



Psychological comorbidities and suicidality in sexual and gender minority foster youth

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ABSTRACT

Objective: Sexual and gender minority youth (SGMY), or those who identify as lesbian, gay, bisexual, transgender or gender diverse and questioning are suggested to be overrepresented in the U.S. foster care system. Lack of systematized data collection on youths' sexual orientation and/or gender identity in child welfare has curtailed studies of this population. This community-based study assessed psychological and behavioral health of youth with current or past foster care involvement in an urban public child welfare system, and examined relations between types of victimization (e.g. LGBTQ-based victimization, caregiver rejection, intimate partner violence) and psychological functioning.

Methods: A total of 35 (12–26 years old) participants were administered a survey assessing multiple domains of health and wellbeing between October 2018 and February 2020. Primary quantitative outcomes included depression, anxiety, post-traumatic stress symptomatology, suicide ideation, planning, and attempt, and non-suicidal self-injury.

Results: 42.7 % of participants identified as lesbian or gay, 37.1 % as bisexual or pansexual, and 20 % identified as heterosexual. 54.3 % identified as transgender or gender diverse (TG/GD). Over 75 % (75.06 %, n = 25) of the total sample met the clinical cutoff for Total Internalizing, 64.71 % (n = 22) met the clinical cutoff for Depression, and 78.79 % (n = 26) met the clinical cutoff for Anxiety. 70 % reported suicidal ideation and 45 % past suicide attempt. Rejection experiences based on sexual orientation were associated with anxiety, depression and post-traumatic symptoms; discrimination experiences based on sexual orientation or TG/GD expression were associated with anxiety. Loneliness and everyday discrimination were associated with post-traumatic stress symptoms. IPV, everyday discrimination, rejection, discrimination, and victimization based on sexual orientation and gender identity, while not statistically significant within this sample, did emerge as factors warranting further investigation concerning suicide ideation, planning, and attempt.

Conclusion: 75% of the SGMY in this study met the clinical threshold for mood disorders, reinforcing the importance of integrated behavioral health support in clinical and wraparound care for SGMY in foster care, and the critical role of SGM-specific competencies for the entire care team. Teams caring for SGMY should be aware of community resources that are competent in addressing SGM-specific stressors and the impacts of multiple forms of victimization, including intimate partner violence for SGMY. Targeted efforts and to work with families are needed.

Abbreviations: SGMY, Sexual and gender minority youth; TGD, transgender or gender diverse, MST, Minority Stress Theory; DCFS, Department of Children and Family Services; IPV, intimate partner violence.

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1. Introduction

Sexual and gender minority youth (SGMY), or those identifying as lesbian, gay, bisexual, queer, transgender and/or gender diverse, are disproportionately overrepresented in the U.S. child welfare system. SGMY prevalence rates range from 15.5 to 35 % (Dettlaff et al., 2018; Fish et al., 2019; Schneeberger et al., 2014; Wilson et al., 2014) compared to 9.5 % of the general US population of adolescents (Conron et al., 2014). Drivers of disproportionate overrepresentation include family/caregiver rejection and abuse based on youths' sexual orientation or gender identity (Baams, 2018; Mallon et al., 2002; Ryan et al., 2009) which may in turn lead directly to child welfare involvement, or indirectly to child welfare involvement after running away from home because of familial rejection (Durso & Gates, 2012; Pearson et al., 2017). Once in the child welfare system, SGMY may experience institutional stressors including greater placement instability (Mallon et al., 2002; longer lengths of foster care stays (Wilson et al., 2014), and more restrictive care placements (Woronoff et al., 2006). Child welfare policies and practices regarding youth placement, case planning, and service provision that fail to account for youths' sexual orientation and/or gender identity contribute to concealment, unattended needs, lack of cultural connection, and further stigmatization (Prince, et al., 2022).

SGMY in the general U.S. population of adolescents' exhibit increased suicidal ideation, planning, and attempt (hereto after referred to as suicidality) and mental health disorders compared to non-SGMY (Kann et al., 2018). Recent estimates of SGMY suicidal ideation are 26.1 % and lifetime suicide attempt of 12.0 % (Luk et al., 2021). Importantly, gender minority youth demonstrate higher rates of suicidality, reporting ideation rates over 33 % (Perez-Brumer et al., 2017). Estimated rates of non-SGMY ideation range from 12.1 to 13 % and attempts from 4.1 to 5.4 % (Luk et al., 2021; Nock et al., 2013). Child welfare involved children and youth have 24.7 % suicidal ideation and 3.6 % past suicide attempt compared to 11.4 % ideation and 0.8 % past attempt among non-care populations (Evans et al., 2017). For SGMY in foster care, complex interpersonal, institutional, and societal-level factors lead to a greater burden of mental health disparities, including mood disorders, anxiety, oppositional defiant disorder and post-traumatic stress disorder (Bronsard et al., 2016; Anderson & Libby, 2011). Very few studies examine the intersection of foster care system involvement and mental health among this population (see Dettlaff et al., 2018; Fish et al., 2019).

The complex relationship between child welfare, trauma exposure, and sexual and gender minority status is marginally represented in the empirical literature. The evidence base is further limited in its examination of the protective factors that support resilience and recovery from these traumatic experiences. This community-based study applied Minority Stress Theory (MST) to child-welfare involved SGMY to examine SGM-specific risk and protective factors in relation to psychological comorbidities among SGM youth with current or past child welfare involvement (Meyer, 2003; Meyer & Frost, 2012).

2. Background

2.1. Child welfare involvement and psychological comorbidities

Prevalence of mental health problems is elevated for youth in the child welfare system (Bronsard et al., 2016; Heneghan et al., 2013). Meta-analyses using data from eight child welfare-involved adolescent studies found nearly half of youth met clinical criteria for at least one mental health disorder (Bronsard et al., 2016). Other studies confirm these findings, with almost 43 % of child welfare-involved adolescents reporting at least one mental health difficulty, including anxiety (13.5 %) and substance use disorder (23 %) (Heneghan et al., 2013). Studies using the NSCAW-II found that approximately 14–21 % of child welfare-involved youth experienced suicidal ideation (He et al., 2015; Heneghan et al., 2013). Cisgender girls were more likely to experience depression

compared to cisgender boys, with about 9 % of the overall sample and 12 % of girls reporting depressive symptoms (Heneghan et al., 2013; Lalayants & Prince, 2014). Child welfare-involved children in out of home placements are at increased risk for depressive symptoms (Anderson, 2011). Such symptoms, in turn, increase their risk for suicidal ideation. In one longitudinal assessment of self-harm statements in foster youth aged 8–11, self- and caregiver-report revealed that 21–24 % of youths expressed a desire to die or to self-harm (Gabrielli et al., 2015).

2.2. SGMY, child welfare involvement and psychological comorbidities

Nationally, the prevalence rates of SGM youth in the child welfare system are significantly higher than the general population (Dettlaff et al., 2018; Fish et al., 2019; Schneeberger et al., 2014; Wilson et al., 2014). Studies examining SGMY in child welfare have been limited methodologically and by measurement tools used by child welfare agencies. Prevalence of child welfare involved SGMY is poorly understood because of a failure to identify sexual orientation and gender identity among the population. In the majority of jurisdictions, youth are not asked about their sexual orientation or gender identity (Wilber, 2013). Additionally, sex at birth is often the only item used to identify gender identity (Wilber, 2013). Given that sexuality and gender are conceptualized and enacted in fluid ways, the rigidity of the child welfare system has left SGMY unaccounted for. Further, without an understanding of the prevalence of SGMY, it has been challenging for child welfare systems to meet their developmental and mental health needs.

