Journal of Social Distress and Homelessness

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/ysdh20

Invisible intersectionality in measuring vulnerability among individuals experiencing homelessness – critically appraising the VI-SPDAT

Courtney Cronley

To cite this article: Courtney Cronley (2020): Invisible intersectionality in measuring vulnerability among individuals experiencing homelessness – critically appraising the VI-SPDAT, Journal of Social Distress and Homelessness, DOI: 10.1080/10530789.2020.1852502

To link to this article: https://doi.org/10.1080/10530789.2020.1852502

Published online: 05 Dec 2020.

JOURNAL OF SOCIAL DISTRESS AND HOMELESSNESS
https://doi.org/10.1080/10530789.2020.1852502

Invisible intersectionality in measuring vulnerability among individuals experiencing homelessness – critically appraising the VI-SPDAT

Courtney Cronley

College of Social Work, University of Tennessee, Knoxville, TN, USA

ABSTRACT

This study applies an intersectional analysis to explore racial and gender differences in a widely used measure of vulnerability while homeless, the VI-SPDAT, among a large community sample. The study is particularly important given that vulnerability assessments are used to triage housing decisions for individuals experiencing homelessness. Based on the high risk for trauma among women lacking permanent shelter, and the fact that persons who are Black experience homelessness at a disproportionate rate, it was hypothesized that Black women would score most vulnerable. Data were analyzed using bivariate tests and a moderated path analysis. White women scored consistently higher on vulnerability compared to all men and Black women, despite both Black and White women reporting similarly higher odds of experiencing homelessness due to a history of trauma and abuse. Being homeless due to trauma and being White directly and significantly predicted higher vulnerability scores. Results suggest evidence of racial bias in the VI-SPDAT, which is particularly problematic for Black women, for whom potential measurement bias could mask the effects of trauma. In consequence, Black women experiencing homelessness may be at risk of receiving delayed housing within an already highly oppressed situation.

ARTICLE HISTORY
Received 11 March 2020
Revised 20 October 2020
Accepted 1 November 2020

KEYWORDS
vulnerability; trauma; race; gender; intersectionality

Introduction

Over a third (39.1%) of individuals experiencing homelessness in the United States (U.S.) are female (Henry et al., 2018), and research shows that poverty, reproductive coercion, and economic inequality intersect with gender to place women at unique risk for housing insecurity compared to men, specifically due to interpersonal violence, poverty, unintended pregnancies, and single parenthood (Cronley et al., 2018; Cronley et al., 2019). Race also appears related to risk for homelessness, with Black people comprising 39.8% of individuals experiencing homelessness (Henry et al., 2018), while only 15% of the general population (U.S. Census Bureau, 2019).

Current best practices in U.S. homelessness services include triaging housing decisions through the use of an assessment tool called the Vulnerability Index, Service Prioritization Decision Assistance Tool (VI-SPDAT [OrgCode, 2015]). Communities in 39 states and the District of Columbia use the VI-SPDAT, and it is also used outside the US. The scientific origins of the VI-SPDAT are unclear, but some attribute it to a study of mortality among street-dwelling adults in Boston, of whom 86% were male and 59% White (Hwang et al., 1998). Just one peer-reviewed study has investigated the psychometric properties of the VI-SPDAT (Brown et al., 2018), and very few studies to date have explored gender or racial differences in the VI-SPDAT (see Wilkey et al. 2019 for an exception).

This paper investigates how the VI-SDPAT assesses vulnerability across women and men and Black and White individuals. This investigation is informed by calls for greater intersectional analysis (based on critical race and feminist theories) of power, privilege, and oppression within health research (Bowleg & Bauer, 2016), and argues that the VI-SPDAT should demonstrate a sensitivity to the specific risk for trauma among women who are Black, Indigenous, or People of Color (BIPOC). The current study is based on a community sample, but results may inform future research at a broader level.

Invisible intersections between homelessness, oppression, and trauma

The United States has only recently begun to consider how intersectionality applies to homelessness (Zuffrey, 2017). Some exceptions include emerging work examining transgendered individuals (Kattari & Begun, 2017) and older women (Gonyea & Melekis, 2017). Common explanations for why people experience homelessness include poverty, substance abuse, mental illness, and lack of affordable housing. These risks intersect, though, with personal identities, including

CONTACT Courtney Cronley ccronle1@utk.edu College of Social Work, University of Tennessee, 1618 Cumberland Avenue, 401 Henson Hall, Knoxville, TN 37996, USA

gender, race, and age, to create unique systems of oppression. As such, an intersectional lens (Cho et al., 2013; Crenshaw, 1989) offers a more critical and holistic theoretical framework through which to account for vulnerability within homelessness.

While the general public may see younger, single individuals living on the street as the most visible image of homelessness, the population is far more heterogeneous. BIPOC are disproportionately represented, as are individuals of Hispanic ethnicity (Henry et al., 2018). Some research indicates that data such as the national point-in-time count that the federal government uses to determine prevalence and inform policy and funding decisions, present misleading statistics regarding the racial make-up of the homeless population, by relying on cross-sectional methodologies, with lifetime prevalence rates showing that individuals who are non-Hispanic Black have three times the odds of experiencing homelessness at some point in their lives compared to non-Hispanic White individuals (Fusaro et al., 2018).

Women, as noted earlier, comprise over a third of the total homeless population, and they are disproportionately represented in families who are homeless, making up 60% of this group. It is often difficult to provide precise counts of underrepresented groups, however, due to their decisions to eschew traditional services and even hide. Families account for approximately 30% of all homeless individuals (Henry et al., 2017), and homeless families are disproportionately headed by women (Henry et al., 2016). Many of these families live doubled-up with other family or friends (Hallett, 2012), thereby avoiding traditional services and not appearing in official homelessness counts.

The intersection of race and gender with homelessness must be considered through the lens of trauma. The theory of race trauma holds that BIPOC face collective trauma stemming from historic racism and discrimination (Comas-Díaz et al., 2019). Women who identify as BIPOC thus face multiplicative risks for trauma – at a structural level, stemming from their position as BIPOC, and at the individual level in terms of risks for experiencing interpersonal violence. When women who identify as BIPOC are also experiencing homelessness, the issue of trauma may be central to understanding their vulnerability on the street.

Housing, vulnerability, and homelessness

Within the past two decades, housing has emerged as the primary goal in homelessness intervention, and assessing the vulnerability of individuals who are experiencing homelessness is a critical factor in determining housing assistance. Starting around the early 2000s, the U.S. Department of Housing and Urban Development (HUD) implemented an innovative housing model, permanent supportive housing (PSH), to help high-risk individuals – most often chronically homeless and unsheltered – access housing more rapidly. In conjunction with PSH, HUD has adopted Housing First (HF) as a state-of-the-art harm reduction model in which individuals at greatest risk of mortality on the streets are given priority permanent supportive housing with wraparound care, without expectations of sobriety or mental health stabilization prior to placement. As part of the HF initiative, communities have adopted Rapid Re-housing approaches in which individuals and families are connected to PSH, in conjunction with individualized supportive services, in order to address immediate barriers to permanent housing and to limit duration of homelessness and help (U. S. Department of Housing and Urban Development, 2014).

