

# 4 DISCRIMINATION & MENTAL HEALTH OUTCOMES OF BLACK YOUTH EXPERIENCING HOMELESSNESS<sup>1</sup>

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## Introduction

Racial, sexual and gender minority youth who also experience homelessness must, during critical stages of development, simultaneously manage stressors that accompany racial minority, sexual and gender minority, and homelessness status. Evidence suggests that adolescents and young adults who self-identify with one or more of these marginalized statuses report higher rates of symptoms of depression and suicidality (Adkins, Wang, Dupre, van den Ord, & Elder, 2009; Edidin, Gamin, Hunter, & Karnik, 2012; Gore & Aseltine, 2003; Hatzenbuehler, McLaughlin, & Nolen-Hoeksema, 2008; National Center on Family Homelessness, 2011; Safren & Heimberg, 1999). A substantial body of evidence suggests that discrimination targeted at individuals with any of those statuses contributes to worse mental health outcomes (Almeida, Johnson, Corliss, Molnar, & Azrael, 2009; Brody et al., 2006; Kessler, Mickelson, & Williams, 1999; Paradies, 2006; Pascoe & Richman, 2009; Thoma & Huebner, 2013).

Although researchers are increasingly examining how marginalization affects adolescents and young adults, we continue to lack a clear understanding of how the combination of racial minority, sexual and gender minority, and homeless statuses may contribute to developmental outcomes. Though it is clear that these stigmatized statuses predict experiences of discrimination targeted at each status (Corrigan et al., 2003; Phelan, Link, Moore, & Stueve, 1997), it is less clear how the experiences of stigma and discrimination targeted at multiple statuses may, when experienced concurrently, be associated with mental health outcomes. This project seeks to improve knowledge of how Black racial status, sexual minority status and homelessness are associated with symptoms of depression and suicidality among adolescents and young adults, and to investigate how much of the association is accounted for by perceived discrimination targeted at each status.

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## Status and Mental Health

Status variables have been empirically linked to mental health outcomes for over a century, with evidence suggesting that positions of marginalized social status are predictive of worse mental health (for a discussion see Muntaner, Ng, Vanroelen, Christ, & Eaton, 2013). Social stress models, outgrowths of the social causation hypothesis (Dohrenwend & Dohrenwend, 1969), suggest that the disadvantages and strains associated with any marginalized status create burdens capable of generating psychological distress (Pearlin, 1989; Schwartz & Meyer, 2010). In other words, individual and group positions in the social hierarchy affect the probability of experiencing particular external circumstances capable of producing stress, which then affect the probability of experiencing mental health problems.

Stress determined by social position is not necessarily an objective feature of circumstances, but instead results from discrepancies between the demands of the external environment and the resources of the individual or group (Aneshensel, 1992). Some circumstances that reflect status hierarchies may not reliably affect mental health outcomes, while other circumstances may be more damaging, despite available compensatory mechanisms. Homelessness is more likely to be damaging, not only because it is linked to severe economic hardship, but also because it is characterized by unpredictability, dislocation (Bassuk, 2010), disruption in social support systems, risks to safety and barriers to receiving adequate services (Kilmer, Cook, Crusto, Strater, & Haber, 2012; Nyamathi, Marfisee, Slagle, Greengold, Liu, & Leake, 2012). Homelessness often follows other preceding stressors (Ryan, Kilmer, Cauce, Watanabe, & Hoyt, 2000; Tyler & Cauce, 2002), resulting in 'risk trajectories' for youth who experience homelessness:

*These trajectories begin with abusive and otherwise dysfunctional home experiences, with [homeless youth] tending to fall into more negative street experiences, including victimization and association with other youth experiencing substantial challenges [...] increasing the likelihood of depressive symptoms and suicidality*

(Kidd, 2006, p. 395).

Research shows that people who experience homelessness exhibit higher levels of psychological distress than their housed counterparts (Cochran, Stewart, Ginzler, & Cauce, 2002; McCaskill, Toro, & Wolfe, 1998; Ritchey, Gory, Fitzpatrick, & Mullis,

1990; Weinreb, Buckner, Williams, & Nicholson, 2006; Wong, 2000). These findings have been replicated in younger population samples, with adolescents and young adults who experience homelessness showing an increased risk for a range of mental health problems (Edidin et al., 2012; Kidd, 2006; National Center on Family Homelessness, 2011; Nyamathi et al., 2012; Saperstein, Lee, Ronan, Seeman, & Medalia, 2014; Unger, Kipke, Simon, Montgomery, & Johnson, 1997), including substantially higher rates of symptoms of depression and suicidality when compared to the general population (Kidd, 2006; Unger et al., 1997). The quality of housing for people experiencing homelessness can also affect health outcomes, with those who are unsheltered or in unstable situations being at higher risk of victimization and less likely to use health care services (National Health Care for the Homeless Council, 2011; Stein, Nyamathi, & Zane, 2009).

