Using the Social Ecological Model to examine how homelessness is defined and managed in rural East Tennessee

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DISCLAIMER

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Abstract

Homelessness, often conceptualized as an urban issue, is pervasive in rural communities due to high rates of poverty, lack of affordable housing, inadequate housing quality, unemployment/ under-employment, and geographic isolation. As homelessness exists within the complexities of a broader environment- including individual circumstances, socio-economic structures, and environmental circumstances, the Social Ecological Model (SEM) provided a framework to consider the perceptions of rural homelessness. The purpose of this study was to provide insight to how rural communities define and manage homelessness as well as engage unstably housed individuals in homeless services by investigating the perceptions of the different levels of influence according to McLeroy's SEM within rural counties of East Tennessee. Paper-based surveys were administered to patients of Cherokee Health System at Maynardville who identify as currently homeless, formerly homeless, or precariously housed (n=30); online surveys were administered to homeless service organization staff (n=10); and phone interviews were conducted with local government officials and affiliates (n=4). The results suggest that there are inconsistencies in how homelessness is defined and managed in rural East Tennessee. Moreover, homelessness in rural communities tends to be hidden, unacknowledged, and without adequate homeless-targeted resources. This study suggests that rural communities need to improve how they currently manage homelessness using the different levels of influence represented in the SEM.

Background

Little is known about individuals experiencing homelessness in rural communities, despite much information about their urban counterparts. Recent attempts to enumerate this population estimated that there are approximately 14 individuals experiencing homelessness for every 10,000 people living in rural areas, accounting for 7% of the U.S. homeless population. These estimates, however, may be grossly inaccurate as they are based on a unit of measure that lacks consistency in what is considered rural or urban. Furthermore, these estimates exclude homeless individuals who are not engaged in services (Henry et al, 2010).

Researchers and government agencies have consistently found it challenging to study this population (Robertson et al., 2007). One major challenge is the inconsistency in defining "rural" and "homelessness" between different agencies. Federal agencies define "rural" differently depending on the context but generally base the definition on population density, proximity to a metropolitan area, and whether or not an area has been urbanized (Robertson et al., 2007). Similarly, definitions of "homelessness" also vary by intended use. The most commonly used definition is found in the Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act of 2009 and used by the US Department of Housing and Urban Development (HUD). According to this legislation, there are four major categories of homelessness: literally homeless [e.g., sleeping outdoors, in emergency shelters, or in places not fit for human habitation], in imminent risk of homelessness, homeless under other federal statutes, and fleeing or attempting to flee domestic violence (HUD, 2009). In addition, HUD has implemented a new definition of chronic homelessness that took effect in January 2016.

Other major issues in studying this population include a lack of awareness and acknowledgement of homelessness in rural communities (Edwards et al., 2009; Robertson et al., 2007; USGAO, 2010). Fitchen, et al. (1992) documented that individuals experiencing homelessness in rural New England did not primarily live outdoors or in shelters. Instead, individuals often opted to live with family and friends or in substandard housing to avoid experiences of literal homelessness. In addition, the sprawling geography of rural landscapes may add to the invisibility of homelessness (Edwards et al., 2009).

Minimal attention has been given to how rural homelessness is managed as well as how individuals are engaged in services. Whitley (2013) documented the perspectives of a sample of homeless individuals in rural New England, showing that they had an aversion to seeking medical attention primarily due to past negative encounters with health professionals. On the other hand, homeless individuals in this study expressed favorable attitudes towards non-medical homeless services, including utilizing local shelters, churches, family and friends to help with managing their experiences of homelessness (Whitley, 2013).

To our knowledge, this study is one of only few that have been conducted to examine how homelessness is managed in rural communities while exploring the barriers and facilitators to utilizing non-medical homeless services. The aims of this study were to elicit perceptions on how rural communities define and manage homelessness as well as engage unstably housed individuals in homeless services. The Social Ecological Model was selected to frame this project (McLeroy et al., 1988).

The Social Ecological Model and Homelessness

The SEM contends that behavior is affected by multiple levels of influence, which shape and are shaped by the social environment. It suggests five levels of influence, including intrapersonal, interpersonal, organizational, community, and public policy (McLeroy et al., 1988) [Figure 1]. Variations of the ecological

model have been used to demonstrate the complexities of homelessness, which are influenced by individual circumstances, socio-economic structures, and environmental circumstances (Nooe et al., 2010). From an ecological perspective, individuals experiencing homelessness need numerous resources and support systems to navigate daily activities and attain a stable and permanent housing situation.

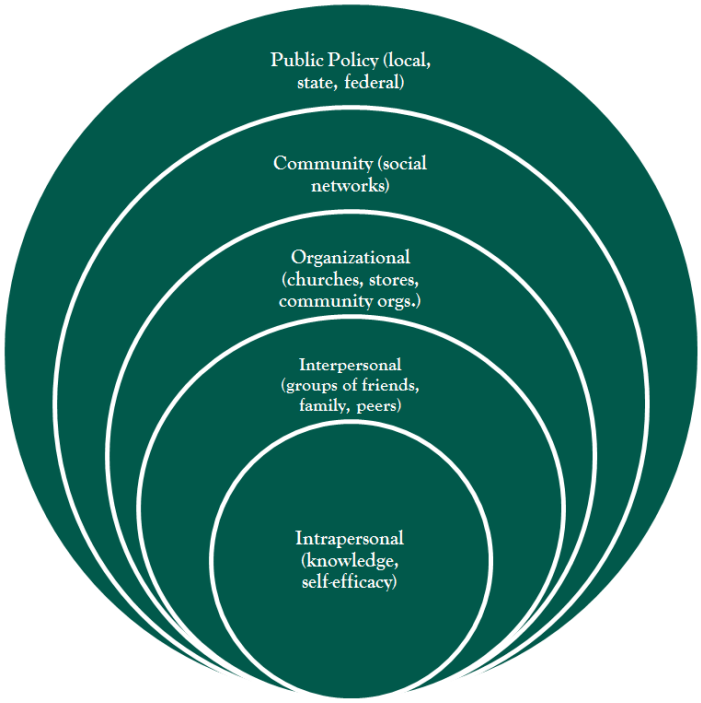

Figure 1. Illustrative model of relationships among the different SEM levels

Methodology

Our study applied the SEM framework to the experiences and perceptions of homeless and non-homeless members of rural communities. We conducted telephone interviews, in-person interviews, and surveys with homeless consumers, organizational staff, and local government officials and affiliates to answer three main research questions:

(1) How do rural communities define homelessness?
(2) How do rural communities manage homelessness?
(3) How do rural communities engage unstably housed individuals in homeless services?