Following the HF initiative, HUD also began requiring communities to implement a coordinated entry system for placing individuals in housing with passage of the Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act of 2009 (Office of Policy Development and Research [OPDR], 2015). Prior to this act, many communities allocated services based on a first-come-first-serve basis or based on whatever was available at the time (Balagot et al., 2019).

A community organization in Boston, Community Solutions, developed the original preliminary Service Prioritization Decision Assistance Tool (SPDAT) as part of its 100,000 Homes Campaign. As noted earlier, the scientific origins of the tool are ambiguous, at best. Research conducted in Boston at the time determined cause of death for homeless persons, but the scientists leading this work never intended for their findings to be applied to a vulnerability index (Hwang et al., 1998). Subsequently, Community Solutions collaborated with an independent consulting firm, OrgCode, to design the Vulnerability Index SPDAT, or VI-SPDAT, as a brief tool that could be used to determine who may be eligible for full screening under the SPDAT (OrgCode, 2015). The VI-SPDAT has become arguably the most prominent vulnerability assessment tool among homeless service providers, and HUD officially endorses this tool for use among communities, despite noting that the "evidence base is limited" (OPDR, 2015, p. 1).

There are three different VI-SPDAT assessment tools for different target populations – for individuals, families, and youth – all of which assess for current vulnerability and future housing stability based on self-report. All three assess vulnerability across four domains: (1) history of housing and homelessness, (2) risks, (3) socialization and daily functioning, and (4) wellness (see Table 1). Total scores range from 0 to 17. At or above scores of 4 and 8, OrgCode recommends that an individual or family be considered

Table 1. VI-SPDAT items and scoring.

History of housing and homelessness		
Q1. Sleep most frequently	Shelters Transitional housing Outdoors Other Refused	*Yes* = 1 pt.
Q2. Time in permanent stable housing	Years	1+ consecutive yrs. and/or 4+ homeless episodes = 1 pt.
Q3. Times homeless last three years	Number of times	
Risks		
Q4. In the past six months, how many times (a) Received health care at emergency department room (b) Taken an ambulance to hospital (c) Been hospitalized as inpatient (d) Used crisis service (e) Talked to police due to witnessing crime, victim of crime, or alleged perpetrator, or told to move along (f) Stayed 1+ nights in holding cell, jail or prison	Number of times	4+ total # of interactions = 1 pt.
Q5. Attacked or beaten up while homeless	Yes/no/refused	*Yes* to either = 1 pt.
Q6. Threatened or tried to hurt yourself or another in the past year	Yes/no/refused	
Q7. Have legal stuff going on that could result in being locked up or having to pay fines	Yes/no/refused	*Yes* = 1 pt.
Q8. Forced or tricked to do things against will	Yes/no/refused	*Yes* to either = 1 pt.
Q9. Engage in risky behavior	Yes/no/refused	
Socialization & Daily Functioning		
Q10. Any person, landlord or group that thinks you owe them money	Yes/no/refused	*Yes* to Q10 or *No* to Q11 = 1 pt.
Q11. Receive money from government, anyone or anything	Yes/no/refused	
Q12. Have planned activities that make you happy/fulfilled	Yes/no/refused	*No* = 1 pt.
Q13. Able to take care of basic needs	Yes/no/refused	*No* = 1 pt.
Q14. Current homelessness due to broken/unhealthy relationships	Yes/no/refused	*Yes* = 1 pt.
Wellness		
Q15. Had to leave housing situation due to physical health	Yes/no/refused	*Yes* to any = 1 pt.
Q16. Have chronic health conditions with liver, kidneys, stomach, lungs, or heart	Yes/no/refused	
Q17. Be interested in housing for people with HIV or AIDS	Yes/no/refused	
Q18. Have physical disabilities that would make it difficult to live independently	Yes/no/refused	
Q19. When ill, avoid seeking help	Yes/no/refused	
Q20. FEMALES ONLY, currently pregnant	Yes/no/refused	
Q21. Substance use led to being kicked out of housing	Yes/no/refused	*Yes* to either = 1 pt.
Q22. Substance use make it difficult to afford housing	Yes/no/refused	
Q23. Ever had trouble maintaining housing or been kicked out due to: (a) Mental health (b) Head injury (c) Learning/developmental disability or other impairment	Yes/no/refused	*Yes* to any = 1 pt.
Q24. Have mental health or brain issue making it hard to live independently	Yes/no/refused	
Q25. Any medications you should be taking but are not	Yes/no/refused	*Yes* to either = 1 pt.
Q26. Any medications taking but should not, or are selling	Yes/no/refused	
Q27. Has your current period of homelessness been caused by an experience of emotional, physical, psychological, sexual, or other type of abuse, or by any other trauma you have experienced?	Yes/no/refused	*Yes* = 1

eligible for rapid re-housing and PSH/HF, respectively. Three versions of the VI-SPDAT assessment tools have been released, with the current, v.30, released in 2020.

Intersectionality and the vulnerability assessment

As the U.S. has shifted to a quantitative assessment approach to housing allocation decisions within homeless services, communities ought to consider homelessness and vulnerability through an intersectional lens in order to better account for how multiple positions of disadvantage reflect vulnerabilities differently. Without doing so, vulnerability assessments are subject to bias. In fact, quantitative assessment tools have a long history of being critiqued for implicit bias that disadvantages non-dominant groups, in domains such as criminal justice (Shepherd & Sullivan, 2016) and special education (Sewell, 2016). Moreover, within public and private housing services, the documented history of discriminatory practices led to the Fair Housing Act and subsequent reform-oriented federal policies (Landis & McClure, 2010). As recently as 2016, *The New York Times* reported on widespread claims of racial discrimination within the home-sharing system, most notably among Airbnb hosts (Glusac, 2016). These historical and contemporary precedents indicate a need to think cautiously about how the process of assessment within homelessness services may be susceptible to similar racial and gender-based biases.

For example, community-level data shows evidence of gender and racial differences in the VI-SPDAT (Wilkey et al., 2019). Moreover, the index may perform particularly poorly with survivors of intimate partner violence, in part due to discomfort in identifying and describing their experiences of violence in the terms used by the index (McCauley & Reid, 2020). Implications of such potential biases are particularly problematic when using the VI-SPDAT, because assessment results are used to allocate scarce housing. If the assessment treats women and men or Black and White people differently, then some individuals face a double disadvantage. As noted earlier, women face a heightened risk for interpersonal violence and trauma on the street compared to men, and Black people are disproportionately represented within the homeless

population. In the case of a biased housing triage system, however, they may find it even more difficult to find permanent housing. Finally, intersectionality would suggest that the intersection of minority race, female gender, and experiencing homelessness could place someone in the greatest position of vulnerability.