Minority stress theory, a version of the more general social stress model (Meyer, 2003; Meyer, 1995), explicitly addresses psychological distress resulting from the experience of minority status (Brooks, 1981). Applied originally to sexual minority status, this theory posits that sexual minorities face unique and chronic stressors related to their sexual orientation, and these are associated with subsequent negative mental health outcomes. In line with other social stress models that consider social status, minority stress theory argues that “sexual minority status itself does not matter so much as the norms, values, mores, and related processes of the social contexts in which sexual minority individuals live” (Martin-Storey & Crosnoe, 2012, p. 1001). Research examining the link between sexual orientation and mental health overwhelmingly suggests that gay, lesbian and bisexual (GLB) youth are at greater risk of experiencing a range of negative mental health outcomes, including higher rates of symptoms of depression and suicidality, as compared to their heterosexual peers (Conron, Mimiaga, & Landers, 2010; Fredriksen-Goldsen, Kim, Barkan, & Hoy-Ellis, 2013; Galliher, Rostosky, & Hughes, 2004; Hatzenbuehler, McLaughlin, & Nolen-Hoeksema, 2008; Loosier & Dittus, 2010; Marshal et al., 2011; Safren & Heimberg, 1999; Savin-Williams, 1994).

While minority stress theory was first used to address the experiences of sexual minorities in a heterosexist society, and was then extended to address gender minorities in a cissexist society, the underlying concepts are based on stressors faced by minority populations, so are arguably applicable to other groups. For example, researchers have long considered the link between Black racial status and developmental outcomes to be due to the enduring negative association between racial minority status and indicators of physical health. However, an often clear association between race and physical health does not consistently

extend to mental health outcomes (Keyes, Barnes, & Bates, 2011). Although racial and ethnic minorities report higher levels of acute and chronic stress than their non-Hispanic White peers (Boardman, 2004; Boardman & Alexander, 2011), studies using adult samples report contradictory findings on racial status and psychological distress. Some studies indicate that mental health problems, particularly symptoms of depression and depressive disorders, are more prevalent among White than Black adults (Blazer, Kessler, McGonagle, & Swartz, 1994; Kessler, Mickelson, & Williams, 1999; Riolo, Nguyen, Greden, & King, 2005), while others report the opposite (González, Tarraf, Whitfield, & Vega, 2010; Jones-Webb & Snowden, 1993; Pratt & Brody, 2008; Taylor & Turner, 2002; Williams, Yu, Jackson, & Anderson, 1997). Findings are somewhat more consistent for younger populations, with multiple studies finding that symptoms of depression are more pronounced among Black adolescents and young adults compared to their White counterparts (Adkins et al., 2009; Boardman & Alexander, 2011; Garrison, Jackson, Marsteller, McKeown, & Addy, 1990; Gore & Aseltine, 2003).

Unlike sexual minority status, disparity in mental health outcomes between Black and White adolescents and young adults is confounded by the association between class and race in American society (Srole, Langner, Michael, Opler, & Rennie, 1960, as cited in Muntaner et al., 2013; Williams & Williams-Morris, 2000). The inverse association between marginalized socioeconomic status and mental health has been documented across racial and ethnic groups (Williams, Yu, Jackson, & Anderson, 1997), and socioeconomic variables are often used to explain health disparities. However, even when researchers consider socioeconomic characteristics, disparities in mental health status often remain. For example, while the impact of stress on symptoms of depression is similar for White and Black young adults, Black young adults are at an increased risk for symptoms of depression because they are more likely to be exposed to a range of stressors, including economic hardship (Boardman & Alexander, 2011). The association between socioeconomic status and symptoms of depression may also be different for Black and White adolescents: low socioeconomic status may be more harmful to Black adolescents (Adkins et al., 2009), which complements results from adult samples suggesting Black adults receive less health benefit from higher socioeconomic status than do White adults (Farmer & Ferraro, 2005).

## **Discrimination and Mental Health**

Perceived discrimination, or unfair treatment based on perceived group membership (Thoits, 2010), has been highlighted as a stressor targeted at marginalized populations that leaves their more advantaged counterparts untouched (Kessler, Mickelson, & Williams, 1999). Research has long documented the negative effects of discrimination on measures of mental health (Gee, 2002; Karlsen & Nazroo, 2002), with results generally indicating a negative association between perceived discrimination and mental health that persists across indicators (Pascoe & Richman, 2009).

Some evidence suggests that racial discrimination is one of the most common, if not the most common, type of discrimination initiated due to perceived group status (Corrigan et al., 2003; Grollman, 2012). Experiences of racial discrimination are associated with poorer mental health functioning among Black population samples (Kessler, Mickelson, & Williams, 1999; Paradies, 2006; Ren, Amick, & Williams, 1999; Thompson, 1996; Williams & Williams-Morris, 2000; Williams et al., 1997). This pattern of findings extends to Black adolescents and young adults, with evidence indicating a positive association between perceptions of racial discrimination and a range of mental health problems, including symptoms of depression and suicidality (Sanders-Phillips, Settles-Reaves, Walker, & Brownlow, 2009; Seaton, Upton, Gilbert, & Volpe, 2014; Thoma & Huebner, 2013). Longitudinally, a preponderance of evidence suggests that as the perception of incidents of discrimination increases over time among Black adolescents and young adults, so does psychological distress (Brody et al., 2006; Greene, Way, & Pahl, 2006; Hurd, Varner, Caldwell, & Zimmerman, 2014).

Discrimination based on a target's perceived minority sexual orientation is also common (Corrigan et al., 2003; Kosciw, Diaz, & Greytak, 2008; Reck, 2009; Savin-Williams, 1994), and is positively associated with negative mental health outcomes (Balsam, Molina, Beadnell, Simoni, & Walters, 2011). Evidence suggests that stressful events, including victimization, and perceptions of poor social support largely explain the disparity in symptoms of depression and suicidality between sexual minority and heterosexual adolescents and young adults (Hatzenbuehler, McLaughlin, & Xuan, 2012; Safren & Heimberg, 1999; Toomey, Ryan, Diaz, Card, & Russell, 2010; Williams, Connolly, Pepler, & Craig, 2005). Multiple studies suggest the association between sexual minority status and poor mental health outcomes is moderated by the perception of discrimination based on sexual orientation, with sexual minority adolescents who report higher levels

of discrimination having poorer mental health than sexual minority peers who report less discrimination (Almeida et al., 2009; Birkett, Espelage, & Koenig, 2009).