Mental health disparities for SGMY are further compounded when the youth experiences proximal or distal stressors related to their minority identity. Overall, there is a significant lack of research examining the intersectional experiences of SGMY who have been involved with the child welfare system. Of the existing research, there is evidence that child welfare-involved SGMY are at a higher risk for adverse mental health outcomes, even as compared to their non-SGM peers. For instance, findings from NSCAW-II suggest that SGMY experience no significant differences in risk factors, permanency, or placement as compared to the general population of youth involved in child welfare (Dettlaff et al., 2018). However, SGMY involved in child welfare are disproportionately more likely to experience adverse mental health outcomes than their non-SGM peers. For instance, 14 % of SGMY involved with child welfare have been hospitalized for emotional reasons, as compared to 4.25 % of their non-SGM peers (Wilson & Kastanis, 2015). At an initial interview, LGB youth involved with the child welfare system were three times more likely than non-LGB youth to meet the clinical threshold for depression (Dettlaff et al., 2018). This disparity increased to five times more likely at 36-month follow-up. LGB youth were over six times more likely to meet the clinically significant threshold for traumatic symptoms at the 36-month follow-up interview. Further, LGB youth also report significantly greater levels of overall behavioral difficulties and were more likely to meet criteria for a substance use disorder.

There likely exists a complex combination of minority stress processes that contribute to these disparate mental health outcomes among SGM youth compared to their non-SGM peers. It is important to note that research involving SGM youth in the child welfare system exclusively refers to LGB youth, excluding gender minority individuals. As such, there is a dearth of research examining the experiences of transgender and gender diverse young people. Collectively, evidence suggests that youth placed in out of home care (i.e. foster care) experience greater levels of stressors and potentially traumatic experiences that in turn increase risk of psychological comorbidities. SGMY in the general U.S. population experience heightened levels of SGM-specific victimization and other stressors that place them at higher risk for mental health comorbidities. SGMY in foster care are at the intersection of these two vulnerable groups.

3. Minority stress theory

Minority Stress Theory was developed to explain how SGM-specific stressors (e.g. discrimination, harassment, rejection, and violence) across levels (i.e. institutional, interpersonal, and intrapersonal) act as drivers of mental health disparities for SGM groups (Lick et al., 2013; Meyer, 2003; Meyer & Frost, 2013; Testa et al., 2015). The theory was first developed among sexual minority groups (Rich et al., 2020; Meyer, 2003; Meyer & Frost, 2013) and has since been adapted to the unique experiences of transgender and gender diverse individuals (e.g. anti-transgender health care and workforce policy, and targeting of hate crimes based on gender identity and expression) (Hendricks & Testa, 2012; Tebbe & Moradi, 2016). Previous theoretical/conceptual work by our group shows how unique stressors within the child welfare system (e.g., discriminatory/biased policies) (Alvarez, 2020; Ehrensaft et al., 2018; Ellis, 2020; Lick et al., 2013); SGM-based abuse (McGeough & Sterzing, 2018; Sterzing et al., 2017), lack of affirmative mental health care (Hong et al., 2011; Oliffe et al., 2019; Taliaferro et al., 2019; Taliaferro & Muehlenkamp, 2017), and cycles of running away/place-ment in higher/more restrictive settings within the child welfare system contribute to the disproportionate overrepresentation of SGMY in child welfare, and to the substantial disproportionate burden of mental health and suicidality behaviors (Oliffe et al., 2019; Tebbe & Moradi, 2016; Testa et al., 2017; Strauss et al., 2020; Prince et al., 2022). This pilot study was guided by our conceptualization of how minority stress is experienced by youth with foster care involvement.

4. Methods

4.1 Procedures. Informed consent procedures differed based upon whether youth were currently in DCFS custody, were under the age of 18, or emancipated. Youth between the ages of 12 and 17 who were in active child welfare custody were invited to participate by DCFS staff. If the youth expressed interest in learning more about the study, trained DCFS senior managers ensured consent was provided through DCFS prior to providing youth contact information to the study PI. SGMY were contacted directly to participate in the study and completed informed assent prior to the interview. Youth aged 18 years or older were recruited through caseworkers, supervisors and senior managers at DCFS as well as community partnerships and word of mouth. Youth completed detailed, two-hour semi-structured interviews, which consisted of a combination of open-ended qualitative questions and quantitative study measures (see Measures section) of key study constructs. The structure of the interviews moved between qualitative short answer questions and quantitative measures. All interviews were conducted with research staff trained in trauma-informed practices. During the interview, the youth could answer the survey items privately via a tablet, or if preferred, research study staff would read the questions and input the youths' answer. Youth received incentives for their participation. Youth received incentives for their participation. The study was approved by the Case Western Reserve University institutional review board.

4.1. Measures

Gender Identity. Gender identity was assessed using the 2-step process (Reisner et al., 2014). Participants were first asked their sex at birth, with response options of male, female, or intersex. Next, participants were asked which gender they most identify with. Response options were girl/woman, boy/man, transgender, genderqueer/non-binary, gender fluid, questioning, and rather not say. Gender identity was coded cisgender girl/woman or boy/man for participants who identified as such and whose biological sex assigned at birth aligned with their expressed gender identity. Participants were coded as transgender or gender diverse (TGD) if they identified as transgender, genderqueer/non-binary, gender fluid or gender questioning, or if their

sex assigned at birth was not congruent with reported gender identity. Due to low cell sizes, we analyzed groups based on cisgender or trans-gender/gender diverse identity.

Sexual Orientation. Participants chose which sexual orientation they identified with the most. Response options were lesbian, gay, bisexual, asexual, pansexual, queer, hetero- sexual/straight, questioning or rather not say. Responses were recoded to three groups for analysis. These were lesbian or gay, bisexual, pansexual or questioning, and heterosexual.

SGM Stress. SGM stress was operationalized as victimization and discrimination, including intimate partner violence (IPV), everyday discrimination, loneliness, as well as social support and strain.

Victimization and discrimination. Participant experiences of SGM-based victimization was assessed with the LGBTQ victimization five item scale assessing verbal harassment, threat of physical violence, physical violence, threatened with a weapon, and sexual assault/rape (D'Augelli et al., 2006). Items explicitly reference victimization experiences attributed to sexual orientation and/or gender identity, e.g. "How many times have you been threatened with physical violence because of your sexual orientation and/or gender identity or expression?" Item responses were dichotomized Yes = 1 and No = 0 and summed.

SGM minority stress and victimization were assessed with the Gender Minority Stress and Resilience Measure (Testa et al., 2015). The original measure evaluated gender identity/expression and was adapted in this study to include sexual orientation. Three subscales were included to measure victimization, rejection and discrimination based on sexual orientation and gender identity/expression. Subscales were adapted by duplicating each question and modifying the referent. First, participants were requested to respond based on sexual orientation e.g. "Because of my sexual orientation I have been threatened with physical harm". Secondly, to answer based on gender identity e.g., "Because of my gen- der identity or expression I have been threatened with physical harm." Victimization was assessed using the adapted 6-item subscale. Sexual orientation- and gender identity-related rejection were assessed using the adapted 5-item subscale. Discrimination based on sexual orientation and gender identity was assessed using the adapted 5-item scale. Across these subscales, response categories were coded Yes = 1 and No = 0 and summed.

