



An exploration of anxiety and depressive symptoms among sexual and gender minority young adults visiting a drop-in center for youth experiencing homelessness

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ABSTRACT

Background: Research suggests that marginalized young adults, particularly sexual and gender minorities (SGM), face distinctive healthcare transition challenges. SGM often navigate a complex intersection of identities, experiences, and stressors that can contribute to mental health disparities. However, they often lack access to appropriate support and resources tailored to their needs, which can result in increased psychological distress. Drop-in centers are effective mental health interventions for marginalized communities. Therefore, we conducted a study to explore the healthcare access experiences and mental health outcomes of young adult SGM compared to their non-SGM counterparts.

Methods: We surveyed 151 young adults aged 18–25 who visited two drop-in centers for young adults experiencing homelessness in Houston, Texas, between October and November 2018. Depressive and anxiety symptoms were assessed using Patient Health Questionnaire- 4 (PHQ-4). Other variables included demographics, prior mental health diagnosis, and experiences of homelessness and involvement in justice.

Results: Transgender and gender-diverse individuals had higher proportions of anxiety symptoms than their cisgender counterparts, while gay and lesbian individuals were more likely to experience depressive symptoms. In general, SGM individuals were three times more likely to report a previous anxiety diagnosis and four times more likely to report a previous depression diagnosis than their non-SGM counterparts. However, we did not find a significant association between having anxiety or depressive symptoms with seeking healthcare, experiences of homelessness, and justice involvement.

Conclusion: The findings suggest that drop-in centers can provide targeted care for SGM youth with intersecting needs, thus improving their mental health outcomes. Nevertheless, more research is needed to understand further and inform more targeted and effective evidence-based interventions that support SGM young adults across the trajectory of experiences, changing needs, and care coordination over time during this critical and vulnerable transition to adulthood.

1. Introduction

Healthcare transition (HCT) is a complex process, including changes in care setting, provider, and health management responsibilities as individuals move through different stages of the healthcare system, adapting to their changing health needs.^{1,2} These transitions can be particularly challenging for Sexual and gender minority (SGM) youth

who are a diverse group, including lesbian, gay, bisexual, transgender, and other sexually and gender-diverse individuals. As SGM youth transition to adulthood, they may face unique healthcare challenges related to their sexual orientation and gender identity, for example, difficulty finding culturally sensitive and competent care.^{3,4} As a result, they may have increased stress, which may have immediate and long-term adverse effects on their mental health.⁵ Researchers have found that

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SGM youth are at an increased risk of adverse mental health, including depression and anxiety, compared to their non-SGM peers.⁶⁻⁹ The Minority Stress theory posits that the mental health disparities among minority populations are not solely a result of individual factors but are significantly influenced by social stressors such as prejudice, discrimination, and societal marginalization.^{10,11} Researchers have widely used the theory as a valuable framework for understanding individual and broader social contexts contributing to disproportionate psychological distress experienced by SGM youth.¹²⁻¹⁴

Recognizing the diverse characteristics and experiences within the SGM youth population is crucial to developing comprehensive healthcare interventions. The intersectionality framework complements the minority stress theory. The framework directs attention to how SGM youth are marginalized along axes of gender and sexual orientation as well as race/ethnicity, class, and other aspects of social location. This intersectional oppression can produce layers of inequity and disadvantage for SGM youth.^{15,16} For example, when SGM youth age out of foster care, they usually encounter several difficulties, such as limited resources and support networks, which make them have a heightened risk of housing instability and experiences of homelessness.^{17,18} Studies have also established that SGM youth had an elevated risk of justice involvement,¹⁹⁻²¹ with exceptionally high rates observed among SGM youth of color.^{22,23} These negative experiences, combined with institutional biases, can cause fear and anxiety, which might ultimately prevent individuals from accessing essential healthcare services, thereby jeopardizing their health.^{24,25}

Although research has significantly advanced our understanding of the unique challenges and needs of SGM youth, many of the studies have predominantly focused on individuals younger than eighteen.^{24,25} However, a nationally representative study found that the prevalence of household homelessness among young adults aged 18–25 in the U.S. was approximately three times higher than among youth aged 13–17, making young adults a significant yet understudied segment of those experiencing homelessness.²⁶ These studies highlight the need for nuanced, intersectional studies that offer a more comprehensive understanding of the unique challenges of SGM young adults.

