University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Sociology Department, Faculty Publications

Sociology, Department of

2018

Bullying at School and on the Street: Risk Factors and Outcomes Among Homeless Youth

Kimberly A. Tyler University of Nebraska-Lincoln, kim@ktresearch.net

Rachel Schmitz

Oklahoma State University, rachel.schmitz@okstate.edu

Follow this and additional works at: http://digitalcommons.unl.edu/sociologyfacpub

Part of the Family, Life Course, and Society Commons, and the Social Psychology and Interaction Commons

Tyler, Kimberly A. and Schmitz, Rachel, "Bullying at School and on the Street: Risk Factors and Outcomes Among Homeless Youth" (2018). *Sociology Department, Faculty Publications*. 550. http://digitalcommons.unl.edu/sociologyfacpub/550

This Article is brought to you for free and open access by the Sociology, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Sociology Department, Faculty Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



Published in *Journal of Interpersonal Violence*, 2018 doi 10.1177/0886260518794024 Copyright © 2018 Kimberly A. Tyler and Rachel M. Schmitz. Published by SAGE Publications. Used by permission. Published August 24, 2018.

Bullying at School and on the Street: Risk Factors and Outcomes Among Homeless Youth

Kimberly A. Tyler, PhD,¹ and Rachel M. Schmitz, PhD²

1 University of Nebraska-Lincoln, Lincoln, Nebraska, USA 2 The University of Texas Rio Grande Valley, Edinburg, Texas. USA

Corresponding author — Kimberly A. Tyler, Department of Sociology, University of Nebraska–Lincoln, 717 Oldfather Hall, Lincoln, NE 68588-0324, USA; email kim@ktresearch.net

Abstract

Though rates of bullying among general population youth are high, there is elevated prevalence among certain subgroups, in particular sexual minority homeless youth. Enduring bullying can have devastating consequences, including poor mental health, revictimization, and substance abuse. The current study compares risk factors (i.e., sexual orientation, gender, and child abuse) for being bullied both at school and on the street among homeless youth. We also examine the associations of both contexts of bullying (i.e., at school and on the street) with physical and sexual victimization while on the street, with illicit drug use. From July 2014 to October 2015, we interviewed 150 homeless youth aged 16 to 22 years in shelters and on the streets from two Midwestern cities. Our sample was 51% female and 22% identified as lesbian, gay, or bisexual (LGB). Results revealed that LGB youth experienced more frequent bullying at school and were more likely to have ever used one or more illicit drugs at least a few times compared with heterosexual youth. Moreover, youth who experienced more child abuse prior to leaving home were also victimized more often at school (school bullying) and on the street (street bullying). Young people who experienced more sexual and physical street victimization were more likely to report illicit drug use compared with those who had fewer street victimization experiences. Overall, youth who experience victimization in one context (i.e., home) are at heightened risk for being bullied in additional contexts (i.e., school). These findings have important policy and service intervention implications, such that service providers should attend to homeless youth's multiple social contexts of victimization and the potential for youth's illicit drug use as a coping mechanism.

Keywords: bullying, victimization, illicit drug use, homeless youth, sexual orientation, child abuse

2

Introduction

Bullying, which can be broadly defined as the abuse of power, but also characterized by repetitive behaviors, power imbalances, and intentionality, is distinctive from other forms of victimization in its varied forms and prevalence in numerous youth social contexts (Hymel & Swearer, 2015). Specifically, Swearer and Hymel (2015) state, "bullying is a unique but complex form of interpersonal aggression, which takes many forms, serves different functions, and is manifested in different patterns of relationships" (p. 344). Rates of peer bullying range from 10% to 33% among general population youth and bullying tends to be at its highest in middle school, and then declines somewhat throughout high school (Hymel & Swearer, 2015). Being bullied by one's peers is often a consistent experience for the victim with common forms including social and verbal bullying (Hymel & Swearer, 2015). Understanding bullying is complicated as these experiences can vary by gender and bullying type. For example, some research has found that girls were more likely to report cyberbullying in combination with school bullying (Kessel Schneider, O'Donnell, Stueve, & Coulter, 2012). Studies also find that boys tend to have higher rates of bullying when the focus is physical aggression (Carbone-Lopez, Esbensen, & Brick, 2010; Card, Stucky, Sawalani, & Little, 2008), but gender differences are unclear when it comes to social aggression (Underwood & Rosen, 2011).

Considering marginalized groups of young people, research finds that sexual minority youth are more likely to experience bullying compared with their heterosexual counterparts (Berlan, Corliss, Field, Goodman, & Austin, 2010; Friedman et al., 2011). Specifically, lesbian, gay, and bisexual (LGB) youth experience various forms of bullying while in school, such as verbal and physical assault (Kosciw, Greytak, & Diaz, 2009). These victimizing experiences likely shape LGB youth's academic achievement and completion (Kosciw et al., 2009). Enduring bullying at school adversely impacts LGB youth's mental health (Russell, Ryan, Toomey, Diaz, & Sanchez, 2011) and has been linked to higher levels of substance abuse (Birkett, Espelage, & Koenig, 2009). Sexual orientation may also play a role in shaping homeless youth's experiences of bullying, though very little is known about this relationship given the limited research on this topic with homeless youth (Kidd & Shahar, 2008).