In sum, understanding how different demographic groups score on VI-SPDAT is critical if homelessness services intend to provide housing assistance equitably and avoid perpetuating inequities within an already oppressed social group. The current study, therefore, uses an intersectional analytic approach (Rice et al., 2019) to investigate how the women and men and Black and White individuals score on the VI-SPDAT and its sub-scales and how gender and race may moderate the relationships between trauma and total vulnerability score. The study hypothesizes that gender and race will moderate the relationship between trauma and overall VI-SPDAT scores, and that Black women will score the highest on the VI-SPDAT.

Methods

Setting

The current study relied on data collected over a two-year period in one county in the southeastern United States. The county is comprised of rural, suburban, and urban communities. The county is the third largest in the state and has a population of nearly half a million people (U.S. Census Bureau, 2018). The racial make-up of the city is disproportionately White with only 8.9% of residents Black and only 4.4% Hispanic or Latino (U.S Census Bureau, 2018). Just over a tenth of residents (13.2%) live in poverty (U.S. Census Bureau, 2018), which is consistent with the national rate (Benson & Bishaw, 2019). The majority of homeless services and the homeless population reside in the urban areas in this community.

Nearly 10,000 persons were counted as seeking services for homelessness assistance in the county in 2018, a 3% increase from 2017 (Cronley et al., 2018). Of that total, 1,899 persons were experiencing street homelessness, such as living in public spaces, car, abandoned building, and/or camping outdoors; this represents 21% of persons experiencing homelessness in 2018 and a 33% increase over 2017 street homelessness.

VI-SPDAT and measures

The VI-SPDAT contains 27 items that capture four subscales: (1) history of housing and homelessness (range 0–2), (2) risks (range 0–4), (3) socialization (range 0–4), and (4) wellness (range 0–6) – and a total score (range 0–17). Higher scores on all subscales and the total indicate greater vulnerability. The instrument is designed for a case manager to read the questions aloud to respondents and record answers. All responses are based on self-report and not on medical or clinical assessments and diagnoses. Individual items are measured at different levels, some as number of times, some as prevalence, *yes* or *no* or *refused to answer*, and time frame varies from *the past six months* to lifetime prevalence; for the majority of items, higher scores or affirmative responses indicate higher vulnerability. Three items are reverse-coded, so that affirmative scores indicate lower vulnerability. Individuals accumulate points for vulnerability based on how they respond to items sets, or an individual item (again, see Table 1 for items and scoring).

For the purposes of this paper, differences in individual items were tested at the bivariate level, as were the sub-scales and total VI-SPDAT scores. The measure of trauma was based on responses from the last item on the VI-SPDAT which asks *yes* or *no*, "Has your current period of homelessness been caused by an experience of emotional, physical, psychological, sexual, or other type of abuse, or by any other trauma you have experienced?"

Gender and race were based on self-report. Gender response options included, *female*, *male*, or *other*. The coding is an artifact of the secondary data set from HMIS that the author used. *Gender* is traditionally defined as *women* and *men*, while *sex* is coded as *female* and *male*. As such, *gender* was coded as *women* and *men* in subsequent analyses. Race was asked as *primary race* and responses options included, *White*, *Black or African American/Black*, *Native Hawaiian or Other Pacific Islander*, *American Indian or Alaska Native*, *Asian*, or *Other*. The frequency distribution of race showed a small number of individuals (1.2%, $n = 16$) reporting to be a race other than *Black or African American/Black* or *White*. Due to this small percentage, the analyses were limited to *Black* and *White*.

VI-SPDAT data collection

The local homeless coalition has partnered with an office of community engagement and outreach that is part of the state's land-grant university to operate a HUD-mandated homeless management information system (HMIS) since 2004. The university contracts with a HUD-approved third-party vendor to host and secure the data. The staff who manage the HMIS also manage the HUD-mandated coordinated entry (CE) system for the homeless coalition. Case managers at partner organizations administer the VI-SPDAT-v2.0 along with other assessments, and data are entered directly into the HMIS in real-time. Individuals must grant informed consent for their information to be entered into the HMIS, and a university institutional review board has determined the

use of HMIS data exempt from review. Individuals seeking homeless assistance services who present as single and without dependent children are directed toward one agency that specializes in services for unaccompanied adults. They are assessed using the VI-SPDAT for individuals. As of December 2019, the HMIS contained VI-SPDAT assessments for over 1,300 unique clients since the community began administering the VI-SPDAT as part of its CES. (Not all clients who are counted in the local PIT are assessed with the VI-SPDAT.)

Data analysis

All data were downloaded from the HMIS, by the HMIS data management staff, at the request of the author and provided to her in a deidentified Microsoft Excel spreadsheet. Initially, the author imported the raw data into SPSS v.25. The author ran a missing values analysis (MVA) in SPSS, which showed 300 cases missing values for all of the variables used in the analysis, excluding wellness. These cases were deleted, resulting in a total sample of 1025. Each variable contained less than 10 missing values, so listwise deletion was used, with the smallest sample being the moderation analysis, which contained 1015 cases.

All statistical tests were conducted with an alpha of 0.05. Data were screened at the univariate level for data entry accuracy, distributions, and outliers. No individuals reported to be a gender other than *female* or *male*; race analyses were also treated as binary, as noted above. Bivariate tests included correlations between gender, race, the subscales, and the total score, as well as chi-square tests of independence and *t*-tests. A moderation model was tested using PROCESS Macro (Hayes, 2018). The initial model included the interaction effect of race and gender on the VI-SPDAT total score, controlling for age. The interaction term was not significant so it was dropped from the final model for parsimony purposes. The final model tested the effect of trauma on total VI-SPDAT scores, as well as the interaction of trauma with gender and the interaction of trauma with race, while controlling for age.

Results

Age was normally distributed in the sample with a mean age of 43.16 ($SD = 12.90$), and ranged from 18 to 78 years old. Nearly 60% described their gender as male (58.5%, $n = 772$) and nearly three quarters (70.7%, $n = 933$) were White. A plurality was sleeping at an emergency shelter (36.4%, $n = 480$) followed by outdoors (26.6%, $n = 351$), and a very small percentage in transitional housing (2.0%, $n = 26$). Excluding those who said 0, the "number of times homeless in the past three years" ranged from 1 time to 10 times with 1 time being the median.

Bivariate tests

As shown in Table 2, women scored significantly higher on all sub-scales and the total, excluding the sub-scale for history of housing and homelessness, where there was not a statistically significant difference. Women had twice the odds of reporting that they were homeless due to trauma compared to men (OR = 1.78 vs. OR = .88). In terms of other items on the VI-SPDAT (see Table 3), women had used emergency rooms, ambulance services, and crisis services more frequently in the past six months compared to men. Women also reported a higher probability of being attacked since experiencing homelessness, having hurt oneself or others, and being tricked. Men, in contrast, had higher probabilities of reporting risks related to legal problems that would result in them being incarcerated or losing their housing.