Intimate partner violence. IPV was assessed with the Partner Victimization Scale (Hamby, 2013). The scale includes five items including being threatened; pushed, shaken or grabbed; hit; beat up; and forced to do sexual acts by one's partner. If the participant endorsed any of these, follow up questions were administered regarding participant age when they experienced violence, how many instances of violence, whether they were physically harmed, who the perpetrator was, whether anyone witnessed the violence and if they intervened.

Everyday discrimination. The Everyday Discrimination Scale (Williams et al., 1997) is a 10-item Likert-type scale of unfair and unequal experiences e.g. "In your day-to-day life, how often do you receive poorer service than other people at restaurants or stores." If the participant endorsed experiences, a follow up question was asked regarding whether they believed the main reason for the experience was related to SGM identity. Responses were summed.

Loneliness. Loneliness was assessed with the Revised UCLA Loneli-ness Scale, (Russell et al., 1980) an 8-item Likert-type scale including questions like "I feel isolated from others." Responses were reverse coded as needed (items 1 and 6) and summed.

Social support and social strain. The Social Support Network Questionnaire (SSNQ) (Gee and Rhodes, 2007) was adapted. Social support was measured using items 1, 1a, 2, 2a, 3, and 3a from section one, relative to social support. Response options were "enough people you can count on"; "too few people" and "no one you can count on". Responses were summed. Social strain was measured using items one through four on section two of the SSNQ. Response options were too many people, some people, just a few people, or no one who disappoints

[me]. Items were summed.

Resilience. Resilience was operationalized as SGM pride, community connection and future expectations. The Brief Resilience Scale, (Smith et al., 2008) a six-item scale assessing resiliency, was administered. Items included questions like “I tend to bounce back quickly after hard times.” Responses utilized a 5-point Likert-type scale ranging from strongly disagree to strongly agree. Responses were reverse coded as needed (items 2, 4, and 6) and summed. **SGM pride and community connection.** SGM pride and community connection were measured using the adapted Gender Minority Stress and Resilience Measure (Testa et al., 2015). SGM pride was assessed using eight items including questions like “My sexual orientation makes me feel special and unique” and “My gender identity or expression makes me feel special and unique.” Responses were dichotomized Yes = 1, No = 0 and summed. Community connection was measured using five items including questions such as “I feel connected to other people who share my sexual orientation” and “I feel connected to other people who share my gender identity or expression.” Responses were dichotomized Yes = 1, No = 0 and summed. **Future expectations.** The Future Expectations Questionnaire (Tolan, 1990) scale was adapted to evaluate how the participant views themselves in five years (Prince et al., 2016). This measure consists of 7-items, including questions like “When I think about the future, and myself in 5 years, I will be able to stay safe and out of danger.” Three items specific to being SGMY were included, e.g. “When I think about the future, and myself in 5 years, I will be accepted by family for being LGBTQ.” Items were summed.

Mental Health. Youth completed the Revised Child Anxiety and Depression Scale-Short Version (RCADS) (Chorpita et al., 2000; Ebesutani et al., 2012) and the PTSD Scale of the Symptom Checklist-90-Revised (SCL-90-R) (Derogatis, 2017). The RCADS—Short version is a 25-item, youth self-report questionnaire that assesses aspects of the youths’ emotional functioning. This includes symptomatology associated with separation anxiety disorder, social phobia, generalized anxiety disorder, panic disorder, obsessive-compulsive disorder, and low mood (major depressive disorder). Participants rated the frequency of distress related to each item on a 4-point scale (0 = Never, 3 = Always). The short version of this measure yields scores for an Anxiety Scale, Depression Scale, and a Total Internalizing Scale.

Symptoms associated with PTSD were measured using a brief version of the PTSD scale of SCL-90-R (Derogatis, 2017; Saunders et al., 1990). This scale includes 12 items assessing present PTSD symptomatology within the past 7 days (e.g., “repeated unpleasant thoughts that won’t leave your mind”). Items are rated on a 5-point scale (0 = Not at all, 4 = A great deal). Suicidal and non-suicidal self-harm behavior were measured using the Self-Injurious Thoughts and Behaviors Interview (Nock et al., 2007). For the present analysis, history of suicidal ideation, suicide plan, suicide attempt, aborted suicide attempt, and non-suicidal self-harm were assessed (Yes = 1, No = 0).

4.2. Analysis strategy

We calculated univariate and bivariate descriptive statistics of key variables for the total sample, as well as by gender identity and sexual orientation where sample sizes allowed. Bivariate comparisons did not meet the Shapiro-Wilk test for normality; therefore, we used tests of associations for non-normal comparisons. We calculated Kendall’s Tau (τ) rank correlation coefficients, which is robust to bivariate non-normality, to test for the strength of association between stress and victimization measures and depression, anxiety, and post-traumatic stress scores. We employed a Bonferroni-corrected alpha (α) of 0.003 for each set of 18 tests to correct for possible Type I error. We conducted Wilcoxon Signed Rank Tests to compare for differences in mean scores on distal stress and resilience measures between those who answered “yes” to suicidal and non-suicidal self-harm behaviors and those who answered “no” on those variables. We also employed a Bonferroni-corrected α of 0.003 for each set of these tests.

5. Results

Overall demographics and foster care involvement. The average age at first entering the foster care system was 7 years old. Average number of months spent in foster care before age 18 was 50.3 months and the average number of placements in foster care (e.g. number of settings lived in) was 6.5. Mean age of discharge from foster care was 18.2. Emancipation was the most common exiting status ($n = 9$), only one youth exited care through reunification with biological family. **Table 1** presents the demographic, education, and housing characteristics of the total sample ($N = 35$), as well as by gender identity (cisgender or TGD). **Prevalence rates mood disorders.** **Table 2** presents the prevalence rates of anxiety and depressive disorders for the overall sample, as well as by sexual minority and gender minority subgroupings. Over 75 % (75.06 %, $n = 25$) of the total sample met the clinical cutoff

Table 1
Demographic Characteristics of the Sample ($N = 35$).

	Total % (n)/ μ (σ)	Cisgender ($n = 16$)	Transgender/ Gender Diverse ($n = 19$)
<i>Average Age in Years</i>	19.09 (3.51)	19.63 (2.68)	18.63 (4.10)
<i>Race or Ethnicity</i>			
Black/African-American	57.14 % (20)	55.00 % (11)	45.00 % (9)
Multiracial or Other	28.57 % (10)	30.00 % (3)	70.00 % (7)
White	14.29 % (5)	20.00 % (2)	80.00 % (3)
<i>Sex Assigned at Birth¹</i>			
Female	45.70 % (16)	50.00 % (8)	42.11 % (8)
Male	51.40 % (18)	43.75 % (7)	57.89 % (11)
<i>Gender Identity²</i>			
Cisgender	45.71 % (16)	–	–
Cisfemale	22.86 % (8)	–	–
Cismale	22.86 % (8)	–	–
Transgender/Gender Diverse	54.29 % (19)	–	–
Transfeminine	22.86 % (8)	–	–
Transmasculine	20.00 % (7)	–	–
Gender Diverse (GD)	11.43 % (4)	–	–
<i>Sexual Orientation²</i>			
Lesbian or Gay (L/G)	42.86 % (15)	53.33 % (8)	46.67 % (7)
Bisexual/Pansexual/ Questioning (BPQ)	37.14 % (13)	46.15 % (6)	53.85 % (7)
Heterosexual	20.00 % (7)	28.57 % (2)	71.43 % (5)
<i>Currently in School</i>	47.06 % (16)	33.33 % (5)	57.89 % (11)
<i>Dropped Out of School</i>	38.24 % (13)	53.33 % (8)	26.32 % (5)
<i>High School/GED</i>	29.41 % (10)	26.67 % (4)	31.58 % (6)
<i>Ever Homeless</i>	65.71 % (23)	75.00 % (12)	57.89 % (11)
<i>Ever “Couch Surfing”</i>	68.57 % (24)	68.75 % (11)	68.42 % (13)
<i>Ever Run Away from an FCP</i>	62.86 % (22)	56.25 % (9)	68.42 % (13)
<i>Run Away From FCP due to Sexual Orientation/Gender Identity/Expression</i>	47.62 % (10)	33.33 % (3)	58.33 % (7)

¹ Intersex sample is too small to report. ²Category “that the participant identifies with the most”.

