

**THE RELATIONSHIP BETWEEN BULLYING, SUICIDALITY, AND YOUTH
HOMELESSNESS: THE ROLE OF PARENT SUPPORT AS A MODERATOR**

by

Kathleen A. McCallops

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Science in Human Development and Family Sciences

Fall 2018

© 2018 Kathleen A. McCallops
All Rights Reserved

**THE RELATIONSHIP BETWEEN BULLYING, SUICIDALITY, AND YOUTH
HOMELESSNESS: THE ROLE OF PARENT SUPPORT AS A MODERATOR**

by

Kathleen A. McCallops

Approved: _____
Ann M. Aviles, Ph.D.
Professor in charge of thesis on behalf of the Advisory Committee

Approved: _____
Bahira Trask, Ph.D.
Chair of the Department of Human Development and Family Sciences

Approved: _____
Carol Vukelich, Ph.D.
Dean of the College of Education and Human Development

Approved: _____
Douglas J. Doren, Ph.D.
Interim Vice Provost for the Office of Graduate and Professional
Education

ACKNOWLEDGMENTS

I want to start off by thanking my incredible advisor, Dr. Ann Aviles, and my outstanding committee members, Dr. Valerie Earnshaw and Dr. Rob Palkovitz. Ann, thank you for helping me find my passions and figure out the type of scholar I want to become. You are encouraging, enthusiastic, and kind, which has enabled me to flourish. Valerie, thank you for your patience and meticulous guidance with the statistics and the results. Finally, Rob, thank you for your thoughtful advice and positive attitude. I appreciate all of you and you were each a vital part of my thesis and academic development. I could not have completed my study without each and every one of you.

I am also grateful for the Human Development and Family Sciences faculty and graduate students for making this thesis possible and particularly for the knowledge and academic support I have received throughout my journey at the University of Delaware.

Finally, I am extremely grateful for my friends and family. Thank you for your encouragement, love, and positivity throughout my personal and academic journey. Your support has never wavered. Thank you for reminding me what is important and to never giving up on my goals or myself. I knew I could always count on you. Lastly, I offer an especially huge thank you to Jon, for all of your writing and editing skills, and for being there for me every step of the way.

TABLE OF CONTENTS

LIST OF TABLES	vi
LIST OF FIGURES	vii
ABSTRACT	viii
Chapter	
1 INTRODUCTION	1
2 LITERATURE REVIEW	3
Bullying Prevalence.....	5
Bullying and Suicide	6
Homelessness Overview	8
Homelessness and Mental Health.....	10
Homelessness, Bullying, and Mental Health	12
Parent Support.....	13
Theoretical Framework: Buffering Hypothesis	14
Present Study.....	15
Hypotheses	16
3 METHODOLOGY	17
Participants and Procedure.....	17
Measures	17
Youth Risk Behavior Survey.....	17
Demographic Characteristics.....	18
Housing Status	19
Bullying.....	19
Suicidality.....	20
Parent Support	21
Data Analysis	21
4 RESULTS	23
Demographic Characteristics	23
Exploratory Factor Analysis.....	25
Moderated Mediation.....	27
5 DISCUSSION	33

6 LIMITATIONS AND FUTURE DIRECTIONS37

7 CONCLUSION39

REFERENCES42

Appendix

2015 DELAWARE YOUTH RISK BEHAVIOR SURVEY QUESTIONS
ANALYZED59

LIST OF TABLES

Table 1	Demographic Characteristics of Sample by Residential Status	24
Table 2	Variable Correlation Matrix	25
Table 3	Rotated Pattern Matrix from the Parent Support Questions.....	27
Table 4	Results of Regression Analysis Predicting Bullying	28
Table 5	Results of Regression Analysis Predicting Suicidality	30
Table 6	Indirect Effect of Homelessness on Suicidality through Bullying at Different Levels of Parent Support.....	31

LIST OF FIGURES

Figure 1	Conceptual model for bullying as a mediator and parent support as a moderator.	22
Figure 2	Results displayed using the conceptual model with lines signifying significance at $p < .05$ and dotted lines signifying not significant at $p > .05$	32

ABSTRACT

The purpose of this study was twofold: (1) to explore the relationship between bullying, suicidality, and youth homelessness, and (2) to determine if parent support moderates these relationships. The study utilized secondary data analysis of 2,433 youth, enrolled in Delaware Public School grades 9-12, who completed the 2015 Delaware Youth Risk Behavior Survey that measured prevalence and trends of health-risk behaviors. Results demonstrated that bullying mediated the relationship between homelessness and suicidality, such that youth experiencing homelessness reported greater bullying, which in turn was associated with greater suicidality. Additionally, parent support moderated the relationship between bullying and suicidality. Among youth experiencing homelessness with low levels of parent support, bullying was associated with worse suicidality while among those with high levels of parent support, bullying was not associated with worse suicidality. Study findings serve to inform youth programming and service providers in schools and communities, specifically in regard to the needs of youth experiencing homelessness.

Chapter 1

INTRODUCTION

Bullying is a significant public health concern that negatively affects children and youth (Nansel et al., 2001). Previous research has examined the relationship between family income, bullying, mental health outcomes among youth. Evidence suggests that youth from low-income families are more likely to be exposed to bullying at school and are more likely to experience negative, long-term mental health outcomes from being bullied (Carlson, 2006; Due, Damsgaard, Lund, & Holstein, 2009). However, there is limited research regarding the relationship between homelessness, bullying, and mental health outcomes. Coates and McKenzie-Mohr (2010) found that prior to experiencing homelessness, youth experienced high incidences of bullying, but this study did not indicate whether youth experienced negative mental health outcomes as a result. Furthermore, Armstrong and colleagues (2018) found that youth experiencing homelessness were more likely to experience peer victimization, which included a measure of bullying.

While many youth experience negative effects from bullying and homelessness, research suggests that parent support can act as a protective factor, which buffers the negative mental health outcomes experienced from bullying and homelessness (Bao, Whitbeck, & Hoyt, 2000; Stadler, Feifel, Rohrman, Vermeiren, & Poustka, 2010; Unger et al., 1998). Therefore, understanding the role of parent support could potentially inform interventions or strategies used to improve mental health outcomes among homeless youth who are also bullied. The purpose of this

study is to explore the relationship between bullying, suicidality, and youth homelessness, and whether parent support moderates these relationships.

Chapter 2

LITERATURE REVIEW

In 2014, the CDC proposed a uniform definition of bullying (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014) and the definition was adopted by the National Academies of Sciences, Engineering, and Medicine (NASEM, 2016) bullying report. The definition is derived from Olweus's (2013) definition of bullying as well as critiques that a single act of aggression should be categorized as bullying (Arora, 1996; Finkelhor, Turner, & Hamby, 2012; Olweus, 1993). The uniform definition of bullying states:

Bullying is any unwanted aggressive behavior(s) by another youth or group of youths who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated. Bullying may inflict harm or distress on the targeted youth including physical, psychological, social, or educational harm. (NASEM, 2016, p. 7)

These unwanted aggressive behavior(s) can be categorized as physical (e.g., being hit, kicked, punched), verbal (e.g., threats, name calling), relational (e.g., spreading rumors, social isolation), and/or damage to property (e.g., theft, destroying a youth's property; Farrington, 1993; Monks & Smith, 2006; NASEM, 2016; Sharp & Smith, 1991). The imbalance of power between the victim and perpetrator can be derived from one or a combination of the following factors: physical size or strength, social status, number of students (Olweus, 2013; Pepler & Craig, 2009), and intellectual force/knowledge (Swearer & Espelage, 2011). For example, power can be achieved by a perpetrator targeting a victim based on a vulnerability and then using that vulnerability to bully the victim. As these situations continue, the perpetrator increases in power, while the victim loses power (Pepler & Craig, 2009).

Additionally, bullying can occur in different contexts. For example, it has been estimated that over 90% of youth have access to the Internet and most have access to cell phones and computers (Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013; Tokunaga, 2010). As access and use of Internet and electronic devices increases, there has also been an increase in bullying through the Internet and electronic devices (Smith et al., 2008). The definition of cyberbullying has stemmed from the uniformed definition of bullying, with the inclusion of electronic means (NASEM, 2016), such that cyberbullying is defined as a form of unwanted aggression that occurs online and through electronic means such as text messages, email, social networking sites (e.g., Facebook, Instagram, Youtube, Snapchat), online chat rooms, and also involves an imbalance of power (Beale & Hall, 2007; Menesini et al. 2012; Miller & Hufstedler, 2009; NASEM, 2016; Wang, Iannotti, & Nansel, 2009). Cyberbullying can also be categorized as verbal (e.g., threats, name calling), relational (e.g., spreading rumors), and damage to property (e.g., deleting personal information; NASEM, 2016).

While similarities exist between traditional bullying and cyberbullying, there are some notable differences. Cyberbullying is different than traditional bullying because there is no immediate in-person contact between perpetrators and victims (i.e., through indirect bullying), perpetrators can bully victims anonymously, perpetrators can reach a larger audience than traditional bullying (Slonje & Smith 2008; Sticca & Perren, 2013), and there are lower levels of parental/guardian supervision online (Patchin & Hinduja, 2006; Sticca & Perren, 2013). Additionally, cyberbullying can happen at any time, on any day (Smith, 2012). Despite the differences, many researchers believe that cyberbullying is an extension of traditional bullying in that most victims who are bullied in-person (i.e., through direct bullying) are also bullied

through electronic means (Hinduja & Patchin, 2008; Juvonen & Gross, 2008; Kowalski & Limber, 2013; Li, 2007; Ybarra & Mitchell, 2004).