Drop-in centers, also known as access or resource centers, are community-based facilities that offer support services. These centers provide a secure and supportive environment for people to seek services tailored to their unique needs, for example, for youth experiencing homelessness.^{27,28} Drop-in centers function as interventions by addressing the unique needs of populations such as young SGM by providing various services, including counseling, peer support, and resources. Evidence suggests that Drop-in centers were effective in reducing behavioral risk factors, including a reduction in drug use, improving service linkage, and HIV-related outcomes.²⁹ However, there was limited evidence of these centers improving mental health outcomes, particularly for SGM young adults.

This study, therefore, explores anxiety and depression symptoms and the role of resource centers in shaping the mental health outcomes for young adult SGM. Understanding the role of drop-in centers in addressing the psychological well-being of SGM young adults is crucial for informing future studies and developing culturally appropriate interventions that promote health equity and the overall well-being of diverse SGM young adults with diverse needs and experiences during healthcare transitions.³⁰

2. Methods

2.1. Study design and setting

The Survey Personal Experiences Attitude Knowledge Uplift Project (SPEAK UP – named by the participants) was a cross-sectional study that assessed the needs of young adult SGM visiting two co-located drop-in centers in Houston, Texas, in October and November 2018. The study was a collaboration between UTHealth, an academic partner, and

community partners that included Lonestar Justice Alliance (LSJA), a legal nonprofit that seeks to improve the lives of justice-involved youth and young adults, and the two co-located drop-in centers, Tony's Place, and the Salvation Army's Young Adult Resource Center (YARC). Tony's has been at the forefront of providing various services, including mental health counseling, access to healthcare resources, support for housing instability, and assistance in navigating the challenges associated with gender-affirming care.³¹

The research team consisted of individuals who identify as SGM and share a strong commitment to promoting social justice. The team members had extensive experience and expertise in addressing individuals' challenges while navigating disfranchised identities. Notably, one of the co-authors, a doctoral student at the time, led a diverse group of students to collect the data. The students were enrolled in a core course, "Enhancing Cultural Humility through Social Justice and Working with Diverse Communities," designed for doctoral students majoring in community health practice at UTHealth. The course taught and previously co-taught by the co-authors aims to prepare students to serve and support marginalized communities more effectively. The study team met to discuss constructs of interest to the community. The academic partners identified existing scales and items to assess the constructs. Then, the team met regularly to review each item and discuss the applicability and necessary adaptations for community relevance and understanding. Participants were eligible to participate if they were aged 18–25 and spoke English.

2.2. Procedures

This study was anonymous and received ethical approval from the Institutional Review Board (IRB) of the primary author's institution. The study team collaborated with young adult clients to develop a study recruitment flyer distributed at Tony's Place and the YARC. The community partners referred those interested in the study to the study team, who screened them for eligibility and obtained Informed consent from all participants before participating. Participants had the option to choose the self-administered or interviewer-administered format. Most responses were self-administered (82.1%), a small number were interviewer-administered (17.9%), and responses via both modes were collected using Qualtrics.

2.3. Measures

2.3.1. Demographics

The demographic characteristics of the study participants were assessed using a series of questions. Age (continuous), current gender identity (cisgender man, cisgender woman, Gender minority (including transgender man, transgender woman, genderqueer, agender, or something else), sexual identity to self (gay/lesbian, bisexual, straight/heterosexual, queer, pansexual, asexual, and something else), race/ethnicity (White/European American, Black/African American, Asian/Pacific Islander, Native American/American Indian/Alaska Native, Hispanic, Latino/a, or Spanish origin, and Other). Insurance status, experiences of homelessness, and justice involvement were assessed with single items that asked participants if they had insurance, considered themselves homeless, and had lifetime felony arrests. The responses were yes and no.

2.3.2. Depression and anxiety

The Patient Health Questionnaire-4 (PHQ-4) was used to assess anxiety and depressive symptoms. The PHQ-4 has two sub-scales, each consisting of two items that assess depressive and anxiety symptoms over the past two-week period. The responses are on a Likert scale ranging from 0 (not at all) to 3 (nearly every day).³² PHQ-2 subscale includes two items, e.g., "Feeling down, depressed, or hopeless." The General Anxiety Disorder-2 item (GAD-2) subscale also has two questions, e.g., "Feeling nervous, anxious, or on edge."³³ The cut-off points

for depressive and anxiety symptoms is a score of > 3 for each sub-scale. A score of 0 was assigned for values < 2 , indicating the absence of depressive or anxiety symptoms, and 1 was assigned for values > 3 , indicating the presence of depressive or anxiety symptoms.