Both general population LGB youth and homeless LGB youth are more likely to have family backgrounds marked by high rates of child sexual and physical abuse in relation to heterosexual youth (Austin, Herrick, & Proescholdbell, 2016; Rew, Whittaker, Taylor-Seehafer, & Smith, 2005; Tyler, 2008; Whitbeck, Chen, Hoyt, Tyler, & Johnson, 2004). These adverse experiences likely contribute to LGB youth's stress and engagement in maladaptive behaviors (Moskowitz, Stein, & Lightfoot, 2013; Mustanski, Andrews, & Puckett, 2016), such as substance use (Goldbach, Tanner-Smith, Bagwell, & Dunlap, 2014; Van Leeuwen et al., 2006). Homelessness, however, can exacerbate these stressors, as LGB homeless youth experience higher rates of street physical victimization (e.g., being robbed or assaulted with a weapon) and sexual victimization (e.g., forced to do something sexual) compared with their heterosexual counterparts (Tyler & Beal, 2010; Whitbeck et al., 2004). Moreover, early child abuse has also been linked to revictimization among homeless youth (Harris, Rice, Rhoades, Winetrobe, & Wenzel, 2017; Tyler & Melander, 2015). Although LGB homeless youth may be at heightened risk for bullying compared with their heterosexual counterparts (Whitbeck et al., 2004), there is a paucity of research comparing these two groups. Moreover, little research has examined correlates of bullying among homeless youth including further victimization on the street and the link between bullying and illicit drug use. As such, using a sample of homeless youth, we compare risk factors (i.e., sexual orientation, gender, and child abuse) for being bullied both at school and bullied while on the street. We also examine potential associations of both contexts of bullying, and street physical and sexual victimization, with illicit drug use.

Literature Review

Approximately one half of homeless youth have experienced child physical abuse prior to leaving home (Rattelade, Farrell, Aubry, & Klodawsky, 2014), and between one quarter and one third have suffered child sexual abuse (Bender, Brown, Thompson, Ferguson, & Langenderfer, 2015). In addition, many homeless youth are revictimized once they are on the streets (Tyler & Melander, 2015), and revictimization has been linked to substance abuse among male homeless youth (Harris et al., 2017). Between 21% and 32% of homeless youth

report being sexually victimized on the street and over 50% of homeless young people report one or more occurrences of street physical victimization, such as being robbed or beaten up (Tyler & Beal, 2010). Homeless youth with a history of child physical abuse experience more street physical victimization, while a history of child sexual abuse is associated with more street sexual victimization (Tyler & Melander, 2015).

Among general population sexual minority youth, research finds that they are 3.8 times more likely to experience child sexual abuse and 1.2 times more likely to experience child physical abuse (Friedman et al., 2011). Heightened experiences of victimization, including verbal and physical assaults, continue for LGB young people while at school (Kosciw et al., 2009; Sterzing, Ratliff, Gartner, McGeough, & Johnson, 2017), which makes it difficult for these young people to complete their educations (Bidell, 2014). Subsequently, some of these youth may end up running away from home and dropping out of school. Specifically, Bidell (2014) found that 16% of sexual and gender minority homeless youth reported frequent verbal harassment while in school, and 10% reported recurring physical victimization. Sexual orientation may impact experiences of school bullying among homeless youth, as one study found that heterosexual youth may experience more bullying, even though this finding runs counter to understandings of bullying victimization of LGB youth (Kidd & Shahar, 2008). Given the paucity of research on the dynamics of bullying among homeless youth, further investigation into how sexual orientation shapes these experiences is warranted.

Regardless of social environment (i.e., at school and/or on the street), bullying can have adverse consequences for homeless youth (Coates & McKenzie- Mohr, 2010), one of which may be substance abuse. For example, approximately one third of homeless youth use illicit drugs (Hadland et al., 2011), and drug use may lead to both prolonged substance abuse (Thompson, Bender, Ferguson, & Kim, 2015) and long-term homelessness (Auerswald & Eyre, 2002). Moreover, in terms of gender, research finds that male youth are more likely to meet lifetime criteria for substance abuse disorder compared with females (Johnson, Whitbeck, & Hoyt, 2005). In addition, homeless youth who have experienced multiple forms of victimization including child abuse, bullying, and street physical and/or sexual victimization may turn to substance use to cope with these traumatic experiences (Harris et al., 2017; Kidd & Carroll, 2007).

Theoretical Framework and Hypotheses

We use a *life stress framework* (Lin & Ensel, 1989; Pearlin, 1989), which emphasizes multiple levels of influence (individual, family, and environment) and both primary and secondary stressors. These complex elements are fundamental to understanding the relationship between various stressful life events homeless youth experience at home, in school, and on the street. At the individual level, occupying the social status of LGB may be a significant source of stress for homeless youth due to its socially marginalized position within society (Hatzenbuehler, 2011; Kelleher, 2009). Furthermore, because of the cumulative nature of risk (Tyler & Whitbeck, 2004), and the strong correlation between child abuse and revictimization (Harris et al., 2017; Tyler & Melander, 2015), it is expected that homeless youth exposed to early trauma (e.g., child sexual abuse) will undergo subsequent trauma, including experiencing school and street bullying and physical and sexual victimization while on the street.

Applied to the current study, we hypothesized the following:

Hypothesis 1: Primary stressors that occurred prior to youth running away or leaving home (i.e., child physical abuse and child sexual abuse) will be positively associated with the secondary stressors of being bullied at school and on the street, as well as with street physical and sexual victimization.

Hypothesis 2: Being bullied at school and on the street will be positively correlated with street physical and/or sexual victimization.

Hypothesis 3: Those who are bullied at school and/or on the street will be more likely to report using illicit drugs.

Hypothesis 4: Street physical and sexual victimization will be positively correlated with illicit drug use.

Hypothesis 5: LGB youth will be more likely to experience bullying in both contexts and experience higher rates of street physical and sexual victimization compared with their heterosexual counterparts.