Study Area

Tennessee is a largely rural state, particularly East Tennessee where this study was conducted. The study area includes Knox County and its rural periphery, including Union, Grainger, and Claiborne Counties. This area was chosen because of its proximity to the research partners and capacity of the grant. Rural areas are usually characterized by higher levels of economic disadvantage in terms of median income, percentage of residents living below the poverty level, and percentage of residents with a low education level. They often have higher levels of home ownership as opposed to multiple rental units. Union, Grainger, and Claiborne County reflect these traditional, rural characteristics [Table 1] (Robertson et al., 2007). Additionally, these counties are federally-designated Medically Underserved Areas and have mental health and dental care provider shortages (TN DOH, 2015).

Table 1. Descriptive comparison of targeted counties compared to the state of Tennessee and nationally. (US Census 2014)

	Union County	Grainger County	Claiborne County	Knox County	Tennessee State	USA
Population, 2014 estimates	19,113	22,864	31,592	448,644	6,549,352	318,857,056
Homeownership rate, 2009-2013	81.7%	81.0%	75.0%	65.2%	67.8%	64.9%
Housing Units in multiple-unit structures, 2009-2013	6.0%	2.8%	7.0%	23.1%	18.3%	26.0%
Persons below poverty level, 2009-2013 (%)	23.6%	20.4%	22.9%	14.6%	17.6%	15.4%
Median household income, 2009-2013	$34,399	$32,364	$33,229	$47,694	$44,298	$53,046
Bachelor's degree or higher, % of persons age 25+, 2009-2013	8.2%	10.5%	13.3%	34.3%	23.8%	28.8%
Persons per square miles, 2010	85.5	80.7	74.1	850.5	153.9	87.4

Participants

The sampling frame focused on multiple levels of the SEM, so participants were divided into three groups:

1. Group 1: Patients of Cherokee Health Systems at Maynardville (CHSM) in Union County, Tennessee, who are currently experiencing homelessness, formerly homeless, or precariously housed, as defined by the Health Resources and Services Administration of the US Department of Health and Human Services (HRSA, 1999). This group reported perceptions on the intrapersonal, interpersonal, organizational, community, and public policy levels of the SEM.
2. Group 2: Staff of local organizations (medical and non-medical homeless service organizations) within the four counties of interest. This group reported perceptions on the organizational, community, and public policy levels of the SEM.
3. Group 3: Local government officials and affiliates also within the four counties of interest. This group reported perceptions on the organizational, community, and public policy levels of the SEM.

Sampling Strategy and Recruitment

Investigators worked closely with case managers of CHSM to select Group 1 participants. To assure appropriate selection of participants, case managers generated a list of patients who met the following criteria: 1) aged 18 years or older; 2) patients of CHSM seen in the past year; and 3) currently experiencing homelessness, formerly homeless, or precariously housed as defined by HRSA. Potential participants were selected systematically from this list starting with the first person and every other person thereafter. Case managers contacted each potential participant by phone to determine their interest in coming into CHSM to participate in a paper-based survey. To increase participation, case managers also recruited patients from the CHSM waiting room who were already there to receive health services.

Group 2 participants were selected based upon an online search of local organizations—Health Center Program Grantee, , Salvation Army chapters, soup kitchens, churches—within the four counties. The investigators contacted potential participants by email and phone to invite them to complete an online survey hosted through SurveyMonkey.

Group 3 participants were recruited from elected government officials who were serving during the data collection period of the study within the four participating counties. Due to extremely low participation, inclusion criteria were expanded to include government affiliate—groups or persons officially connected to local government. Investigators contacted potential Group 3 participants by email and phone and invited them to participate in one-on-one phone interviews.

Data Collection and Instruments

Staff at CHSM received training on research ethics for community partners before recruitment and data collection began. Also prior to data collection, five CHSM patients completed face-to-face interviews to inform the paper-based survey questions issued to Group 1 participants. Each interview participant was recruited according on the same procedure described for Group 1 participants and interviewed one-on-one by an investigator for approximately 60-minutes. The paper-based survey questions were modified based on participant feedback regarding unclear or invasive items. In addition, answer choices for survey items were modified based on responses to interview questions.

Once revisions were made, contents of the paper-based survey instrument for Group 1 covered the following issues from the perspective of unstably house individuals: (1) how they define homelessness and perceive community norms regarding homelessness; (2) how they are personally managing their homelessness; (3) how friends/family/peers help manage homelessness; (4) how their local communities (service organizations, churches, local government) help manage homelessness (if at all); (5) how they became engaged in homeless services; and 6) what barriers and facilitators they have encountered when attempting to access homeless services. Group 1 surveys were administered by CHSM's case managers as they had an existing rapport with that population. Each paper-based survey was completed by patients in a private room with access to case managers to answer unclear questions.

Contents of the online survey for Group 2 included questions on how participant organizations: (1) define homelessness; (2) perceive community norms regarding homelessness; (3) help manage homelessness; and (4) engage clients in homeless services. The survey also asked what participants perceive to be barriers and facilitators to homeless services for clients and effective service models are for addressing rural homelessness. Lastly, the survey asked participants how local government policies help manage homelessness in their communities. Once potential participants agreed to take the online survey, investigators emailed a link to the online survey. Participants were given up to two weeks to complete the survey on their own, with the understanding that they could contact the investigators at any time with questions.

Contents of the interview guide for Group 3 covered how local government representatives and affiliates: (1) define homelessness; (2) help to manage homelessness; (3) manage homelessness at the community level; (4) help to engage clients in homelessness services; and (5) engage clients in practice, policies, and regulations of the community. The study investigators conducted all interviews one-on-one with participants and by phone. Investigators recorded and transcribed interviews for data analysis.

Data collection methods for each group were selected to maximize engagement and occurred over a period of seven months (December 2014-June 2015).

All survey and interview data were anonymous and measures to prevent any breach of confidentiality were taken. No personally identifying information was obtained during the interviews, or on the surveys, that could be linked back to participants. Group 1 participants submitted written consent forms; interview

participants received $50 gift cards and survey participants received $25 gift cards. Group 2 participants received information about the study on the first page of the online survey and consented to participate by initiating the survey; they were offered $10 gift cards yet Health Center Program participants waived their incentives. Group 3 participants provided verbal consent and received no remuneration. This study protocol, including consent procedures for each group, was approved by the Vanderbilt University Institutional Review Board.

Analysis

We analyzed quantitative data with IBM SPSS v. 21. Because this study was exploratory, descriptive statistics were used to increase our understanding of rural homelessness from the perspectives of Group 1 and 2 participants. Frequency tables were calculated initially for all quantitative measures. Additionally, Group 1 data was stratified by current living circumstances; temporary or permanent nature of living situation; and self-identified homeless status. Qualitative data collected from Group 3 participants were transcribed and analyzed using ATLAS.ti 7. Responses were manually coded to identify emerging themes within each question of interest. Identified concepts and categories are illustrated by quotes throughout the results section.