Table 2

Revised Child Anxiety and Depression Scale (RCADS) Depression and Anxiety Sub-Scale Percent (n) Clinical Cutoff by Total Sample, Sexual Orientation, and Gender.

	Total Internalizing	Depression	Anxiety
<i>Total Sample</i>	75.06 % (25)	64.71 % (22)	78.79 % (26)
<i>Sexual Orientation</i>			
Lesbian/Gay	71.43 % (10)	53.33 % (8)	71.43 % (10)
BPQ	83.33 % (10)	75.00 % (9)	83.33 % (10)
Heterosexual	71.43 % (5)	71.43 % (5)	85.71 % (6)
<i>Gender Identity</i>			
Cisfemale	62.50 % (5)	62.50 % (5)	62.50 % (5)
Cismale	83.33 % (5)	85.71 % (6)	83.33 % (5)
Transgender/GD	78.95 % (15)	57.89 % (11)	84.21 % (16)

for Total Internalizing, 64.71 % (n = 22) met the clinical cutoff for Depression, and 78.79 % (n = 26) met the clinical cutoff for Anxiety. Over 83 % (83.33 %, n = 10) of bisexual, pansexual, or questioning

Table 3

Distal Stress, Resilience, Depression, Anxiety, and Post-Traumatic Stress (PTS) Scales Mean (μ) and Standard Deviation (σ) and Kendall's τ Correlation Coefficients, by Total, Gender, and Sexual Orientation (N = 35).

Construct & Scale	Gender			Sexual Orientation			Total Sample		
	Total μ (σ)	Cisgender μ (σ)	T/GDμ (σ)	Lesbian/Gayμ (σ)	Bi/Pan/Queer μ (σ)	Straightμ (σ)	Depression τ (p-value; n)	Anxietyτ (p-value; n)	PTSτ (p-value; n)
Victimization									
Partner Victim.	1.68 (1.98)	2.07 (1.94)	1.29 (2.02)	1.00 (1.55)	2.38 (2.06)	1.25 (2.50)	0.24 (0.10; 27)	0.30 (0.04; 27)	0.28 (0.07, 25)
LGBTQ Victim.	14.18 (5.16)	14.00 (4.49)	14.35 (5.86)	13.43 (3.92)	13.46 (4.17)	17.50 (8.53)	0.23 (0.07; 32)	0.22 (0.09; 31)	0.37 (0.006; 29)
Sexual and Gender Minority Stressors, Pride, and Community Connection									
GR ¹ Disc.	1.15 (1.56)	0.43 (1.09)	1.68 (1.67)	0.79 (0.97)	1.08 (1.89)	2.17 (1.72)	0.25 (0.07; 32)	0.29 (0.03; 32)	0.11 (0.46, 29)
SOR ² Disc.	0.81 (1.05)	0.46 (0.66)	1.06 (1.21)	0.58 (0.67)	0.69 (0.85)	1.50 (1.76)	0.23 (0.11; 30)	0.31 (0.03; 30)	0.23 (0.13, 28)
GR ¹ Rejection	2.11 (2.18)	1.08 (1.73)	2.88 (2.22)	2.36 (2.16)	1.92 (2.54)	2.00 (1.58)	0.15 (0.32; 27)	0.13 (0.38; 27)	0.02 (0.88, 25)
SOR ² Rejection	2.75 (2.07)	2.73 (2.05)	2.76 (2.14)	2.55 (1.57)	3.18 (2.40)	2.33 (2.42)	0.43 (0.003; 27)	0.43 (0.002; 27)	0.32 (0.04, 25)
GR ¹ Vict.	2.17 (2.52)	1.08 (2.06)	3.00 (2.58)	2.33 (2.53)	1.83 (2.66)	2.50 (2.59)	0.23 (0.11; 29)	0.19 (0.18; 29)	0.15 (29, 28)
SOR ² Vict.	5.25 (1.22)	5.00 (0.82)	5.38 (1.41)	5.40 (0.89)	5.00 (1.73)	5.50 (0.71)	0 (1.00; 11)	0.24 (0.34; 11)	-0.07 (0.79, 11)
GR ¹ Pride	30.60 (11.27)	34.62 (12.07)	27.53 (9.89)	30.75 (12.85)	28.50 (10.00)	34.50 (11.17)	-0.05 (0.68; 29)	-0.02 (0.89; 28)	-0.07 (0.60, 27)
SOR ² Pride	22.50 (4.95)	22.79 (4.14)	22.28 (5.60)	25.46 (2.88)	19.92 (4.70)	21.67 (6.15)	-0.16 (0.21; 31)	-0.13 (0.32; 31)	-0.05 (0.69, 29)
GR ² Connections	16.30 (3.33)	15.43 (4.43)	17.06 (1.77)	16.08 (8.15)	15.85 (2.34)	18.00 (2.12)	-0.06 (0.65; 29)	0.04 (0.75; 29)	0.06 (0.65, 28)
SOR ² Connections	17.06 (3.21)	16.93 (2.56)	17.17 (3.71)	18.00 (2.24)	15.77 (3.54)	17.83 (3.82)	-0.13 (0.34; 31)	-0.09 (0.51; 31)	-0.05 (0.72, 29)
Resilience, Future Expectations									
Resilience	19.80 (3.71)	19.79 (3.75)	19.81 (3.80)	20.83 (3.71)	19.42 (4.36)	18.50 (1.64)	-0.08 (0.56; 29)	-0.23 (0.09; 28)	-0.13 (0.38, 26)
Future Expectations	42.63 (4.61)	42.57 (4.55)	42.67 (4.79)	43.46 (4.29)	42.00 (4.56)	42.17 (5.88)	-0.12 (0.33; 31)	-0.14 (0.29; 30)	-0.03 (0.81, 27)
Social Supports and Strain									
Social Support	7.93 (1.36)	7.70 (1.54)	8.07 (1.22)	7.75 (1.54)	8.18 (1.25)	7.80 (1.30)	0.01 (0.92; 27)	-0.11 (0.47; 26)	-0.13 (0.41, 25)
Social Strain	10.21 (3.14)	11.56 (2.70)	12.70 (2.58)	11.33 (2.87)	12.67 (2.25)	13.25 (2.63)	0.22 (0.09; 33)	0.14 (0.27; 32)	0.23 (0.10, 29)
Intersectional Discrimination (race, gender, age, appearance)									
Everyday Discrimin.	16.35 (13.34)	16.06 (13.59)	16.67 (13.53)	13.50 (13.49)	18.25 (11.38)	18.00 (17.09)	0.30 (0.02; 30)	-0.26 (0.05; 29)	0.44 (0.001, 28)
Mental Health									
Depression	53.89 (17.32)	51.02 (11.92)	56.16 (20.66)	48.32 (12.82)	54.59 (12.14)	64.79 (27.91)	-	-	-
Anxiety	54.41 (16.88)	50.19 (14.53)	57.52 (18.16)	47.38 (12.07)	58.53 (17.59)	61.37 (20.74)	-	-	-
PTS	11.70 (8.39)	12.20 (8.45)	11.20 (8.59)	9.45 (8.70)	13.00 (8.27)	13.00 (18.67)	-	-	-
Loneliness	9.90 (3.74)	10.64 (2.41)	9.20 (4.63)	9.50 (4.33)	10.67 (2.61)	9.14 (4.74)	0.30 (0.03; 28)	0.34 (0.01; 28)	0.45 (0.002, 27)

Bold at Statistically significant Bonferroni-corrected $p = .003$. ¹GR = Gender-related. ²SOR = Sexual Orientation-Related.

youth met the Total Internalizing clinical cutoff, 75 % (n = 9) of bisexual, pansexual, or questioning youth met the Depression clinical cutoff, and 85.71 % (n = 6) heterosexual youth met the Anxiety clinical cutoff.

