Mississippi State University
Scholars Junction

Theses and Dissertations | Theses and Dissertations

1-1-2018

Making a Decision to Retreat, Relate, or Retaliate: An Examination of Theoretical Predictors of Behavioral Responses to Bullying in a High School Setting

Megan Suzanne Stubbs-Richardson

Follow this and additional works at: https://scholarsjunction.msstate.edu/td

Recommended Citation
Stubbs-Richardson, Megan Suzanne, "Making a Decision to Retreat, Relate, or Retaliate: An Examination of Theoretical Predictors of Behavioral Responses to Bullying in a High School Setting" (2018). *Theses and Dissertations*. 2993.
https://scholarsjunction.msstate.edu/td/2993

This Dissertation - Open Access is brought to you for free and open access by the Theses and Dissertations at Scholars Junction. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Scholars Junction. For more information, please contact scholcomm@msstate.libanswers.com.

www.manaraa.com

Making a decision to retreat, relate, or retaliate: An examination of theoretical predictors of behavioral responses to bullying in a high school setting

By

Megan Suzanne Stubbs Richardson

A Dissertation
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in Sociology
in the Department of Sociology

Mississippi State, Mississippi

December 2018

www.manaraa.com

Copyright by

Megan Suzanne Stubbs Richardson

2018

www.manaraa.com

Making a decision to retreat, relate, or retaliate: An examination of theoretical predictors of behavioral responses to bullying in a high school setting

By

Megan Suzanne Stubbs Richardson

Approved:

_____

David C. May
(Major Professor)

_____

Raymond Edward Barranco
(Committee Member)

_____

Stacy H. Haynes
(Committee Member)

_____

Nicole E. Rader
(Committee Member)

_____

H. Colleen Sinclair
(Committee Member)

_____

Robert L. Boyd
(Graduate Coordinator)

_____

Rick Travis
Dean
College of Arts & Sciences

www.manaraa.com

Name: Megan Suzanne Stubbs Richardson

Date of Degree: December 14, 2018

Institution: Mississippi State University

Major Field: Sociology

Major Professor: David C. May

Title of Study: Making a decision to retreat, relate, or retaliate: An examination of theoretical predictors of behavioral responses to bullying in a high school setting

Pages in Study 237

Candidate for Degree of Doctor of Philosophy

The purpose of this dissertation is to extend General Strain Theory (GST) to examine prosocial, asocial, and antisocial behavior in response to bullying. In GST, Agnew (1992; 2001; 2013) asserted that negative emotions can lead to criminal or aggressive coping but there are a number of factors that increase or decrease the propensity to respond aggressively (Agnew, 1992; Richman & Leary, 2009). In this dissertation, I examine whether and how rejection (operationalized as bullying victimization) is associated with aggressive responding as opposed to prosocial (e.g., befriending others) or asocial (e.g., avoiding people and social events) responding. This dissertation consists of three studies testing theoretical variables of bullying victimization as well as behavioral responses to four types of bullying: physical, verbal, relational, and cyber. Study 1 of this dissertation examines risk and protective factors for types of bullying victimization. Study 2 applies GST to test the effect of social support, or the availability of alternative relationships (i.e., having others to count on or turn to for social support), on responses to four types of bullying. Study 3 tests the effect of power dynamics on responses to physical and relational bullying. In conducting this research, I

www.manaraa.com

hope to: 1) integrate interdisciplinary bodies of literature to examine risk and protective factors of bullying victimization and behavioral responses to bullying and 2) improve understanding of how these experiences are affected by the power dynamics involved in bullying. Overall, the results of this dissertation suggest that types of negative emotions and behavioral outcomes vary by type of bullying victimization. Cyber bullying was found to have more negative consequences than any other form of bullying. Across all four forms of bullying, social support was found to be associated with an increased likelihood of youth engaging in prosocial behavior. Implicit power, or the perception that one's bully has a high social standing at school, significantly influenced responses based on the type of bullying. However, even when controlling for power dynamics, social support was still associated with increased prosocial behavior in response to bullying victimization. Theory and policy implications are discussed.

www.manaraa.com

DEDICATION

This dissertation is dedicated to my daughter, Mila Rose Richardson.

www.manaraa.com

ACKNOWLEDGEMENTS

I wish to thank my major professor, Dr. David May for his guidance and mentorship throughout my time in this program as well as throughout this dissertation process. I also would like to express gratitude for my committee members: Drs. Stacy Haynes, Nicole Rader, Raymond Barranco, and H. Colleen Sinclair. All members of my committee have substantially improved my scholarship over the years. I cannot thank my chair and committee members enough for their undue efforts in providing me with invaluable mentorship. I will forever be grateful.