We interviewed 150 youth in shelters and on the streets from July 2014 to October 2015 in two Midwestern cities. All youth aged 16 to 22 years and who were homeless or a runaway on the night prior to

screening were eligible to participate. Runaway refers to youth below age 18 years who have spent the previous night away from home without parental permission (Ennett, Bailey, & Federman, 1999). Homeless youth, as inclusively defined by the 2015 reauthorization of the McKinney-Vento Homeless Assistance Act, includes those who lack permanent housing such as spending the previous night in a shelter, public place, on the street, staying with friends or in a transitional facility, or other places not intended as a domicile (National Center for Homeless Education & National Association for the Education of Homeless Children and Youth, 2017). All participants in the current study were unaccompanied youth, meaning they were not experiencing homelessness with family members or caregivers. Four trained and experienced interviewers conducted the interviews. Participants were recruited through three local agencies, which offer various services (e.g., emergency shelter). Interviewers approached youth at these different venues, varying the times of the day, on both weekdays and weekends. This sampling protocol was conducted repeatedly over the course of the study. Interviewers obtained written informed consent from respondents and told them their responses were confidential and participation was voluntary. The structured interview, which lasted approximately 45 min, was typically conducted in shelter conference rooms with fewer completed at a public library or outside in a park if weather permitted. Participants received a \$20 gift card for their time. Referrals for shelter, counseling services, and food services were offered to all youth at the time of the interview. The institutional review board at the first author's institution approved this study.

Measures

Dependent variable.

Illicit drug use included eight items which asked youth, during their lifetime, how often they used each of the following: methamphetamine, amphetamines, cocaine, heroin, hallucinogens, barbiturates, inhalants, and designer drugs (o = never, 1 = a few times, 2 = monthly, 3 = monthly, 4 = monthly, Due to skewness, this variable was dichotomized into 0 = monthly never used any of these drugs and 1 = monthly used at least one of these drugs a few times or more. This measure has been used in previous studies with this population (Hadland et al., 2011).

Independent variables.

Child sexual abuse included seven items (adapted from Whitbeck & Simons, 1990) which asked youth, "Before you were on your own, how often did any adult or someone at least 5 years older than you . . . " for example, "ask you to do something sexual" (o = never to 6 = $more\ than\ 20\ times$). All items loaded on a single factor ($\alpha = .92$). Due to skewness, the seven items were dichotomized (o = never; 1 = at least once) and then a count variable was created. A higher score indicates more types of sexual abuse experienced.

Child physical abuse included 16 items from the Conflict Tactics Scale (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). Youth were asked, for example, how frequently their caretaker kicked them hard (0 = never to 6 = more than 20 times). A mean scale was created where a higher score indicates more child physical abuse (α = .93). Previous studies of homeless youth report similar reliability with this scale (Whitbeck & Simons, 1990; α = .88).

Bullying at school included a single item which asked youth, since leaving home, "how often have you been bullied at school?" (o = never to $3 = many \ times$).

Bullying on the street was measured with the following item: since leaving home, "how often have you been bullied on the street?" (0 = never to 3 = many times). Both bullying items were created by the first author. Similar items have been used with this population (Kidd & Shahar, 2008).

Street sexual victimization included four items such as, how often youth have been forced to do something sexual since leaving home (o = never to 3 = many times). All items loaded on a single factor (α = .90). Due to skewness, the four items were dichotomized (o = never; 1 = at least once) and then a count variable was created; a higher score indicates more sexual victimization experienced. This scale has been used in prior studies of homeless youth (Tyler & Beal, 2010; α = .83; Tyler & Melander, 2015; α = .84).

Street physical victimization included six items such as "how often were you beaten up" and "how often were you robbed" since leaving home (o = never to 3 = many times). A mean scale was created where a higher score indicates greater street physical victimization (α = .85). These same items have been used in previous studies with homeless youth (Tyler & Beal, 2010; α = .77; Whitbeck & Simons, 1990; α =

Table 1. Descriptives for All Study Variables.

n (%)						
Dichotomous variables						
Female	77 (51)					
Male	73 (49)					
LGB	33 (22)					
Heterosexual	117 (78)					
Ever used illicit drugs	64 (43)					
	M (SD)	Range				
Continuous variables						
Child sexual abuse	1.53 (2.29)	0-7				
Child physical abuse	2.16 (1.38)	0-5.63				
Bullied at school	.85 (1.27)	0-3				
Bullied on the street	.78 (1.15)	0-3				
Street sexual victimization	.89 (1.45)	0-4				
Street physical victimization	.91 (.81)	0-3				

LGB = lesbian, gay, bisexual

Table 2. Bivariate Comparisons for Dichotomous (Chi-Square) and Continuous (t Test) Correlates With Sexual Orientation.

	$LGB \ Youth$ $(n = 33)$	Hetero	osexual You (n = 11		
	n (%)		n (%	%)	χ^{2}
Male	9 (29.0)	62 (53.0)			
Female	22 (71.0)	55 (47.0)		o)	5.64*
Never used drugs	13 (39.4)	73 (62.4)			
Ever used drugs	20 (60.6)	44 (37.6)			5.57*
Correlates	M	SD	M	SD	t Test
Child sexual abuse	2.58	2.68	1.23	2.09	3.06**
Child physical abuse	2.27	1.36	2.13	1.40	0.49
Bullying at school	1.36	1.32	.70	1.22	2.70**
Bullying on the street	1.09	1.28	.69	1.10	1.76
Sexual victimization	1.70	1.74	.66	1.27	3.80**
Physical victimization	1.05	.80	.87	.81	1.07

LGB = lesbian, gay, bisexual

^{*} p < .05; ** p < .01

.82). *Respondent gender* was coded 0 = male and 1 = female. *Sexual orientation* was coded 0 = lesbian, gay, bisexual and 1 = heterosexual.