2.3.3. Data analysis

All data were analyzed using IBM Statistical Package for the Social Sciences (SPSS) software Version 26. Chi-square tests, Fisher's exact tests, and t-tests were used to explore the association between depression and anxiety symptoms and sociodemographic characteristics. Sexual minority categories (gay/lesbian, bisexual/pansexual, and other sexuality) and gender minority categories (non-binary/transgender and other gender) were grouped into an SGM versus non-SGM (heterosexual, cisgender man or cisgender woman) binary variable. Binary logistic regression was used to assess differences between SGM and non-SGM participants, adjusting for race/ethnicity. Gender, sexuality, and race/ethnicity categories with N less than five were collapsed to protect the confidentiality of participants.

3. Results

There were 168 responses to the initial request for consent to participate. Of these, 4.76% ($n = 8$) did not consent to participate, and one affirmative response was a duplicate participant who did finish the rest of the survey. Of 159 responses to the screening question on current age, 3.77% ($n = 6$) of respondents were screened out due to age. Two of these respondents reported being less than 17 years of age, and four respondents reported ages over 25 years. Finally, two respondents started the survey but did not complete it, so the final data set contains complete responses from 151 participants. Table 1 provides an overview of descriptive and bivariate statistics. Among the participants, the mean age was 21.75 (SD (Standard Deviations) = 2.075). The majority, 67.55% ($n = 102$), identified as heterosexual, while 19.87% ($n = 30$) identified as bisexual/pansexual, and 9.27% ($n = 14$) identified as gay/

lesbian. A small number, 7.95% ($n = 12$), identified as non-binary/transgender, while 59.60% ($n = 90$) identified as cisgender men and 31.13% ($n = 47$) as cisgender women. A sizable proportion of the participants, 66.23% ($n = 100$), were Black non-Hispanic. Many participants had completed high school or GED (52.32%, $n = 79$) or had some post-secondary education (15.23%, $n = 23$), while 45.63% ($n = 69$) were uninsured. Notably, 50.99% ($n = 77$) reported experiencing homelessness, and 56.95% ($n = 86$) reported justice involvement.

As summarized in Table 1, among transgender or non-binary participants, 58.3% ($n = 7$) reported a positive screening for anxiety symptoms compared to cisgender women (46.8%, $n = 22$) and cisgender men (43.3%, $n = 39$). However, no statistically significant association existed between gender identity and anxiety or depressive symptoms. Significant differences existed between those with no depressive symptoms and those with depressive symptoms by sexuality ($p = .022$) and race /ethnicity ($p = .027$). When assessed by sexuality, gay/lesbian participants were more likely to report depression (78.6%, $n = 11$) than bisexual/pansexual (36.7%, $n = 11$), heterosexual (37.3%, $n = 38$), and other (60.0%, $n = 3$) individuals. When assessed by race/ ethnicity, Hispanic participants reported the highest percentages of depression, with White-Hispanic participants the most likely to report depression (100%, $n = 4$), followed by Black Hispanics (83.3%, $n = 5$). There were no statistically significant differences between education, health insurance, experiences of homelessness, and justice involvement.

Table 2 summarizes the results of prior anxiety or depression diagnoses by a doctor or healthcare provider. When assessed for previous diagnosis by a healthcare provider, a significantly higher proportion of SGM individuals (73.60%, $n = 39$) reported a prior diagnosis of anxiety compared to non-SGM individuals (48.00%, $n = 47$), with SGM being three times more likely to report a previous anxiety diagnosis than non-SGM (OR = 3.023, 95% CI (Confidence Interval), [1.46, 6.26], $p = .003$). Similarly, a significantly higher proportion of SGM (79.20%, $n = 42$) reported a prior depression diagnosis compared to non-SGM individuals (46.90%, $n = 46$), with SGM being four times more likely to report a

Table 1
Demographic characteristics by psychological distress (N = 151).