Bivariate tests also revealed consistent statistically significant differences in the sub-scales and trauma based on race (see Table 2). White people scored higher than Black people on the risks, socialization, wellness, and grand total, whereas the latter scored higher on the history of housing and homelessness subscale. Regarding trauma, White people had one-and-a-half times the odds of reporting being homeless due to trauma compared to Black people (OR = 1.48 vs. OR = .67). At an individual-item level (see Table 3), statistically significant racial differences included more frequent use of emergency rooms, ambulance services, and inpatient services past six-months among White compared to Black people. White people also showed higher probabilities of being attacked since or tricked since entering homelessness. In contrast, Black people reported higher odds of having received money.

Bivariate gender and race interaction

Examining differences at an intersectional level (see Table 2), White women scored the highest on the sub-scales for risks, socialization, and wellness, and on the grand total. Black men scored the highest on the history of homelessness and housing sub-scale. Tests of the gender and race interactions showed significant differences on the total score and the first three sub-scales, but not the history of homelessness and housing sub-scale. White women's scores were statistically significantly higher than Black men on the risk and wellness vulnerability sub-scales, higher than Black and White men on social vulnerabilities, and Black men on the total score.

In terms of intersectional differences in trauma as the reason for homelessness (see Table 2), White

Table 2. Bivariate gender & race differences for Trauma, VI-SPDAT subscales, and total score.

	Bivariate Gender Differences ($N = 1023$)			Bivariate Race Differences ($N = 1021$)			Bivariate Gender X Race Differences ($N = 1019$)				
	Female	Male	χ/t	Black/ AA	White	χ/t	Female, AA	Male, AA	Female, White	Male, White	Chi-square/F
Homeless due to trauma or abuse[a]	64.1 (221)	46.7 (315)	27.46**	45.7 (128)	55.5 (409)	7.79**	62.3 (43)	40.0 (84)	64.6 (177)	50.0 (231)	33.06**
Homelessness History[b]	1.09 (.75)	1.06 (.75)	.668	1.15 (.75)	1.03 (.74)	.668*	1.45 (.77)	1.16 (.75)	1.08 (.74)	1.01 (.75)	2.34
Risks[b]	1.66 (1.30)	1.49 (1.18)	2.04*	1.32 (1.21)	1.63 (1.22)	2.04**	1.45 (1.36)	1.29 (1.17)	1.72 (1.29)	1.58 (1.18)	5.28**
Socialization[b]	1.97 (.91)	1.73 (.95)	3.90*	1.63 (.93)	1.88 (.93)	3.90**	1.74 (.89)	1.60 (.94)	2.04 (.90)	1.79 (.94)	9.23**
Wellness[b]	2.41 (1.45)	2.13 (1.52)	2.76*	1.93 (1.49)	2.34 (1.49)	2.76**	2.28 (1.49)	1.81 (1.48)	2.45 (1.44)	2.28 (1.52)	7.64**
Grand Total[b]	6.55 (2.93)	7.22 (3.02)	3.42**	6.179	7.009	−4.01**	6.64 (3.11)	6.03 (3.03)	7.38 (2.98)	6.78 (2.86)	8.37**

[a]Non-parenthetical values represent percentages and parenthetical values represent frequencies.
[b]Non-parenthetical values represent means and parenthetical values represent standard deviations.
**$p < .01$, *$p < .05$.

and Black women had the first and second highest odds, respectively, followed by White and Black men. Standardized residuals and post-hoc tests showed that White women's odds were statistically significantly higher than those for Black men, and White women were nearly three times as likely to report being homeless due to trauma compared to Black men (OR = 1.82 vs. OR = .67). Additional differences based on the intersection of race and gender (see Table 4) included past six-month use of emergency rooms, ambulance services, inpatient services, and crisis services. White women reported the most frequent use of emergency room and ambulance services, White men reported the most frequent use of inpatient services, and Black women showed the most frequent use of crisis services.

Moderation model

Results of the moderation model (see Table 5) show that the overall model was significant ($F = 66.17$, $p<.001$) and explained 25% of the variance in the VI-SPDAT total scores. Trauma and race significantly and directly predicted VI-SPDAT scores, while controlling for age. Those who had entered homelessness due to trauma or abuse scored more than three points higher compared to those who entered homelessness for other reasons. White women and men also scored higher than Black women and men by nearly a point. Controlling for trauma, mean scores were 7.03 for White women, 6.90 for White men, 6.36 for Black women, and 6.40 for Black men (see Figure 1). The interactions of race and gender with trauma were not statistically significant.

Discussion

Results from the analysis suggest that the VI-SPDAT may be assessing vulnerability among Whites based on trauma and abuse, but that its ability to show this relationship among Blacks, particularly women, is masked by their generally lower scores on other items within the measurement. In general, the higher odds for trauma among both Black and White women underscore the extent to which that trauma and violence pervade the lives of women experiencing homelessness. The VI-SPDAT seems to capture this risk among White women, which is important. White women score highest on the VI-SPDAT, and this assessment result would lead providers to prioritize them when allocating scarce housing and services.

In contrast, while Black women are reporting similar levels of trauma and abuse as the reason for being homeless, they are scoring lower, overall on the VI-SPDAT. In many other areas, White *men* actually scored higher than Black *women*. This finding underscores the need for additional research to better

Table 3. Bivariate gender & race differences for VI-SPDAT items.