Data Analyses

We first calculated descriptive statistics (see Table 1). Next, we performed chi-square tests and Student's t tests to compare LGB and heterosexual youth on all variables (see Table 2). Finally, we used Mplus 7.4 (Muthén & Muthén, 1998-2015) to estimate a fully recursive path model and examine the linkages between primary and secondary stressors of early child abuse, bullying at school and on the street, as well as street physical and sexual victimization, with illicit drug use. We used a path model because it allows for simultaneous analysis of all the variables in the model, allows for direct and indirect pathways, and more clearly delineates the analytic relationships. We ran two separate path models. The first path model included child sexual abuse, bullying, and street sexual victimization, while the second path model examined child physical abuse, bullying, and street physical victimization and their association with illicit drug use, as prior research has found that child sexual abuse is linked to street sexual victimization, whereas child physical abuse is associated with street physical victimization (Tyler & Melander, 2015). We report standardized beta coefficients in Figures 1 and 2. A p value of less than .05 is considered significant.

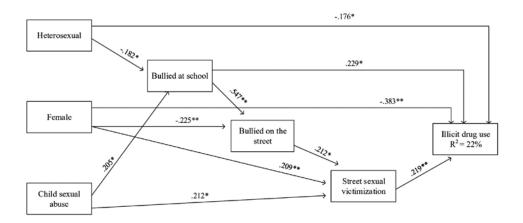


Figure 1. Bullying, sexual victimization, and illicit drug use (only significant paths shown). *p < .05. **p < .01.

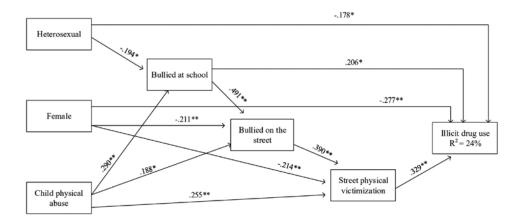


Figure 2. Bullying, physical victimization, and illicit drug use (only significant paths shown). *p < .05. **p < .01.

Results

Sample Characteristics

Our sample was almost evenly split between females (51%) and males (49%) and 22% of young people identified as LGB. Approximately one half (43%) of youth reported ever using one or more illicit drugs at least a few times. In terms of bullying, 33% of youth reported being bullied at school at least once and 35% reported being bullied while on the street one or more times. Moreover, 85% of young people reported being physically victimized at least once, while 32% experienced at least one type of sexual victimization since being on the street (see Table 1 for descriptive statistics for all study variables).

Bivariate Results

The top portion of Table 2 results revealed that LGB youth were significantly more likely to be female ($\chi^2 = 5.64$; p < .05) than male. LGB youth were also significantly more likely to have ever used illicit drugs ($\chi^2 = 5.57$; p < .05) compared with heterosexual youth. The bottom portion of Table 2 revealed that LGB youth were significantly more likely to have experienced more child sexual abuse (t = 3.06; p < .01), more frequent bullying at school (t = 2.70; t < .01), and more street sexual victimization (t = 3.80; t < .01) compared with heterosexual youth.

Multivariate Results

Path analysis results for bullying, sexual victimization, and illicit drug use (only significant paths given) shown in Figure 1 revealed that LGB youth ($\beta = -.182$; p < .05) and those who had experienced more child sexual abuse (β = .205; p < .05) were bullied more frequently at school compared with heterosexual youth and those with lower rates of child sexual abuse. Youth who were bullied more often on the street were more likely to be male ($\beta = -.225$; p < .01) and to have been bullied more frequently at school (β = .547; p < .01). Those who experienced more street sexual victimization also experienced more frequent bullying on the street (β = .212; p < .05), were more likely to be female (β = .209; p < .01), and experienced more child sexual abuse (β = .212; p < .05). Finally, those who ever used one or more illicit drugs at least a few times were more likely to be LGB $(\beta = -.176; p < .05)$, male $(\beta = -.383; p < .01)$, to have been bullied more frequently at school (β = .229; p < .05), and to have experienced more sexual victimization on the street (β = .219; p < .01). These variables explained 22% of the variance in youth's illicit drug use.

Path analysis results for bullying, physical victimization, and illicit drug use (only significant paths given) shown in Figure 2 revealed that LGB youth ($\beta = -.194$; p < .05) and those who had experienced more child physical abuse (β = .290; p < .01) were bullied more frequently at school compared with heterosexual youth and those with lower rates of child physical abuse. Youth who were bullied more often on the street were more likely to be male ($\beta = -.211$; p < .01), to have experienced more physical abuse ($\beta = .188$; p < .05), and to have been bullied more frequently at school (β = .491; p < .01). Those who experienced more street physical victimization also experienced more frequent bullying on the street (β = .390; p < .01), were more likely to be male ($\beta = -.214$; p < .01), and to have experienced more child physical abuse (β = .255; p < .01). Finally, those who ever used one or more illicit drugs at least a few times were more likely to be LGB ($\beta = -.178$; p < .05), to be male ($\beta = -.277$; p< .01), to have been bullied more frequently at school (β = .206; p< .05), and to have experienced more physical victimization on the street (β = .329; p < .01). These variables explained 24% of the variance in youth's illicit drug use.

Discussion

The current study examined risk factors (i.e., sexual orientation, gender, and child abuse) for being bullied at school and bullied while on the street. In addition, this study examined the association between both contexts of bullying with street physical and sexual victimization and illicit drug use. Overall, results show that LGB youth experience more frequent bullying at school and are more likely to have ever used one or more illicit drugs at least a few times. Moreover, youth who have been abused prior to leaving home are also victimized at school (school bullying), and on the street, including sexual and physical victimization and/or street bullying. Those who experience bullying in one context (i.e., school) are likely to be bullied in other contexts. Finally, young people who experience more street sexual and physical victimization also report ever using one or more illicit drugs at least a few times.