Anxiety, depression and post-traumatic stress symptoms. Table 3 presents the Bonferroni-corrected Kendall's Tau (τ) rank correlation coefficients between sources of LGBTQ-based victimization and discrimination with depression, anxiety, and post-traumatic stress scale total scores. TGD gender-related discrimination is moderately positively correlated with anxiety score (τ = 0.43, $p = .002$). Sexual orientation-related rejection was also positively correlated with depression (τ = 0.43, $p = .003$), and anxiety (τ = 0.43, $p = .002$). Loneliness was positively correlated with PTS score (τ = 0.45, $p = .002$). Everyday discrimination was significantly correlated with PTS score (τ = 0.44, $p = .001$).

Suicidal behaviors and non-suicidal self-harm. Table 4 presents the Bonferroni-corrected Wilcoxon Signed Rank Tests of Association

Table 4
Wilcoxon-Signed Rank Test Association between Distal Stress and Resilience Processes with Suicidal Behaviors and Non-Suicidal Self-Harm.

Construct and Scale	Ideation M.D ¹ (z ² ; p ³ ; n)	PlanM. D. (z; p; n)	Aborted Attempt M.D. (p; n)	Attempt M.D. (z; p; n)	Non-Suicidal Self-harm M.D. (z;p; n)
Victimization					
Partner Victimization	7.37 (-2.35, 0.02, 27)	8.23 (-2.89, 0.004, 27)	-6.60 (2.31, 0.02, 27)	7.56 (2.65, 0.008, 27)	8.17 (-2.85, 0.004, 27)
LGBTQ Victimization	4.35 (-1.24, 0.22, 31)	6.33 (-1.93, 0.05, 31)	-7.22 (2.18, 0.03, 31)	5.60 (1.70, 0.09, 31)	0.65 (-0.18, 0.86, 31)
Sexual and Gender Minority Stressors, Pride, and Community Connection					
Gender-Related Discrimination	4.62 (-1.37, 0.17, 31)	6.64 (-2.17, 0.03, 31)	-2.15 (0.69, 0.49, 31)	3.62 (1.18, 0.24, 31)	3.05 (-1.00, 0.32, 30)
Sexual Orientation-Related Discrimination	3.54 (-1.11, 0.27, 29)	3.11 (-1.05, 0.29, 29)	-3.21 (1.09, 0.27, 29)	3.87 (1.33, 0.18, 29)	4.67 (-1.65, 0.10, 28)
Gender-Related Rejection	1.49 (-0.042, 0.68, 28)	5.90 (-1.91, 0.06, 28)	-1.35 (0.43, 0.67, 27)	4.15 (1.37, 0.17, 27)	0.63 (-0.19, 0.85, 26)
Sexual Orientation-Related Rejection	7.64 (-2.29, 0.02, 27)	6.31 (-2.07, 0.04, 27)	-5.44 (1.79, 0.07, 26)	4.49 (1.48, 0.14, 26)	3.98 (-1.33, 0.18, 25)
Gender-Related Victimization	0.48 (-0.13, 0.90, 29)	6.77 (-2.26, 0.02, 29)	-2.48 (0.81, 0.42, 28)	4.09 (1.37, 0.17, 28)	-0.52 (0.16, 0.88, 27)
Sexual Orientation-Related Victimization	1.52 (-0.52, 0.60, 11)	1.53 (-0.52, 0.60, 11)	-0.55 (-0.20, 0.84, 11)	0 (1.00, 11)	0.45 (0.11, 0.91, 11)
Gender-Related Pride	0.62 (-0.17, 0.87, 28)	-1.36 (-0.41, 0.68, 28)	-0.07 (0.47, 0.64, 28)	-1.87 (-0.58, 0.56, 28)	-4.75 (1.53, 0.13, 27)
Sexual Orientation-Related Pride	-1.92 (0.34, 0.73, 30)	0.34 (-0.09, 0.93, 30)	3.74 (-1.14, 0.26, 30)	-0.87 (-0.25, 0.80, 30)	3.55 (1.10, 0.27, 29)
Gender-Related Community Connections	-3.71 (1.07, 0.28, 29)	-0.69 (0.20, 0.84, 29)	0.63 (-0.18, 0.86, 29)	-3.31 (-1.03, 0.30, 29)	-1.72 (0.53, 0.60, 28)
Sexual Orientation-Related Community Connections	-1.90 (0.53, 0.60, 30)	-0.40 (0.10, 0.92, 30)	1.63 (-0.49, 0.62, 30)	-1.07 (-0.31, 0.75, 30)	1.47 (-0.45, 0.66, 29)
Loneliness	6.07 (-1.72, 0.08, 27)	3.61 (-1.14, 0.25, 27)	-5.78 (1.86, 0.06, 27)	5.27 (1.71, 0.09, 27)	2.08 (-0.50, 0.62, 27)
Everyday Disc.	8.89 (-2.49, 0.01, 29)	6.49 (-2.02, 0.04, 29)	-8.37 (2.61, 0.009, 29)	6.28 (1.97, 0.05, 29)	7.73 (-2.44, 0.01, 28)
Resilience	-4.11 (1.18, 0.24, 28)	-4.38 (1.38, 0.17, 28)	5.98 (-1.89, 0.06, 28)	-2.65 (-0.83, 0.40, 28)	-2.03 (0.64, 0.52, 27)
Future Expectations	-6.27 (1.77, 0.08, 30)	-3.32 (1.01, 0.31, 30)	7.67 (-2.35, 0.02, 30)	-2.61 (-0.79, 0.43, 30)	-3.70 (1.14, 0.26, 29)
Social Support and Social Strain					

Table 4 (continued)

Construct and Scale	Ideation M.D ¹ (z ² ; p ³ ; n)	PlanM. D. (z; p; n)	Aborted Attempt M.D. (p; n)	Attempt M.D. (z; p; n)	Non-Suicidal Self-harm M.D. (z;p; n)
Social Support	2.05 (0.62, 0.53, 17)	-6.31 (2.18, 0.03, 27)	0.31 (-0.08, 0.94, 27)	-4.97 (-1.71, 0.09, 27)	1.00 (-0.33, 0.74, 26)
Social Strain	5.40 (-1.90, 0.06, 18)	3.38 (-1.24, 0.22, 18)	-3.44 (-1.35, 0.18, 18)	-0.47 (0.14, 0.89, 18)	3.39 (-1.29, 0.20, 18)

Statistically significant at Bonferroni-corrected $p = .003$. ¹Means Difference (M. D.) between Participants who indicated “Yes” & those who indicated “No” on each suicidal/self-harm variable. ²z-score. ³p-value.

results, including means differences, between LGBTQ victimization, discrimination and resilience processes and suicidal/non-suicidal self-harm variables (ideation, planning, aborted attempt, attempt, and non-suicidal self-harm). No factors were significantly associated with suicidality at the Bonferroni-corrected $p = .003$. No factors were significantly associated with suicidal behaviors and ideation at the Bonferroni-corrected $p = .003$. While no factors were significantly associated with suicidal behaviors and ideation, those with either higher scores on the partner victimization or LGBTQ victimization constructs had higher prevalence of suicidal behaviors than those with lower scores on either victimization scale. However, these differences were not statistically significant at the corrected alpha level.