Results

Sample Characteristics

Group 1: Individuals experiencing homelessness. Ultimately 30 patients participated in paper-based surveys. The majority of Group 1 participants were White/Caucasian (93.3%), unemployed (96.7%), uninsured (66.7%), and living with someone—family, friend, or peer (66.7%) [Table 2]. Eighty three percent reported that their living situation was temporary. Out of those, 80% identified as currently homeless and 20% did not identify as such.

Table 2. Demographic characteristics of Group 1 participants.

	n	%
Mean age, years (range)	41(24-62)	
Race		
White/Caucasian	28	93%
Other (Black or African American and American Indian or Alaska Native)	2	7%
Gender		
Male	18	60%
Female	12	40%
Employment Status		
Unemployed	29	97%
Employed Part-time	1	3%
Insurance Status		
Uninsured	20	67%
Medicare/Medicaid	7	23%
Other	3	10%
Disability Status		
Approved for disability	7	23%
Applying for disability	10	33%
Other	13	43%
Housing status		
Living with someone (family, friend, peer)	20	67%
Public or private spaces (street, car/van, and bus/railroad stations)	5	17%

Temporary housing (hotel/motel and transitional housing)	2	7%
Own apartment/house	1	3%
Other	2	7%
Served in US Military	3	10%

Since turning 18 years old, participants reported being without their own place to live one to two times (46.7%), three to five times (33.3%), and six or more times (18.2%). Forty percent also reported that the longest they had been without their own place to live since turning 18 was 12 months or more. In the past three years, participants reported being without their own place to live one to three times (57%) and four or more times (17%). About 27% had their own place to live in the past three years. During episodes of homelessness, participants reported sleeping in the following spaces: someone else's home temporarily, transitional housing, sober living centers, the street/outdoors, cars, bus/railroad stations, hotels, substance use treatment centers, and shelters.

Group 2: Organizational staff. Fourteen organizations were contacted and ultimately 10 participants in Group 2—six clinicians (physicians and case managers) from different Health Center Program Grantees and four administrators (program team members, a director, and a housing operations manager) from a shelter, a food pantry, transportation public transportation agency, and a clothing supplier. Participants reported that they performed a number of roles in the homeless services field, including provider, advocate, and outreach worker.

Group 3: Local government. Seventeen government officials and affiliates were contacted and four local government participants (LGP) completed a phone interview. Participants included a county government official, two HUD affiliates, and one official of local government. The affiliates included:

- LGP 1- Homeless Management Information System (HMIS) Director
- LGP 2- HMIS data analyst
- LGP 3- County Commissions appointee
- LGP 4- County Engineering and Public Works administrator (former sheriff)

They performed a number of roles in homelessness including: data management, community outreach research, informal consultation, correctional, and property management.

Defining Homelessness

Group 1 and 2 participants were asked to select from a predetermined list of living circumstances that would describe an individual who is experiencing homelessness [Table 3]. Fifty percent or more of Group 1 participants selected that individuals living on the street, in a shelter, car/van, temporarily with someone, or in shelters made of discarded materials would describe an individual experiencing homelessness. The majority of Group 2 participants selected that individuals living on the street, in shelters, cars/vans, temporarily with someone, and in shelters made of discarded materials would describe an individual experiencing homelessness.

Table 3. Group 1 response to how they define homelessness

Survey items	Group 1, n (%)	Group 2, n (%)
Living situations of an individual experiencing homelessness:		
On the street	22(73%)	9(90%)
In transitional housing	9(30%)	5(50%)
In a shelter	21(70%)	10(100%)
In a fifth wheel/RV	3(10%)	Not asked

In a car/van	19(63%)	9(90%)
Temporarily in a motel/hotel	10(33%)	7(70%)
Temporarily with family/friend/peer due to inability to afford own hosing (doubling –up, shared dwelling, couch surfing)	15(50%)	8(80%)
Shelters made of discarded materials (i.e. cardboard boxes, wood, fabric, plastic, etc.)	18(60%)	10(100%)
Not sure	2 (7%)	0(0%)

Group 3 participants were asked how they or their organizations defined homelessness. Themes emerged from their qualitative responses and included literal and temporarily-housed homelessness. Concepts are illustrated by quotes from local government officials and affiliates. In general, participants defined homelessness in line with the definition used by the US Department of Housing and Urban Development (HUD). LGPs 1 and 2 pointed out that they are required to use the HUD definition:

> "We use the HUD guidelines for defining homelessness and a lot of our programs, we do have several that are HUD funded, they are required to also follow those definitions but because we are HUD funded, we ask all of our providers of our list whether or not they receive any type of HUD funding to follow those definitions."

Literal homelessness—living on the streets, under bridges, or places not meant for human habitation—was the main way participants defined homelessness. As LGP 3 stated:

> "It's not something that this organization would define but to me it would be someone that has no shelter, exposed to the elements the majority of the time they are living outside."

Temporarily-housed homelessness—couch surfing, being at risk of losing housing within 14 days, or staying with family members—was also discussed as an important piece of the homeless experience. LGP 4 makes a distinction between literal homelessness and temporarily-housed homelessness:

> "We would define it as the lack of permanent, safe, and stable housing.....and I think the distinction that we would draw is that the conventional definition of homelessness is thought of a person that lives one the streets and under a bridge, maybe drifting about the town. But there are a lot of folks we do encounter even here who may at any point in time have some form of temporary housing whether it's through an NGO, one of the rescue missions that they stay at overnight, to even a family member who is housing them for a week or two and then puts them back out on the street. Generally we would regard that person as homeless even though they are not always living on the street in the absence of a permanent and safe place to live. They would essentially be homeless."

However, when probed further on defining homelessness, LGP 3 expressed that they had never considered someone temporarily living with another adult, either couch surfing or doubling up, to actually be homeless:

> "On the surface I wouldn't. I wouldn't think they were homeless but thinking about it if they are staying with someone whether it's a family member or just a friend, that's something I've seen quite a bit but I've never really considered them homeless."

Community Perceptions and Images of Homelessness

All three groups were asked about the priority level of homelessness in their communities and how often individuals experiencing homelessness are stereotyped or discriminated against by these communities [Table 4]. Group 1 participants were specifically asked how often stereotyping and discrimination influence or affect decisions to use homeless services. Twenty percent reported never or rarely, 50% reported sometimes, and 30% reported very often or always.