Our findings are generally consistent with a life stress framework (Lin & Ensel, 1989; Pearlin, 1989) as individual, family, and environmental factors were all important in understanding the relationship between various stressful life events these young people experience at home (child abuse), in school (bullying), and on the street (victimization). At the individual level, occupying the social status of LGB appears to be a significant source of stress for homeless youth, such that LGB youth experience more bullying at school and are more likely to report using illicit drugs more frequently compared with their heterosexual counterparts. It may be that LGB homeless youth engage in illicit drug use to cope with the multiple stressors they have to manage related to both their stigmatized social status and the elevated rates of bullying they experience (Goldbach et al., 2014). The positive link found between early child abuse and street victimization in the current study supports prior research that risk tends to be cumulative (Tyler & Whitbeck, 2004), with these youth experiencing revictimization (Harris et al., 2017; Tyler & Melander, 2015) in various social contexts including at school and while on the street.

Some of the current study findings are consistent with prior studies of general population, nonhomeless youth, such as LGB youth have high rates of child sexual and physical abuse compared with heterosexual youth (Austin et al., 2016) and are more likely to be bullied at school (Berlan et al., 2010). Experiencing homelessness, however, appears to exacerbate these early stressors, not only for LGB homeless

youth but also for heterosexual homeless youth as being bullied on the street and experiencing street victimization did not significantly differ for these two groups. In this way, homelessness may act as a type of leveling experience for young people in that it evens the playing field, so to speak, so that homeless youth could be enduring similar levels of trauma and victimization when they do not have basic resources such as shelter and are exposed to the same vulnerabilities (Auerswald & Eyre, 2002).

Consistent with Hypothesis 1, both child sexual and physical abuse are associated with school bullying. Sexual abuse also was positively correlated with street sexual victimization, while child physical abuse was associated with physical street victimization, which is also consistent with our first hypothesis and the broader literature. That is, those who experience early abuse are at higher risk for being revictimized among both homeless (Harris et al., 2017) and general population samples (Widom, Czaja, & Dutton, 2008). It is possible that children who are abused may come to expect this type of behavior as normative (Owens & Straus, 1975) and research finds that children exposed to violent experiences at a young age, either as victims or perpetrators, report greater acceptance of interpersonal violence as adults (Ponce, Williams, & Allen, 2004). As such, when youth experience victimization, in the form of bullying or street victimization, they may be less likely to seek help because they view it as a normalized, expected aspect of social relationships as many have also been abused and exposed to violence in their family of origin. In addition, because children who have been sexually abused experience numerous emotional problems, including depression and reduced self-esteem (Turner, Finkelhor, & Ormrod, 2010), youth may be at increased risk for being taken advantage of socially, such as being bullied and victimized.

Next, we find that being bullied on the street is positively correlated with street sexual and physical victimization, which is consistent with Hypothesis 2. Being taken advantage of either physically or sexually on the street may be an extension of prior forms of victimization including being bullied, as those who have experienced prior abuse are at higher risk for revictimization (Harris et al., 2017; Widom et al., 2008). Being bullied at school and experiencing sexual and physical street victimization are all positively correlated with using illicit drugs, which is supportive of Hypotheses 3 and 4. Though no research has examined the link between bullying and substance

use among homeless youth, our findings are consistent with prior research on general population youth, which finds that youth who have been bullied at school report greater substance use (Radliff, Wheaton, Robinson, & Morris, 2012), while those youth who have been victimized on the street are more likely to have a drug use disorder (Thompson et al., 2015). Youth may be using drugs to cope with these multiple traumatic events (Thompson et al., 2015) that they may be chronically enduring across numerous social contexts (e.g., in school and on the street). Young people who experience repeat victimization may be at greater risk for developing substance abuse disorders (Begle et al., 2011).

The results reveal that LGB youth are more likely to be bullied at school, which is consistent with Hypothesis 5 and the broader literature (Kosciw et al., 2009). Because LGB youth in school are in close proximity to other students, which can result in more frequent social interactions surrounding youth's sexual orientation, this likely increases their exposure to both verbal and physical assault (Kosciw et al., 2009). In terms of being bullied or victimized physically or sexually on the street, this did not vary by sexual orientation, which is contrary to the second part of Hypothesis 5. It is possible that all homeless youth, regardless of sexual orientation, are at elevated risk for being bullied or physically and/or sexually victimized on the street due to their lack of stable shelter, and the precarious nature of homelessness may preclude more clearly defined social hierarchies. Another explanation is that potential perpetrators may be unaware of youth's sexual orientation, as some research has found that LGB homeless young people often cannot explicitly focus on establishing their sexual identities because they are more concerned with daily survival and meeting their basic needs (Schmitz & Tyler, 2018). Finally, it is also possible that because homeless youth have experienced so many challenges and stressful events in their lives, they tend to be more empathetic to what other homeless youth are experiencing (Tyler, Schmitz, & Ray, 2018). Thus, one's status as an LGB youth may have distinctive implications for shaping youth's experiences on the street compared with certain school environments (Schmitz & Tyler, 2018).