Bullying Prevalence

While there is a standard bullying definition, the exact prevalence of bullying is unknown because bullying is measured differently, with some measures asking about bullying behaviors (e.g., have you been hit or teased) and some measures asking about the frequency of bullying (e.g., how often have you been bullied). The different measurement types lead to different results. In one nationally representative sample, 24.2% of youth in grades 6-10 reported being bullied once or twice during the year, 8.5% reported being bullied sometimes, and 8.4% said they were bullied every week (Nansel et al., 2001). In another nationally representative survey, participants were asked if they had been bullied in the past two months and asked to indicate the type of bullying (i.e., physical, verbal, and/or relational) and the researchers found that 12.8% of students had been physically bullied, 36.5% had been verbally bullied, and 41% had been relationally bullied (Wang et al., 2009). In 2015, the National Center for Education Statistics used the Youth Risk Behavior Survey (YRBS) to assess the prevalence of traditional bullying at school in the past 12 months, and the results revealed that around 21% of youth ages 12-18 reported being bullied in-person at school (i.e., on school property, on a school bus, and going to and from school; Musu-Gillette, Zhang, Wang, Zhang, & Oudekerk, 2017).

Furthermore, according to Tokunaga's (2010) review and synthesis of cyberbullying literature, on average, around 20-40% of teens reported having been cyberbullied in the past year. However, as noted in the results, the rates of cyberbullying may actually be higher because studies only asked participants to

indicate if they had been bullied in the past year, thereby reducing the prevalence rates of lifetime cyberbullying (Tokunaga, 2010). The author also noted that rates of cyberbullying could be lower because some studies, Juvonen and Gross (2008), broadened the term of cyberbullying for their survey by replacing the term “cyberbullied” with “said mean things online” and reported that 72% of youth had been cyberbullied at least once in their lifetime. The rates might be different if the authors maintained the language of “cyberbullied.” Tokunaga’s (2010) review results are also significantly different compared to the data collected by the U.S Department of Education (2015) which used the School Crime Supplement to the National Crime Victimization Survey and found about 7% of youth reported being cyberbullied in the past school year. While the exact rates of cyberbullying are unclear, research has demonstrated that traditional bullying and cyberbullying can have negative effects on youth’s academic outcomes and mental health. Youth who are bullied are more likely to be absent from school, leave school due to an illness, and have lower grades than their non-bullied peers (Kowalski & Limber, 2013), and youth who are bullied are more likely to experience depression, anxiety, and suicide than their non-bullied peers (Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2007; Wang et al., 2009).

Bullying and Suicide

Just as it is imperative to understand the effects of bullying on depression, it is also imperative to explore the relationship between bullying and suicide. This is especially relevant for youth, as suicide is the third leading cause of death among youth aged 10 - 14 and the second leading cause of death among youth aged 15 - 24 (Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2015).

Adolescents who are victims of traditional bullying have higher rates of suicide ideation and suicide attempts than their non-bullied peers (Hinduja & Patchin, 2010; Kaminski & Fang, 2009; Kim, Leventhal, Koh, & Boyce, 2009; Klomek et al., 2007; Mills, Guerin, Lynch, Daly, & Fitzpatrick, 2004). Kim and Leventhal (2008) conducted a systematic review of 37 articles that examined bullying and suicide in both the United States and internationally. This review found that despite some methodological differences, youth who were traditional bullying victims had an increased risk of suicide ideation. Furthermore, other research indicates that frequent exposure (i.e., three to four times in the past month) to bullying increases youths' risks of suicide attempts (Klomek et al., 2007). Additionally, Klomek and colleagues (2007) discovered that even infrequent exposure (i.e., less than once a week) to bullying increases youths' risk of suicide attempts and the effect was more pronounced among girls.

Previous research has demonstrated that both victims and perpetrators of cyberbullying are more likely to have suicidal thoughts and attempt suicide than youth who have not been directly involved in cyberbullying. However, the relationship between cyberbullying and suicidal thoughts and attempts was much stronger for victims than for perpetrators (Hinduja & Patchin, 2008; Mills et al., 2004). One study reported that victims of cyberbullying were 3.2 times more likely to attempt suicide than individuals who were not cyberbullied (Goebert, Else, Matsu, Chung-Do, & Chang, 2011). It has also been posited that victims of cyberbullying are more likely to commit suicide than those who are victims of traditional bullying (Hinduja & Patchin, 2010). Similar to students who have been bullied in-person and online, students who experience homelessness also have worse mental health outcomes (Busen &

Edgebretson, 2008; Martijn & Sharpe, 2006; Moore, Benbenishti, Astor, & Rice, 2017). In order to understand the relationship between youth homelessness and mental health, it is first important to discuss the current policy that classifies students as homelessness.

Homelessness Overview

According to the U.S. Department of Education (2016), public school districts served 1.27 million homeless children and youth in the 2014-2015 school year. The current U.S. policy in place that defines homelessness and the rights for children and youth experiencing homelessness is the McKinney-Vento Homeless Assistance Act of 2001 (McKinney-Vento Act). The specific part of the act that affects youth and children experiencing homelessness who attend public schools is Subtitle B – Education for Homeless Children and Youth, which states that all children and youth should have equal access to public education, regardless of residential status (McKinney-Vento Homeless Education Assistance Improvements Act, 2001).

The McKinney-Vento Act classifies children and youth as homeless if they lack a regular and adequate residence at night, which includes: (a) children and youth who are living with another person or family because of economic hardship, loss of housing, or similar reasons; (b) children and youth who consider their nighttime residence to be that of a public or private space that is not designated for sleeping; (c) children and youth who are living in parks, cars, abandoned homes, or similar locations; and (d) children and youth who are waiting to be placed in foster care (McKinney-Vento Homeless Education Assistance Improvements Act, 2001).

Homelessness can negatively impact a variety of areas in one's life, such as academic achievement and mental health. One reason homelessness can negatively

impact a person's life is due to its' episodic and cyclical nature. A study conducted by Rog and Gutman (1997) examined family's residential patterns 18-months prior to being accepted into a housing program, and discovered that out of the 18 months, on average, families spent seven months in their own home, five months living doubled-up, five months in transitional housing, and one month in an unspecified living situation. This cyclical nature of homelessness means that families are frequently moving around, known as highly mobile. Furthermore, youth in this type of living situation are considered *high mobility youth* because they are frequently moving around, which can be detrimental to their mental health, as well as their education (Low, Hallett & Mo, 2016).

Being highly mobile can present unique challenges for youth at school. For example, youth may have a hard time finding space to complete homework, and as a result have lower GPAs (Cutuli et al., 2013; Hallett & Skrla, 2017). Additionally, longitudinal research has demonstrated that as youth get older, the achievement gap in school continues to widen, such that youth who are behind in reading continue getting further and further behind their peers. This is especially detrimental high mobility youth as they are more likely to miss more days of school and attend many different schools (Cutuli et al., 2013; Obradović et al., 2009). The culmination of behavioral and attendance issues as well as lower academic achievement affects students' graduation rates such that youth experiencing homelessness are more likely to graduate from high school in more than four years (Low et al., 2016) and they are more likely to leave high school altogether (Ausikaitis et al., 2014). Many students leave high school for a variety of reasons such as they do not feel supported by school staff, they feel overwhelmed by school due to their living situation, and they are not

aware of their McKinney-Vento rights (i.e., transportation to school; Ausikaitis et al., 2014). Not completing high school has many negative consequences on youth. Research indicates that students who leave school are more likely to lose social support from adults and are more likely to be exposed to harmful environments (Ausikaitis et al., 2014).

In addition to these student challenges, experiencing homelessness can be challenging for parents. For example, parenting is forced to occur in public places and in front of social workers and shelter staff, rather than in the private space, such as one's home (Hallett & Skrla, 2017; Hausman & Hammen, 1993). Furthermore, at other times, parents are working so hard to provide basic needs for their children that they often have limited time and energy needed for daily parenting and helping with homework (Hallett & Skrla, 2017). Experiencing homelessness can also cause distress for parents as they feel they are not providing enough for their children (Hallett & Skrla, 2017; Hausman & Hammen, 1993).

Homelessness and Mental Health

In addition to negative outcomes associated with experiencing homelessness, being forced to move out of one's home can also be traumatic. Trauma occurs when individuals experience an event that makes them feel helpless and vulnerable (Hopper, Bassuk, & Olivet, 2010). A traumatic experience is an emotionally frightening experience where individuals feel as though they are no longer emotionally, psychologically, and physically safe. Due to the emotionally charged experience, it can become overwhelming and cause an individual's coping mechanism to become obsolete (Health Care for the Homeless Clinicians' Network, 2010; Hopper et al., 2010). Experiencing a traumatic event, like being forced out of one's home,

predisposes youth to experience depression (Laugharne, Lillee, & Janca, 2010), which supports previous research that has consistently reported higher levels of depression and suicide among youth experiencing homelessness (Ayerst, 1999; Busen & Edgebretson, 2008; Feitel, Margetson, Chamas, & Lipman, 1992; Frederick, Kirst, & Erickson, 2012; Institute for Children, Poverty and Homelessness [ICPH], 2018; Martijn & Sharpe, 2006; Moore et al., 2017; Votta & Manion, 2004). For example, one study found that 41% of homeless youth met the DSM-IV criteria for Major Depressive Disorder (Busen & Edgebretson, 2008), as compared to 11.3% of youth who have reported experiencing at least one major depressive episode in the past year (Mojtabai, Olfson, & Han, 2016). In addition to this high rate of depression, the study found that 76% of youth experiencing homelessness were diagnosed with multiple psychiatric disorders (i.e., post-traumatic stress disorder, conduct disorder, ADHD), 20% were diagnosed with one psychiatric disorder, and only 4% were not diagnosed with any psychiatric disorders. As indicated by these results, homeless youth are at a much higher risk for depression in conjunction with other psychiatric disorders (Busen & Edgebretson, 2008).

Given the high rates of depression, it is not surprising that suicide ideation and attempts are also high among youth experiencing homelessness (ICPH, 2018; Moore et al., 2017; Votta & Manion, 2004). Research has indicated that approximately 23-52% of youth experiencing homelessness have reported suicide attempts (Busen & Edgebretson, 2008; Feitel et al., 1992; Salomonsen-Sautel et al., 2008). One study demonstrated that 66.2% of people experiencing homelessness have thought about committing suicide, 51.3% attempted suicide, and 8% indicated they attempted suicide within the last thirty days (Desai, Liu-Mares, Dausey, & Rosenheck, 2003). Another

study posited a pathway for youth experiencing homelessness and suicide ideation, finding that youth experiencing homelessness for longer than six months reported higher levels of psychological distress (i.e., feelings of loneliness, hopelessness, trapped, helplessness, and giving up) than youth experiencing homelessness for less than six months. The study found high levels of psychological distress was positively related to suicide ideation (Cleverley & Kidd, 2011), such that youth with higher levels of psychological distress were more likely to think about suicide. Therefore, the amount of time youth experience homelessness can also play a role in suicide ideation and attempts.