	Bivariate Gender Differences ($N = 1023$)			Bivariate Race Differences ($N = 1021$)		
	Female	Male	χ/t	Black/AA	White	χ/t
Outdoors	45.3 (136)	39.0 (218)	3.269	43.3 (100)	40.1 (251)	2.248
Shelters	52.0 (156)	57.8 (323)		55.0 (127)	56.4 (353)	
Transitional housing	2.7 (8)	3.2 (18)		1.7 (4)	3.5 (22)	
Time in PSH	0	0	N/A	1.91 (1.51)	1.84 (1.28)	0.752
Time homeless past 3 yr.	1.96 (1.42)	1.80 (1.31)	1.81	0	0	N/A
6 mo. use ER[a] **	2.08 (2.29)	1.64 (2.07)	3.012	1.29 (1.80)	1.99 (2.25)	−5.05
6 mo. use ambul service[a]	1.21 (1.80)	0.97 (1.76)	1.964	0.79 (1.6)	1.15 (1.82)	−2.986
6 mo. use inpatient service[a]	0.62 (1.08)	0.69 (1.36)	−0.863	0.44 (1.07)	0.76 (1.33)	−3.828
6 mo. use crisis service[a] **	0.71 (1.28)	0.42 (1.02)	3.609	0.42 (1.01)	0.56 (1.16)	−1.874
6 mo. talked to police[a]	1.13 (1.70)	0.98 (1.79)	1.218	0.92 (1.69)	1.07 (1.79)	−1.123
6 mo. spent time in drunk tank[a]	0.51 (.97)	0.54 (1.00)	−0.577	0.44 (0.79)	0.56 (1.04)	−1.906
Attacked since homeless**	39.1 (135)	29.8 (201)	8.946	27.2 (76)	35.5 (262)	6.227
Hurt self or others past year**	26.7 (92)	18.4 (124)	9.268	17.5 (49)	22.8 (168)	3.426
Risks related to legal problems*	26.0 (90)	32.5 (219)	4.611	29.6 (83)	30.7 (226)	0.1
Tricked*	19.5 (67)	13.1 (88)	7.273	11.4 (32)	16.7 (123)	4.379
Engaged in risk behavior	22.8 (79)	17.8 (120)	3.681	16.4 (46)	20.7 (153)	2.39
Owe money	41.2 (142)	35.0 (236)	3.692	37.6 (105)	37.0 (273)	0.036
Receive money	52.2 (181)	49.4 (333)	0.695	56.1 (157)	48.0 (355)	5.242
Planned activities happy	51.0 (177)	56.4 (380)	2.666	61.4 (172)	51.8 (383)	7.549
Take care basic needs	92.5 (321)	89.6 (603)	2.271	89.3 (250)	91.2 (673)	0.872
Homeless due trauma**	69.7 (242)	51.5 (347)	31.28	49.3 (138)	61.0 (451)	11.48
Leave shelter physical health**	13.3 (46)	7.3 (49)	9.825	10.0 (28)	9.1 (67)	0.204
Chronic health condition**	49.6 (172)	32.9 (222)	26.732	27.1 (76)	42.8 (316)	20.924
Needs HIV aids housing	12.7 (44)	14.7 (99)	0.767	17.1 (48)	13.0 (96)	2.885
Physical disability	18.7 (65)	16.2 (109)	1.062	13.9 (39)	18.1 (134)	2.546
Avoid help when needed	41.9 (145)	38.2 (257)	1.324	28.2 (79)	44.0 (324)	21.033
Drug use cause housing loss	17.0 (59)	20.9 (141)	2.231	14.3 (40)	21.7 (160)	6.983
Drug use difficult stay housed*	6.4 (22)	10.4 (70)	4.519	8.6 (24)	9.2 (68)	0.089
Kicked out mental health	17.3 (60)	16.2 (109)	0.217	13.3 (37)	18.0 (133)	3.295
Kicked out head injury	5.5 (19)	8.8 (59)	3.425	5.0 (14)	8.7 (64)	3.837
Kicked out dev. disability	9.6 (33)	10.5 (71)	0.234	9.7 (27)	10.4 (77)	0.126
Brain injury – dependent	11.3 (39)	10.2 (69)	0.258	11.8 (33)	10.2 (75)	0.564
Need take meds*	41.4 (143)	34.0 (229)	5.498	31.5 (88)	38.5 (284)	4.205
Abuse meds	3.2 (11)	3.7 (25)	0.185	3.2 (9)	3.7 (27)	0.113

Note: Unless otherwise specified, non-parenthetical values represent percentages and parenthetical values represent frequencies. [a.] Non-parenthetical values represent means and parenthetical values represent standard deviations.
**$p < .01$, *$p < .05$.

understand how BIPOC individuals experience vulnerability within the context of homelessness and how to measure vulnerability more validly across racially and ethnically diverse populations. At this preliminary point, this study's findings suggest that use of the VI-SPDAT could perpetuate racial, as well as gender bias, in housing triage decisions. In scoring the highest on the VI-SPDAT, White women in this sample have greater likelihood of receiving permanent housing before Black women.

In order to interpret the results fully, though, it is necessary to examine the patterns at each level – within race, within gender, and then at the intersection of the two. First, White people scored higher on the VI-SPDAT and its sub-scales compared to Black people, despite the latter's disproportionate risk for homelessness. Secondly, women scored higher than men. At a more granular level, the intersection of gender and race showed that Black men scored the lowest on the VI-SPDAT and its sub-scales, excluding history of homelessness, suggesting the lowest level of vulnerability for homelessness. Black women showed the second lowest scores, again excluding history of homelessness, where they also scored higher than White women and men. White women reported the highest levels of vulnerability, excluding the history of homelessness.

Empirical research does not support the idea that Black women are less vulnerable on the street compared to their White counterparts. In fact, there is opposing research indicating that BIPOC women may be more vulnerable to housing insecurity compared to other groups (Levin et al., 2004). Indeed, their odds for experiencing risks to physical harm while homeless did not differ significantly from White women in this sample suggesting they are similarly vulnerable. And yet, they were scoring lower on the sub-scales and total VI-SPDAT.

This discrepancy may stem from the fact that homelessness and public housing services are nested with the wider society's systems of power and privilege (Bowleg & Bauer, 2016). Institutionalized racism may be contributing to widespread use of an assessment scale that privileges White experiences over those of other races and ethnicities. Evidence of this may be found within the individual items on the VI-SPDAT. For example, a large portion of the risks sub-scale is devoted to emergency services use. However, research shows that Blacks utilize health services at a lower rate compared to Whites, even when perceiving the same need (Ault-Brutus & Alegria, 2018), and that they may discontinue treatment due to perceived discrimination (Mays et al., 2017). The general trend toward

Table 4. Bivariate gender × race differences for VI-SPDAT items ($N = 1023$).