Current study results also show that LGB youth are more likely to report ever using one or more illicit drugs at least a few times compared with heterosexual youth. It may be that youth who have been exposed to multiple stressors including child abuse, bullying, and street victimization are trying to cope with their situation and using illicit drugs may be one way to manage such traumas (Kidd & Carroll, 2007). Research finds that bullying can have adverse consequences for homeless youth (Coates & McKenzie-Mohr, 2010), and if youth lack social supports, they may find solace in using drugs. Similarly, the further marginalization of being LGB can exacerbate stressors for young people, as both structural (Hatzenbuehler, 2011) and interpersonal (Goldbach et al., 2014) sources of anti-LGB stigma can result in adverse mental health consequences. For homeless LGB youth, the lack of tangible support outlets is extremely salient, particularly if they are enduring multiple types of trauma in various contexts, so their engagement with illicit drug use can be a way to cope with these intersecting stressors (Rosario, Schrimshaw, & Hunter, 2012).

Though we did not specify gender differences in our hypotheses, we did control for this variable in our analyses and found that gender mattered for being bullied on the street, street victimization, as well as for illicit drug use. First, males are more likely to experience street bullying and street physical victimization compared with females whereas, females are more likely to experience street sexual victimization compared with males. These findings are consistent with the extant literature on homeless youth (Tyler & Melander, 2015) as well as general population youth (Carbone-Lopez et al., 2010; Card et al., 2008). Prior research has found that boys who were abused while growing up may learn interaction styles that are abusive and coercive, and these aggressive tendencies are generalized into other contexts (Milletich, Kelley, Doane, & Pearson, 2010). Learned aggressive and coercive interaction styles may result in young men being more prone to engage in fights and other physical confrontations (Tyler & Whitbeck, 2004; Tyler & Beal, 2010), which may explain their higher risk for street physical victimization. Females, on the contrary, are more likely to experience child sexual abuse and subsequent lowered self-esteem because of this abuse (Turner et al., 2010). As such, having lower self-esteem may result in young women being more vulnerable to sexual revictimization once on the street (Harris et al., 2017; Widom et al., 2008). Males also are more likely to report illicit drug use compared with females, which is consistent with prior research showing males greater tendency toward externalizing symptoms, while females are more likely to internalize (Harris et al., 2017; Johnson et al., 2005).

Limitations

In terms of limitations, data are self-reported and retrospective, which may have resulted in some recall bias. Given the difficulties sampling homeless populations, the sample was not random, as is the case with the vast majority of research with homeless youth; therefore, results cannot be generalized to all diverse populations of homeless youth. Furthermore, though we modeled bullying at school and on the street occurring prior to street victimization, it is possible that the order is reversed or that these may have occurred simultaneously. Thus, while our model implies a causal order, we are only examining associations among study variables. In addition, because illicit drug use was based on the time frame of "ever," it may be that some youth were using such drugs before experiencing an episode of street victimization. Relatedly, it is possible that reciprocal pathways could be occurring whereby being sexually victimized on the street leads to illicit drug use and using drugs may lead to further victimization.

Despite these limitations, our study has numerous strengths as it fills a gap in the existing literature on understanding correlates of bullying and illicit drug use and how these relationships differ by LGB status and gender among homeless youth. First, examining a range of traumatic risk factors within youth's social environments, including early child abuse, school and street bullying, and sexual and physical street victimization using a life stress framework, provides a more complete picture of the numerous stressors that many homeless youth have endured. Second, we simultaneously examine differences by sexual orientation and gender, and our results reveal that some homeless youth are victimized multiple times not only due to their status of being homeless but also because of their marginalized sexual orientation and/or gender. Third, identifying multiple forms of victimization in different contexts allows us to better understand how these risk factors are uniquely tied to youth's use of illicit drugs.

These findings also have implications for service providers. Primarily, because some homeless young people have been victimized multiple times in various contexts (i.e., home, school, on the street), programs are needed that specifically target these different social contexts as solutions and intervention strategies may differ. Moreover, programs may need to be tailored for specific subpopulations of homeless youth. LGB homeless youth's lives are shaped by intersecting

sources of marginalization, and their experiences of bullying and other forms of victimization may distinctively differ compared with heterosexual homeless youth. In addition, because numerous youth are at high risk for revictimization (Harris et al., 2017), interventions are needed to prevent victimization from reoccurring. Relatedly, services should promote prosocial coping skills among youth and implement intensive case management to educate youth on healthy relationships, and that episodes of violence and victimization are not "normative," regardless of their past histories. Finally, if youth are using drugs to cope with traumatizing events (Kidd & Carroll, 2007), intervention programs are needed that teach alternative coping strategies, such as developing problem-solving skills, which may result in lowering youth's risk for revictimization and developing substance abuse disorders (Thompson et al., 2015).

Funding — This article is based on research funded by a grant from the National Institute on Drug Abuse (DA036806), Dr. Kimberly A. Tyler, PI.

Declaration of Conflicting Interests — The authors have no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References

- Auerswald, C. L., & Eyre, S. L. (2002). Youth homelessness in San Francisco: A life cycle approach. *Social Science & Medicine*, *54*, 1497-1512.
- Austin, A., Herrick, H., & Proescholdbell, S. (2016). Adverse childhood experiences related to poor adult health among lesbian, gay, and bisexual individuals. *American Journal of Public Health*, *106*, 314-320. doi:10.2105/AJPH.2015.302904
- Begle, A. M., Hanson, R. F., Danielson, C. K., McCart, M. R., Ruggiero, K. J., Amstadter, A. B., ... Kilpatrick, D. G. (2011). Longitudinal pathways of victimization, substance use, and delinquency: Findings from the National Survey of Adolescents. *Addictive Behaviors*, *36*, 682-689.
- Bender, K., Brown, S. M., Thompson, S. J., Ferguson, K. M., & Langenderfer, L. (2015). Multiple victimizations before and after leaving home associated with PTSD, depression, and substance use disorder among homeless youth. *Child Maltreatment*, 20, 115-124. doi:10.1177/1077559514562859
- Berlan, E., Corliss, H., Field, A., Goodman, E., & Austin, S. (2010). Sexual orientation and bullying among adolescents in the growing up today study. *Journal of Adolescent Health*, *46*, 366-371. doi:10.1016/j.jadohealth.2009.10.015