Table 4. Communities' perceptions of and response to homelessness

Survey items	Group 1, n (%)	Group 2, n (%)
Describe the priority level of homelessness in this community		
low priority	1(3%)	3(30%)
not sure	15(50%)	4(40%)
standard priority	3(10%)	2(20%)
high priority	11(37%)	1(10%)
How often are individuals that are experiencing homelessness stereotyped and or discriminated against by this community		
never to rarely	6 (20%)	-
sometimes	15 (50%)	7 (70%)
very often to always	9 (30%)	3 (30%)

Responses varied considerably among Group 3 participants regarding the priority level of homelessness in their communities. LGP 1 made a distinction between the different levels of local government, noting homelessness to be of 'average priority' among city government and between 'low priority' and 'not a priority at all' among county government. Similar distinctions between communities were made by LGP 2 and 4. LGP 4 commented on the contributing factors to why homelessness may be of higher priority for city government compared to county government:

> "I'm employed by the city and so our jurisdiction is outside the corporate city limits…the center city is where the homeless gravitate because services are provided there…So if we define the community as the county balance where I work, it's not an issue people contend with if they don't work in the downtown environment, it's not an issue they contend with on a regular basis. As an issue that they don't contend with on a regular basis, it may not be at the top of the mind priority. Versus somebody who lives in town and is regularly exposed to the effects of homelessness, the condition that folks are in. I think that it's clear that they are going to be a much higher priority for folks who live inside the city…"

LGP 3 noted that he was not aware of any homeless issues in the counties of interest and suggested policies to address that lack of knowledge later in the interview:

> "To my knowledge if they're having any issues, I have not heard anything about it…I'm not telling you that it's not there, I'm just not aware of it or seeing it."

> "The policy thing that I can think of that would help small rural areas is probably a policy that took into account or the officials have awareness of the homeless issue. There needs to be some kind of inventory or census taken where they are aware of the issue."

Distinctions between communities were also made by group 3 participants regarding the frequency at which individuals experiencing homelessness are stereotyped or discriminated against. LGP 1 and 2 emphasized

that in different sectors individuals experiencing homelessness can face stereotyping and discrimination differently. LGP 2 emphasized these differences between people in the downtown business districts and homeless service providers:

> "I think all of our homeless service providers are very aware and sensitive to those experiencing homelessness and do treat them fairly and equitably. I think it's mostly would be coming from the business district and businesses in our downtown areas or on the university campus. I think that for most of that, discrimination would come from, and I don't necessarily think that it comes from the faith based community, I think that those individuals seem to want to help anyone at risk for homelessness."

Managing Homelessness

Group 1. Group 1 participants reported utilizing a number of resources to help manage their experiences with homelessness, including: food pantries (70%), income support services (67%), resources from family or friends (60%), shelters (17%), housing assistance (13%), employment services (7%), and other resources not specified (10%). Additionally, 10% of Group 1 participants reported that they travel to other counties in order to receive services.

Participants reported receiving help from family members and friends, with shelter and food being the most commonly reported form of assistance [Table 5]. Qualitative responses in regards to assistance received, included money and transportation. Food was also the most commonly reported type of assistance received from service organizations in Union County. Thirty percent of participants reported that they were not aware of any services in their community. Qualitative responses did not specify what other services they had received from an organization [Table 5].

Table 5. Managing homelessness in rural communities (Group 1).

Survey item	Family	Friends	Organization
Types of services/resources:			
Provide a place to sleep/shelter	23(77%)	18(60%)	5(17%)
Provide food	22(73%)	17(57%)	16(53%)
Help with finding resources	9(30%)	10(33%)	6(20%)
Does not help or not aware of services (organization only)	0(0%)	5(17%)	9(30%)
No relationship with family or friend	4(13%)	3(10%)	-
Other (money, transportation or not specified)	1(3%)	2(7%)	3(10%)

Participants reported that local governments helped manage homelessness in their communities by providing eligibility assistance for private insurance or Tennessee's Medicaid program—TennCare (17%), and by providing income support (48%). About 35% reported that, to the best of their knowledge, local government does nothing to help manage their experiences of homelessness.

Group 2. Group 2 participants reported that their organizations helped manage homelessness in their communities by identifying unstably housed individuals (50%), collaborating with other organizations and providers (40%), promoting community empowerment (20%), providing homeless services (20%), and providing connections to other homeless services (60%). They provide various services including health, food (prepared meals and non-perishable), emergency shelter, housing assistance, clothing and furniture (low cost/free), job assistance, and connections to other resources.

An overwhelming 70% of Group 2 participants reported that they did not know how the local governments

helped to manage homelessness. The other 30% reported that the local governments promoted community empowerment (20%), allocated funding appropriately for homeless services (20%), and collaborated with local organizations and homeless service providers (30%).

Group 3. When Group 3 participants were asked to describe how homelessness is being managed, five themes emerged from their responses: monitoring homeless populations and service utilization; managing homelessness through local policies; managing homelessness through improvements in infrastructure; managing homelessness through local organizations; and managing homelessness through neighboring counties.

Regarding the monitoring of homeless populations and service utilization, LGPs 1 and 2 were well-versed in data collection in their communities as they primarily work with HMIS. They expressed that HMIS monitors how many individuals access services as well as the types of services being utilized. Furthermore, it was noted that HMIS data is not currently used as a way of coordinating services to ensure non-duplication of resources. LGP 1 stated:

> "We report to the community the numbers of services, but if you are asking, is there an organized and conscious effort to utilize information as a way of making sure that there is judicious use of resources and non-duplication of resources, that would be a laudable goal but it's not present."

Drawing from experience in the sheriff's office, LGP 4 noted that though housing information was collected in the jail system, there was no effort made to aggregate data to see what kind of impact it may have had on inmate population and public expenditures.

In managing homelessness through local policies, only LGPs 1 and 2 were aware of and able to provide examples. These policies were related to public ordinances and included regulations regarding lying on sidewalks, panhandling, and protecting businesses through non-solicitation rules. LGPs 1 and 4 also hinted at policies related to housing initiatives but did not expand on them. LGP 1 reiterated that they were not aware of any homeless issues in rural areas.

In regards to efforts being made to manage homelessness through improving community infrastructure, the transit system and housing initiatives were two major topics discussed. LGP 3 noted that there are federal grants to fund transportation to and from homeless services while LGP 2 noted the absence of a full transportation system in rural areas. Three LGPs noted major HUD initiatives, including rapid re-housing, and permanent supportive and low-income housing.

In managing homelessness through local organizations, there was great emphasis placed on the role of churches and non-governmental organizations (NGOs). LGP 3 noted that, outside of government entities or agencies, churches may silently help an individual or family only for a short period of time. LGP 4 noted that the Salvation Army and other NGOs played a role in managing homelessness, but added that they were treating the symptoms of homelessness instead of the underlying causes.