	Female, AA	Male, AA	Female, White	Male, White	Chi-square/*F*
Outdoors	45.0 (27)	42.9 (73)	45.4 (11)	37.0 (14)	6.806
Shelters	53.3 (32)	55.3 (94)	51.7 (12)	59.2 (23)	
Transitional housing	1.7 (1)	1.8 (3)	2.9 (7)	3.9 (15)	
Time in PSH	0	0	0	0	N/A
6 mo. use ambul service[a] **	1.40 (2.39)	0.60 (1.25)	1.16 (1.63)	1.14 (1.93)	6.186
6 mo. use inpatient service[a] **	0.41 (0.82)	0.46 (1.14)	0.67 (1.13)	0.80 (1.44)	4.488
6 mo. use crisis service[a] **	0.79 (1.43)	0.29 (0.80)	0.67 (1.24)	0.48 (1.11)	6.505
6 mo. talked to police[a]	1.23 (1.87)	0.83 (1.61)	1.10 (1.65)	1.05 (1.86)	1.298
6 mo. spent time in drunk tank[a]	0.37 (0.80)	0.47 (0.80)	0.53 (0.99)	0.58 (1.07)	1.236
Attacked since homeless**	38.2 (26)	23.3 (49)	39.6 (109)	32.9 (152)	15.169
Hurt self or others past year**	26.1 (18)	14.8 (31)	27.0 (74)	20.2 (93)	11.971
Risks related to legal problems**	24.6 (17)	31.4 (66)	26.5 (73)	33.0 (152)	4.563
Tricked	13 (9)	11 (23)	21.2 (58)	14.1 (65)	11.329
Engaged in risk behavior	17.4 (12)	16.2 (34)	24.2 (67)	18.6 (86)	6.01
Owe money	38.2 (26)	37.1 (78)	41.8 (115)	34.2 (1158)	4.324
Receive money	56.5 (39)	56.2 (118)	50.7 (140)	46.3 (214)	6.929
Planned activities happy*	59.4 (41)	61.9 (130)	48.6 (134)	53.9 (249)	9.323
Take care basic needs	94.2 (65)	87.6 (184)	92.0 (254)	90.7 (418)	3.923
Homeless due trauma**	60.9 (42)	45.2 (95)	72.1 (199)	54.3 (251)	39.255
Leave shelter physical health*	15.9 (11)	8.1 (17)	12.7 (35)	6.9 (32)	10.83
Chronic health condition**	39.1 (27)	23.3 (49)	52.5 (145)	37.0 (171)	43.79
Needs HIV aids housing	15.9 (11)	17.1 (36)	12.0 (33)	13.6 (63)	2.933
Physical disability	18.8 (13)	12.4 (26)	18.5 (51)	18.0 (83)	4.072
Avoid help when needed**	20.3 (14)	30.5 (64)	47.6 (131)	41.6 (192)	26.318
Drug use cause housing loss*	14.5 (10)	14.3 (30)	17.8 (49)	24.0 (111)	11.215
Drug use difficult stay housed	4.4 (3)	10.0 (21)	6.9 (19)	10.6 (49)	4.937
Kicked out mental health	16.2 (11)	12.4 (26)	17.8 (49)	18.0 (83)	3.62
Kicked out head injury*	4.4 (3)	5.2 (11)	5.8 (16)	10.4 (48)	8.975
Kicked out dev. disability	11.8 (8)	9.0 (19)	9.1 (25)	11.3 (52)	1.409
Brain injury – dependent	13.0 (9)	11.4 (24)	10.9 (30)	9.7 (45)	0.972
Need take meds	38.2 (26)	29.5 (62)	42.5 (117)	35.9 (166)	8.892
Abuse meds	4.4 (3)	2.9 (6)	2.9 (8)	4.1 (19)	1.211

Note: Unless otherwise specified, non-parenthetical values represent percentages and parenthetical values represent frequencies. [a.] Non-parenthetical values represent means and parenthetical values represent standard deviations.
** $p < .01$, * $p < .05$.

under-utilizing health care may persist within the homeless population and lead Black individuals experiencing homelessness to respond negatively to questions about emergency services, thereby biasing their vulnerability scores.

In addition, in some instances on the VI-SPDAT, Black people actually reported a higher probability of protective factors. For example, a higher percentage of Black people reported receiving money or some form of financial support while homeless. The is counter-intuitive given that poverty may be the main factor driving Black women, in particular, into homelessness (Levin et al., 2004). It would helpful to understand if this higher probability of self-reported financial protection persists across other community samples and times. It would also be important to triangulate the self-report with other sources such as employment status or receipt of SSI. Black people in this sample also reported a higher probability of engaging in activities that make them happy. This finding may explain, in part, lower vulnerability scores for Black individuals in this sample, but future research is necessary in order to replicate this correlation and secondly, if replicated, to explore why this might be the case. Some research shows that spiritual and religious support seeking may serve as protective factors among Black individuals (Hope et al., 2017), and it may be informative to look into how spiritual or religious involvement or support is represented in current vulnerability assessments for the homeless.

Ultimately, the discrepancy between the over-representation of Black people in the homeless population, and their generally lower scores on the VI-SPDAT merits serious attention. Scoring lower on this critical instrument may result in a delayed receipt of housing and other services if one is deemed *less vulnerable*. One way to mitigate racial bias in our conceptual understanding of vulnerability is through qualitative methodologies, such as phenomenology or narrative theory (Moxley et al., 2015). Doing so would allow BIPOC to self-construct the phenomena in their own words. In addition, there is research suggesting that Black people may underutilize formal health care, such as visiting a mental health professional, compared to Whites (Dobalian & Rivers, 2008), perhaps due to the history of racism in medicine (Suite et al., 2007). Other research indicates that Black people use pharmaceutical treatments for

Table 5. Moderation model bootstrap results and variance explained for VI-SDPAT grand total ($N = 1015$).

R^2	.2469		
	B	95% Confidence Interval	*p*
Trauma**	3.14	1.70–4.60	.0001
Gender	−.17	−.68 to .34	.5215
Trauma × Gender	.13	−.58 to .82	.7191
Race*	.65	.18–1.12	.01116
Trauma × Race	−.22	−.96 to .51	.5493
Age	−.002	−.02 to .01	.8085

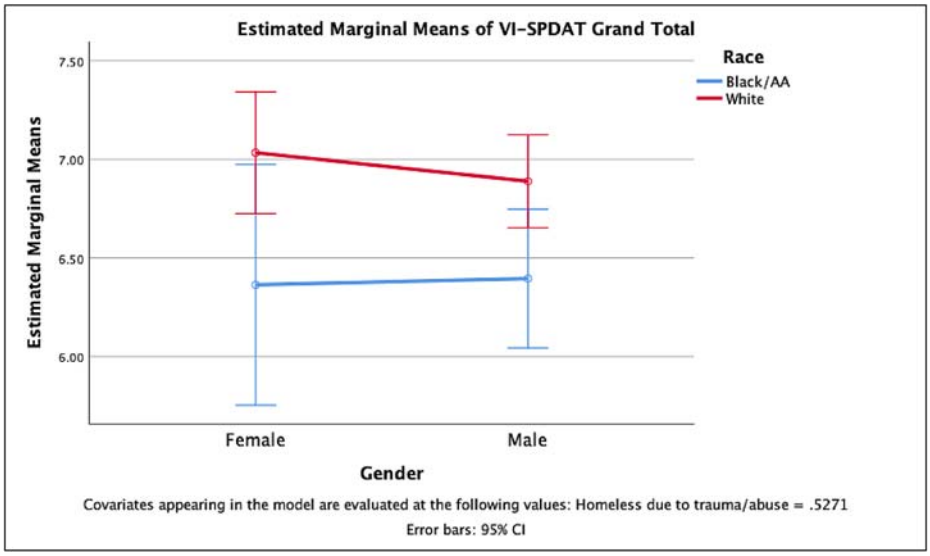

Figure 1. Estimated marginal means of VI-SPDAT grand total for African American/Black female, African American/Black male, White female, and White male individuals. Means are higher for Whites, regardless of gender.

mental illness at lower rates compared to White people (Givens et al., 2007; Jimenez et al., 2013). As such, assessment items emphasizing medication use could distort vulnerability levels among BIPOC. Likewise, it is well-established that racism and structural discrimination create unique economic and health risks for BIPOC persons, contributing to disproportionately high rates of poverty, as well as poor health (Pascoe & Richman, 2009). Therefore, a robust and comprehensive measure of vulnerability among individuals experiencing homelessness ought to contain items related to discrimination or stigma.