I also wish to express gratitude for my family and friends. First, I have an amazing, supportive husband, Josh Richardson who kept me encouraged and motivated to "phinish" throughout this process. Second, the Stubbs and Richardson family have all been strong sources of social support throughout the years. In short, I could not have pulled this off without my family's love, especially that of my loving husband, Josh and "dog-taur," Mimmy Sue. Third, to my friends, including family, mentors and colleagues, thank you for all of the good laughs and mini adventures in between the strains of this process. I could not have achieved this huge milestone without the positive influence that all of you have offered to my life.

www.manaraa.com

TABLE OF CONTENTS

DEDICATION ii

ACKNOWLEDGEMENTS iii

LIST OF TABLES ix

CHAPTER

I. INTRODUCTION 1

Statement of the problem 1
What is the nature of bullying? 2
Study 1 5
Study 2 6
Study 3 7

II. A REVIEW OF THEORETICAL PREDICTORS OF BULLYING VICTIMIZATION AND BEHAVIORAL RESPONSES TO BULLYING RELATED STRAINS 9

Statement of the problem 9
Who is most likely to be victimized? 13
Age 13
Gender 16
Race 17
Sexual orientation 18
Individual risk factors 19
Peer rejection, alienation, and prior victimization 19
Low self-control 20
Low self-esteem 21
Depression and anxiety 21
Social competence 21
Behavioral factors 22
School risk factors 22
Family risk factors 24
Contextual risk factors 25
What are the effects of bullying victimization? 25
How do victims respond to bullying? 27

www.manaraa.com

Why do people bully?....28
What works to reduce bullying?....30
Meta-analyses on bullying prevention programs....30
Effective Crime Prevention Solutions....33
Positive action....34
Second step: A violence prevention curriculum for elementary school (2002 edition)....35
Steps to respect....37
Stop school bullying (Greece)....38
The Snap under 12 outreach program....39
School-wide positive behavioral interventions and supports (SWPBIS)....41
Programs rated as promising....42
Programs rated as ineffective....44
Theoretical perspectives....44
General strain theory....45
Forerunners of general strain theory....47
Extensions of general strain theory....51
Situational tests of general strain theory....55
General strain theory and bullying....62
Situating general strain theory in positive criminology....72
Research questions and hypotheses....73
Study 1 research questions....73
Study 1 research hypotheses....73
Study 2 research questions....74
Study 2 hypotheses....75
Study 3 research questions....75
Study 3 hypotheses....75

III. DESCRIPTIVES OF PREVALENCE AND PREDICTORS OF BULLYING VICTIMIZATION....77

Statement of the problem....77
Literature review....78
Prevalence of types of bullying....78
Consequences of Bullying victimization....80
Risk and protective factors of bullying victimization....81
Who is most at risk?....81
What are individual-level risk factors?....82
What are school-level risk factors?....83
Theoretical perspectives....84
The current study....86
Study 1 research questions....87
Study 1 hypotheses....87
Methods....88
The sample....88

www.manaraa.com

Survey design 89
Dependent variables 90
Independent variables 91
Analytical approach 97
Results 97
Descriptive analyses 97
Regression analyses 99
Predictors of physical bullying victimization 100
Predictors of verbal bullying victimization 101
Predictors of relational bullying victimization 102
Predictors of cyber bullying victimization 103
Predictors of bullying victimization 104
Discussion 105
Implications of predictors of physical bullying victimization 106
Implications of predictors of verbal bullying victimization 106
Implications of predictors of relational bullying victimization 107
Implications of predictors of cyber bullying victimization 108
Limitations and future research 109
Contributions 110

IV. RESPONSES TO BULLYING AMONG HIGH SCHOOL STUDENTS THROUGH THE LENS OF GENERAL STRAIN THEORY 111

Statement of the problem 111
Literature review 113
Definitions, statistics, and consequences of bullying 113
Theoretical perspectives 116
Bullying and general strain theory 116
Proposed extensions of general strain theory 117
Prosocial behavior 118
Situation-based negative emotions 119
The availability of alternative relationships 119
The current study 120
Study 2 research questions 120
Study 2 hypotheses 120
Methods 121
The sample 121
Survey Design 122
Dependent variables 122
Independent variables 124
Analytical approach 126
Results 126
Descriptive analyses 126
Regression analyses 129
Responses to physical bullying victimization 129
Responses to verbal bullying victimization 130

www.manaraa.com

Responses to relational bullying victimization....135
Responses to cyber bullying victimization....135
Discussion....136
Implications of responses to physical bullying findings....138
Implications of responses to verbal bullying findings....139
Implications of responses to relational bullying findings....140
Implications of responses to cyber bullying findings....141
Limitations and future research....142
Contributions....143

V. BUT WHAT ABOUT POWER RELATIONS? A CRITICAL GENERAL STRAIN THEORY EXAMINATION OF BEHAVIORAL RESPONSES TO BULLYING....144