Lastly, managing homelessness through neighboring counties emerged as a major concept. LGPs 2 and 3 shared similar views that there are no services available in rural counties in Tennessee and individuals who are homeless tend to migrate to larger urban areas where with larger homeless populations and services. LGP 3 stated:

> "I think if you were in Grainger, Union County or one of those smaller counties north of

> Knoxville, they're going to migrate and go to Knoxville. There would be services readily available to them. Plus there's a community of homeless people that are going to be able to tell them, 'Hey you, got to, go here. They got better food, or got better place to sleep here than there.' But out in the rural areas you don't even have that. You don't have anyone else to talk to about how to survive."

Engaging in Homeless Services

Group 1. In regards to health services, CHSM (77%) was the most frequently reported health facility through which Group 1 participants usually accessed health services, then hospitals (40%), and lastly at a different facility within the county (7%). The reasons for accessing health services through these facilities included having little to no cost to receive services (57%), great service from providers (52%), being in closest proximity (48%), and the facility's welcoming environment (39%).

Primary care (73%) and mental health (67%) services were the most frequently reported health services received at these health facilities. The least reported services received included specialist care or referral (13%), sexually transmitted infections (STIs) screenings (3%), and health education (3%) [Table 6]. Sixty-seven percent of participants reported unmet health needs. Of those that reported a need for health services, access to specialist care (60%) was the most frequently reported health service need. There were also reports of a need for primary care, nutrition education, STI screening, oral health, mental health, vision, and substance abuse treatment.

Table 6. Health care services used in rural communities (Group 1)

Survey Item	n (%)
Types of health services used:	
Primary care	22(73%)
Mental health	20(67%)
Oral health	10(30%)
Specialty care	4(13%)
Substance abuse treatment	3(9%)
STI screening	1(3%)
Health education	1(3%)
Vision care	0
Nutrition	0

Participants were asked to describe their level of ease in accessing health services, mode of transportation to health facility, and the distance and time it takes to get to their nearest health facility. About 13% of participants reported that it is difficult to access services; 67% reported that their primary mode of transportation to their health facility is by car; 57% reported living within 15 miles of their health facility; and 43% reported that it takes them 15 minutes or less to get to their nearest health facility [Table 7].

Table 7. Participants' perceptions of health care service access (Group 1)

Survey items	n (%)
Level of ease in accessing health services (based on a scale from 1-very difficult to 5-very easy)	
difficult	4 (13%)
neither easy nor difficult	13(43%)
easy	13(43%)
Primary mode of transportation	
Car (either their own or getting a ride)	20 (67%)

Public transportation (ETHRA, bus, or train)	4(13%)
Walking/On foot	2(7%)
Other (not specified)	4 (13%)
Miles to nearest health facility	
0-15 miles	17 (57%)
16-30 miles	5 (17%)
31-60 miles	4(14%)
Not sure	4 (13%)
Time it takes to get to nearest health facility	
0-15 minutes	13 (43%)
16-30 minutes	9 (30%)
31-60 minutes	5 (17%)
Not sure	3 (10%)

Participants reported a number of barriers in accessing health services, including: lack of money (70%), lack of health insurance (63%), transportation (40%), knowledge of services (33%), length of wait-time (10%), distance to health facility (3%), issues communicating with providers (3%), and issues with paperwork (3%). Seven percent of participants reported that they do not face any barriers to accessing health services.

Most of the participants had never had a service provider meet them where they live to offer health services (97%) or received health services from a mobile clinic (90%). Only 17% reported having access to a community health worker or patient navigator who helped them with informal counseling, getting access to resources, and social support.

In regards to shelter and housing assistance, 57% of participants reported that they had never discussed or been offered these services. Those who had discussed or been offered shelter or housing assistance (n=13) reported difficulty in accessing these services [Table 8]. The top four barriers to accessing shelters and housing programs were transportation, lack of knowledge of how to apply (housing assistance only), wait time, and availability [Table 9]. In addition, most of the participants (90%) had never had a service provider meet them where they live to help with finding a place to sleep, housing assistance, or permanent housing.

Table 8. Perceptions of ease in accessing shelter and housing assistance **(Group 1)**

Survey item	Emergency shelter (N=13)	Temporary shelter (N=13)	Housing assistance (N=13)
Level of ease in accessing services:			
Very difficult	4(31%)	4(31%)	6(46%)
Somewhat difficult	3(23%)	4(31%)	2(15%)
Neither easy nor difficult	6(46%)	5(39%)	4(31%)
Somewhat easy	-	-	1(8%)

Table 9. Reported barriers to other homeless services including shelter, housing assistance, income support, and employment programs (Group 1).

Survey item	Shelters (N=29)	Housing Assistance (N=29)	Income Support (N=29)	Employment Programs (N=27)
Types of barriers:	n (%)	n (%)	n (%)	n (%)
Transportation	12 (36%)	10 (35%)	10 (35%)	9 (33%)

Lack of knowledge of how to apply	-	16 (55%)	13 (45%)	9 (33%)
Length of the application	-	8 (28%)	5 (17%)	1 (4%)
Complexity of the application	-	4 (14%)	5 (17%)	2 (7%)
Fear of discrimination/stigma	9 (31%)	9 (31%)	7 (24%)	3 (11%)
Concerns of safety	8 (28%)	-	-	-
Lack of required documents	3 (10%)	1 (3%)	2 (7%)	3 (11%)
Lack of availability	-	12 (41%)	-	-
Eligibility denied based on personal history	4 (14%)	6 (21%)	1 (3%)	1 (4%)
Length of processing time	-	11 (38%)	6 (21%)	1 (4%)
Long waitlist or line	13 (45%)	-	-	-
No barriers exist	1 (3%)	1 (3%)	3 (10%)	6 (22%)
Other	3 (10%)	4 (14%)	4 (14%)	5 (19%)

Fifty-three percent of unduplicated participants reported barriers to accessing income support and 10% reported barriers to accessing employment programs. Some of the barriers to accessing income support and employment programs were transportation, lack of knowledge of how to apply, and fear of discrimination [Table 9].

The top three service needs reported by participants in Union County were affordable housing, emergency shelter, and employment support [Table 10]. Participants also identified initiatives that would help increase awareness and utilization of homeless services (n=29), including: provider-lead outreach (69%), creating a resource guide (55%), creating events for education (48%), forming community roundtables (41%), providing transportation (41%), increasing outreach to most remote areas (36%), and consumer participant outreach (28%).

Table 10. Identification of service needs in rural communities

Survey item	Yes more services are needed
Types of services or facilities:	
Affordable housing	25 (83%)
Emergency shelter (immediate need for short-term)	24 (80%)
Employment support (job placement/training/education)	23 (77%)
Vision care	22 (73%)
Temporary shelter (specified amount of time)	22 (73%)
Dental care	21 (70%)
Primary care facilities	19 (63%)
Substance abuse treatment facilities	19 (63%)
Transportation services	19 (63%)
Transitional housing	18 (60%)
Mental health care	14 (47%)
Health education	11 (37%)

Group 2. All health care providers from Health Center Program Grantees reported that their health facilities offered primary care and mental health services. Health care providers also reported offering specialist care or referral (2), nutritional education or counseling (2), STI screening (1), oral health (5), health education (3), vision care (1), and substance abuse treatment (2). Among health care providers that reported unmet health needs (n=5), all reported a need for specialty care or referrals. They also reported needs for

nutritional education or counseling (1), oral health (2), vision care (3), and substance abuse treatment (2).