Before concluding, it is important to consider the results of this study within the context of any potential limitations. Since the present study uses a community sample, the same analyses must be replicated across other communities before being generalized. The composition of this study's community sample also limited measurement of racial differences between Black and White people, and future research must expand the group analyses to include Hispanic respondents, at the very least, if not other racial and ethnic groups. Likewise, given the disproportionate representation of sexual and gender minorities within the homeless population, intersectional analyses that consider non-binary definitions of gender are critical. A final limitation stems from the reliance on self-report. As such, estimates of vulnerability and trauma are based on perceptions and could have produced biased estimates; clinical assessments, such as the *Life Events Checklist* (Gray et al., 2004), could be beneficial for triangulation.

Additionally, the current study was unable to include ethnicity and sexual and gender identities in the intersectional analysis. As the U.S. population grows increasingly diverse, understanding vulnerabilities and potential differences along ethnic groups will be essential. Likewise, future research may also want to investigate potential bias towards sexual and gender minorities within the VI-SPDAT. Sexual minorities are disproportionately represented among young adults experiencing homelessness (Ray, 2006). Likewise, young people who are transgendered or sexual minority report preferring to sleep outdoors rather than in shelters due to perceived discrimination (Kattari et al., 2015) and fear of assault (Coates & McKenzie-Mohr, 2010) due to their sexual and/or gender identity. The unintended consequence of these decisions and preferences may be a pattern of under-using and mis-trusting traditional services among sexual and gender minority groups. These tendencies could lead to distortions in vulnerability assessments. Without empirical validation, however, we cannot be certain.

Conclusion

Despite limitations, this study used intersectionality to help expose the possibility of racial bias in an instrument commonly used to decide on the allotment of resources. Even within this highly marginalized population, results from this study suggest that structures of power and privilege based on gender and race persist (Bowleg & Bauer, 2016). These structures create the risk of biases in instruments used to make decisions about critical service provision. Despite being disproportionately at risk for homelessness, Black people score lower on the VI-SPDAT assessment compared to White people. Black women, in particular, show levels of trauma in their backgrounds comparable to White women, but may be *less* likely to receive prompt housing services. If biases persist within the assessment and coordinated entry process, over time more Black people who are experiencing homelessness will

be without housing for longer periods of time compared to their White counterparts, and Black women may face elevated risk for chronic trauma on the street.

Disclosure statement

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

Notes on contributor

Dr. Courtney Cronley is an Associate Professor in the College of Social Work at the University of Tennessee (UT). Her research spans topics related to homelessness, poverty, transportation equity, feminist geography, and access to opportunities. She teaches graduate–level courses in applied statistics and research methods. She is a faculty liaison for the National Center for Excellence in Homeless Services and a Faculty Fellow in the UT Center for Transportation Research.

References

Ault-Brutus, A., & Alegria, M. (2018). Racial/ethnic differences in perceived need for mental health care and disparities in use of care among those with perceived need in 1990-1992 and 2001-2003. *Ethnicity & Health*, *23*(2), 142–157. https://doi.org/10.1080/13557858.2016.1252834

Balagot, C., Lemus, H., Hartrick, M., Kohler, T., & Lindsay, S. P. (2019). The homeless coordinated entry system: The VI-SPDAT and other predictors of establishing eligibility for services for single homeless adults. *Journal of Social Distress and the Homeless*, https://doi.org/10.1080/10530789.2019.1622858

Benson, C., & Bishaw, A. (2019). *Poverty: 2017 and* 2018. American Community Survey Briefs. U. S. Census Bureau. Retrieved January 28, 2020, from https://www.census.gov/content/dam/Census/library/publications/2019/acs/acsbr18-02.pdf

Bowleg, L., & Bauer, G. (2016). Invited Reflection. *Psychology of Women Quarterly*, *40*(3), 337–341. https://doi.org/10.1177/0361684316654282

Brown, M., Cummings, C., Lyons, J., Carrión, A., & Watson, D. P. (2018). Reliability and validity of the vulnerability index-service prioritization decision assistance tool (VI-SPDAT) in real-world implementation. *Journal of Social Distress and Homelessness*, *27*(2), 110–117. https://doi.org/10.1080/10530789.2018.1482991

Cho, S., Crenshaw, K. M., & McCall, L. (2013). Toward a field of intersectionality studies: Theory, applications, and praxis. *Signs: Journal of Women in Culture and Society*, *38*(4), 785–810. https://doi.org/10.1086/669608

Coates, J., & McKenzie-Mohr, S. (2010). Out of the frying pan, into the fire: Trauma in the lives of homeless youth prior to and during homelessness. *The Journal of Sociology & Social Welfare*, *37*, 65-96.

Comas-Díaz, L., Nagayama Hall, G., & Neville, H. A. (2019). Racial trauma: Theory, research, and healing: Introduction to the special issue. *American Psychologist*, *74*(1), 1–5. https://doi.org/10.1037/amp0000442

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum*, *140*, 139–167.

Cronley, C., Hohn, K., & Nahar, S. (2018). Reproductive health rights and survival: The voices of mothers experiencing homelessness. *Women & Health*, *58*(3), 320–333. https://doi.org/10.1080/03630242.2017.1296060

Cronley, C., Nahar, S., & Hohn, K. (2019). There's like no support system: Life Course stories of women with children about growing up, becoming mothers, and becoming homeless. *Journal of Social Distress and the Homeless*, https://doi.org/10.1080/10530789.2019.1677064

Dobalian, A., & Rivers, P. A. (2008). Racial and ethnic disparities in use of mental health services. *Journal of Behavioral Health Services*, *35*(2), 128–141. https://doi.org/10.1007/s11414-007-9097-8

Fusaro, V. A., Levy, H. G., & Shaefer, H. L. (2018). Racial and ethnic disparities in lifetime prevalence of homelessness in the United States. *Demography*, *55*(6), 2119–2128. https://doi.org/10.1007/s13524-018-0717-0

Givens, J. L., Houston, T. K., Van Voorhees, B. W., Ford, D. E., & Cooper, L. A. (2007). Ethnicity and preferences for depression treatment. *General Hospital Psychiatry*, *29*(3), 182–191. https://doi.org/10.1016/j.genhosppsych.2006.11.002

Gonyea, J. G., & Melekis, K. (2017). Older homeless women's identity negotiation: Agency, resistance, and the construction of a valued self. *The Sociological Review*, *65*(1), 67–82.

Glusac, E. (2016, Jun. 21). As Airbnb grows, so do claims of discrimination. *New York Times*.

Gray, M., Litz, B., Hsu, J., & Lombardo, T. (2004). Psychometric properties of the Life Events Checklist. *Assessment*, *11*(4), 330–341. https://doi.org/10.1177/1073191104269954

Hallett, R. E. (2012). *Educational experiences of hidden homeless teenagers: Living doubled-up*. Routledge.