Homelessness, Bullying, and Mental Health

There are a limited number of studies that have examined the relationship between homelessness, bullying, and mental health. For example, Coates and McKenzie-Mohr (2010) found that prior to experiencing homelessness, youth experienced high incidence of bullying, but did not indicate whether youth experienced negative mental health outcomes as a result. While Armstrong and colleagues (2018) found that youth experiencing homelessness were more likely to experience peer victimization, which included a measure of bullying. Furthermore, an ICPH (2018) report indicated that youth experiencing homelessness who were bullied were more likely to report being depressed than youth who were stably housed and bullied. However, the relationship between youth from low-income families, bullying, and mental health has been studied and research has found that youth from low-income families are more likely to be exposed to bullying and violence at school (Carlson, 2006; Due et al., 2009). Additionally, youth from low-income families are more likely to identify with a bullying culture and believe other students will join in if

they are being bullied and that teachers will not stop the bullying if they know it is happening (Unnever & Cornell, 2003).

In addition to increased exposure to bullying, Due and colleagues (2009) conducted a study in the Netherlands which examined the long-term effects of bullying among children from low-income families. The authors studied children who were bullied when they were young and then twelve years later when they were young adults. The study found that men and women from low-income families who were bullied during their childhood experience more victimization and are more depressed in young adulthood than men and women who were bullied in childhood and raised by more affluent families (Due et al., 2009). These effects indicate that depression could also be present for youth experiencing homelessness in that they might be more likely to be exposed to bullying at school and experience lasting negative effects. While there is research that examines mental health outcomes among youth from low-income families who are bullied, there is limited research that examines mental health outcomes among youth experiencing homelessness who are bullied.

Parent Support

As previously mentioned, bullying and experiencing homelessness can have negative impacts on youths' mental health outcomes; however, research suggests that parent support can mitigate the effects of bullying victimization and improve youth's well-being (Yeung & Leadbeater, 2010). For example, youth who are bullied and view their parents as more supportive and encouraging, are more resilient and have lower levels of depression and suicide than youth with less supportive and encouraging parents (Baldry & Farrington, 2005). The authors defined supportive parents as those who were encouraging their children to develop independently while

also providing supervision and guidance (Smith & Myron-Wilson, 1998). Furthermore, supportive parents help their children with difficulties in school, and teach their children how to improve social and relational skills (Smith & Myron-Wilson, 1998). In the literature about parent support and youth who are bullied, research demonstrates that parent support can moderate the relationship between bullying and mental health outcomes (Baldry & Farrington, 2005; Bonanno & Hymel, 2010). For example, one study demonstrated that youth who had higher parent support, were at a lower risk of suicide ideation than youth with lower parent support (Bonanno & Hymel, 2010). Other studies have further demonstrated support for parents as protective factors against bullying (Baldry & Farrington, 2005; Stadler et al., 2010), and that this relationship was particularly salient for girls entering high school (Stadler et al., 2010).

In addition to the relationship between parent support and bullying, there is research indicating that friends, sexual partners, stably housed adults, and family members (e.g., parents) provide social support for youth experiencing homelessness (la Haye et al., 2012; Wenzel et al., 2012). Research has demonstrated that these different sources of social support can help buffer the negative mental health effects of experiencing homelessness, such that youth experiencing homelessness with family support engage in less substance use and have lower levels of depression and stress (Bao et al., 2000; Falci, Whitbeck, Hoyt, & Rose, 2011; Unger et al., 1998).

Theoretical Framework: Buffering Hypothesis

As previously mentioned, there are a number of factors that buffer the effects of stressful situations. This study uses the buffering hypothesis to examine whether parent support acts as a moderator between bullying and suicidality, and homelessness

and suicidality. The buffering hypothesis is appropriate for this study because, as previously discussed, both bullying and homelessness are stressors, which lead to worse suicidality. However, parent support has been demonstrated to be a mechanism that buffers individuals from stressors or stressful environments (Cohen & McKay, 1984). The buffering hypothesis states that, “psychosocial stress will have deleterious effects on the health and well-being of those with little or no social support, while these effects will be lessened or eliminated for those with stronger support systems” (Cohen & McKay, 1984, p. 253). While there has also been limited research regarding parent support as a moderator for youth who are bullied and experiencing homelessness, it can be hypothesized that parent support would act in a similar manner as a buffer for youth experiencing homelessness who are also bullied to mitigate negative mental health outcomes.

Present Study

The current study explored the relationship between bullying (traditional and cyberbullying), suicidality, and youth homelessness, and determined whether parent support moderates these associations. This research focused specifically on suicidality as the mental health outcome. Additionally, while the literature distinguishes between traditional and cyberbullying, this study collapsed across these two types of bullying (both traditional and cyberbullying), focusing on the overall effects of bullying in relationship to suicidality among youth experiencing homelessness. The following are the guiding research questions:

1. Does bullying mediate the relationship between experiencing homelessness and suicidality among youth?
2. Does parent support moderate the relationship between bullying and suicidality among youth experiencing homelessness?

3. Does parent support moderate the relationship between experiencing homelessness and suicidality among youth?

Hypotheses

First, it is hypothesized that bullying would mediate the relationship between experiencing homelessness and suicidality among youth. Specifically, youth experiencing homelessness would experience more bullying and in turn have worse suicidality. Second, it is hypothesized that parent support would moderate the association between bullying and suicidality, such that among youth experiencing homelessness with low levels of parent support, bullying would be associated with worse suicidality, and among homeless youth with high levels of parent support, bullying would not be associated with worse suicidality. Finally, it is hypothesized that parent support would moderate the association between homelessness and suicidality. Therefore, among youth who have low levels of parent support, homelessness would be associated with worse suicidality; but among youth who have high levels of parent support, homelessness would not be associated with worse suicidality. This study has implications for identifying potential school and family-based bullying intervention programs to improve mental health outcomes among youth who are bullied and experiencing homelessness.

Chapter 3

METHODOLOGY

Participants and Procedure

Secondary data were obtained from the University of Delaware Center for Drug and Health Studies, which included a sample of 2,433 youth, enrolled in grades 9-12, in the Delaware Public Schools who completed the 2015 YRBS (Center for Drug and Health Studies [CDHS], 2015). All data obtained through CDHS was aggregated and therefore was de-identified. Permission to perform secondary data analysis was approved by the University of Delaware's Institutional Review Board.

When the YRBS was administered, parental consent was obtained prior to youth participating in the survey, so parents could decide not to have their child participate and youth could also decide not to participate. For those assenting youth, they were asked to fill out the 150-item questionnaire during school in the spring of 2015 and followed procedures outlined by the Center for Disease Control and Prevention (CDC, 2015a). Research indicates that adolescents answer the YRBS accurately and the survey has demonstrated adequate levels of test-retest reliability (Brener et al., 1995, 2002, 2013).

Measures

Youth Risk Behavior Survey

This research study analyzed data collected from the Delaware YRBS for the 2015-2016 academic school year. The YRBS is administered to middle and high school students, grades 6-12, and has been conducted biannually since its development by the Center for Disease Control in 1991 (CDC, 2004). In addition to the national

YRBS survey, the CDC also enables states to customize the YRBS by adding or removing questions from the survey as well as supplementing with Delaware-developed questions. The YRBS is administered to a random sample of classes within each state. While every school has an equal opportunity of being selected, schools that are selected can opt out of testing.

The purpose of the YRBS is to describe and assess youths' health-risk behaviors across time, as well as, to influence programs and policies related to youths' health (Brener et al., 2013). The survey is anonymous and does not collect any identifying information. Obtaining data from this survey aligns well with the study because it provides information about health-risk behaviors (i.e., bullying, depression, and suicide) while also providing parent support measures. Furthermore, this data provides valuable information on a state by state basis which can be used to shape or inform state as well as federal policies. The following are the questions analyzed from the YRBS for the current study. See the Appendix for the full list of questions used in the study. For the purposes of this study, a select number of variables/questions were identified and analyzed based on items related to housing status, bullying, mental health and parent support.

Demographic Characteristics

Participants reported their age, gender, current grade level, race/ethnicity, sexual orientation, as well as whether a parent is serving active duty in the military and/or has been incarcerated. All demographic variables were self-reported.

Housing Status

Participants were asked, “Where did you typically sleep at night?” The response set included the following five responses: (1) At home with your parent(s) or guardian(s); (2) At a friend’s or relative’s home with your parent(s) or guardian(s); (3) At a friend’s or relative’s home without your parent(s) or guardian(s); (4) Somewhere else (such as a shelter, transitional housing, public place, hotel, car) with your parent(s) or guardian(s); (5) Somewhere else (such as a shelter, group home, foster care home, public place, car, hotel) without your parent(s) or guardian(s) (CDC, 2015a). A categorical homelessness variable was created by coding (0 = not homeless, 1 = homeless). Participants were considered not homeless and were coded as 0 if they answered the question with the first response, “At home with your parent(s) or guardian(s),” and for all additional responses, participants were considered homeless and were coded as 1.

Bullying

Participants were asked two questions about bullying. When participants reached this point in the survey, the YRBS provided the following definition of bullying:

Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way. (CDC, 2015a, p. 6)

Directly following the YRBS definition of bullying, the participants were asked the following: (1) “During the past 12 months, have you ever been bullied on school property?” and (2) “During the past 12 months, have you ever been electronically bullied?” (Count being bullied through email, chat rooms, instant

messaging, websites, or texting.). Participants were asked to answer both questions on a dichotomous scale from “yes” to “no” (CDC, 2015a). Responses were coded as dichotomous variables (0 = no, 1 = yes) and summed to create a composite bullying variable. The CDC (2015b) indicated their rationale for including these two questions is to measure the frequency and severity of bullying. Additionally, the questions were included because both traditional and cyberbullying are associated with depression, suicide ideation, and suicide attempts (Schneider, O’Donnell, Stueve, & Coulter, 2012; Van der Wal, De Wit, & Hirasing, 2003), all of which the Delaware YRBS asked students (CDC, 2015b).