	n (%)	Anxiety symptoms		p-value	Depressive symptoms		p-value
		No anxiety symptoms	Anxiety symptoms		No Depressive symptoms	Depressive symptoms	
Age (Mean; SD)	21.75(2.075)	21.88 (2.103)	21.60(2.045)	.417	21.77(2.088)	21.73(2.073)	.902
Gender Identity				.607			.300
Non-binary/Transgender	12(7.95%)	5(41.7%)	7(58.3%)		5(41.7%)	7(58.3%)	
Cisgender man	90(59.60%)	51(56.7%)	39(43.3%)		56(62.2%)	34(37.8%)	
Cisgender woman	47(31.13%)	25(53.2%)	22(46.8%)		25(53.2%)	22(46.8%)	
Sexuality				.900			.022
Gay/lesbian	14(9.27%)	4(28.6%)	10(71.4%)		3(21.4%)	11(78.6%)	
Bisexual/ pansexual	30(19.87%)	16(53.3%)	14(46.7%)		19(63.3%)	11(36.7%)	
Heterosexual	102(67.55%)	62(60.8%)	40(39.2%)		64(62.7%)	38(37.3%)	
Other	5(3.31%)	1(20%)	4(80%)		2(40%)	3(60%)	
Race/Ethnicity				.288			.027
Black non-Hispanic	100(66.23%)	58(58.0%)	42(42.0%)		65(65.0%)	35(35.0%)	
Black Hispanic	6(3.97%)	1(16.7%)	5(83.3%)		1(16.7%)	5(83.3%)	
White non-Hispanic	23(15.23%)	10(43.5%)	13(56.5%)		13(56.5%)	10(43.5%)	
White Hispanic	4(2.65%)	2(50.0%)	2(50.0%)		0(0.0%)	4(100.0%)	
Other	15(9.93%)	10(66.7%)	5(33.3%)		7(46.7%)	8(53.3%)	
Education				.382			.131
Less than high school	6(3.97%)	4(66.7%)	2(33.3%)		5(83.3%)	1(16.7%)	
Some high school	37(24.50%)	16(43.2%)	21(56.8%)		19(51.4%)	18(48.6%)	
High school graduate	79(52.32%)	47(59.5%)	32(40.5%)		51(64.6%)	28(35.4%)	
Some College or higher	23(15.23%)	13(56.5%)	10(43.5%)		10(43.5%)	13(56.5%)	
Health insurance				.549			.071
Insured	70(46.36%)	35(50.0%)	35(50.0%)		34(48.6%)	36(51.4%)	
Uninsured	69(45.63%)	38(55.1%)	31(44.9%)		44(63.8%)	25(36.2%)	
Homelessness				.067			.592
Yes	77(50.99%)	36(46.8%)	41(53.2%)		42(54.5%)	35(45.5%)	
No	54(35.76%)	34(63.0%)	20(37.0%)		32(59.3%)	22(40.7%)	
Justice Involvement				.782			.610
Yes	86(56.95%)	46(53.5%)	40(46.5%)		47(54.7%)	39(45.3%)	
No	49(32.45%)	25(51.0%)	24(49.0%)		29(59.2%)	20(40.8%)	

Note: The bolded values indicate statistical significance at a level of $p < .05$

Table 2
Previous anxiety or depression diagnosis by a healthcare provider in the last 12 months (N = 151).

		Total	SGM	non-SGM	OR	p-value
Previous anxiety diagnosis	Yes	86 (57.00%)	39 (73.60%)	47 (48.00%)	3.023 (1.46, 6.26)	.003
	No	65 (43.00%)	14 (26.40%)	51 (52.00%)		
Previous depression diagnosis	Yes	88 (58.30%)	42 (79.20%)	46 (46.90%)	4.316 (1.99, 9.35)	< .001
	No	63 (41.70%)	11 (20.80%)	52 (53.10%)		

Note: The bolded values indicate statistical significance at a level of $p < .05$

previous depression diagnosis than non-SGM individuals (OR = 4.316, 95% CI [1.99, 9.35], $p < .001$).

Additionally, we examined the association between prior diagnosis or screening results for anxiety and depression and current care status. Although SGM individuals had indicated significantly higher rates of previous anxiety and depression diagnoses, there were no significant differences between SGM and non-SGM individuals reporting that they were currently in care for anxiety or depression, regardless of their prior diagnosis or screening positive for anxiety and depressive symptoms using GAD2 and PHQ-2, respectively.