6. Discussion

These data emphasize the overlapping and compounding impact of social determinants of health on the experiences of SGMY in foster care. Study strengths include the highly marginalized and diverse sample of system-involved SGMY, the detailed analysis of sexual and gender diversity, analysis of both proximal and distal stressors on mental health, and the findings highlight several key areas for further research and policy development.

The prevalence of depression and anxiety within this pilot study reinforces the importance of integrated behavioral health support in clinical and wraparound care for SGMY in foster care, and the critical role of SGM-specific competencies for the entire care team. Future investigations with larger study samples will be necessary to develop culturally appropriate systems-level interventions to mitigate the impact of SGM-based violence, discrimination, and rejection, and to protect youth from re-victimization. One potential future practice implication could be to ensure that when depression screenings administered in primary care settings are positive for SGMY patients, the issue of violence from multiple locations is explored and responded to. Teams caring for SGMY should be aware of community resources that are competent in addressing IPV in SGM communities, and work with youths’ identified families and trusted supports to understand and intervene.

SGMY in our study shared multiple experiences of foster care disruption, underscoring the need for training and support for all foster families caring for SGMY. SGM identification and disclosure is the prerequisite for ensuring affirming care and care connections. Research indicates that youth do not disclose their sexual or gender minority statuses because of previous negative experiences with discrimination (Burke et al., 2021). Youth with current or past involvement in foster care may be even more wary of disclosures because of loss of placements (e.g. being “kicked out” of foster homes due to sexual or gender identity) or negative reactions from caseworkers (Wilson et al., 2014; Salazar et al., 2021). Pairing SGMY with explicitly welcoming households who have the capacity to support youth is one clear opportunity to increase

SGMY success. Clinicians should ensure SGMY are receiving SGM trained and affirming multidisciplinary care and support, including referral sources.

This study was limited by the small geographic nature and by the fact that participants were recruited either from within the child welfare system or community-based organizations. Only current foster youth who disclosed their SGM status were identified as potential participants. Disclosure may be uncomfortable and some may choose not to share this information (Kaasbøll et al., 2021). Therefore, this study excludes SGMY in foster care who did not self-disclose, or who were not asked about their sexual orientation or gender identity/expression by system workers in culturally appropriate or affirmative ways. Several SGMY identified for this study were unreachable because of risk factors unique to SGMY. For example, youth experienced upheaval and placement moves, including to rural areas in the state, or in some cases out of state. Youth moved in and out of more restrictive settings, including group homes and psychiatric treatment facilities, ran away from placements and were lost to follow-up outreach efforts. All of these factors precluded participation. If SGMY who had exited the foster care system were not connected to one of the partner community-based organizations, their perspectives were not accounted for in this study. Another limitation was the small sample size of this pilot study, which threatens generalizability of the findings. Relatedly, due to the small sample size and conducting a post-hoc alpha correction to control for Type I error, statistical testing for this study may have been underpowered, resulting in greater risk of Type II error. We caution against focusing on statistical significance as a measure of clinical importance and encourage referencing effect sizes reported. Future studies will use effect sizes calculated to determine appropriate sample sizes needed for statistical testing to avoid underpowered results. Finally, our convenience sampling strategy included SGMY currently in foster care as well as those who had exited care; there are developmental differences from adolescence through young adulthood that should be considered in future studies.

IPV, everyday discrimination, rejection, discrimination, and victimization based on sexual orientation and gender identity, while not statistically significant within this pilot sample, did emerge as factors warranting further investigation concerning suicidality. The relationship between IPV experiences and suicidal behavior evidenced the need to address violence in and outside of the home as a driver of suicidality. The impact of everyday discrimination on mental health outcomes and suicidality is also of note. These experiences impacted mental health particularly for gender diverse young people in our sample. Addressing these experiences in the context of structural factors is a critical component to support SGMY to develop strategies to resist the impact of this behavior. Medical, mental, and behavioral health providers have an opportunity to work with SGMY to address these issues and ensure clinical environments do not perpetuate or worsen SGMY's experiences of everyday discrimination.

The populations in this study live at the intersections of multiple communities known to experience structurally driven health disparities (e.g., racism, homophobia, transphobia, ableism, sexism) along with the disruption of foster care placement. SGMY in foster care experience mental health distress that is worsened by repetitive experiences of trauma and discrimination both internal and external to the home. Providing mental and physical health care for these patients requires a multidisciplinary approach to build the capacity of SGMY to resist and respond to discrimination as a critical task in their development.

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Article Summary

This community-based pilot study assessed psychological health of LGBTQ+ youth with current or past foster care involvement in an urban public child welfare system.

What's Known on This Subject

Sexual and gender minority youth (SGMY) are overrepresented in the child welfare system, experience higher rates of mental health disorders, and greater levels of suicidality. SGMY experience greater placement instability and higher levels of care within the foster care system.

What this study adds

This community-based pilot study adds a greater understanding of both risk and protective factors related to psychological comorbidities among sexual and gender minority youth in an urban public child welfare system.

CRedit authorship contribution statement

Dana M. Prince: Funding acquisition, Conceptualization, Investigation, Methodology, Project administration, Data curation, Writing – original draft, Writing – review & editing. **Meagan Ray-Novak:** Writing – original draft, Writing – review & editing. **Krystal Tossone:** Formal analysis, Writing – original draft, Writing – review & editing. **Emily Peterson:** Writing – review & editing. **Braveheart Gillani:** Writing – review & editing. **Laura Mintz:** Writing – review & editing.

Declaration of competing interest

This research was supported by the National Institute of Minority Health and Health Disparities (MD002265) and the Center for Reducing Health Disparities at Case Western Reserve University in Cleveland, Ohio

Data availability

The data that has been used is confidential.