Suicidality

Suicidality was assessed by asking five questions about suicide ideation and suicide attempts. Questions regarding suicide ideation and attempts have been validated and demonstrate support for adequate convergent and discriminant validity (May & Klonsky, 2011). The first three questions were as follows: (1) “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?”; (2) “During the past 12 months, did you ever seriously consider attempting suicide?”; and (3) “During the past 12 months, did you make a plan about how you would attempt suicide?” All three questions elicited a “yes” or “no” response (CDC, 2015a). A categorical variable was created by coding (0 = no, 1 = yes to any of the three questions). Participants were also asked one question about the number of suicide attempts (“During the past 12 months, how many times did you actually attempt suicide?”) and were asked to respond on a 5-point scale from 0 times to 6 or more times (CDC, 2015a). A categorical variable was created by coding (0 = 0 times, 1 = 1 or more

times). The next question participants were asked to indicate the result of their attempted suicide (“If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?”) and participants were asked to respond on a dichotomous scale from “yes” to “no”, while also having a response for students who did not commit suicide and therefore the question does not apply (CDC, 2015a). A categorical variable was created (0 = no, 1 = yes), and all five suicide variables were summed to create a suicide composite score.

Parent Support

Participants were asked eight questions about their relationship with their parents (e.g., “My parent(s) show me they are proud of me” and “I can count on my parent(s) to be there when I need them”). Participants were asked to rate their response on a 3-point scale from 1 (never or almost never) to 3 (always or almost always; CDC, 2015a). Responses were summed to create a composite parent support variable.

Data Analysis

First, preliminary analyses explored descriptive statistics to characterize the socio-demographics of the sample and explored correlations between bullying (traditional and cyber), parent support, and mental health. Results were stratified among youth who were experiencing homelessness and youth who were not homeless. Then, an exploratory factor analysis (EFA) was run to test the factor loadings for parent support because the underlying structure of the parent support questions on the

YRBS is unknown. Finally, the PROCESS macro, a regression-based analysis tool, was run to test for mediation and moderation (Hayes, 2013).

As previously mentioned, while the literature distinguishes between traditional and cyberbullying, these analyses collapsed across traditional and cyberbullying to focus on the overall effects of bullying in relationship to mental health outcomes among youth experiencing homelessness. Therefore, the PROCESS tool tested parent support as a moderator between bullying and mental health outcomes, as well as between experiencing homelessness and mental health outcomes. The PROCESS tool also tested for bullying as a mediator between homelessness and mental health outcomes (see Figure 1).

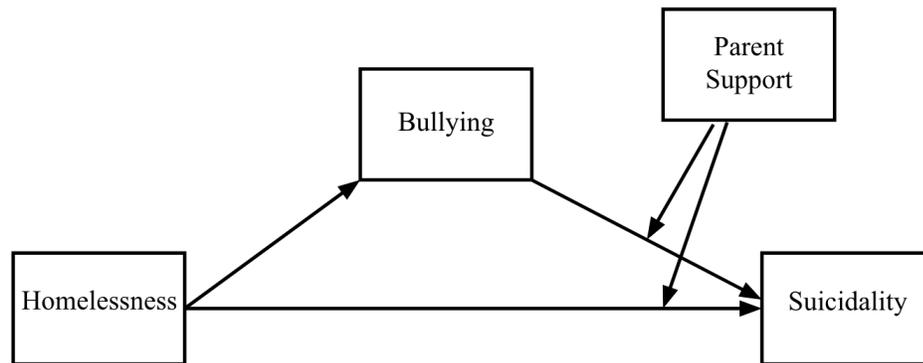


Figure 1 Conceptual model for bullying as a mediator and parent support as a moderator.

Chapter 4

RESULTS

Demographic Characteristics

Participant socio-demographic characteristics by housing status are included in Table 1. A total of 2,433 youth participated in the study; however, 344 youth were excluded from the study who did not answer all questions. Out of the 2,433 participants, 100 youth (4.1%) met the criteria for experiencing homelessness. This percentage is similar to rates found throughout the United States (Armstrong et al., 2018; ICPH, 2017; Morton, Dworsky, & Samuels, 2017). Additionally, correlations are presented in Table 2 and demonstrate that all bivariate correlations between variables were significant.

Table 1 Demographic Characteristics of Sample by Residential Status

Characteristic	Homeless	Stably Housed
Gender		
Female	39 (39%)	1,350 (50.9%)
Male	58 (58%)	1,266 (47.8%)
Sexual Orientation		
Heterosexual	67 (67%)	2,230 (84.2%)
LGBTQ	20 (29%)	289 (10.9%)
Grade		
9	23 (23%)	759 (28.6%)
10	24 (24%)	601 (22.7%)
11	25 (25%)	951 (35.9%)
12	23 (23%)	305 (11.5%)
Race/Ethnicity		
White	56 (40%)	1,497 (49%)
Black/African American	40 (28%)	882 (29%)
Hispanic/Latino	21 (15%)	420 (14%)
Other	24 (17%)	268 (8%)
Military		
Parent Active Duty Military	24 (24%)	305 (11.5%)
Non-Active Duty	75 (75%)	2,322 (87.6%)
Incarcerated		
Parent Incarcerated	35 (35%)	200 (7.5%)
Not Incarcerated	65 (65%)	2,450 (92.5%)

Table 2 Variable Correlation Matrix

Variable	Variable			
	Homelessness	Bullying	Suicidality	Parent Support
Homelessness	1.00			
Bullying	0.10**	1.00		
Suicidality	0.14**	0.33**	1.00	
Parent Support	-0.14**	-0.13**	-0.29**	1.00

Note. **p < .01

Exploratory Factor Analysis

Principal axis factor analysis was run on the parent support questions because it the best method for recovering weak factors and is better at handling non-normal data (Briggs & MacCallum, 2003). This study used a Promax rotation with k = 4 because it was concluded that any factors would be correlated (Tataryn, Wood, & Gorsuch, 1999). In order to evaluate each EFA model, the following four rules were utilized: (1) Scree test (Cattell, 1966), (2) Kaisers criteria (Kaiser, 1960), (3) Minimum Average Parcels (MAP; Velicer, 1976), and (4) Glorfeld's (1995) extension of Parallel Analysis (PA; Horn, 1965). Previous research has demonstrated that PA and MAP are the two most accurate methods for retaining the accurate number of factors (Buja & Eyuboglu, 1992; Glorfeld, 1995).

Prior to evaluating the EFA models, the results from Bartlett's Test of Sphericity (Bartlett, 1954) were analyzed and demonstrated that the correlation matrix contained underlying factor(s) and was not random, ($\chi^2 = 10,360.58$; $df = 28$; $p = .001$). Additionally, the results from the Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) statistic were analyzed. The results indicated the KMO statistic was .93, which is

above the .60 minimum that was proposed by Kline (1994), and therefore indicates the data is suitable for factor analysis. A one-factor and a two-factor EFA model were rotated. Scree, Kaiser's criterion, MAP, and PA all suggested the one-factor solution best explains the data and therefore one factor should be retained.

The two-factor solution contained a complex structure with multiple variables loading on both factors, known as a doublet, while the one-factor solution demonstrated that all variables showed very good factor loadings on the one factor, known as simple structure (Field, 2005; Tabachnick & Fidell, 2007). Therefore, the one-factor solution was accepted, given that all four rules pointed to one factor, as well as the simple structure of the one factor. According to Comrey and Lee (1992), in order to have 'very good' loadings, the coefficient for each variable must be greater than .63. This standard was used to determine appreciable loadings, see Table 3.

Table 3 Rotated Pattern Matrix from the Parent Support Questions

Variable	Component
How often do you get along well with your parent(s)?	0.701
How often do your parent(s) spend time with you doing something fun?	0.643
My parent(s) show me they are proud of me:	0.774
My parent(s) take an interest in me:	0.800
My parent(s) listen to me when I talk to them:	0.784
I can count on my parent(s) to be there when I need them:	0.790
My parent(s) and I talk about what really matters:	0.798
I am comfortable sharing my thoughts and feelings with my parent(s):	0.704
Eigenvalue	4.516
% of var.	56.448
cum. % of var.	56.448

Moderated Mediation

Results of the regression analyses are displayed in Table 4 and Table 5. As indicated by Table 4, a statistically significant positive association existed between experiencing homelessness and bullying, [B(SE) = 0.24(0.07), $p = 0.01$]. Therefore, youth who were experiencing homelessness also reported experiencing more bullying. Sexual orientation [B(SE) = 0.21(0.04), $p = 0.01$], identifying as White [B(SE) = 0.13(0.03), $p = 0.01$], and having a parent incarcerated [B(SE) = 0.16(0.04), $p = 0.01$] were all statistically significant and positively associated with bullying. Therefore, youth who identified as part of the LGBTQ community, youth who were White, and youth who had an incarcerated parent reported experiencing more bullying.

Additionally, gender was statistically significant and negatively associated with bullying [B(SE) = -0.12(0.02), p = 0.01], which indicates that females reported more bullying than males. All other socio-demographic variables were not statistically significant.

Table 4 Results of Regression Analysis Predicting Bullying

	<i>B</i> (SE)	<i>p</i> -value
Experiencing Homelessness	0.24 (0.07)	0.01
Age	-0.02 (0.01)	0.06
Gender ^a	-0.12 (0.02)	0.01
Sexual Orientation ^b	0.21 (0.04)	0.01
Hispanic/Latino	0.03 (0.04)	0.42
White	0.13 (0.03)	0.01
Black	-0.01 (0.03)	0.93
Parental incarceration	0.16 (0.04)	0.01
Parent in active duty military	0.01 (0.04)	0.69

Note. ^aGender was scored as 0 = female and 1 = male.

^bSexual orientation was scored as 0 = heterosexual and 1 = gay or lesbian, bisexual, or not sure.