Finally, stigma toward people experiencing homelessness, particularly in desire for social distance (Belcher & DeForge, 2012; Phelan, et al., 1997), remains pervasive in the general population. Qualitative research reports that perceived stigma is a barrier to young adults experiencing homelessness receiving services (Kozloff et al., 2013), but few studies have examined discrimination targeted at homeless status specifically. Kidd's (2003, 2004, 2007) work is a notable exception; in a series of qualitative and quantitative studies, Kidd reports that homelessness-related discrimination is related to negative mental health outcomes (e.g., suicidality, loneliness, self-blame) among adolescents and young adults experiencing homelessness.

### **Multiple Statuses, Discrimination, and Mental Health**

Stress that is chronic (e.g., based on racial or sexual minority status), uncontrollable (e.g., homelessness), and unpredictable (e.g., discrimination targeted at any specific status) appears to be particularly harmful to health (Avison & Turner, 1988; Williams & Mohammed, 2009). Combining the stress related to each marginalized status with the stress of perceived discrimination directed at those statuses simultaneously makes managing adolescent and young adult development potentially overwhelming. As many adolescents and young adults occupy multiple positions of marginalization, and thus are targets of multiple forms of discrimination, ignoring this disproportionate exposure means that how status and discrimination contribute to mental health outcomes may be misunderstood (Grollman, 2012).

Sexual and gender minority adolescents and young adults appear at particular risk of experiencing homelessness (Corliss, Goodenow, Nichols, & Austin, 2011; Kruks, 1991; Ray, 2006), which places them at increased risk of negative mental health outcomes when compared to housed LGBTQ2S peers (Kruks, 1991; Rosario, Schrimshaw, & Hunter, 2012; Walls, Hancock, & Wisneski, 2007) and heterosexual and cisgender peers experiencing homelessness (Cochran, Stewart, Ginzler, & Cauce, 2002; Gangamma, Slesnick, Toviessi, & Serovich, 2008; Gattis, 2013; Gattis, 2009; Grafsky, Letcher, Slesnick, & Serovich, 2010; Noell & Ochs, 2001; Whitbeck et al., 2004). Members of sexual minorities report higher levels of homelessness stigma than heterosexual peers

experiencing homelessness (Kidd, 2007). Finally, though discrimination directed at sexual minority status has been associated with symptoms of depression among adolescent and young adult males experiencing homelessness, the association does not differ by racial/ethnic minority status (Bruce, Stall, Fata, & Campbell, 2014).

Although adolescents and young adults who identify with both sexual minority and racial minority statuses may experience discrimination targeted at perceived racial and sexual orientation group membership (Meyer, Schwartz, & Frost, 2008), only a few studies to our knowledge have specifically examined how these forms of discrimination affect Black adolescents or young adults. Evidence suggests that racial and sexual minority discrimination may combine to affect mental health outcomes over and above that resulting from a single stigmatized status (Grollman, 2012), a finding that has been replicated in adult samples (Grollman, 2014). For example, Thoma and Huebner (2013) analyzed data from a sample of Black GLB adolescents and young adults and found that perceptions of discrimination targeted at racial and sexual minority status independently predicted symptoms of depression and suicidality, and race discrimination was a stronger predictor of symptoms of depression.

In contrast to findings that multiple forms of marginalization contribute to worse mental health outcomes, especially with multiple forms of discrimination, evidence suggests that Black adolescents and young adults experiencing homelessness report lower rates of suicidal behaviour than homeless youth of other races (Unger, Kipke, Simon, Montgomery, & Johnson, 1997). Furthermore, although Black adolescents and young adults who experience homelessness report psychological distress following instances of discrimination (Milburn et al., 2010), they report lower levels of discrimination targeted at homelessness status than do their White peers (Kidd, 2007).

In summary, evidence suggests that Black GLB adolescents who experience homelessness face unique combinations of stressors that are particularly likely to affect their mental health (Reck, 2009). Although researchers have carefully considered the potential impact of stigma and discrimination directed at multiple statuses for a single individual (Corrigan, et al., 2003; Kidd, Veltman, Gately, Chan, & Cohen, 2011; Ren, Amick, & Williams, 1999), and this work has been tested empirically in adolescent and young adult samples, there is little research on how the combination of racial minority, sexual minority and homelessness statuses may affect mental health outcomes, particularly in contexts of discrimination.

## **Research Question**

Our primary research question was: Are multiple forms of perceived discrimination, targeted at racial minority, sexual minority and homeless statuses independently associated with symptoms of depression and suicidality in a sample of Black adolescents and young adults experiencing homelessness? We defined a number of hypotheses based on the literature reviewed in the previous section of this chapter. First, we hypothesized that, while all forms of discrimination will be positively associated with symptoms of depression and suicidality, perceived racial discrimination will be the most pervasive form of discrimination, and thus will be more strongly associated than sexual minority discrimination or homelessness stigma with symptoms of depression and suicidality. Secondly, we hypothesized that persons reporting sexual minority status will report higher levels of symptoms of depression and suicidality than their heterosexual peers.