References

- Alvarez, A. (2020). LGBTQ youth in foster care: Litigated reform of New Jersey's child welfare system. *Journal of Public Child Welfare*, 14, 231–253. <https://doi.org/10.1080/15548732.2019.1602098>
- Anderson, H. O., & Libby, A. M. (2011). Depression with and without comorbid substance dependence in a child welfare sample of young adults. *Depression Research and Treatment*, 2011, 1–10. <https://doi.org/10.1155/2011/475248>
- Baams, L. (2018). Disparities for LGBTQ and gender nonconforming adolescents. *Pediatrics*, 141(5). <https://doi.org/10.1542/peds.2017-3004>
- Bronsard, G., Alessandrini, M., Fond, G., Loundou, A., Auquier, P., Tordjman, S., & Boyer, L. (2016). The prevalence of mental disorders among children and adolescents in the child welfare system: A systematic review and meta-analysis. *Medicine*, 95(7), e2622.
- Burke, T. A., Bettis, A. H., Barnicle, S. C., Wang, S. B., & Fox, K. R. (2021). Disclosure of self-injurious thoughts and behaviors across sexual and gender identities. *Pediatrics*, 148(4).
- Chorpita, B. F., Yim, L., Moffitt, C., Umemoto, L. A., & Francis, S. E. (2000). Assessment of symptoms of DSM-IV anxiety and depression in children: A revised child anxiety and depression scale. *Behavior Research and Therapy*, 38, 835–855. [https://doi.org/10.1016/S0005-7967\(99\)00130-8](https://doi.org/10.1016/S0005-7967(99)00130-8)
- Conron, K. J., Landers, S. J., Reiser, S. L., & Sell, R. L. (2014). Sex and gender in the US health surveillance system: A call to action. *American Journal of Public Health*, 104(6), 970–976. <https://doi.org/10.2105/AJPH.2013.301831>
- D'Augelli, A. R., Grossman, A. H., & Starks, M. T. (2006). Childhood Gender Atypicality, Victimization, and PTSD Among Lesbian, Gay, and Bisexual Youth. *Journal of Interpersonal Violence*, 21(11), 1462–1482. <https://doi.org/10.1177/0886260506293482>
- Derogatis, L. R. (2017). Symptom Checklist-90-Revised, Brief Symptom Inventory, and BSI-18. In M. E. Maruish (Ed.), *Handbook of psychological assessment in primary care settings* (pp. 599–629). Routledge/Taylor & Francis Group.
- Dettlaff, A. J., Washburn, M., Carr, L. C., & Vogel, A. N. (2018). Lesbian, gay, and bisexual (LGB) youth within in welfare: Prevalence, risk and outcomes. *Child Abuse & Neglect*, 80, 183–193. <https://doi.org/10.1016/j.chiabu.2018.03.009>
- Durso, L. E., & Gates, G. J. (2012). *Serving Our Youth: Findings from a National Survey of Services Providers Working with Lesbian, Gay, Bisexual and Transgender Youth Who Are Homeless or At Risk of Becoming Homeless*. UCLA: The Williams Institute. Retrieved from <https://escholarship.org/uc/item/80x75033>.
- Ebesutani, C., Reise, S. P., Chorpita, B. F., Ale, C., Regan, J., Young, J., ... Weisz, J. R. (2012). The Revised Child Anxiety and Depression Scale-Short Version: Scale reduction via exploratory bifactor modeling of the broad anxiety factor. *Psychological Assessment*, 24(4), 833–845. <https://doi.org/10.1037/a0027283>
- Ehrensaft, D., Giammattei, S. V., Storck, K., Tishelman, A. C., & Keo-Meier, C. (2018). Prepubertal social gender transitions: What we know: What we can learn – A view