As indicated by Table 5, a statistically significant positive association existed between bullying and suicidality, [B(SE) = 0.86(0.14), p = 0.01]. This relationship demonstrated that youth who experienced more bullying had worse suicidality. A statistically significant negative association between parent support and suicidality, [B(SE) = -0.50(0.04), p = 0.01], such that youth with lower levels of parent support had worse suicidality. Additionally, sexual orientation [B(SE) = 0.52(0.06), p = 0.01]

and identifying as Hispanic/Latino [B(SE) = 0.12(0.06), p = 0.05] were statistically significant and positively associated with suicidality, such that youth who identified as part of the LGBTQ community had worse suicidality and youth who identify as Hispanic/Latino had worse suicidality. Gender was statistically significant and negatively associated with suicidality, [B(SE) = -0.23(0.04), p = 0.01], such that females had worse suicidality. Furthermore, the interaction term between homelessness and parent support was not significant, [B(SE) = 0.08(0.17), p = 0.64], see Table 6. However, the interaction term between bullying and parent support was statistically significant, [B(SE) = -0.17(0.06), p = 0.01]. The results indicate that parent support did not moderate the effect between homelessness and suicidality, however, it did moderate the effect between bullying and parent support.

Table 5 Results of Regression Analysis Predicting Suicidality

	<i>B</i> (SE)	<i>p</i> -value
Experiencing Homelessness	0.26 (0.35)	0.45
Bullying	0.86 (0.14)	0.01
Parent Support	-0.50 (0.04)	0.01
Parent Support*Bullying	-0.17 (0.06)	0.01
Parent Support*Homelessness	0.08 (0.17)	0.64
Age	-0.01 (0.02)	0.50
Gender ^a	-0.23 (0.04)	0.01
Sexual Orientation ^b	0.52 (0.06)	0.01
Hispanic/Latino	0.12 (0.06)	0.05
White	0.04 (0.05)	0.48
Black	0.06 (0.05)	0.31
Parental incarceration	-0.12 (0.07)	0.09
Parent in active duty military	0.04 (0.06)	0.51

Note. ^aGender was scored as 0 = female and 1 = male.

^bSexual orientation was scored as 0 = heterosexual and 1 = gay or lesbian, bisexual, or not sure.

Table 6 Indirect Effect of Homelessness on Suicidality through Bullying at Different Levels of Parent Support

Percentile	Parent Support		
	Value	<i>B</i> (SE)	95% CI
10th	1.89	0.13 (0.05)	[0.04, 0.22]
50th	2.40	0.11 (0.04)	[0.04, 0.19]
90th	2.92	0.09 (0.03)	[0.03, 0.17]

The conditional indirect effect was explored further to understand the indirect effects between homelessness and suicidality at three levels of parent support. At low [B(SE) = 0.13(0.05), CI = 0.04, 0.22], medium [B(SE) = 0.11(0.04), CI = 0.04, 0.19], and high [B(SE) = 0.09(0.04), CI = 0.03, 0.17] levels of parent support, bullying was associated with suicidality via the mediator of greater bullying. The strength of the association between homelessness and suicidality became weaker at higher levels of parent support, but it did not become non-significant. Figure 2 displays the significant association between variables using the conceptual model.

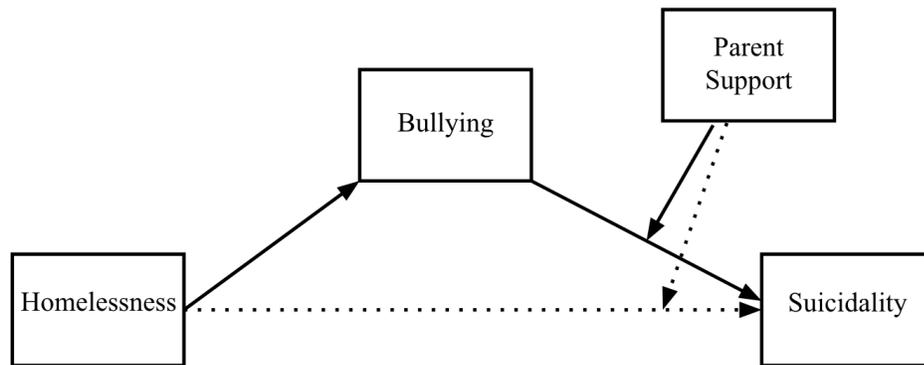


Figure 2 Results displayed using the conceptual model with lines signifying significance at $p < .05$ and dotted lines signifying not significant at $p > .05$.

Chapter 5

DISCUSSION

Using data obtained from the YRBS, the relationship between bullying, suicidality, and youth homelessness was analyzed using Hayes' PROCESS model to examine the following research questions: (1) Does bullying mediate the relationship between experiencing homelessness and suicidality among youth?; (2) Does parent support moderate the relationship between bullying and suicidality among youth experiencing homelessness?; and (3) Does parent support moderate the relationship between experiencing homelessness and suicidality among youth?

Based on research literature, first, it was hypothesized that bullying would mediate the relationship between experiencing homelessness and suicidality among youth. Specifically, youth experiencing homelessness would experience more bullying and in turn have worse suicidality. This hypothesis was supported, as youth experiencing homelessness were bullied more and had worse suicidality. This finding was similar to other studies that have demonstrated that victims of bullying (not considering income level or residential status) experience higher rates of suicide than their non-bullied peers (e.g., Bauman, Toomey, & Walker, 2013; Hinduja & Patch, 2010; Kim, & Leventhal, 2008; Kim et al., 2009; Klomek, Sourander, & Gould, 2010). However, there is limited research to support this finding related to income level and residential status. One study examined rates of bullying for youth experiencing homelessness and found that prior to experiencing homelessness, youth experienced very high rates of bullying, such that 78% of the sample reported being bullied prior to experiencing homelessness and 21% of youth reported being bullied after experiencing homelessness. Additionally, Carlson (2006) and Due and

colleagues (2009) found that youth from low-income families were more likely to be exposed to bullying at school and were more likely to experience negative, long-term mental health outcomes from being bullied. Therefore, this study adds to the current literature by examining youth experiencing homelessness, a specific sub-population of low-income youth, and demonstrates immediate impacts of being bullied (i.e., worse suicidality) as compared to Due and colleagues (2009) who conducted a longitudinal study to demonstrate the long-term mental health outcomes of being bullied.

Second, it was hypothesized that parent support would moderate the association between bullying and suicidality, such that among youth experiencing homelessness with low levels of parent support, bullying would be associated with worse suicidality, and among homeless youth with high levels of parent support, bullying would not be associated with worse suicidality. This hypothesis was also confirmed. The results suggested that parent support moderates the relationship between bullying and suicidality. At low levels of parent support, bullying was associated with worse suicidality, and at high levels of parent support, bullying was not associated with worse suicidality. This finding is consistent with previous research which suggests that parent support acts as a buffer and can mitigate the negative effects experienced from being bullied (Baldry & Farrington, 2005; Stadler et al., 2010; Yeung & Leadbeater, 2010). Also, research has demonstrated that parent support can moderate the relationship between bullying and mental health outcomes, such as suicidality (Baldry & Farrington, 2005; Bonanno & Hymel, 2010). For example, one study found that youth who were bullied and who have higher levels of parent support are at a lower risk of suicide ideation than youth who are bullied and have lower levels of parent support (Bonanno & Hymel, 2010). The current study

extends Bonanno and Hymel's (2010) study by replicating their findings for youth experiencing homelessness.

Finally, it was hypothesized that parent support would moderate the association between homelessness and suicidality. Therefore, youth experiencing homelessness who have low levels of parent support would have worse suicidality and youth with high levels of parent support would not have worse suicidality. Contrary to previous research, this hypothesis was not supported. Previous research has suggested that family support can help buffer the negative mental health effects from experiencing homelessness, such that youth with family support engage in less substance use and have lower levels of depression and stress (Bao et al., 2000; Falci et al., 2011; Unger et al., 1998). There are several reasons why this finding might not have been replicated. One potential reason is the previous research demonstrated parent support has shown to moderate the relationship between homelessness and substance use, as well as, homelessness and depression and stress, rather than the current study which looked at the relationship between homelessness and suicide (Bao et al., 2000; Falci et al., 2011; Unger et al., 1998). Another potential reason is that the current study only looked at parent support, it is possible that a different type of social support moderates the relationship between homelessness and suicidality. As previous research demonstrated that friends, sexual partners, stably housed adults, service providers, and family members provide social support for youth experiencing homelessness (la Haye et al., 2012; Wenzel et al., 2012). Additionally, Whitbeck and Hoyt (1999) found that youth experiencing homelessness seek out emotional support (i.e., feelings of being valued and belonging; la Haye et al., 2012) from peers more than their family; however, youth may receive more tangible support (i.e., money,

food, and resources; la Haye et al., 2012) from romantic partners and family members (Falci et al., 2011; Johnson, Whitbeck, & Hoyt 2005).

Lastly, another potential explanation is that experiencing homelessness and experiencing bullying are different types of stressors. This study used the buffering hypothesis to examine whether parent support acted as a moderator between bullying and suicidality, and homelessness and suicidality because parent support has been demonstrated to be a mechanism that buffers individuals from stressors or stressful environments (Cohen & McKay, 1984). However, since parent support only buffered the relationship between bullying and suicidality, potentially parent support does not moderate this relationship due to the type of stressor and differences in experiences based on housing status and bullying. Many youth experiencing homelessness leave their parent's home due to family conflict as well as trauma and abuse (Coates & McKenzie-Mohr, 2010; Mallett, Rosenthal, & Keys, 2005; Zerger, Strehlow, & Gundlapalli, 2008). Youth have also reported familial abuse, abandonment, and rejection prior to experiencing homelessness (Ferguson, 2009). Therefore, for these youth experiencing homelessness, parent support might not have the same effect on the relationship between homelessness and suicidality due to familial conflict as compared to the relationship between bullying (i.e., non-familial conflict) and suicidality.