- Bidell, M. P. (2014). Is there an emotional cost of completing high school? Ecological factors and psychological distress among LGBT homeless youth. *Journal of Homosexuality*, *61*, 366-381.
- Birkett, M., Espelage, D. L., & Koenig, B. (2009). LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. *Journal of Youth and Adolescence*, *38*, 989-1000.
- Carbone-Lopez, K., Esbensen, F. A., & Brick, B. T. (2010). Correlates and consequences of peer victimization: Gender differences in direct and indirect forms of bullying. *Youth Violence and Juvenile Justice*, *8*, 332-350.
- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, 79, 1185-1229.
- Coates, J., & McKenzie-Mohr, S. (2010). Out of the frying pan, into the fire: Trauma in the lives of homeless youth prior to and during homelessness. *Journal of Sociology and Social Welfare*, 37, 65-96.
- Ennett, S. T., Bailey, S. L., & Federman, E. B. (1999). Social network characteristics associated with risky behaviors among runaway and homeless youth. *Journal of Health and Social Behavior*, 40, 63-78.
- Friedman, M. S., Marshal, M. P., Guadamuz, T. E., Wei, C., Wong, C. F., Saewyc, E. M., & Stall, R. (2011). A meta-analysis of disparities in childhood sexual abuse, parental physical abuse, and peer victimization among sexual minority and sexual nonminority individuals. *American Journal of Public Health*, *101*, 1481-1494. doi:10.2105/AJPH.2009.190009
- Goldbach, J. T., Tanner-Smith, E. E., Bagwell, M., & Dunlap, S. (2014). Minority stress and substance use in sexual minority adolescents: A meta-analysis. *Prevention Science*, *15*, 350-363.
- Hadland, S. E., Marshall, B. D., Kerr, T., Qi, J., Montaner, J. S., & Wood, E. (2011). Depressive symptoms and patterns of drug use among street youth. *Journal of Adolescent Health*, 48, 585-590.
- Harris, T., Rice, E., Rhoades, H., Winetrobe, H., & Wenzel, S. (2017). Gender differences in the path from sexual victimization to HIV risk behavior among homeless youth. *Journal of Child Sexual Abuse*, 26, 334-351.
- Hatzenbuehler, M. L. (2011). The social environment and suicide attempts in lesbian, gay, and bisexual youth. *Pediatrics*, 127, 896-903.
- Hymel, S., & Swearer, S. (2015). Four decades of research on school bullying: An introduction. *American Psychologist*, *70*, 293-299. doi:10.1037/a0038928
- Johnson, K. D., Whitbeck, L. B., & Hoyt, D. R. (2005). Substance abuse disorders among homeless and runaway adolescents. *Journal of Drug Issues*, *35*, 799-816.
- Kelleher, C. (2009). Minority stress and health: Implications for lesbian, gay, bisexual, transgender, and questioning (LGBTQ) young people. *Counselling Psychology Quarterly*, 22, 373-379.
- Kessel Schneider, S., O'Donnell, L., Stueve, A., & Coulter, R. W. S. (2012). Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health*, 102, 171-177.

- Kidd, S., & Shahar, G. (2008). Resilience in homeless youth: The key role of self-esteem. *American Journal of Orthopsychiatry*, *78*, 163-172. doi:10.1037/0002-9432.78.2.163
- Kidd, S. A., & Carroll, M. R. (2007). Coping and suicidality among homeless youth. *Journal of Adolescence*, 30, 283-296.
- Kosciw, J. G., Greytak, E. A., & Diaz, E. M. (2009). Who, what, where, when, and why: Demographic and ecological factors contributing to hostile school climate for lesbian, gay, bisexual, and transgender youth. *Journal of Youth and Adolescence*, *38*, 976-988.
- Lin, N., & Ensel, W. M. (1989). Life stress and health: Stressors and resources. *American Sociological Review*, *54*, 382-399.
- Milletich, R. J., Kelley, M. L., Doane, A. N., & Pearson, M. R. (2010). Exposure to interparental violence and childhood physical and emotional abuse as related to physical aggression in undergraduate dating relationships. *Journal of Family Violence*, *25*, 627-637.
- Moskowitz, A., Stein, J. A., & Lightfoot, M. (2013). The mediating roles of stress and maladaptive behaviors on self-harm and suicide attempts among runaway and homeless youth. *Journal of Youth and Adolescence*, *42*, 1015-1027.
- Mustanski, B., Andrews, R., & Puckett, J. A. (2016). The effects of cumulative victimization on mental health among lesbian, gay, bisexual, and transgender adolescents and young adults. *American Journal of Public Health*, 106, 527-533.
- Muthén, L. K., & Muthén, B. O. (1998-2015). *Mplus user's guide* (7th ed.). Los Angeles, CA: Author.
- National Center for Homeless Education and The National Association for the Education of Homeless Children and Youth. (2017). *Definitions of homelessness for federal programs serving children, youth, and families*. Retrieved https://nche.ed.gov/downloads/briefs/introduction.pdf
- Owens, D. J., & Straus, M. A. (1975). The social structure of violence in childhood and approval of violence as an adult. *Aggressive Behavior*, *1*, 193-211.
- Pearlin, L. I. (1989). The sociological study of stress. *Journal of Health and Social Behavior*, 30, 241-256.
- Ponce, A. N., Williams, M. K., & Allen, G. J. (2004). Experience of maltreatment as a child and acceptance of violence in adult intimate relationships: Mediating effects of distortions in cognitive schemas. *Violence and Victims*, *19*, 97-108.
- Radliff, K. M., Wheaton, J. E., Robinson, K., & Morris, J. (2012). Illuminating the relationship between bullying and substance use among middle and high school youth. *Addictive Behaviors*, *37*, 569-572.
- Rattelade, S., Farrell, S., Aubry, T., & Klodawsky, F. (2014). The relationship between victimization and mental health functioning in homeless youth and adults. *Journal of Interpersonal Violence*, 29, 1606-1622.
- Rew, L., Whittaker, T. A., Taylor-Seehafer, M. A., & Smith, L. R. (2005). Sexual health risks and protective resources in gay, lesbian, and bisexual, and heterosexual homeless youth. *Journal for Specialists in Pediatric Nursing*, 10, 11-19.
- Rosario, M., Schrimshaw, E. W., & Hunter, J. (2012). Risk factors for homelessness among lesbian, gay, and bisexual youths: A developmental milestone approach. *Children and Youth Services Review*, *34*, 186-193.