## **Methods**

This study utilized a cross-sectional research design with structured face-to-face interviews with a convenience sample of 89 Black youth experiencing homelessness, aged 16 to 24 years ( $M=20.06$ ,  $SD=2.06$ ). Human subjects approval was obtained from the Institutional Review Board at the University of Wisconsin–Madison. The interviews took place between October 2012 and October 2013.

## **Sample**

### ***Recruitment Procedures***

Potential subjects were initially approached to participate in the study when seeking drop-in services at an agency that provides services for youth experiencing homelessness in Milwaukee. A member of the staff explained the study to gauge interest and, if the person expressed interest, assessed whether inclusion criteria were met (aged between 16 and 24, homeless at least 7 days in the past month and Black). A staff member informed eligible individuals of the requirements, procedures and compensation for the study. If individuals were willing to consent to the interview, they were referred to a member of the research team who obtained consent and conducted the survey. Upon completion of the survey, each participant was given a \$15 honorarium.



## **Dependent Variables**

### ***Symptoms of Depression***

These were measured using the Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff, 1977), originally developed for epidemiology studies in the general population and previously used in a racially diverse sample of youth (Skriner & Chu, 2014). Respondents were asked 20 questions that inquired about their feelings and behaviour in the past week (e.g., “I was bothered by things that usually don’t bother me,” “I did not feel like eating; my appetite was poor”) and asked to respond on a scale from 0, “rarely or none of the time (less than one day)”, to 3, “most or all of the time (5-7 days).” The coefficient alpha for this sample is 0.89, indicating excellent internal consistency and replication of reliability levels noted in previous studies with similar populations (Littrell & Beck, 2001). A score of 16 or higher on the CES-D indicates risk of clinical depression, while a score of 21 or higher indicates the presence of major symptoms of depression (Bruce, Stall, Fata, & Campbell, 2014).

### ***Suicidality***

Suicidal ideation, planning and attempts were measured using three questions from the 2009 Youth Risk Behavior Survey, funded by the Centers for Disease Control and Prevention. The questions were: 1) “During the past 12 months, did you ever seriously consider attempting suicide?” (1=yes, 0=no); 2) “During the past 12 months, did you make a plan about how you would attempt suicide?” (1=yes, 0=no); and 3) “During the past 12 months, how many times did you actually attempt suicide?” (dichotomized for analysis, 1=at least one time, 0=zero times). These items were summed and averaged to create a composite suicidality measure ( $M=0.19$ ,  $SD=0.31$ ). This item was transformed into an indicator variable of any endorsement of past-year suicidality (1=yes, 0=no).

## **Independent Variables**

### ***Homelessness Stigma***

Perceived stigma related to homelessness was assessed using the 12-item social stigma scale (Kidd, 2007). Items included: 1) “I have been hurt by how people have reacted to me being homeless;” 2) “People seem afraid of me because I am homeless;” and 3) “I feel that I am not as good as others because I am homeless” (for the full scale and factor analysis, see Kidd, 2007). Each item response was formatted as 4-point Likert-type scale (1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree). The full scale ( $M=2.53$ ,  $SD=0.71$ ) evidenced strong internal consistency in our sample ( $\alpha=0.86$ ).

### ***Racial Discrimination***

Perceived racial discrimination was measured using the 7-item race-ethnicity discrimination scale from the Alcohol Use Disorder and Associated Disabilities Interview Schedule-IV (AUDADIS-IV), which was modelled after the Experiences of Discrimination (EOD) scales and intended to measure experienced rather than perceived discrimination (for discussion of scale construction and reliability information from a random sample of respondents to the National Epidemiologic Survey on Alcohol and Related Conditions [NESARC], see Ruan et al., 2008). The scale was included to make it possible to examine how responses from members of the sample compared to national data on racial discrimination. Each respondent was read the following question stem: “Now I’d like to know about how often you have experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior in any of the following situations because of your race. During the last 12 months, about how often did you experience discrimination...”. Items included: 1) “Ability to obtain health care/health insurance;” 2) “In how you were treated when you got care;” and 3) “Obtaining a job, on the job, or getting admitted to school or training program, or in the courts or by the police, or obtaining housing.” Responses were reported on a five-point Likert scale (0=never, 1=almost never, 2=sometimes, 3=fairly often, or 4=very often) and then summed and averaged to create a single racial discrimination score ( $M=6.56$ ,  $SD=5.32$ ,  $\alpha=0.79$ ).

### ***Sexual Orientation Discrimination***

Perceived sexual orientation discrimination was measured using the sexual orientation discrimination scale from AUDADIS-IV, also modeled after the EOD (for discussion of scale construction and reliability information from a random sample of NESARC respondents, see Ruan et al., 2008). Each respondent who reported a sexual identity other than 100% heterosexual (straight) ( $n=45$ ) was read the following question stem: “Now I’d like to know about how often you have experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior in any of the following situations because of your sexual orientation. During the last 12 months about how often did you experience discrimination...” and asked to respond to the same items included in the racial discrimination scale, except answers pertained to sexual orientation discrimination rather than racial discrimination. After the question stem, the items were worded identically, except for item 5, which replaced “racist” with “homophobic.” For respondents who reported an identity of 100% heterosexual, values of zero were entered in order to retain our full sample. Responses were summed and averaged to create a single perceived sexual orientation discrimination score ( $M=3.02$ ,  $SD=4.86$ ,  $\alpha=0.87$ ).