Group 2 participants (n=10) engage consumers in homeless services through hosting or attending community forums/roundtables (30%), provider outreach (20%), consumer participant outreach (20%), using social media (20%) and mobilizing services (10%). Forty percent of participants reported not having, or being unaware of, methods of engaging consumers their organizations. While 50% reported that they are not in close proximity to other community resources, 70% reported that they offer resources to connect to other homelessness services. Participants also reported connecting homeless individuals to resources and services through methods such as word-of-mouth, case workers, and flyers [Table 11].

Table 11. Connecting individuals experiencing homelessness to resources and services (Group 2)

Survey item	n (%)
Is this organization in close proximity to other community resources (e.g. HCH, employment programs, income support agencies, shelters, etc.)?	
Yes, very close	2(20%)
Yes, somewhat close	3 (30%)
No, not close at all	5 (50%)
Does this organization offer resources to connect to other homeless services	
No	1(10%)
Yes	7(70%)
Not sure	2 (20%
How are homeless individuals connected to resources and services of other homeless services through this organization?	
Through case worker	5 (50%)
Provide computer access to look up resources	5 (50%)
Word-of-mouth	4 (40%)
Flyers	3 (30%)
Consumer participant outreach	3 (30%)
Not sure	2 (20%)

Eighty percent reported that it is easy to access services at their organizations and 20% reported it was neither easy nor difficult. Reported barriers to accessing services included transportation (60%), cost (20%), long wait times (20%), limited hours of operation (10%), and fear of discrimination (10%).

Lastly, Group 2 participants were asked to identify service strategies that have been effective in their rural communities. The most frequently reported service strategy was transportation assistance (60%). Other strategies included: developing service delivery infrastructures that include a wide variety of homeless services (20%); using community networks and native workers to facilitate outreach (20%); promoting cultural competencies of service staff (20%); providing early interventions for the most at-risk groups (20%); coordinating rural service delivery systems to maintain continuity of care (10%); and increasing outreach to the most remote rural areas (10%).

Group 3. Group 3 participants reported on engaging consumers in homeless services, barriers to services, engaging stakeholders in homeless issues, and engaging consumers in policy processes.

In general, LGPs were unable to speak to how local governments engage consumers in actual health, shelter, housing, or income support services. However, they did mention a number of barriers to services, including availability, awareness, transportation, rural culture, interpersonal skills, and discrimination from

the community. LGP 2 described a few of these barriers to homeless services:

> "I think that a lot of people are precariously housed. Meaning they are staying or living with a family member or a friend either because they don't have the service available to them in the community. Maybe because those efforts to provide those services are not organized or publicized. I do think that given the opportunity, if there were transportation, they would be able to access services in Knox County, but I think transportation is still an issue. Sometimes people in our community, Knox County and surrounding counties, in rural counties, don't want to seek services.....because it's outside of the family or outside of the faith-based community. There's kind of that notion that we keep it to ourselves, we keep our problems to ourselves.....I think it's more of a cultural kind of Appalachian mindset. We stay within what we know and reaching outside of the family or the faith-based community is a challenge."

Regarding interpersonal skills, LGP 4 talked about personal limitations of individuals experiencing homelessness in being able to seek and ask for care themselves, as the following quote illustrates:

> "The basic interpersonal skills to ask for services and to navigate both governmental and non-governmental organizations, whether you're looking to one of the community based NGOs for services or whether you're looking to the health department or anybody else for services, you got to be able to articulate your needs in clear and unambiguous terms. You have to be able to ask questions and that's a tough thing for folks and for some even under the best of circumstances...to some extent that is a barrier for a lot of folks, both poor and homeless. You have to be able to ask for help and some folks can't do that. I see the problem fairly frequently."

In regards to engaging stakeholders in homeless issues, one of the main issues that arose was the role that major agencies such as the Health Department and Cherokee Health Systems play in initiatives to end homelessness. LGPs 1 and 2 stated that there was limited participation in ongoing initiatives such as participating in HMIS, meeting with other homeless service organizations, and actively participating at the mayor's roundtable. This can result in duplicated services and a lack of coordinated services. LGP 2 stated:

> "I feel that the lack of participation from the mainstream participants where they are going to encounter people is not there... they just want to put bandages on things rather than really trying to understand what's going on."

Lastly, in regards to engaging consumers in policy processes, LGPs 1 and 2 noted that some agencies are required or choose to have consumer representation on an advisory board for their organizations. However, having steady representation of consumers, according to LGP 2, is an ongoing challenge as current or formerly homeless individuals may be reluctant to share their stories and may face logistical issues to actively participate.

Discussion

The purpose of this study was to provide insight into how homelessness is defined and managed in rural communities as well as to document knowledge and utilization of homeless services. McLeroy, et al. (1988) describes the SEM as a mechanism to understanding individual behaviors by considering the different levels of social factors that can influence behavior. As such, the SEM provided a framework to highlight similarities and differences in the perception of homelessness in rural East Tennessee and to document utilization of services.

Figure 2 illustrates how participant perceptions of rural homeless management and service utilization fit within the levels of the SEM. Knowledge of homeless status, self-efficacy, and personal barriers were most often addressed at the intrapersonal level while tangible support, systematic barriers, and engagement in services were addressed at the interpersonal, organizational, and community levels. Additionally, the public policy level provides laws and regulations that influence the availability of homeless resources often offered through the community and organizational levels to the individual (McLeroy_1988).