4. Discussion

The transition into adult healthcare can be challenging for young adult SGM, particularly those who belong to marginalized racial or ethnic groups. Drop-in centers designed to meet this population’s needs may address these challenges effectively. In this study, exploring the healthcare access experiences and mental health outcomes of young adults visiting a drop-in center, we observed significant differences in unadjusted rates of depressive symptoms by sexual orientation and race/ethnicity.

The unadjusted rates of depressive symptoms by sexuality were initially higher among gay/lesbian individuals. The results are consistent with previous studies that have documented higher rates of depression among gay/lesbian individuals relative to their heterosexual counterparts.³⁴ However, the proportion of bisexual/pansexual young adults with depressive symptoms was equal to that of straight/heterosexual young adults, which is inconsistent with previous studies. For example, a meta-analysis found that bisexual/pansexual individuals had a higher risk of depression than their heterosexual and gay/lesbian counterparts.³⁵ Similarly, a systematic review found that although subgroups of sexual minority groups had a higher risk of adverse mental health outcomes, including depression, bisexual individuals were at the greatest risk.³⁶ Factors such as stigma, discrimination, minority stress, and limited social support have contributed to these disparities.^{37,38} Therefore, drop-in centers may provide support groups and other social support, which can be invaluable to isolated or marginalized young adult SGM as they navigate complex healthcare systems and transition experiences.

We observed significant differences in unadjusted rates of depression by race/ethnicity. Hispanic participants, particularly Black Hispanics, had higher proportions of anxiety and depressive symptoms than other races/ethnicities. This is consistent with previous studies that have documented higher rates of depression among some racial and ethnic minority groups, such as Hispanic individuals in both the general population and subpopulation samples. For example, a study found that first-generation Latino youth had an increased likelihood of depressive symptoms and anxiety because of migration stressors.³⁹ The findings highlight the importance of considering the stressors that can intensify existing mental health burdens and offer tailored services to alleviate

these issues, especially among young individuals who identify as SGM and come from diverse racial and ethnic backgrounds.

While we observed significant differences in depressive symptoms based on sexuality and race/ethnicity, the associations did not remain significant when the analysis was adjusted for race/ethnicity and analyzed by SGM status. Interestingly, despite the higher rates of anxiety and depressive symptoms among SGM individuals, SGM were not any more likely to be disengaged from care. These findings contradict previous studies that have reported lower care engagement among SGM individuals.^{32,40} However, it is important to note that the lack of significant differences in care between SGM and non-SGM individuals may be specific to the study’s sample, setting, and design. The study was conducted in collaboration with drop-in centers and community partners focused on providing services to SGM individuals, indicating a targeted approach to mental healthcare. As such, the centers, particularly Tony’s place, may have provided comprehensive case management, which could have effectively mitigated the barriers to care that SGM individuals typically face, such as the lack of culturally competent providers⁴¹ and concern about discrimination.⁴² Therefore, these findings extend the understanding of knowledge by previous literature and highlight the potential benefits of specialized care settings, including drop-in centers designed to meet the unique needs of SGM populations.⁴³

We did not find any statistical association between health insurance, experiences of homelessness, justice involvement, depression, and anxiety. The lack of statistical significance between health insurance, experiences of homelessness, justice involvement, depression, and anxiety could be attributed to factors such as limited variability within the sample and a small sample size. Drop-in centers tend to attract people who have similar characteristics and situations. Similar attributes, experiences, or conditions within the sample may result in a lack of diversity and compromise the ability to discern patterns or trends. Additionally, drop-in centers offer supportive services to address these problems, which may contribute to a lack of variability and significance. However, SGM young adults with experiences of homelessness and justice involvement represent an understudied yet vulnerable population.⁴⁴

4.1. Strengths and Limitations

It is helpful to consider these findings in the context of the study’s strengths and limitations. Multiple strengths are related to the community-based nature of the study, which enabled the young adult participants to have agency in the research process and play a role in improving the services. This project also allowed community partners to incorporate participant perspectives into program planning, strengthening the relevance and applicability of the study findings and making programming more effective. Additionally, we used reliable and validated measures for assessing depression, anxiety, and psychological distress. Including standardized screening tools, such as the PHQ-4, enhances the rigor and reliability of the findings, increasing confidence in the results.