### ***Sexual Identity***

Sexual identity was assessed by asking participants to “please choose the description that best fits how you think about yourself.” Mutually exclusive response categories include: 1) 100% heterosexual (straight) ( $n=44$ ); 2) mostly heterosexual (straight), but somewhat attracted to people of my own sex ( $n=7$ ); 3) bisexual, attracted to men and women equally ( $n=9$ ); 4) mostly homosexual (gay or lesbian), but somewhat attracted to people of the opposite sex ( $n=9$ ); 5) 100% homosexual (gay or lesbian) ( $n=16$ ); 6) not sexually attracted to either males or females ( $n=1$ ); 7) man having sex with men (MSM) ( $n=0$ ); 8) woman having sex with women (WSW) ( $n=0$ ); or 9) pansexual ( $n=3$ ). Because our small sample size would not allow investigation of each category, we created a dichotomized item that assigned the value of zero to respondents reporting a 100% heterosexual identity ( $n=44$ ), and a value of one to respondents reporting any other identity ( $n=45$ ).

### ***Homelessness Severity***

Because some evidence suggests that youth who sleep on the street fare worse than youth who use shelter services or sleep elsewhere (Patel & Greydanus, 2002), we considered whether youth reported ever sleeping on the street as a measure of homelessness severity. Participants who reported ever spending one or more nights on the street in an abandoned building or another place out in the open (Whitbeck et al, 2004) were assigned a value of one ( $n=41$ ) and all others were assigned a value of zero ( $n=48$ ).

### ***Covariates***

Mental health indicators have been shown to vary according to gender and age, with females and adolescent age associated with higher rates of symptoms of depression (Adkins, et al., 2009; Pratt & Brody, 2008). Both gender and age have been associated with perceptions of discrimination as well (Kessler, Mickelson, & Williams, 1999). Thus, we considered gender identity (male  $n=35$ , 36.84%, female  $n=49$ , 51.58%, or other [e.g., male to female, two-spirit]  $n=5$ , 5.26%) and age (continuous) as covariates in all models.

## **Analysis**

After completing univariate and bivariate analyses, we tested a series of models to investigate the relative input of primary independent variables of interest (perceived racial, sexual and homelessness-related discrimination) on outcomes of interest, controlling for status, homelessness severity and personal characteristics. Although

our research question of interest would have been more thoroughly tested by using an intersectionality framework and a series of interaction terms in multiple regression models (Muntaner et al., 2013), this was precluded by sample and data limitations. Nonetheless, we tested whether the association between 1) homelessness stigma and mental health and 2) racial discrimination and mental health differed by sexual minority status. All analyses were completed using Stata v.13 and all multivariate models were adjusted using the Bonferroni correction.

## **Results**

Univariate analyses indicated that approximately 70% of the sample ( $n=66$ ) reported a CES-D score of 16 or higher and approximately 61% reported scores of 21 or higher ( $M=26.13$ ,  $SD=2.49$ ), indicating a high prevalence of symptoms of depression. Approximately 30% of the sample endorsed any measure of suicidality in the past year, with 22% reporting consideration of suicide, 18% reporting a suicide plan, and close to 14% reporting a suicide attempt. Finally, 41 respondents (43%) reported having ever slept on the street.

## **Bivariate Analyses**

Results of our bivariate correlations are displayed in Table 1. In line with previous literature, symptoms of depression were positively correlated with suicidality, perceived homelessness stigma, racial discrimination, sexual orientation discrimination and time on the street. Suicidality was also positively associated with perceived homelessness stigma, racial discrimination and identifying with a sexual identity other than 100% heterosexual, though perceived sexual orientation discrimination showed no association. Time on the street was, as expected, positively associated with perceived homelessness stigma, and reporting a gender identity other than male or female was associated with perceived sexual discrimination. Females were more likely to report sexual identities other than heterosexual, and males were more likely to report ever spending a night on the street.

TABLE 1: CORRELATIONS BETWEEN INDEPENDENT AND DEPENDENT VARIABLES

	1	2	3	4	5	6	7	8	9	10
Symptoms of depression	-									
Suicidality	.35***	-								
Perceived homelessness stigma	.46***	.27*	-							
Perceived racial discrimination	.52***	.31**	.33**	-						
Perceived racial discrimination	.30**	.18	.14	.25*	-					
Sexual identity—other than heterosexual	.20	.23*	.08	-.07	.65***	-				
Time on the street	.32**	.15	.32**	.12	.07	.06	-			
Gender—male	-.09	-.14	-.07	.10	-.16	-.35***	.27*	-		
Gender—female	.04	.07	.04	-.11	-.0001	.28**	-.25*	-.89***	-	
Gender—other	.12	.14	.09	.02	.35**	.14	-.03	-.20	-.27*	-
Age	.10	.04	.01	.15	.20	.21*	.03	-.08	.06	.04

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$   
 $n$  ranges from 83–89 observations

## Multivariate Analyses

### *Symptoms of Depression*

We next completed a series of ordinary least squares (OLS) regressions to test the relative strength of the associations between stigma and discrimination with symptoms of depression, while controlling for potentially confounding variables. Results of these models are summarized in Table 2. Our models indicate that perceived homelessness stigma and racial discrimination showed consistently positive associations with symptoms of depression, after controlling for other factors, whereas perceived sexual orientation discrimination showed no association. Specifically, adolescents and young adults who reported levels of homelessness stigma one

standard deviation above the mean reported symptoms of depression approximately one-third of a standard deviation above the mean, relative to their peers in the sample. Model 3 shows that the association between homelessness stigma and symptoms of depression attenuated when controlling for homelessness severity, so that the association between perceived homelessness stigma and symptoms of depression was no longer significant. Though the association between time on the street and symptoms of depression was positive ( $\beta = 0.42$ ,  $t = 2.31$ ,  $p = 0.024$ ) it was not statistically significant, using the 0.0025 corrected alpha level.

