*, 13(6), 1-14.  
doi:[10.1371/journal.pone.0198176](https://doi.org/10.1371/journal.pone.0198176)

- Smith, W. G. (2008). Does gender influence online survey participation? A record-linkage analysis of university faculty online survey response behavior. *Online Submission*. <https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED501717>
- Staton-Tindall, M., Webster, M., Oser, C., Havens, J., & Leukefeld, C. (2015). Drug use, hepatitis c, and service availability: perspectives of incarcerated rural women. *Social Work in Public Health, 30*:385–396, 2015. doi:10.1080/19371918.2015.1021024
- Substance Abuse and Mental Health Services Administration. (2015). *Behavioral Health Trends in the United States: Results from the 2014 National Survey on Drug Use and Health*. Retrieved from <https://www.samhsa.gov/data/sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.pdf>
- Substance Abuse and Mental Health Services Administration. (2016). *Prescription drug use and misuse in the United States: results from the 2015 National Survey on Drug Use and Health*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Sullivan, G., Hunt, J., Haynes, T. F., Bryant, K., Cheney, A.M., Pyne, J. M.,...Richison, R. (2014). Building partnerships with rural Arkansas faith communities to promote veterans' mental health: lessons learned. *Progressive Community Health Partnership, 8*(1): 11-19. doi:10.1353/cpr.2014.0004
- Treichler, E. B., & Lucksted, A. A. (2017). The role of sense of belonging in self-stigma among people with serious mental illnesses. *Psychiatric Rehabilitation Journal, 1*(1), 1-4. <http://dx.doi.org/10.1037/prj0000281>
- United States Census Bureau. (2016). Defining Rural at the U.S. Census Bureau: American Community Survey and Geography Brief. Retrieved from [https://www2.census.gov/geo/pdfs/reference/ua/Defining\\_Rural.pdf](https://www2.census.gov/geo/pdfs/reference/ua/Defining_Rural.pdf)
- Warshaw, R. (2017). Health disparities affect millions in rural U.S. communities. *AAMCNews*. Retrieved from <https://news.aamc.org/patient-care/article/health-disparities-affect-millions-rural-us-commun/>
- Wessells, M. G. (2015). Bottom-up approaches to strengthening child protection systems: placing children, families, and communities at the center. *Child Abuse & Neglect, 43*, 8-21. doi:[10.1016/j.chiabu.2015.04.006](https://doi.org/10.1016/j.chiabu.2015.04.006)
- Wijnberg, M. H., & Reding, K. M. (1999). Reclaiming a stress focus: the hassles of rural, poor, single mothers. *Families in Society: The Journal of Contemporary Human Services, 8*(5), 506-515. <https://doi.org/10.1606/1044-3894.1480>
- Williams, S. L., & Polaha, J. (2014). Rural parents' perceived stigma of seeking mental health services for their children: Development and evaluation of a new instrument. *Psychological Assessment, 26*(3), 763-773. doi:10.1037/a0036571

Young, L. B., Grant, K. M., & Tyler, K. A. (2015). Community-level barriers to recovery for substance-dependent rural residents. *Journal of Social Work Practice in the Addictions*, *15*, 307-326. doi:10.1080/1533256X.2015.1056058