Chapter 6

LIMITATIONS AND FUTURE DIRECTIONS

There were a number of limitations that may have impacted the outcomes of this research. The first limitation is the data was based on self-report measures. The questions used in this study related to homelessness, bullying, and suicidality may have been difficult to report and/or recall for participants, which could have affected the overall the rate with which students responded to the survey. While students were informed their responses would be anonymous, it is unclear if youth did not respond to certain questions based on the difficulty of reliving those experiences. Therefore, it is recommended that future research should utilize data from multiple people (i.e., teachers and parents), as well as observational studies to understand the extent to which these experiences are occurring.

A second limitation of the study is that cyberbullying and traditional bullying were one item indicators of bullying, as they only included only one question. Therefore, future research is needed to understand a broader range of experience with cyber and traditional bullying as well as validating a bullying scale that will capture a broader experience of both cyber and traditional bullying to understand how bullying experience affect youth experiencing homelessness. Having a better understanding of cyber and traditional bullying experiences will provide more nuanced information, which will hopefully lead to more specific interventions and programs.

Finally, the data was based on cross-sectional research, and therefore unable to determine if the results are a trend over time. Youth took the YRBS one year during one day of class, so longitudinal research should be conducted to follow the participants over time to provide further insight into the specific causes to understand

why youth experiencing homelessness are more likely to be bullied and in turn have worse suicidality.

Chapter 7

CONCLUSION

Despite the study's limitations, this study contributes to the current literature by providing valuable insights into factors that affect youth experiencing homelessness. This study suggests that youth experiencing homelessness are more likely to be bullied and in turn have worse suicidality. Furthermore, higher levels of parent support protect youth experiencing homelessness who are bullied from having worse suicidality. The findings from this study do indicate that more research needs to be done to understand the relationship between experiencing homelessness, bullying, and suicidality.

These findings can inform youth programming and service providers. For example, school personnel and homeless liaisons in each school district should ensure that all youth experiencing homelessness are provided mental health screening and meet regularly with school personnel because they are at a greater risk of experiencing bullying and worse suicidality. School personnel should also provide opportunities to develop strong school-family partnerships to keep parents involved in their child's school work as well as provide opportunities to further develop supportive child-parent relationships.

This study can also support programming and services provided by homelessness shelters as well as transitional living programs. For example, homelessness shelters that provide services for families and adults and transitional living programs can provide structured opportunities for parents to learn and discuss the significance of supportive parent-child relationships as well as parents identifying and reflecting on their own type of parent-child relationship. These services could

also develop or strengthen opportunities for parents and children to spend time together as a way to continue developing supportive parent-child relationships. Parental support is a critical type of social support as it can buffer the negative effects of experiencing bullying and suicidality, which is why parents should be provided opportunities to develop and improve their parent-child relationships. Furthermore, homeless shelters for youth can provide similar opportunities in addition to mental health screenings and support from professionals to become aware of and help improve the well-being of youth experiencing homelessness. Also, many youths leave environments and families that create stress and trauma, however, these youth still seek out parental/adult support and guidance as well as desire to mend family relationships (Aviles de Bradley, 2011). Youth shelters could provide youth with interpersonal tools and skills (i.e., social-emotional, conflict resolution) to increase their ability to navigate familial relationships in ways that preserve their well-being and can potentially facilitate healthier familial relationships.

In addition to providing opportunities to learn these skills at youth shelters, future researchers should develop an intervention for youth experiencing homelessness to teach youth social-emotional skills and to address bullying behavior as well as provide a family component that can continue to foster supportive parent-child relationships where appropriate. Youth should also be taught healthy coping mechanisms and the development of healthy boundaries in instances where parents/family are the source of stress. Social-emotional learning has been demonstrated to be effective at teaching youth necessary skills for addressing bullying by improving social competence (Smith & Low, 2013). Providing these types of services and interventions will have profound impacts on youth and families by

supporting positive family functioning and positive parent-child relationships, in addition to improving the well-being and positive coping skills of youth experiencing homelessness.

REFERENCES

- Armstrong, J. M., Owens, C. R. & Haskett, M. E. (2018). Mental health of homeless youth: Moderation by peer victimization and teacher support. *Child Psychiatry and Human Development*, *49*, 1-7. <https://doi.org/10.1007/s10578-018-0790-z>
- Arora, C. M. (1996). Defining bullying: Towards a clearer general understanding and more effective intervention strategies. *School Psychology International*, *17*, 317-329. <https://doi.org/10.1177/0143034396174002>
- Ausikaitis, A. E., Wynne, M. E., Persaud, S., Pitt, R., Hosek, A., Reker, K., ... & Flores, S. (2014). Staying in school: The efficacy of the McKinney–Vento Act for homeless youth. *Youth & Society*, *47*, 707-726. <https://doi.org/10.1177/0044118X14564138>
- Aviles de Bradley, A. M. (2011). Unaccompanied homeless youth: Intersections of homelessness, school experiences and educational policy. *Child & Youth Services*, *32*, 155-172. <https://doi.org/10.1080/0145935X.2011.583176>
- Ayerst, S. L. (1999). Depression and stress in street youth. *Adolescence*, *34*, 567-575.
- Baldry, A. C., & Farrington, D. P. (2005). Protective factors as moderators of risk factors in adolescence bullying. *Social Psychology of Education*, *8*, 263-284. <https://doi.org/10.1007/s11218-005-5866-5>
- Bao, W. N., Whitbeck, L. B., & Hoyt, D. R. (2000). Abuse, support, and depression among homeless and runaway adolescents. *Journal of Health and Social Behavior*, *41*, 408-420. <https://doi.org/10.2307/2676294>

- Bartlett, M. S. (1954). A further note on the multiplying factors for various c^2 approximations in factor analysis. *Journal of the Royal Statistical Society*, *16*, 296-298.
- Bauman, S., Toomey, R. B., & Walker, J. L. (2013). Associations among bullying, cyberbullying, and suicide in high school students. *Journal of Adolescence*, *36*, 341-350. <https://doi.org/10.1016/j.adolescence.2012.12.001>
- Beale, A. V., & Hall, K. R. (2007). Cyberbullying: What school administrators (and parents) can do. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *81*, 8-12. <https://doi.org/10.3200/TCHS.81.1.8-12>
- Bonanno, R. A., & Hymel, S. (2010). Beyond hurt feelings: Investigating why some victims of bullying are at greater risk for suicidal ideation. *Merrill-Palmer Quarterly*, *56*, 420-440. <https://doi.org/10.1353/mpq.0.0051>
- Brener, N. D., Collins, J. L., Kann, L., Warren, C. W., & Williams, B. I. (1995). Reliability of the youth risk behavior survey questionnaire. *American Journal of Epidemiology*, *141*, 575-580. <https://doi.org/10.1093/oxfordjournals.aje.a117473>
- Brener, N. D., Kann, L., McManus, T., Kinchen, S. A., Sundberg, E. C., & Ross, J. G. (2002). Reliability of the 1999 Youth Risk Behavior Survey Questionnaire. *Journal of Adolescent Health*, *31*, 336-342. [https://doi.org/10.1016/S1054-139X\(02\)00339-7](https://doi.org/10.1016/S1054-139X(02)00339-7)
- Brener, N. D., Kann, L., Shanklin, S., Kinchen, S., Eaton, D. K., Hawkins, J., & Flint, K. H. (2013). Methodology of the Youth Risk Behavior Surveillance System—

2013. *Morbidity and Mortality Weekly Report: Recommendations and Reports*, 62, 1-20.
- Briggs, N. E., & MacCallum, R. C. (2003). Recovery of weak common factors by maximum likelihood and ordinary least squares estimation. *Multivariate Behavioral Research*, 38, 25-56.
https://doi.org/10.1207/S15327906MBR3801_2
- Buja, A., & Eyuboglu, N. (1992). Remarks on parallel analysis. *Multivariate Behavioral Research*, 27, 509-540.
https://doi.org/10.1207/s15327906mbr2704_2
- Busen, N. H., & Engebretson, J. C. (2008). Facilitating risk reduction among homeless and street-involved youth. *Journal of the American Association of Nurse Practitioners*, 20, 567-575. <https://doi.org/10.1111/j.1745-7599.2008.00358.x>
- Carlson, K. T. (2006). Poverty and youth violence exposure: Experiences in rural communities. *Children & Schools*, 28, 87-96.
<https://doi.org/10.1093/cs/28.2.87>
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245-276. https://doi.org/10.1207/s15327906mbr0102_10
- Centers for Disease Control and Prevention. (2004). *Methodology of the youth risk behavior surveillance system*. MMWR; 53 (No. RR-12). Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5312a1.htm>
- Centers for Disease Control and Prevention. (2015a). *Delaware Youth Risk Behavior Survey High School Questionnaire*. Retrieved from

[https://www.cdhs.udel.edu/content-sub-site/ Documents/DDATA/YRBS-HS%202015.pdf](https://www.cdhs.udel.edu/content-sub-site/Documents/DDATA/YRBS-HS%202015.pdf)

Centers for Disease Control and Prevention. (2015b). *Youth Risk Behavior Survey (YRBS): 2015 standard questionnaire item rationale*. Retrieved from file:///C:/Users/mccallops/Downloads/2015_standard_itemrationale.pdf

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2015). *Ten leading causes of death, United States*. Retrieved from <https://webappa.cdc.gov/cgi-bin/broker.exe>

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2010). *10 leading causes of death, United States*. Retrieved from <https://www.cdc.gov/injury/wisqars/LeadingCauses.html>

Center for Drug and Health Studies [CDHS]. (2015). *2015 Youth Risk Behavior Survey results: Demographic table*. Retrieved from [https://www.cdhs.udel.edu/content-sub-site/Documents/DDATA/2015%20 DE%20HS%20Demographic%20Table.pdf](https://www.cdhs.udel.edu/content-sub-site/Documents/DDATA/2015%20DE%20HS%20Demographic%20Table.pdf)

Cleverley, K., & Kidd, S. A. (2011). Resilience and suicidality among homeless youth. *Journal of Adolescence, 34*, 1049-1054. <https://doi.org/10.1016/j.adolescence.2010.11.003>

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 Sociology and Social Welfare, 37*, 65-95. Retrieved from <http://scholarworks.wmich.edu.udel.idm.oclc.org>