**TABLE 2: OLS REGRESSION, ASSOCIATIONS BETWEEN PREDICTORS (STATUS VARIABLES, DISCRIMINATION, AND PERSONAL CHARACTERISTICS) AND THE OUTCOME SYMPTOMS OF DEPRESSION**

	1 $\beta$ (SE)	2 $\beta$ (SE)	3 $\beta$ (SE)	4 $\beta$ (SE)	5 $\beta$ (SE)
Other than 100% heterosexual <sup>a</sup>		0.38 (.25)	0.32 (.24)	0.29 (.18)	0.27 (.19)
Perceived homelessness stigma	0.31* (.09)	0.30* (.09)	0.23 (.09)	0.32 (.13)	0.23 (.09)
Perceived racial discrimination	0.30* (.10)	0.35* (.10)	0.35* (.10)	0.34* (.09)	0.28 (.14)
Perceived sexual orientation discrimination	0.09 (.09)	0.03 (.19)	-0.03 (.12)		
Time on street			0.42 (.18)	0.44 (.18)	0.43 (.18)
Sexual minority status x homelessness stigma				-0.16 (.17)	
Sexual minority status x racial discrimination					0.10 (.18)
Gender—female <sup>b</sup>	0.13 (.18)	0.03 (.19)	0.17 (.19)	-0.04 (.20)	0.18 (.19)
Gender—other <sup>b</sup>	0.37 (.46)	0.36 (.46)	0.48 (.45)	0.42 (.46)	0.44 (.42)
Age	0.02 (.04)	0.01 (.04)	0.01 (.04)	0.03 (.04)	0.01 (.04)

\* $p < .0025$

<sup>a</sup>omitted group: 100% heterosexual

<sup>b</sup>omitted group: Gender—male

$n = 86$

Model 1  $R^2 = 0.34$ , M. 2  $R^2 = 0.36$ , M. 3  $R^2 = 0.40$ , M. 4  $R^2 = 0.41$ , M. 5  $R^2 = 0.41$ .

Coefficients and standard errors from ordinary least square regressions are presented, with standardized coefficients for predictors homelessness stigma, racial discrimination, and sexual orientation discrimination ( $M = 0$ ,  $SD = 1$ ).

Perceived racial discrimination was consistently associated with symptoms of depression, and this association did not attenuate when considering homelessness severity or personal characteristics. Specifically, adolescents and young adults who reported racial discrimination experiences one standard deviation above the mean also reported, on average, symptoms of depression approximately one-third of a standard deviation above the mean. We found no significant

associations between personal characteristics and symptoms of depression in any model. Finally, Model 3, which included all forms of discrimination, homelessness severity and personal characteristics, accounted for 40% of the variance in symptoms of depression in our sample.

### ***Investigating Moderation***

We tested whether the association between homelessness stigma, racial discrimination and symptoms of depression differed by sexual minority identity in Models 4 and 5 (see Table 2). Neither interaction term was significant, suggesting that the association between each respective form of discrimination and symptoms of depression was consistent across sexual orientation statuses in our sample.

### ***Suicidality***

We tested a series of logistic regressions to determine associations with any past-year endorsement of suicidality, and results of these models are summarized in Table 3. In contrast to our findings for symptoms of depression, we found no significant association between any form of discrimination, homelessness severity or personal characteristics, and suicidality.

**TABLE 3: LOGISTIC REGRESSION, ASSOCIATIONS BETWEEN PREDICTORS (STATUS VARIABLES, DISCRIMINATION, AND PERSONAL CHARACTERISTICS) AND THE OUTCOME SUICIDALITY**

	<b>1 OR (SE)</b>	<b>2 OR (SE)</b>	<b>3 OR (SE)</b>	<b>4 OR (SE)</b>	<b>5 OR (SE)</b>
Other than 100% heterosexual <sup>a</sup>		4.95 (3.89)	4.77 (3.76)	2.18 (1.26)	2.04 (1.21)
Perceived homelessness stigma	1.55 (.42)	1.51 (.42)	1.40 (.40)	1.27 (.51)	1.42 (.42)
Perceived racial discrimination	1.69 (.46)	2.12 (.66)	2.16 (.69)	1.82 (.52)	1.49 (.68)
Perceived sexual orientation discrimination	0.96 (.26)	0.59 (.22)	0.59 (.21)		
Time on street			1.59 (.90)	1.55 (.87)	1.61 (.90)
Sexual minority status x homelessness stigma				1.19 (.65)	
Sexual minority status x racial discrimination					1.35 (.77)
Gender—female <sup>b</sup>	2.12 (1.14)	1.38 (.81)	1.64 (1.03)	1.86 (1.13)	1.88 (1.15)
Gender—other <sup>b</sup>	8.09 (11.05)	7.54 (10.38)	8.56 (11.80)	4.78 (6.29)	4.61 (6.07)
Age	0.97 (.12)	0.95 (.12)	0.94 (.12)	0.93 (.12)	0.94 (.12)

\* $p < .0025$

<sup>a</sup>omitted group: 100% heterosexual

<sup>b</sup>omitted group: Gender—male

$n = 86$

Model 1 Pseudo  $R^2 = 0.12$ , M. 2  $R^2 = 0.16$ , M. 3  $R^2 = 0.17$ , M. 4  $R^2 = 0.15$ , M. 5  $R^2 = 0.15$ .