- from a gender affirmative lens. *International Journal of Transgenderism*, 1–18. <https://doi.org/10.1080/15532739.2017.1414649>
- Ellis, A. E. (2020). Providing trauma-informed affirmative care. Introduction to special issue on evidence-based relationship variables in working with affectional and gender minorities. *American Psychological Association*, 5, 179–188. <https://doi.org/10.1037/pri0000133>
- Evans, R., White, J., Turley, R., Slater, T., Morgan, H., Strange, H., & Scourfield, J. (2017). Comparison of suicidal ideation, suicide attempt and suicide in children and young people in care and non-care populations: Systematic review and meta-analysis of prevalence. *Children and Youth Services Review*, 82, 122–129. <https://doi.org/10.1016/j.chilyouth.2017.09.020>
- Fish, J. N., Baams, L., Wojciak, A. S., & Russell, S. T. (2019). Are sexual minority youth overrepresented in foster care, child welfare, and out-of-home placement? Findings from nationally representative data. *Child Abuse & Neglect*, 89, 203–211. <https://doi.org/10.1016/j.chiabu.2019.01.005>
- Gabrielli, J., Hambrick, E. P., Tunno, A. M., Jackson, Y., Spangler, A., & Kanine, R. M. (2015). Longitudinal Assessment of Self-Harm Statements of Youth in Foster Care: Rates, Reporters, and Related Factors. *Child Psychiatry & Human Development*, 46(6), 893–902. <https://doi.org/10.1007/s10578-014-0529-4>
- Gee, C. B., & Rhodes, J. E. (2007). A social support and social strain measure for minority adolescent mothers: A confirmatory factor analytic study. *Child: Care, Health and Development*, 34(1), 87–97. <https://doi.org/10.1111/j.1365-2214.2007.00754.x>
- Hamby, S. (2013). *The Partner Victimization Scale*. Sewanee, TN: Center for Victim Research. <https://ncvc.dspacedirect.org/handle/20.500.11990/1695>.
- He, A. S., Lim, C. S., Lecklitner, G., Olson, A., & Traube, D. E. (2015). Interagency collaboration and identifying mental health needs in child welfare: Findings from Los Angeles County. *Children and Youth Services Review*, 53, 39–43. <https://doi.org/10.1016/j.chilyouth.2015.03.013>
- Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, 43(5), 460–467. <https://doi.org/10.1037/a0029597>
- Heneghan, A., Stein, R. E. K., Hurlburt, M. S., Zhang, J., Rolls-Reutz, J., Fisher, E., ... Horwitz, S. M. C. (2013). Mental health problems in teens investigated by U.S. child welfare agencies. *Journal of Adolescent Health*, 52(5), 634–640. <https://doi.org/10.1016/j.jadohealth.2012.10.269>
- Hong, J., Espelage, D. L., & Kral, M. J. (2011). Understanding suicide among sexual minority youth in America: An ecological systems analysis. *Journal of Adolescence*, 34, 885–894. <https://doi.org/10.1016/j.adolescence.2011.01.002>
- Kann, L., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J., Lim, C., Bradford, D., Yamakawa, Y., Leon, M., Brener, N., & Ethier, K. A. (2018). Youth Risk Behavior Surveillance – United States, 2017. Morbidity and mortality weekly report. Surveillance summaries (Washington, D.C.: 2002), 67(8), 1–114. <https://doi.org/10.15585/mmwr.mm6708a1>.
- Kaasbøll, J., Pedersen, S. A., & Paulsen, V. (2021). What is known about the LGBTQ perspective in child welfare services: A scoping review. *Child & Family Social Work*, cfs.12894. <https://doi.org/10.1111/cfs.12894>
- Lalayants, M., & Prince, J. D. (2014). Delinquency, depression, and substance use disorder among child welfare-involved adolescent females. *Child Abuse & Neglect*, 38(4), 797–807. <https://doi.org/10.1016/j.chiabu.2013.08.008>
- Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority stress and physical health among sexual minorities. *Perspectives on Psychological Science*, 8(5), 521–548. <https://doi.org/10.1177/1745691613497965>
- Luk, J. W., Goldstein, R. B., Yu, J., Haynie, D. L., & Gilman, S. E. (2021). Sexual minority status and age of onset of adolescent suicide ideation and behavior. *Pediatrics*, 148(4).
- Mallon, G. P., Aledort, N., & Ferrera, M. (2002). There's no place like home: Achieving safety, permanency, and well-being for lesbian and gay adolescents in out-of-home care settings. *Child Welfare*, 81(2), 407–439.
- McGeough, B. L., & Sterzing, P. R. (2018). A systematic review of family victimization experiences among sexual minority youth. *Journal of Primary Prevention*, 39, 491–528. <https://doi.org/10.1007/s10935-018-0523-x>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674. <https://doi.org/10.1037/0033-2909.129.5.674>
- Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities. In C. J. Patterson, & A. R. D'Augelli (Eds.), *Handbook of Psychology and Sexual Orientation* (pp. 252–266). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199765218.001.0001>
- Nock, M. K., Holmberg, E. B., Photos, V. I., & Michel, B. D. (2007). Self-Injurious Thoughts and Behaviors Interview: Development, Reliability, and Validity in an Adolescent Sample. *Psychological Assessment*, 19(3), 309–317. <https://doi.org/10.1037/1040-3590.19.3.309>
- Nock, M. K., Green, J. G., Hwang, I., McLaughlin, K. A., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2013). Prevalence, correlates, and treatment of lifetime suicidal behavior among adolescents: Results from the National Comorbidity Survey Replication Adolescent Supplement. *JAMA psychiatry*, 70(3), 300–310.
- Olliffe, J. L., Rossnagel, E., Seidler, Z. E., Kealy, D., Ogronczuk, J. S., & Rice, S. M. (2019). Men's depression and suicide. *Current Psychiatry Reports*, 21, 1–6. <https://doi.org/10.1007/s11920-019-1088-y>. Retrieved from.
- Pearson, J., Thrane, L., & Wilkinson, L. (2017). Consequences of runaway and throwaway experiences for sexual minority health during the transition to adulthood. *Journal of LGBT Youth*, 14(2), 145–171. <https://doi.org/10.1080/19361653.2016.1264909>
- Perez-Brumer, A., Day, J. K., Russell, S. T., & Hatzenbuehler, M. L. (2017). Prevalence and Correlates of Suicidal Ideation Among Transgender Youth in California: Findings From a Representative, Population-Based Sample of High School Students. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(9), 739–746. <https://doi.org/10.1016/j.jaac.2017.06.010>
- Prince, D. M., Epstein, M., Nurius, P. S., King, K., Gorman-Smith, D., & Henry, D. B. (2016). Assessing Future Expectations of Low-Income Minority Young Men: Survival-Threats and Positive Expectations. *Journal of Child and Family Studies*, 25(7), 2089–2101. <https://doi.org/10.1007/s10826-016-0384-y>
- Prince, D. M., Ray-Novak, M., Gillani, B., & Peterson, E. (2022). Sexual and gender minority youth in foster care: an evidence-based theoretical conceptual model of disproportionality and psychological comorbidities. Trauma, Violence, & Abuse, 23(5), 1643-1657. Reiser, S. L., Conron, K. J., Tardiff, L. A., Jarvi, S., Gordon, A. R., & Austin, S. B. (2014).
- Rich, A. J., Salway, T., Scheim, A., & Poteat, T. (2020). Sexual Minority Stress Theory: Remembering and Honoring the Work of Virginia Brooks. *LGBT Health*, 7(3), 124–127. <https://doi.org/10.1089/lgbt.2019.0223>
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39, 472–480.
- Ryan, C., Huebner, D., Diaz, R. M., & Sanchez, J. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. *Pediatrics*, 123(1), 346–352. <https://doi.org/10.1542/peds.2007-3524>
- Salazar, A. M., Barkan, S. E., Rankin, L. F., Woo, C. B., Rozekova, I., Fowler, N. E., ... Salzer, A. (2021). Evaluation of a Brief Foster Parent/ Case Worker Training to Support Relationship Building Skills and Acceptance of LGBTQ+ Youth in Care. *Journal of Public Child Welfare*, 1–25. <https://doi.org/10.1080/15548732.2021.2011531>
- Saunders, B. E., Arata, C. M., & Kilpatrick, D. G. (1990). Development of a crime-related posttraumatic stress disorder scale for women within the Symptom Checklist-90-Revised. *Journal of Traumatic Stress*, 3, 439–448.
- Schneeberger, A. R., Dietl, M. F., Muenzenmaier, K. H., Huber, C. G., & Lang, U. E. (2014). Stressful childhood experiences and health outcomes in sexual minority populations: A systematic review. *Social Psychiatry and Psychiatric Epidemiology*, 49, 1427–1445. <https://doi.org/10.1007/s00127-014-0854-8>
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194–200.
- Sterzing, P. R., Ratliff, G. A., Gartner, R. E., McGeough, B. L., & Johnson, K. C. (2017). Social ecological correlates of polyvictimization among a national sample of transgender, genderqueer, and cisgender sexual minority adolescents. *Child Abuse & Neglect*, 67, 1–12. <https://doi.org/10.1016/j.chiabu.2017.02.017>
- Strauss, P., Cook, A., Winter, S., Watson, V., Wright Toussaint, D., & Lin, A. (2020). Mental health issues and complex experiences of abuse among trans and gender diverse young people: Findings from Trans Pathways. *LGBT health*, 7(3), 128–136. <https://doi.org/10.1089/lgbt.2019.0232>
- Taliaferro, L. A., McMorris, B. J., Rider, G. N., & Eisenberg, M. E. (2019). Risk and protective factors for self-harm in a population-based sample of transgender youth. *Archives of Suicide Research*, 23(2), 203–221. <https://doi.org/10.1080/13811118.2018.1430639>
- Taliaferro, L. A., & Muehlenkamp, J. J. (2017). Nonsuicidal self-injury and suicidality among sexual minority youth: Risk factors and protective connectedness factors. *Academic Pediatrics*, 17(7), 715–722. <https://doi.org/10.1016/j.acap.2016.11.002>
- Tebbe, E. A., & Moradi, B. (2016). Suicide risk in trans populations: An application of minority stress theory. *Journal of Counseling Psychology*, 63(5), 520. <https://doi.org/10.1037/cou0000152>
- Testa, R. J., Habarth, J., Peta, J., Balsam, K., & Bockting, W. (2015). Development of the Gender Minority Stress and Resilience Measure. *Psychology of Sexual Orientation and Gender Diversity*, 2(1), 65–77. <https://doi.org/10.1037/sgd0000081>
- Testa, R. J., Michaels, M. S., Bliss, W., Rogers, M. L., Balsam, K. F., & Joiner, T. (2017). Suicidal ideation in transgender people: Gender minority stress and interpersonal theory factors. *Journal of Abnormal Psychology*, 126(1), 125–136. <https://doi.org/10.1037/abn0000234>
- Tolan, P.H. (1990). Pathways of adolescent antisocial behavior. National Institute of Mental Health Grant Proposal RO1 48248 available from the National Institute of Health, Bethesda, MD.
- Wilber, S. (2013). *Guidelines for managing information related to the sexual orientation and gender identity and expression of children in child welfare systems*. Family Builders by Adoption: Putting Pride into Practice Project.
- Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health. Socio-economic status, stress and discrimination. *Journal of Health Psychology*, 2(3), 335–351. <https://doi.org/10.1177/135910539700200305>
- Wilson, B.D.M., Cooper, K., Kastanis, A., & Nezhad, S. (2014). *Sexual and gender minority youth in foster care: Assessing disproportionality and disparities in Los Angeles*. The Williams Institute, UCLA School of Law.
- Wilson, B. D. M., & Kastanis, A. A. (2015). Sexual and gender minority disproportionality and disparities in child welfare: A population-based study. *Children and Youth Services Review*, 58, 11–17. <https://doi.org/10.1016/j.chilyouth.2015.08.016>
- Woronoff, R., Estrada, R., Sommer, S. (2006). *Out of the margins: A report on regional listening forums highlighting the experiences of lesbian, gay, bisexual, transgender, and questioning youth in care*. Child Welfare League of America and Lambda Legal Defense & Education Fund.