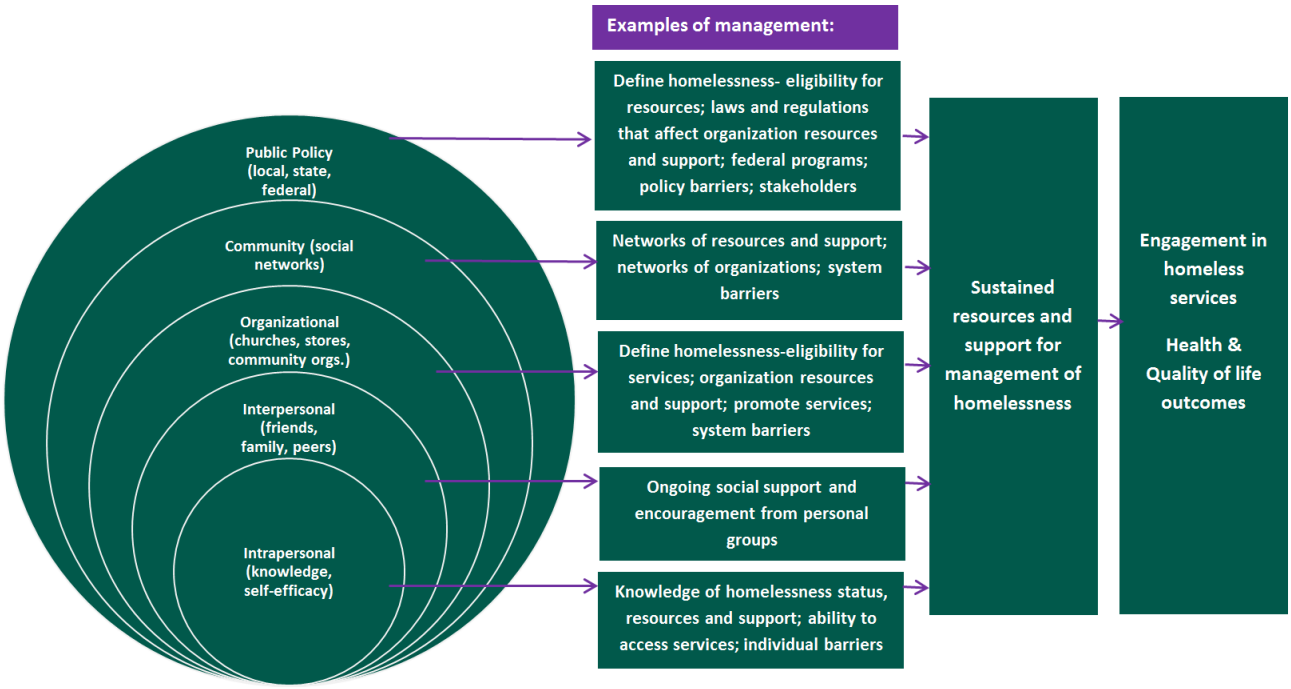

Figure 2. Illustrative model of relationships among the different SEM levels for managing experiences of homelessness. (Adapted and modified from Fischer et al, 2007 and McLeroy et al., 1988)

As our literature review indicates, homelessness is defined in a number of ways by federal agencies (Robertson et al., 2007). Definitions provided by each level of influence of the SEM also varied and underscore the need for a consistent definition of homelessness for providers to identify homeless clients and target services to them. Participants across all three levels of the SEM consistently reported that literal homelessness—living in a place not meant for human habitation, such as the street or in a car—describes an individual experiencing homelessness, which is a definition held throughout federal agencies like HUD (HUD, 2015).

However, there was variation in regards to individuals who are temporarily housed in transitional housing or living with someone else. Individuals experiencing homelessness and organizational staff in our study generally did not include transitional housing in their definitions of homelessness even though it is included in the HUD definition.

In regards to living with someone, there were some discrepancies among the individual and government levels of the SEM. A small portion of individuals experiencing homelessness reported that they were temporarily living with someone but did not consider themselves to be currently homeless. According to the Health Resources and Services Administration (HRSA) Health Care for the Homeless Principles of Practice, a person living in a doubled-up situation may still be considered homeless (HRSA, 1999).

However, according to HUD definitions, a person is not considered homeless simply by living in a doubled-up situation but must be in imminent risk of losing housing in 14 days (HUD, 2009). While investigators did not ascertain if the participant was in imminent risk of losing housing, responses suggest that there are some differences around self-definition of homelessness.

Within local government participants, LGP 3 mentioned encounters with many people who were staying with someone else temporarily but did not consider themselves to be homeless. In this case, LGP 3's comments support a common misconception that homelessness only includes those who are living in an area not suitable for human habitation and goes against conventional definitions of homelessness documented by federal agencies that include doubled-up living situations (HRSA, 1999; HUD, 2009). Inconsistent definitions of homelessness may influence how an individual is connected to and qualifies for homeless services and federal assistance programs (Robertson et al., 2007).

Views on whether homelessness was a priority in their communities differed among participants; one LGP even reported never encountering homelessness in their community. According to 2015 point-in-time (PIT) counts in Union, Grainger, and Claiborne counties, there were a total of 204 individuals experiencing homelessness and 243 precariously housed individuals [Table 12] (TVCH, 2015). PIT counts are annual counts of both sheltered (required annually) and unsheltered (required once every two years) homeless individuals on a single night in January. These counts are often criticized for underestimating the actual homeless population as they do not account for homelessness experienced over a period time, and may exclude individuals experiencing episodic homelessness versus those who are chronically homeless and engaged continuously in services (Hulchanski, 2000; Echenberg et al., 2008; HUD, 2014). In addition, PIT counts may miss subpopulations that tend to be more hidden, such as those doubled-up or couch surfing and homeless individuals who are living in expansive rural geographies (HUD_2014; Robertson et al., 2007).

Table 12. 2013 -2015 point-in-time counts for Union, Grainger, and Claiborne Counties.

	n= homeless count in 2015	n= precariously housed count in 2015	% change in homeless count since 2013
Counties:			
Union	1	8	88% decrease
Grainger	76	64	105% increase
Claiborne	127	171	No change

Perhaps the most striking finding in managing homelessness is how each level of influence contributes to addressing homelessness [Figure 2]. At the intrapersonal level, individuals experiencing homelessness reported using a number of resources offered within the interpersonal (resources from family, friends, and peers), organizational/community (shelters, food pantries), and public policy (income support and housing assistance) levels to help with managing their experiences with homelessness.

However, a good portion of participants experiencing homelessness was not aware of or felt that local organizations and government institutions did not provide help in their communities. It is worth mentioning that in recruiting potential participants for Group 2, investigators found it increasingly challenging to locate non-medical homeless services within the same county as Group 1 participants. As a result, four Group 2 participants were located in surrounding counties but still within the study area of interest. Similarly, investigators found it challenging to recruit Group 3 participants in the same county; they consistently received feedback that the community did not have a homeless issue, a similar sentiment of rural community leaders found in the literature (Edwards et al., 2009). Challenges in finding non-

medical homeless services and engaging local government may be related to the challenges experienced by Group 1 participants.

At the organizational level, staff participants manage homelessness by providing a number of tangible supports and connecting individuals experiencing homelessness to other homeless services. However, less than half reported that they collaborate with other organizations and providers. Edwards, et al. (2009) suggests that rural communities may face a number of barriers to collaborating with other organizations, including limited funding and human resources to focus on homeless populations and the desire to operate in silos in order to document their own progress. Many of these organizations are outcome-based and data-driven, which results in "protecting their turf." These organizations, though fragmented, provide a safety net for individuals experiencing homelessness in rural East Tennessee.