Odds ratios and standard errors from logistic regressions are presented, with standardized coefficients for predictors homelessness stigma, racial discrimination, and sexual orientation discrimination ( $M = 0$ ,  $SD = 1$ ).

Although reporting a sexual orientation other than 100% heterosexual was associated with an increased likelihood of endorsing past-year suicidality at an alpha level of 0.05, after controlling for all forms of discrimination and personal characteristics (OR=4.77,  $z=1.98$ ,  $p=0.048$ ), this association was not significant when accounting for multiple tests using the Bonferroni correction. The same is true for racial discrimination (OR=2.17,  $z=2.43$ ,  $p=0.015$ ), with the associated odds ratio suggesting that an increase of one standard deviation in racial discrimination was associated with twice the odds of reporting past-year suicidality, after controlling for other forms of discrimination, homelessness severity and personal characteristics. While neither of these associations was significant in our sample, we highlight the direction and strength of the associations here to encourage investigation of these associations in larger samples.

### *Investigating Moderation*

Mirroring our approach to symptoms of depression, we tested whether the association between homelessness stigma, racial discrimination and suicidality differed by sexual minority identity in Models 4 and 5 (see Table 3). Neither interaction term was significant, suggesting the association between each respective form of discrimination and suicidality was consistent across sexual orientation statuses in our sample.

## **Open-Ended Responses**

In addition to the standardized survey instruments that were administered, participants in the study were also asked about the three most important issues facing them, as well as an open-ended question about whether there was anything else they would like to add. Six of the 45 non-heterosexual participants mentioned their sexual orientation or gender identity as factors complicating their lives as they experienced homelessness. One respondent felt their gender identity had an impact on their ability to get a job and said, “Um, me being a transsexual, I felt like some employers won’t hire me because I’m a tranny. If I do get hired, I have to worry about word getting out and me being fired and being accepted as a female instead of a guy.”

Family relationships regarding sexual orientation were mentioned as an additional source of stress in the lives of the participants. One young woman commented that her mother and family don’t approve of her sexual orientation and she was pushed out of the house because of that. Another respondent said, “I lived with Mom, who says she loves me, but she taunts me about my sexual orientation—says she loves me but does not want to



accept my orientation, even when talking about sexual orientation, and doesn't like my boyfriend." Another participant said, "Relationship with stepmom has become strained fighting about my sexual orientation—stepmom is in a lot of denial, especially with religious difference." A youth participant stated, "Well, um, one [a counsellor] was trying to get my family to accept me, but they are so close-minded. It's one thing that bothers me. I do want to have a strong family bond, but they are close-minded about my lifestyle. They want me to conform to their lifestyle, be a robot. They know I'm gay, but they don't accept that I'm gender-nonconforming. That's it." Another youth commented, "You need to discuss some of the reasons why homeless LGBTQ are the way they are—because there are many reasons, like rape and especially childhood rape and molestation." Of the entire sample, 33 (37%) of the participants mentioned employment as one of the top three issues they are facing now.

## **Discussion**

The results of the present study add to the existing literature on the link between perceived discrimination and mental health, and extend it to Black adolescents and young adults experiencing homelessness, half of whom identified as belonging to a sexual minority. Our results suggest that symptoms of depression and suicidality within the past year are common among adolescents and young adults experiencing homelessness. Furthermore, symptoms of depression are associated with homelessness and racial discrimination, providing support for social stress and minority stress models, as well as support for previous empirical findings (Kidd, 2007; Kidd, 2004; Kidd, 2003; Sanders-Phillips et al., 2009; Thoma & Huebner, 2013). The association between homelessness stigma and symptoms of depression attenuated once the severity of homelessness was included in the model, suggesting that certain experiences of homelessness may be particularly predictive of symptoms of depression. On the other hand, we found no evidence that sexual orientation discrimination was associated with symptoms of depression, in contrast to previous findings (Almeida et al., 2009; Balsam et al., 2011; Birkett, Espelage, & Koenig, 2009), though we note that heterosexual adolescents and young adults were assigned a value of zero on the sexual orientation discrimination measure, likely reducing actual variability and reducing our ability to detect significant associations. Though our results suggest that sexual minority status and racial discrimination may be associated with past-year suicidality, these associations were not significant after correcting for multiple tests. These findings contrasted with those from the models considering symptoms of

depression, suggesting that even though symptoms of depression and suicidality were correlated in our sample, they were actually associated with various sets of predictors.

Importantly, perceived racial discrimination showed the most consistent pattern of association with mental health outcomes in our sample, as compared to other forms of discrimination, homelessness severity and personal characteristics. This evidence provides partial support for the hypothesis that racial discrimination more robustly predicts symptoms of depression and suicidality than perceived sexual orientation discrimination or homelessness stigma, and confirms previous findings from the literature on the association between race, sexual orientation discrimination and mental health (Crawford, Allison, Zamboni, & Soto, 2002; Grollman, 2012; Paradies, 2006). Regarding social stress and minority stress models, we suggest that because racial status cannot be concealed, as sexual identity or homelessness status may be, perceived discrimination targeted at race may be especially stressful. In other words, avoiding the experience and associated detrimental effects of racial discrimination may be nearly impossible for Black youth, particularly in situations of homelessness. However, it is notable that homelessness severity did not attenuate the impact of racial discrimination on symptoms of depression, as it did in terms of homelessness stigma. This suggests that racial discrimination is not as dependent on indicators of homelessness that may make youth experiencing homelessness more accessible to members of the public who may initiate discrimination. This idea supports the long history of literature that suggests racial discrimination is pervasive and occurs across settings (Corrigan et al., 2003), making it nearly impossible for Black adolescents and young adults to avoid.