Despite its contributions, the study has limitations. The cross-sectional design impedes causal inferences, necessitating caution in interpreting temporal relationships. Furthermore, the focus on participants from drop-in centers may limit generalizability. This study was conducted more than five years ago, so the temporal context is important. However, it is encouraging to note that the results have been actively utilized by the community, including organizations, to inform program policy, guide fundraising efforts, and shape interventions, showcasing the enduring impact of the research beyond its immediate temporal confines. For example, in collaboration with a national advisory council, Lonestar Justice Alliance used the study results to develop transformative justice intervention to divert young justice-involved adults from the traditional justice systems in Williamson and Dallas counties in Texas. Future research directions should involve longitudinal

designs to capture the evolving mental health dynamics of SGM young adults. Additionally, interventions should focus on bridging the gap between diagnosis and ongoing care, considering the nuanced needs of different subgroups within the SGM community.

5. Conclusions

This cross-sectional study found that SGM young adults visiting drop-in centers were more likely than their non-SGM counterparts to report prior depression and anxiety but not more likely to be in care for these issues. Additionally, there were no differences between anxiety and depressive symptoms and experiences of homelessness and justice involvement. Nevertheless, our study suggests that targeted services, like drop-in centers, can be an important resource for young adult SGM who are navigating healthcare transitions. By providing holistic, culturally sensitive care in a safe and supportive environment, these centers can help to ensure that all individuals have access to the healthcare services they need to thrive. However, further research is needed to understand the factors affecting SGM young adults' psychological health. The research can lead to tailored interventions that promote health equity and improve the psychological well-being of SGM young adults with complex intersecting identities and experiences.

Ethical approval statement

The University of Texas Health Science Center at Houston (UTHealth) School of Public Health Institutional Review Board (IRB) approved all study procedures. All participants provided Informed consent to participate in the study.

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CRediT authorship contribution statement

Vanessa Schick: Writing – review & editing, Supervision, Resources, Methodology, Funding acquisition, Formal analysis, Conceptualization. **MaDonna Land:** Project administration, Investigation, Conceptualization. **Elizabeth Henneke:** Writing – review & editing, Resources, Methodology, Conceptualization. **Laura Witte:** Writing – review & editing, Supervision, Project administration, Methodology, Investigation, Conceptualization. **Lourence Misedah-Robinson:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests Misedah-Robinson, Lourence reports financial support was provided by National Center for Advancing Translational Sciences.

Data availability

Data will be made available on request.