Hayes, A. E. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford.

Henry, M., Mahathey, A., Morrill, T., Robinson, A., Shivji, A., & Watt, R. (2018). The 2018 Annual Homeless Assessment Report (AHAR) to Congress. Part 1: Point-In-Time Estimates of Homelessness. Retrieved January 28, 2020, from https://files.hudexchange.info/resources/documents/2018-AHAR-Part-1.pdf

Henry, M., Watt, R., Rosenthal, L., & Shivji, A. (2016). The 2016 annual homeless assessment report (AHAR) to Congress. Washington, D. C.: The U.S. Department of Housing and Urban Development Office of Community Planning and Development. https://www.huduser.gov/portal/sites/default/files/pdf/2016-AHAR-Part-1.pdf

Henry, M., Watt, R., Rosenthal, L., & Shivji, A. (2017). *The 2017 annual homeless assessment report to Congress*. The U.S. Department of Housing and Urban Development. https://www.hudexchange.info/resources/documents/2017-AHAR-Part-1.pdf

Hope, M. O., Assari, S., Cole-Lewis, Y. C., & Caldwell, C. H. (2017). Religious social support, discrimination, and psychiatric disorders among Black adolescents. *Race and Social Problems*, *9*(2), 102–114.

HUD Office of Policy Development and Research. (2015, July). Assessment tools for allocating homelessness assistance: State of the evidence. PD&R expert convenings summary report. Washington, DC: U.S. Department of Housing and Urban Development. https://www.huduser.gov/publications/pdf/assessment_tools_Convening_Report2015.pdf

Hwang, S. W., Lebow, J. M., & Bierer, M. F. (1998). Risk factors for death in homeless adults in Boston. *Journal of American Medical Association*, *158*(13), 1454–1460. https://doi.org/10.1001/archinte.158.13.1454

Jimenez, D. E., Cook, B., Bartels, S. J., & Alegria, M. (2013). Disparities in mental health service use of racial and ethnic minority older adults. *Journal of the American Geriatrics Society*, *61*(1), 18–25. https://doi.org/10.1111/jgs.12063

Kattari, S. K., & Begun, S. (2017). On the margins of marginalized – Transgender homelessness and survival sex. *Affilia: Journal of Women and Social Work*, *32*(1), 92–103. https://doi.org/10.1177/0886109916651904

Kattari, S. K., Walls, N. E., Whitfield, D. L., & Langenderfer-Magruder, L. (2015). Racial and ethnic differences in experiences of discrimination in accessing health services among transgender people in the United States. *International Journal of Transgenderism*, *16*(2), 68–79. https://doi.org/10.1080/15532739.2015.1064336

Landis, J. D., & McClure, K. (2010). Rethinking federal housing policy. *Journal of American Planning Association*, *76*(3), 319–348. https://doi.org/10.1080/01944363.2010.484793

Levin, R., McKean, L., & Raphael, J. (2004). *Pathways to and from homelessness: Women and children in Chicago shelters. Findings of the Center for Impact Research*. Retrieved January 27, 2020, from https://www.issuelab.org/resource/pathways-to-and-from-homelessness-women-and-children-in-chicago-shelters.html

Mays, V. M., Jones, A. L., Delaney-Brumsey, A., Coles, C., & Cochran, S. D. (2017). Perceived discrimination in health care and mental health/substance abuse treatment among Blacks, Latinos, and Whites. *Medical Care*, *55*(2), 173–181. https://doi.org/10.1097/MLR.0000000000000638

McCauley, H. L., & Reid, T. (2020). *The limitations of the VI-SPDAT for survivors of domestic and sexual violence*. Safe Housing Partnerships and National Resource Center on Domestic Violence. Retrieved September 3, 2020, from https://safehousingpartnerships.org/sites/default/files/2020-08/CoordinatedEntry-Assessing%20Vulnerability-Risk_0.pdf

Moxley, D. P., Washington, O. G. M., & Crystal, J. (2015). The relevance of four narrative themes for understanding vulnerability among homeless older African-American women. *Practice*, *27*(2), 113–133. https://doi.org/10.1080/09503153.2015.1014333

OrgCode Consulting Inc. and Community Solutions. (2015). Vulnerability Index – Service Prioritization Decision Assistance Tool (VI-SPDAT): Prescreen Triage Tool for Single Adults. Retrieved January 28, 2020, from https://d3n8a8pro7vhmx. cloudfront.net/orgcode/pages/315/attachments/original/ 1479851654/VI-SPDAT-v2.01-Single-CA-Fillable.pdf? 1479851654

Pascoe, E. A., & Richman, L. S. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, *135*(4), 531–554. https://doi.org/10.1037/a0016059

Ray, N. (2006). Lesbian, gay, bisexual and transgender youth: An epidemic. National Gay and Lesbian Task Force Policy. Retrieved January 28, 2020, from http://www.thetaskforce.org/static_html/downloads/reports/reports/HomelessYouth_Exec utiveSummary.pdf

Rice, C., Harrison, E., & Friedman, M. (2019). Doing justice to intersectionality in research. *Cultural Studies – Critical Methodologies*, *19*(6), 409–420. https://doi.org/10.1177/1532708619829779

Sewell, A. (2016). A theoretical application of epistemological oppression to the psychological assessment of special educational needs; Concerns and practical implications for anti-oppressive practice. *Educational Psychology in Practice*, *32*(1), 1–12. https://doi.org/10.1080/02667363.2015.1090404

Shepherd, S. M., & Sullivan, D. (2016). Covert and implicit influences on the interpretation of violence risk instruments. *Psychiatry Psychology Law, 24*(2), 292-301. https://doi.org/10.1080/13218719.2016.1197817

Suite, D. H., La Bril, R., Primm, A., & Harrison-Ross, P. (2007). Beyond misdiagnosis, misunderstanding, and mistrust: Relevance of the historical perspective in the medical and mental health treatment of people of color. *Journal of the National Medical Association*, *99*(8), 879–885.

U.S. Department of Housing and Urban Development. (2014). *Rapid re-housing brief*. Washington, DC: Author. https://www.hudexchange.info/resource/3891/rapid-re-housing-brief/

U.S. Census Bureau. (2018). Quick facts United States. Retrieved January 31, 2020, from https://www.census.gov/quickfacts/knoxcountytennessee

U.S. Census Bureau. (2019). Quick facts United States. Retrieved January 28, 2020, from https://www.census.gov/quickfacts/fact/table/US/PST045218

Wilkey, C., Donegan, R., Yampolskaya, S., & Cannon, R. (2019). Coordinated entry systems racial equity analysis of assessment data. C4 Innovations. Retrieved August 31, 2020, from https://c4innovates.com/wp-content/uploads/2019/10/CES_Racial_Equity-Analysis_Oct112019.pdf

Zuffery, C. (2017). *Homelessness and social work: An intersectional approach*. London: Routledge.