## **Limitations**

The findings of this study should be interpreted through several limitations. First, the data are cross-sectional, and therefore the direction of causality in any association cannot be determined. While previous research documents that perceived racist and antigay discrimination is associated with symptoms of depression and suicidality in black GLB youth (Thoma & Huebner, 2013), and longitudinal and experimental research has found that perceived discrimination negatively affects mental health (Pascoe & Richman, 2009), other studies have found that depressed mood predicts homelessness (Fothergill, Coherty, Robertson, & Ensminger, 2012), and it is possible that mental health status

might have an effect on perceptions of discrimination as well. Indeed, evidence of the independent and joint action of social selection and causation processes on mental health outcomes suggests that both causal directions warrant consideration (for a discussion, see Muntaner et al., 2013).

Secondly, we relied on a small convenience sample of adolescents and young adults receiving services in order to access this largely hidden and invisible population. As a result, we cannot assume the sample is representative of Black adolescents and young adults experiencing homelessness. Black adolescents and young adults experiencing homelessness who are not accessing services may be more vulnerable, and thus experience different outcomes related to perceptions of discrimination, particularly if these adolescents and young adults also identify as GLB. There may also be differences in experiences of minors experiencing homelessness versus adults experiencing homelessness not identified in our study, as the age range in our sample was 16 to 24 years. Our small sample size also limited the nature of our analyses and prevented a full exploration of intersectionality, which would have been the analytic approach most supported by previous literature and theory. Though accessing people experiencing homelessness is difficult from a sampling point of view, future research should weigh the value of sample size against the desire to investigate combined or moderating effects.

Third, we note that our measures used are based on self-report, with no objective verification of the events reported and analyzed in this study. Furthermore, while perceived racial and sexual discrimination were measured over the previous year, perceived homelessness stigma was measured over the course of an individual's life. Thus, the data were collected retrospectively and therefore subject to recall bias, which may have led to inaccurate reporting of events. Despite evidence that the CES-D operates similarly across race and ethnicity in youth samples (Skriner & Chu, 2014), we urge caution when comparing the CES-D scores measured here to those for other groups. Fourth, we did not include a measure of identity salience, which would have helped gain a deeper understanding of how important racial, sexual and homeless identities were to individuals involved in the study. Fifth, it is possible that reports of one's own experiences of stigma or discrimination may be related to how long a person has been homeless, and that was not accounted for. Finally, there is a need for additional research to better understand the experiences of transgender and gender minority youth, as there was a small subset of transgender youth in the study, but the focus of the study was on sexual minority youth.

## Implications and Conclusion

As Unger and colleagues (1997) stated more than a decade ago, interested parties “could benefit from an improved understanding of the mental health needs of homeless adolescents. This knowledge could be used to identify youths at risk of becoming homeless and to provide appropriate services to those currently homeless” (p. 377). Our results, in line with many previous findings, suggest that symptoms of depression and suicidality are present at alarming levels in Black adolescents and young adults experiencing homelessness. Additionally, racial discrimination and indicators of homelessness matter to the mental health of this population, providing support for Grollman’s (2012) assertion that a lack of attention to multiple forms of marginalization, and their accompanying multiple forms of discrimination, may limit attempts to appropriately study, prevent and/or adequately treat mental health problems in adolescents and young adults experiencing homelessness.

We support Kilmer and colleagues’ (2012) challenge for homelessness interventions to incorporate a “multilevel, ecological approach, rather than interventions aimed solely at distinct components of these [ . . . ] experiences, such as housing, parenting behaviors, mental health services, and the like” (p. 393), as adolescents and young adults experiencing homelessness are often linked to interventions and supports that do not address the comprehensive nature of their needs (Swick, 2005).

We identify two practice implications. First, because homelessness itself is a highly stressful experience, it should be addressed through primary preventions such as Housing First policies (Lanzerotti, 2004). These interventions, argued against by some housing researchers as a ‘distinct component’ of assistance, reduce the detrimental effects of the experiences of homelessness, including discrimination targeted at homeless status. Reducing exposure to this discrimination, particularly with interventions that prevent the most severe forms of homelessness, can do much to prevent the psychological distress associated with these experiences.

Secondly, we maintain that discrimination research has too often focused on single forms of marginalization and the experiences of the targets of discrimination. Our findings suggest that racial discrimination may be particularly harmful to adolescents and young adults, even in the contexts of homelessness and sexual minority discrimination. These results, and their alignment with a long history of research, point to the need for inquiry and interventions that address the initiation of discrimination. As stated above,

racial discrimination is pervasive and is experienced as being particularly alarming during stressful circumstances (e.g., homelessness) that occur during critical stages of development. Interventions to help Black adolescents and young adults who identify with any minority sexual identity and who experience homelessness should carefully consider how to prevent the negative effects of the chronic, uncontrollable and unpredictable stressors endemic to experiences of marginalization. Specifically, researchers and practitioners must shift their focus from assisting adolescents and young adults dealing with overwhelming amounts of stress to manage their distress, and instead focus on systemic interventions that reduce the occurrence of these stressors. Housing First policies and anti-discrimination efforts, particularly in the form of laws supported by aggressive enforcement, deserve sustained support.

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