References

- Betz CL, Ferris ME, Woodward JF, Okumura MJ, Jan S, Wood DL. The health care transition research consortium health care transition model: a framework for research and practice. *J Pediatr Rehabil Med*. 2014;7(1):3–15.
- Betz CL, Coyne I, Hudson SM. Health care transition: the struggle to define itself. *Compr Child Adolesc Nurs*. 2023;46(3):162–176. <https://doi.org/10.1080/24694193.2021.1933264>.
- Pham T, García A, Tsai M, Lau M, Kuper LE. Transition from pediatric to adult care for transgender youth: A qualitative study of patient, parent, and provider perspectives. *LGBT Health*. 2021;8(4):281–289.
- Ferlatte O, Salway T, Rice SM, Oliffe JL, Knight R, Ogrodnick JS. Inequities in depression within a population of sexual and gender minorities. *J Ment Health*. 2019;1–8. <https://doi.org/10.1080/09638237.2019.1581345>.
- Arnett JJ. Emerging adulthood: a theory of development from the late teens through the twenties. *Am Psychol*. 2000;55(5):469. <https://doi.org/10.1037/0003-066X.55.5.469>.
- Seelman KL, Colón-Díaz MJ, LeCroix RH, Xavier-Brier M, Kattari L. Transgender noninclusive healthcare and delaying care because of fear: connections to general health and mental health among transgender adults. *Transgender Health*. 2017;2(1):17–28.
- Marshal MP, Dietz LJ, Friedman MS, et al. Suicidality and depression disparities between sexual minority and heterosexual youth: a meta-analytic review. *J Adolesc Health*. 2011;49(2):115–123. <https://doi.org/10.1016/j.jadohealth.2011.02.005>.
- Shearer A, Herres J, Kodish T, et al. Differences in mental health symptoms across lesbian, gay, bisexual, and questioning youth in primary care settings. *J Adolesc Health*. 2016;59(1):38–43. <https://doi.org/10.1016/j.jadohealth.2016.02.005>.
- Russell ST, Fish JN. Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. *Annu Rev Clin Psychol*. 2016;12:465–487. <https://doi.org/10.1037/amp0000068>.
- Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychol Bull*. 2003;129(5):674.
- Meyer IH, Northridge ME. *The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual and transgender populations*. Springer; 2007.
- Weeks SN, Renshaw TL, Vinal SA. Minority stress as a multidimensional predictor of LGB adolescents' mental health outcomes. *J Homosex*. 2023;70(5):938–962. <https://doi.org/10.1080/00918369.2021.2006000>.
- Kelleher C. Minority stress and health: implications for lesbian, gay, bisexual, transgender, and questioning (LGBTQ) young people. *Couns Psychol Q*. 2009;22(4):373–379. <https://doi.org/10.1080/09515070903334995>.
- Meyer IH. Resilience in the study of minority stress and health of sexual and gender minorities. *Psychol Sex Orientat Gend Divers*. 2015;2(3):209.
- Crenshaw K. Mapping the margins: intersectionality, identity politics, and violence against women of color. *Stan L Rev*. 1990;43:1241.
- Goodyear T, Chayama KL, Oliffe JL, et al. Intersecting transitions among 2S/LGBTQ + youth experiencing homelessness: a scoping review. *Child Youth Serv Rev*. 2024;156, 107355. <https://doi.org/10.1016/j.childyouth.2023.107355>.
- Dworsky A, Napolitano L, Courtney M. Homelessness during the transition from foster care to adulthood. *Am J Public Health*. 2013;103(S2):S318–S323. <https://doi.org/10.2105/AJPH.2013.301455>.
- Shah MF, Liu Q, Mark Eddy J, et al. Predicting homelessness among emerging adults aging out of foster care. *Am J Community Psychol*. 2017;60(1-2):33–43. <https://doi.org/10.1002/ajcp.12098>.
- Feinstein R, Greenblatt A., Hass L., Kohn S., Rana J. Justice for All? A Report on Lesbian, Gay, Bisexual and Transgendered Youth in the New York Juvenile Justice System. 2001.
- Jonsson MR, Bird BM, Li SM, Viljoen JL. The prevalence of sexual and gender minority youth in the justice system: a systematic review and meta-analysis. *Crim Justice Behav*. 2019;46(7):999–1019. <https://doi.org/10.1177/0093854819848803>.
- Katz A.B. LGBT youth in the juvenile justice system: Overrepresented yet unheard. 2014. (https://scholarship.shu.edu/student_scholarship/503).
- Wilson B.D., Jordan S.P., Meyer I.H., Flores A.R., Stemple L., Herman J.L. Disproportionality and disparities among sexual minority youth in custody. 2017; 46:1547–1561. <https://doi.org/10.1007/s10964-017-0632-5>.
- Irvine A., Canfield A. The overrepresentation of lesbian, gay, bisexual, questioning, gender nonconforming, and transgender youth within the child welfare to juvenile justice crossover population. 2015;24:243. (<https://digitalcommons.wcl.american.edu/jgspl/vol24/iss2/2>).
- Johns M.M., Poteat V.P., Horn S.S., Kosciw J. Strengthening our schools to promote resilience and health among LGBTQ youth: Emerging evidence and research priorities from The State of LGBTQ Youth Health and Wellbeing Symposium. 2019;6(4):146–155. <https://doi.org/10.1089/lgbt.2018.0109>.
- Jonas L., Salazar de Pablo G., Shum M., Nosarti C., Abbott C., Vaquerizo-Serrano J. A systematic review and meta-analysis investigating the impact of childhood adversities on the mental health of LGBT youth. 2022;2(2):e12079. <https://doi.org/10.1002/jcv2.12079>.
- Morton M.H., Dworsky A., Matjasko J.L., et al. Prevalence and correlates of youth homelessness in the United States. 2018;62(1):14–21. <https://doi.org/10.1016/j.jadohealth.2017.10.006>.
- Pedersen E.R., Tucker J.S., Kovalchik S.A. Facilitators and Barriers of Drop-In Center Use Among Homeless Youth. 2016;59(2):144–153. <https://doi.org/10.1016/j.jadohealth.2016.03.035>.
- Rice E., Thompson N., Onasch-Vera L., et al. Ending youth homelessness is about relationships: The importance of drop-in centers and staff to youth experiencing