At the government level, participants provided insight into local government's efforts to: identify and enumerate individuals experiencing homelessness; provide funding to support resources and services; and develop policies and public ordinances. Additionally, two LGPs worried heavily about the lack of involvement of non-governmental organizations in local government initiatives and ultimately a lack of coordination of services, suggesting that these gaps lead to a fragmented system in which resources are not being utilized to their full capacity. The literature supports this need for collaboration between non-governmental and governmental service providers (Edwards, et al. 2009).

Though often viewed as a stereotypical assumption (Cloke et al., 2007), the idea that individuals experiencing homelessness travel to neighboring cities to access resources is actually descriptive of rural East Tennessee, as it was reported by group 1 and 3 participants. Additionally, objective data from Knox County HMIS suggests that individuals experiencing homelessness from surrounding rural areas traveled to a more urban city in order to receive services. For example, in 2014, 229 individuals accessing services in Knox County reported Union County zip codes in their last permanent addresses. Meanwhile, the 2014 PIT count showed that one person was experiencing homelessness in Union County (TVCH, 2015; HMIS, 2014).

One key finding regarding engagement in services is that specialty care was the health service need most frequently reported by individuals experiencing homelessness as well as by organizational staff. Though further studies are needed to explore access to specialized health care in rural areas, limited research has shown that a number of barriers may exist to specialty care, including: limited availability of specialists in a specific area, lack of insurance or underinsured patients, insufficient funds, overburdened providers, long waitlists, and transportation/distance issues (Forchul et al., 2010; Gruen et al., 2009; Cook et al., 2007). While these barriers also exist in urban areas, they may impact rural areas disproportionately and even more so for individuals experiencing homelessness (Robertson et al., 2007).

The second key finding around engagement is that lack of transportation and proximity to services were the most frequently reported barriers to homeless services, expressed by all three levels of influence of the SEM. This finding overlaps with previous research, suggesting that individuals experiencing homelessness in rural areas are at a greater disadvantage to securing income support, housing, shelter, and a number of health services. This could be due to the sprawling landscape of rural areas or simply the absence of services and distance needed to travel to access services in neighboring cities (Forchuk et al., 2010; Robertson et al., 2007; Whitley, 2013). In addition to this barrier, LGPs emphasized rural culture as a major barrier to accessing services. This has also been found in recent research where conservative rural culture may reject the existence of homelessness as they see their communities as self-sufficient (helping each other), insular, and private with highly connected social networks where "everybody knows everybody." (Robertson et al.,

2007; Edwards et al., 2009; Cloke et al., 2007).

A third noteworthy finding, reported by LGPs, is the lack of engagement of stakeholders and consumers in homeless issues. Participants recognized a need for increased collaboration and communication between agencies, stakeholders, and consumers in a better effort to coordinate care and prevent duplication of services. Similar experiences were documented in the literature for agencies serving homeless youth in rural areas (Edwards et al., 2009).

Limitations/strengths and Implications

This study used a theoretical framework to investigate the perceptions of different levels of McLeroy's Social Ecological Model to gain a better understanding of rural homelessness. A strength of this study was its focus on and inclusion of government officials and affiliates, which shed light on how higher levels of the SEM, perceive homelessness in rural communities. To the best of our knowledge, no other studies on homelessness have examined the perceptions among this level of decision-makers. With that said, a limitation of the study was that not all perspectives described by the SEM were explored (i.e. the interpersonal and community levels). Including these groups in the study would have provided additional challenges to participant recruitment. However, organizational and intrapersonal levels were represented and provided perceptions on the influence of other levels of the SEM not represented. Future studies could explore the additional levels in greater depth by investigating the perspectives of families, friends, and community networks, particularly those involved in providing resources such as temporary places to sleep.

A second limitation of the current study was response bias among each group of participants. According to Delroy L. Paulhus, people may respond in a way that portrays themselves in the best light especially in self-portrayals, attitudes, and behavior (Robinson et al., 1991). In addition, though there were steps taken to refine the interview and survey instruments, there still may have been issues with the questionnaires- - including unfamiliar content, question fatigue, and faulty recall- that influenced the way participants responded adding to response biases (Robinson et al., 1991).

Although this study had a small sample size and focused on four counties of East Tennessee, the results do support existing research on rural communities in general. The results, however, cannot be generalized to other unexamined rural communities as they still may vary in how they prioritize and manage homelessness as well as due to the small sample size of the study. Future studies could look at perceptions in other rural communities, either within the state of Tennessee or nationwide, and compare them to the perceptions expressed in this study.

The third limitation of this study is that it provided a surface-level description of rural homelessness rather than a deeper exploration of the interaction of the SEM levels in managing homelessness. Future research could consider how policies, communities, organizations, and individuals develop and implement initiatives to alleviate circumstances related to homelessness.

Finally, this study engaged communities of rural East Tennessee in research which, according to Ahmed et al. (2010), increases the communities' understanding of the issues and their ability to address their own needs and disparity issues. As a result, authentic partnerships were developed between an academic institution and community organizations addressing homeless issues. The academic partnership was imperative in refining the study methodology, analysis, and seeing the project from start to finish; CHSM helped considerably in engaging unstably housed clients as well as non-medical organizations; and investigators at the National Health Care for the Homeless Council also saw the project from start to finish including refining methodology, analysis and final products. Future research looking at rural homelessness

should make effort to include community partners as they play an important role in addressing their community issues.

Conclusion

Our findings demonstrate the inconsistencies in how homelessness is defined and managed in rural areas. Consistent with the literature, homelessness in rural communities tends to be hidden, unacknowledged, and without adequate organizational resources. Furthermore, a lack of awareness and acknowledgment of rural homelessness can prevent communities from taking action to start providing or increase access to existing services.

Differences in how homelessness is defined adds to the hidden nature of homelessness in rural areas; those in transitional living situations or staying temporarily with family, friends, or peers may be missed in annual counts. Additionally, the prevailing culture of rural communities can add to the difficulty in identifying individuals experiencing homelessness and getting them access to services. While rural culture adds to these issues, it also seems to attempt to mitigate homelessness by providing tangible support through health facilities, churches, and NGOs. However, it still neglects to address the underlying causes of homelessness and efforts to end it.

From the SEM perspective, the study suggests that the interactions between government/policies, communities, organizations, and individuals influence the availability and accessibility of homeless services for individuals experiencing homelessness in rural East Tennessee.

Overall, this study suggests that rural communities need to improve how they currently manage homelessness using the different levels of influence represented in the SEM. They can make improvement by: (1) standardizing how they define homelessness; (2) using appropriate enumerating methods, (3) recognizing that rural areas differ from urban areas in homeless culture, geography, and needs; and (4) improving coordination, communication, and collaboration of medical and non-medical services available to individuals experiencing homelessness in rural areas and their neighboring urban areas.

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