- Cohen, S., & McKay, G. (1984). Social support, stress and the buffering hypothesis: A theoretical analysis. In A. Baum, S. E. Taylor, & J.E. Singer (Eds.), *Handbook of psychology and health* (pp. 253-267). Hillsdale, NJ: Psychology Press.
- Comrey, A. L., & Lee, H. B. (1992), *A first course in factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cutuli, J. J., Desjardins, C. D., Herbers, J. E., Long, J. D., Heistad, D., Chan, C. K., ... & Masten, A. S. (2013). Academic achievement trajectories of homeless and highly mobile students: Resilience in the context of chronic and acute risk. *Child Development, 84*, 841-857. <https://doi.org/10.1111/cdev.12013>
- Desai, R. A., Liu-Mares, W., Dausey, D. J., & Rosenheck, R. A. (2003). Suicidal ideation and suicide attempts in a sample of homeless people with mental illness. *The Journal of Nervous and Mental Disease, 191*, 365-371.
- Due, P., Damsgaard, M. T., Lund, R., & Holstein, B. E. (2009). Is bullying equally harmful for rich and poor children?: A study of bullying and depression from age 15 to 27. *The European Journal of Public Health, 19*, 464-469. <https://doi.org/10.1093/eurpub/ckp099>
- Falci, C. D., Whitbeck, L. B., Hoyt, D. R., & Rose, T. (2011). Predictors of change in self-reported social networks among homeless young people. *Journal of Research on Adolescence, 21*, 827-841. <https://doi.org/10.1111/j.1532-7795.2011.00741.x>
- Farrington, D. P. (1993). Understanding and preventing bullying. *Crime and Justice, 17*, 381-458.

- Feitel, B., Margetson, N., Chamas, J., & Lipman, C. (1992). Psychosocial background and behavioral and emotional disorders of homeless and runaway youth. *Psychiatric Services, 43*, 155-159. <https://doi.org/10.1176/ps.43.2.155>
- Ferguson, K. M. (2009). Exploring family environment characteristics and multiple abuse experiences among homeless youth. *Journal of Interpersonal Violence, 24*, 1875-1891. <https://doi.org/10.1177/0886260508325490>
- Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). London: Sage.
- Finkelhor, D., Turner, H. A., & Hamby, S. (2012). Let's prevent peer victimization, not just bullying. *Child Abuse & Neglect, 36*, 271-274. <http://dx.doi.org/10.1016/j.chiabu.2011.12.001>
- Frederick, T. J., Kirst, M., & Erickson, P. G. (2012). Suicide attempts and suicidal ideation among street-involved youth in Toronto. *Advances in Mental Health, 11*, 8-17. <https://doi.org/10.5172/jamh.2012.11.1.8>
- Gladden, R. M., Vivolo-Kantor, A. M., Hamburger, M. E., & Lumpkin, C. D. (2014). *Bullying surveillance among youths: Uniform definitions for public health and recommended data elements, version 1.0*. Atlanta, GA; National Center for Injury Prevention and Control, Centers for Disease Control and Prevention and U.S. Department of Education.
- Glorfeld, L. W. (1995). An improvement on Horn's parallel analysis methodology for selecting the correct number of factors to retain. *Educational and Psychological Measurement, 55*, 377-393. <https://doi.org/10.1177/0013164495055003002>

- Goebert, D., Else, I., Matsu, C., Chung-Do, J., & Chang, J. Y. (2011). The impact of cyberbullying on substance use and mental health in a multiethnic sample. *Maternal and Child Health Journal, 15*, 1282-1286.
<https://doi.org/10.1007/s10995-010-0672-x>
- Hallett, R. E., & Skrla, L. (2017). *Serving students who are homeless: A resource guide for schools, districts, and educational leaders*. New York, NY: Teachers College Press.
- Hausman, B., & Hammen, C. (1993). Parenting in homeless families: The double crisis. *American Journal of Orthopsychiatry, 63*, 358-369.
<https://doi.org/10.1037/h0079448>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Health Care for the Homeless Clinicians' Network (2010). Delivering trauma-informed services. *Healing Hands, 14*, 1-8. Retrieved from <https://www.nhchc.org/wpcontent/uploads/2011/09/DecHealingHandsWeb.pdf>
- Hopper, E. K., Bassuk, E. L., & Olivet, J. (2010). Shelter from the storm: Trauma-informed care in homelessness services settings. *The Open Health Services and Policy Journal, 3*, 80-100. <https://doi.org/10.2174/1874924001003010080>
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika, 30*, 179-185.
- Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior, 29*, 129-156.

<https://doi.org/10.1080/01639620701457816>

Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research, 14*, 206-221. <https://doi.org/10.1080/13811118.2010.494133>

Institute for Children, Poverty and Homelessness (ICPH). (2017). *More than a place to sleep: Understanding the health and well-being of homeless high school students*. Retrieved from: www.ICPHusa.org

Institute for Children, Poverty and Homelessness (ICPH). (2018). *Suicide and depression among homeless high school students*. Retrieved from <http://www.icphusa.org/national/suicide-and-depression-among-homeless-high-school-students/>

Johnson, K. D., Whitbeck, L. B., & Hoyt, D. R. (2005). Predictors of social network composition among homeless and runaway adolescents. *Journal of Adolescence, 28*, 231–248. <https://doi.org/10.1016/j.adolescence.2005.02.005>

Juvonen, J., & Gross, E. F. (2008). Extending the school grounds?—Bullying experiences in cyberspace. *Journal of School Health, 78*, 496-505. <https://doi.org/10.1111/j.1746-1561.2008.00335.x>

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39*, 31-36.

Kaminski, J. W., & Fang, X. (2009). Victimization by peers and adolescent suicide in three US samples. *The Journal of Pediatrics, 155*, 683-688. <https://doi.org/10.1016/j.jpeds.2009.04.061>

Kim, Y. S., & Leventhal, B. (2008). Bullying and suicide. A review. *International*

Journal of Adolescent Medicine and Health, 20, 133-154.

<https://doi.org/10.1515/IJAMH.2008.20.2.133>

Kim, Y. S., Leventhal, B. L., Koh, Y. J., & Boyce, W. T. (2009). Bullying increased suicide risk: Prospective study of Korean adolescents. *Archives of Suicide Research*, 13, 15-30. <https://doi.org/10.1080/13811110802572098>

Kline, P. (1994). *An easy guide to factor analysis*. New York, NY: Routledge.

Klomek, A. B., Marrocco, F., Kleinman, M., Schonfeld, I. S., & Gould, M. S. (2007). Bullying, depression, and suicidality in adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46, 40-49. <https://doi.org/10.1097/01.chi.0000242237.84925.18>

Klomek, A. B., Sourander, A., & Gould, M. (2010). The association of suicide and bullying in childhood to young adulthood: A review of cross-sectional and longitudinal research findings. *The Canadian Journal of Psychiatry*, 55, 282-288. <https://doi.org/10.1177/070674371005500503>

Kowalski, R. M., & Limber, S. P. (2013). Psychological, physical, and academic correlates of cyberbullying and traditional bullying. *Journal of Adolescent Health*, 53, S13-S20. <https://doi.org/10.1016/j.jadohealth.2012.09.018>

la Haye, K., Green, H. D., Kennedy, D. P., Zhou, A., Golinelli, D., Wenzel, S. L., & Tucker, J. S. (2012). Who is supporting homeless youth? Predictors of support in personal networks. *Journal of Research on Adolescence*, 22, 604-616. <https://doi.org/10.1111/j.1532-7795.2012.00806.x>

Laugharne, J., Lillie, A., & Janca, A. (2010). Role of psychological trauma in the

- cause and treatment of anxiety and depressive disorders. *Current Opinion in Psychiatry*, 23, 25-29. <https://doi.org/10.1097/YCO.0b013e3283345dc5>
- Li, Q. (2007). New bottle but old wine: A research of cyberbullying in schools. *Computers in Human Behavior*, 23, 1777–1791. <https://doi.org/10.1016/j.chb.2005.10.005>
- Low, J. A., Hallett, R. E., & Mo, E. (2016). Doubled-up homeless comparing educational outcomes with low-income students. *Education and Urban Society*, 1-19. <https://doi.org/10.1177/0013124516659525>
- Madden, M., Lenhart, A., Duggan, M., Cortesi, S., & Gasser, U. (2013). *Teens and technology 2013: Internet and American Life Project*. Washington, DC: Pew Research Center.
- Mallett, S., Rosenthal, D., & Keys, D. (2005). Young people, drug use and family conflict: Pathways into homelessness. *Journal of Adolescence*, 28, 185-199. <https://doi.org/10.1016/j.adolescence.2005.02.002>
- Martijn, C., & Sharpe, L. (2006). Pathways to youth homelessness. *Social Science & Medicine*, 62, 1-12. <https://doi.org/10.1016/j.socscimed.2005.05.007>
- May, A., & Klonsky, E. D. (2011). Validity of suicidality items from the Youth Risk Behavior Survey in a high school sample. *Assessment*, 18, 379-381. <https://doi.org/10.1177/1073191110374285>
- McKinney-Vento Homeless Education Assistance Improvements Act of 2001, 42 U.S.C. §§ 11431 et seq. (2001).
- Menesini, E., Nocentini, A., Palladino, B. E., Frisén, A., Berne, S., Ortega-Ruiz, R., ...