- homelessness. 2023;154:107125. <https://doi.org/10.1016/j.chilyouth.2023.107125>.
29. Guo X, Slesnick N. Reductions in hard drug use among homeless youth receiving a strength-based outreach intervention: comparing the long-term effects of shelter linkage versus drop-in center linkage. *Subst Use Misuse*. 2017;52(7):905–915. <https://doi.org/10.1080/10826084.2016.1267219>.
 30. Garofalo R. *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. The National Academies Press; 2011.
 31. Tony's Place. About. December 22, 2023, Web site. (<https://tonysplace.org/history>).
 32. Cadigan JM, Lee CM, Larimer ME. Young adult mental health: a prospective examination of service utilization, perceived unmet service needs, attitudes, and barriers to service use. 2019;20:366–376. <https://doi.org/10.1007/s11121-018-0875-8>.
 33. Kroenke K, Spitzer RL, Williams JB, Monahan PO, Löwe B. Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. *Ann Intern Med*. 2007;146(5):317–325. <https://doi.org/10.7326/0003-4819-146-5-200703060-00004>.
 34. Wittgens C, Fischer MM, Buspavanich P, Theobald S, Schweizer K, Trautmann S. Mental health in people with minority sexual orientations: a meta-analysis of population-based studies. *Acta Psychiatr Scand*. 2022;145(4):357–372. <https://doi.org/10.1111/acps.13405>.
 35. Ross L.E., Salway T., Tarasoff L.A., MacKay J.M., Hawkins B.W., Fehr C.P. Prevalence of depression and anxiety among bisexual people compared to gay, lesbian, and heterosexual individuals: A systematic review and meta-analysis. 2018; 55(4–5):435–456. <https://doi.org/10.1080/00224499.2017.1387755>.
 36. Plöderl M., Tremblay P. Mental health of sexual minorities. A systematic review. 2015;27(5):367–385. <https://doi.org/10.3109/09540261.2015.1083949>.
 37. Frost D.M., Meyer I.H. Minority stress theory: Application, critique, and continued relevance. 2023;101579. <https://doi.org/10.1016/j.copsyc.2023.101579>.
 38. Ehlike S.J., Braitman A.L., Dawson C.A., Heron K.E., Lewis R.J. Sexual minority stress and social support explain the association between sexual identity with physical and mental health problems among young lesbian and bisexual women. 2020;83: 370–381. <https://doi.org/10.1007/s11199-019-01117-w>.
 39. Potochnick SR, Perreira KM. Depression and anxiety among first-generation immigrant Latino youth: key correlates and implications for future research. *J Nerv Ment Dis*. 2010;198(7):470. <https://doi.org/10.1097/NMD.0b013e3181e4ce24>.
 40. Moore K.L., Lopez L., Camacho D., Munson M.R. A qualitative investigation of engagement in mental health services among black and Hispanic LGB young adults. 2020;71(6):555–561. <https://doi.org/10.1176/appi.ps.201900399>.
 41. Moe JL, Sparkman NM. Assessing service providers at LGBTQ-affirming community agencies on their perceptions of training needs and barriers to service. *J Gay Lesbian Soc Serv*. 2015;27(3):350–370. <https://doi.org/10.1080/10538720.2015.1051687>.
 42. McNair RP, Bush R. Mental health help seeking patterns and associations among Australian same sex attracted women, trans and gender diverse people: a survey-based study. *BMC Psychiatry*. 2016;16(1):16. <https://doi.org/10.1186/s12888-016-0916-4>.
 43. Pachankis JE, Clark KA, Jackson SD, Pereira K, Levine D. Current capacity and future implementation of mental health services in US LGBTQ community centers. 2021;72(6):669–676. <https://doi.org/10.1176/appi.ps.202000575>.
 44. Narendorf SC, Palmer A, Minott K, et al. Experiences of discrimination among young adults experiencing homelessness: Relationship to mental health outcomes. *Am J Orthopsychiatry*. 2022;92(1):58.