- Russell, S., Ryan, C., Toomey, R., Diaz, R., & Sanchez, J. (2011). Lesbian, gay, bisexual, and transgender adolescent school victimization: Implications for young adult health and adjustment. *Journal of School Health*, *81*, 223-230. doi:10.1111/j.1746-1561.2011.00583.x
- Schmitz, R. M., & Tyler, K. A. (2018). LGBTQ+ young adults on the street and on campus: Identity as a product of social context. *Journal of Homosexuality*, *65*, 197-223.
- 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.
- Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent-Child Conflict Tactics
- Scales: Development and psychometric data for a national sample of American parents. *Child Abuse & Neglect*, 22, 249-270.
- Swearer, S. M., & Hymel, S. (2015). Understanding the psychology of bullying: Moving toward a social-ecological diathesis-stress model. *American Psychologist*, 70, 344-353.
- Thompson, S. J., Bender, K., Ferguson, K. M., & Kim, Y. (2015). Factors associated with substance use disorders among traumatized homeless youth. *Journal of Social Work Practice in the Addictions*, *15*, 66-89.
- Turner, H. A., Finkelhor, D., & Ormrod, R. (2010). The effects of adolescent victimization on self-concept and depressive symptoms. *Child Maltreatment*, *15*, 76-90.
- Tyler, K. A. (2008). A comparison of risk factors for sexual victimization among gay, lesbian, bisexual, and heterosexual homeless young adults. *Violence and Victims*, 23, 586-602.
- Tyler, K. A., & Beal, M. R. (2010). The high-risk environment of homeless young adults: Consequences for physical and sexual victimization. *Violence and Victims*, 25, 101-115.
- Tyler, K. A., & Melander, L. A. (2015). Child abuse, street victimization, and substance use among homeless young adults. *Youth & Society*, *47*, 502-519.
- Tyler, K. A., Schmitz, R. M., & Ray, C. M. (2018). Role of social environmental factors on anxiety and depressive symptoms among midwestern homeless youth. *Journal of Research on Adolescence*, 28, 199-210. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/jora.12326/full
- Tyler, K. A., & Whitbeck, L. B. (2004). Lost childhoods: Risk and resiliency among runaway and homeless adolescents. In P. Allen-Meares & M. W. Fraser (Eds.), *Intervention with children & adolescents: An interdisciplinary perspective* (pp. 378-397). Boston, MA: Pearson Education.
- Underwood, M. K., & Rosen, L. (2011). Gender and bullying: Moving beyond mean differences to consider conceptions of bullying, processes by which bullying unfolds, and cyber bullying. In D. Espelage & S. Swearer (Eds.), *Bullying in North American schools* (2nd ed., pp. 13-22). New York, NY: Routledge.
- Van Leeuwen, J. M., Boyle, S., Salomonsen-Sautel, S., Baker, D. N., Garcia, J. T., Hoffman, A., & Hopfer, C. J. (2006). Lesbian, gay, and bisexual homeless youth:

An eight-city public health perspective. Child Welfare, 85, 151-170.

- Whitbeck, L. B., Chen, X., Hoyt, D. R., Tyler, K. A., & Johnson, K. D. (2004). Mental disorder, subsistence strategies, and victimization among gay, lesbian, and bisexual homeless and runaway adolescents. *The Journal of Sex Research*, *41*, 329-342.
- Whitbeck, L. B., & Simons, R. L. (1990). Life on the streets: The victimization of runaway and homeless adolescents. *Youth & Society*, 22, 108-125.
- Widom, C. S., Czaja, S. J., & Dutton, M. A. (2008). Childhood victimization and lifetime revictimization. *Child Abuse & Neglect*, *32*, 785-796.

Authors

Kimberly A. Tyler, PhD, is Willa Cather Professor of Sociology at the University of Nebraska–Lincoln. Her research interests include homelessness, child abuse and neglect, partner violence, substance use, and other high-risk behaviors among adolescents and youth.

Rachel M. Schmitz, PhD, is now an assistant professor of Sociology at Oklahoma State University. Her research interests include gender and sexuality, the family, LG-BTQ youth and young adults, and qualitative methods. She has recently published work in *Journal of LGBT Youth, Archives of Sexual Behavior*, and *Journal of Research on Adolescence*. Currently, she is conducting a qualitative study that examines LG-BTQ Latino/a young people's subjective interpretations of health within dominant societal frameworks that emphasize the risks they face.