- & Naruskov, K. (2012). Cyberbullying definition among adolescents: A comparison across six European countries. *Cyberpsychology, Behavior, and Social Networking, 15*, 455-463. <https://doi.org/10.1089/cyber.2012.0040>
- Miller, J. D., & Hufstedler, S. M. (2009). Cyberbullying knows no borders. *Australian Teacher Education Association*. Retrieved from <http://files.eric.ed.gov/fulltext/ED524610.pdf>
- Mills, C., Guerin, S., Lynch, F., Daly, I., & Fitzpatrick, C. (2004). The relationship between bullying, depression and suicidal thoughts/behaviour in Irish adolescents. *Irish Journal of Psychological Medicine, 21*, 112-116. <https://doi.org/10.1017/S0790966700008521>
- Mojtabai, R., Olfson, M., & Han, B. (2016). National trends in the prevalence and treatment of depression in adolescents and young adults. *Pediatrics, 138*, 1-10. <https://doi.org/10.1542/peds.2016-1878>
- Monks, C. P., & Smith, P. K. (2006). Definitions of bullying: Age differences in understanding of the term, and the role of experience. *British Journal of Developmental Psychology, 24*, 801-821. <https://doi.org/10.1348/026151005X82352>
- Moore, H., Benbenishti, R., Astor, R. A., & Rice, E. (2017). The positive role of school climate on school victimization, depression and suicidal ideation among school-attending homeless youth. *Journal of School Violence, 1-13*. <https://doi.org/10.1080/15388220.2017.1322518>
- Morton, M.H., Dworsky, A., & Samuels, G.M. (2017). *Missed opportunities: Youth*

homelessness in America. National estimates. Chicago, IL: Chapin Hall at the University of Chicago.

Musu-Gillette, L., Zhang, A., Wang, K., Zhang, J., and Oudekerk, B.A. (2017).

Indicators of school crime and safety: 2016 (NCES 2017-064/NCJ 250650).

Washington, DC: National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice.

Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *JAMA*, 285, 2094-2100.

<https://doi.org/10.1001/jama.285.16.2094>

National Academies of Sciences, Engineering, and Medicine (NASEM). (2016).

Preventing bullying through science, policy, and practice. Washington, DC: National Academies Press.

National Center for Education Statistics (2015). *Fast facts: How many students are bullied at school?*. Retrieved from

<https://nces.ed.gov/fastfacts/display.asp?id=719>

Obradović, J., Long, J. D., Cutuli, J. J., Chan, C. K., Hinz, E., Heistad, D., & Masten, A. S. (2009). Academic achievement of homeless and highly mobile children in an urban school district: Longitudinal evidence on risk, growth, and resilience. *Development and Psychopathology*, 21, 493-518.

<https://doi.org/10.1017/S0954579409000273>

- Olweus, D. (1993). *Bullying at school: What we know and what we can do* (*Understanding children's worlds*). Oxford: Blackwell Publishers.
- Olweus, D. (2013). School bullying: Development and some important challenges. *Annual Review of Clinical Psychology, 9*, 751-780.
<https://doi.org/10.1146/annurev-clinpsy-050212-185516>
- Patchin, J. W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice, 4*, 148-169. <https://doi.org/10.1177/1541204006286288>
- Pepler, D., & Craig, W. (2009). *Bullying, interventions, and the role of adults*. Retrieved from <https://www.education.com/reference/article/role-of-adults-in-preventing-bullying/>
- Rog, D.J., & Gutman, M. (1997). The Homeless Families Program: A summary of key findings. In S. Isaacs & J. Knickman (Eds.), *To improve health and health care 1997: The Robert Wood Johnson Foundation Anthology* (pp. 209–231). San Francisco, CA: Jossey-Bass Publishers.
- Salomonsen-Sautel, S., Van Leeuwen, J. M., Gilroy, C., Boyle, S., Malberg, D., & Hopfer, C. (2008). Correlates of substance use among homeless youths in eight cities. *The American Journal on Addictions, 17*, 224-234.
<https://doi.org/10.1080/10550490802019964>
- Schneider, S. K., O'donnell, L., Stueve, A., & Coulter, R. W. (2012). Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health, 102*, 171-177.

<https://doi.org/10.2105/AJPH.2011.300308>

Sharp, S., & Smith, P. K. (1991). Bullying in UK schools: The DES Sheffield bullying project. *Early Child Development and Care*, 77, 47-55.

Slonje, R., & Smith, P. K. (2008). Cyberbullying: Another main type of bullying?. *Scandinavian Journal of Psychology*, 49, 147-154.

<https://doi.org/10.1111/j.1467-9450.2007.00611.x>

Smith, P.K. (2012) Cyberbullying and cyber aggression. S.R. Jimerson, M.J. Mayer, M.J. Furlong (Eds.), *Handbook of school violence and school safety: International research and practice* (2nd ed.), (pp. 93-103). New York, NY: Routledge.

Smith, B. H., & Low, S. (2013). The role of social-emotional learning in bullying prevention efforts. *Theory Into Practice*, 52, 280-287.

<https://doi.org/10.1080/00405841.2013.829731>

Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of child Psychology and Psychiatry*, 49, 376-385.

<https://doi.org/10.1111/j.1469-7610.2007.01846.x>

Smith, P. K., & Myron-Wilson, R. (1998). Parenting and school bullying. *Clinical Child Psychology and Psychiatry*, 3, 405-417.

<https://doi.org/10.1177/1359104598033006>

Stadler, C., Feifel, J., Rohrmann, S., Vermeiren, R., & Poustka, F. (2010). Peer-victimization and mental health problems in adolescents: Are parental and

- school support protective?. *Child Psychiatry & Human Development*, *41*, 371-386. <https://doi.org/10.1007/s10578-010-0174-5>
- Sticca, F., & Perren, S. (2013). Is cyberbullying worse than traditional bullying? Examining the differential roles of medium, publicity, and anonymity for the perceived severity of bullying. *Journal of Youth and Adolescence*, *42*, 739–750. <https://doi.org/10.1007/s10964-012-9867-3>
- Swearer, S. M., & Espelage, D. L. (2011). Expanding the social-ecological framework of bullying among youth. In D. L. Espelage, & S. M. Swearer (Eds.), *Bullying in North American schools (2nd ed.)* (pp. 3-10). New York, NY: Taylor & Francis.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th. ed.). Boston, MA: Pearson.
- Tataryn, D. J., Wood, J. M., & Gorsuch, R. L. (1999). Setting the value of k in promax: A Monte Carlo study. *Educational and Psychological Measurement*, *59*, 384-391. <https://doi.org/10.1177/00131649921969938>
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, *26*, 277-287. <https://doi.org/10.1016/j.chb.2009.11.014>
- Unger, J. B., Kipke, M. D., Simon, T. R., Johnson, C. J., Montgomery, S. B., & Iverson, E. (1998). Stress, coping, and social support among homeless youth. *Journal of Adolescent Research*, *13*, 134-157.
- Unnever, J. D., & Cornell, D. G. (2003). The culture of bullying in middle school.

- Journal of School Violence*, 2, 5-27. https://doi.org/10.1300/J202v02n02_02
- U.S Department of Education, National Center for Education Statistics (2015). *Student reports of bullying and cyber-bullying: Results from the 2013 School Crime Supplement to the National Crime Victimization Survey*. Retrieved from <https://nces.ed.gov/pubs2015/2015056.pdf>
- U.S. Department of Education, National Center for Homeless Education. (2016). *Federal data summary: School years 2012-13 to 2014-15* (Publication No. ED-ESE-14-C-0131). Retrieved from <https://nche.ed.gov/downloads/data-comp-1213-1415.pdf>
- Van der Wal, M. F., De Wit, C. A., & Hirasing, R. A. (2003). Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics*, 111, 1312-1317.
- Velicer, W. F. (1976). Determining the number of components from the matrix of partial correlations. *Psychometrika*, 41, 321-327.
- Votta, E., & Manion, I. (2004). Suicide, high-risk behaviors, and coping style in homeless adolescent males' adjustment. *Journal of Adolescent Health*, 34, 237-243. <https://doi.org/10.1016/j.jadohealth.2003.06.002>
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health*, 45, 368-375. <https://doi.org/10.1016/j.jadohealth.2009.03.021>
- Wenzel, S. L., Holloway, I., Golinelli, D., Ewing, B., Bowman, R., & Tucker, J.

- S. (2012). Social networks of homeless youth in emerging adulthood. *Journal of Youth and Adolescence*, *41*, 561–571. <https://doi.org/10.1007/s10964-011-9709-8>
- Whitbeck, L. B., & Hoyt, D. R. (1999). *Nowhere to grow: Homeless and runaway adolescents and their families*. Hawthorne, NY: Aldine de Gruyter.
- Ybarra, M. L., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry*, *45*, 1308-1316. <https://doi.org/10.1111/j.1469-7610.2004.00328.x>
- Yeung, R., & Leadbeater, B. (2010). Adults make a difference: The protective effects of parent and teacher emotional support on emotional and behavioral problems of peer-victimized adolescents. *Journal of Community Psychology*, *38*, 80-98. <https://doi.org/10.1002/jcop.20353>
- Zerger, S., Strehlow, A. J., & Gundlapalli, A. V. (2008). Homeless young adults and behavioral health: An overview. *American Behavioral Scientist*, *51*, 824-841. <https://doi.org/10.1177/0002764207311990>

Appendix

2015 DELAWARE YOUTH RISK BEHAVIOR SURVEY QUESTIONS ANALYZED

Demographics

Question 2: How old are you?

Question 3: What is your sex?

Question 4: In what grade are you?

Question 5: Are you Hispanic or Latino?

Question 6: What is your race? (Select one or more responses.)

Question 13: Are either of your parents or other adults in your family serving on active duty in the military?

Question 14: Have any of your family members been incarcerated (in jail or prison) in the past year? (Mark all that apply.)

Question 94: Which of the following best describes you?

Housing Status

Question 12: Where do you typically sleep at night?

Bullying

Question 39: During the past 12 months, have you ever been bullied on school property?

Question 40: During the past 12 months, have you ever been electronically bullied? (Count being bullied through email, chat rooms, instant messaging, websites, or texting.)

Suicidality

Question 45: During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?

Question 46: During the past 12 months, did you ever seriously consider attempting suicide?

Question 47: During the past 12 months, did you make a plan about how you would attempt suicide?

Question 48: During the past 12 months, how many times did you actually attempt suicide?

Question 49: If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?

Parent Support

Question 140: How often do you get along well with your parent(s)?

Question 141: How often do your parent(s) spend time with you doing something fun?

Question 142: My parent(s) show me they are proud of me.

Question 143: My parent(s) take an interest in me.

Question 144: My parent(s) listen to me when I talk to them.

Question 145: I can count on my parent(s) to be there when I need them.

Question 146: My parent(s) and I talk about what really matters.

Question 147: I am comfortable sharing my thoughts and feelings with my parent(s).