Statement of the problem....144
Bullying, victimization, power dynamics, and responses to provocation....145
Literature review....151
The effects of power on bullying....151
Explicit and implicit power in bullying and responses to bullying....152
Theoretical perspectives....154
General strain theory....155
Status hierarchies, power dynamics, and bullying....155
The current study....158
Study 3 research questions....158
Study 3 hypotheses....159
Methods....159
The sample....159
Survey design....160
Dependent variables....162
Independent variables....164
Analytical approach....171
Results....171
Descriptive analyses....171
Regression analyses....173
Responses to physical bullying victimization....173
Responses to relational bullying victimization....173
Discussion....176
Implications of responses to physical bullying victimization....176
Implications of responses to relational bullying victimization....177
Limitations and future research....178
Contributions....179

VI. DISCUSSION AND FUTURE DIRECTIONS: TYING IT ALL TOGETHER....181

www.manaraa.com

Purpose of this dissertation....181
Summary of research findings: Similarities....181
Summary of research findings: Differences and contradictions....184
Limitations and future directions....188
Unique contributions and theoretical implications....190
Study 1....191
Study 2....193
Study 3....195
So, what do we know?....196
Theoretical implications....201
How can this research improve anti-bullying prevention programs?....201
Summary of policy recommendations....205

REFERENCES 208

APPENDIX

A. OVERVIEW OF SURVEY METHODOLOGY....235

www.manaraa.com

LIST OF TABLES

3.1 Scale reliabilities (Cronbach's Alpha) independent variables for responses to bullying....93

3.2 Scale reliabilities (Cronbach's Alpha) independent variables for responses to bullying types....96

3.3 Descriptive statistics for dependent variables....97

3.4 Descriptive statistics for experienced, vicarious, and anticipated strain....98

3.5 Descriptive statistics for perpetration, hostility, social support, digital/electronic media use, and demographics....99

3.6 Logistic regression models predicting physical bullying victimization....100

3.7 Logistic regression models predicting verbal bullying victimization....101

3.8 Logistic regression models predicting relational bullying victimization....102

3.9 Logistic regression models predicting cyber bullying victimization....103

3.10 Summary of significant findings from Study 1....105

4.1 Scale reliabilities (Cronbach's Alpha) for responses to bullying....124

4.2 Scale reliabilities (Chronbach's Alpha) independent variables for responses to bullying types....125

4.3 Descriptive statistics for dependent variables for all types of bullying....127

4.4 Descriptive statistics for independent variables for all types of bullying....128

4.5 OLS regression models explaining behavioral responding to physical bullying victimization....131

4.6 OLS regression models explaining behavioral responding to verbal bullying victimization....132

www.manaraa.com

4.7 OLS regression models explaining behavioral responding to relational bullying victimization 133

4.8 OLS regression models explaining behavioral responding to cyber bullying victimization 134

4.9 Summary of significant findings from Study 2 138

4.10 Scale reliabilities (Cronbach's Alpha) for behavioral responses to bullying 163

4.11 Scale reliabilities (Cronbach's Alpha) for negative emotions, social support, and perception of future alternative relationships 165

4.12 Scale reliabilities (Cronbach's Alpha) for implicit and explicit power relationship dynamics 170

4.13 Descriptive statistics for dependent variables for physical and relational bullying 171

4.14 Descriptive statistics for independent variables for physical and relational bullying 172

4.15 OLS regression models predicting behavioral responding to physical and relational bullying victimization 175

4.16 Summary of significant findings in study 3 176

A.1 Definitions of types of bullying provided in survey of students 236

A.2 Definitions of types of behavioral responses to bullying provided in survey of students 237

www.manaraa.com

CHAPTER I

INTRODUCTION

Statement of the problem

Bullying is the act of engaging in intentional and repeated harm-doing towards another when the bully has greater power than the victim (Olweus, 1993). According to the School Safety Supplement of the National Crime Victimization Survey (NCVS), as many as 21% of high school students reported experiencing traditional (offline) bullying and 8% reported experiencing cyber bullying within the last six months (Zhang, Musu-Gillette, & Oudekerk, 2016). In a meta-analysis conducted by Modecki, Minchin, Harbaugh, Guerra, and Runions (2014), the average prevalence of traditional bullying was 36% while the prevalence of cyberbullying was about 15% for youth between the ages of 12 and 18 years old.

Bullying can cause psychological harm, depression, self-harm, and suicide ideation among its victims (Hay & Meldrum, 2010; Hay, Meldrum, & Mann, 2010). Victims of bullying also experience maladjustment problems, including fighting, antisocial behavior, delinquency, substance use, poor relationship with peers, increased loneliness, and low self-esteem (Cullen, Unnever, Hartman, Turner, & Agnew, 2008; Juvonen, Graham, & Schuster, 2003; Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001). Bullying may also be associated with school shootings (Leary, Kowalski, Smith, & Phillips, 2003; Vossektuil, Fein, Reddy, Borum, & Modzeleski, 2002); three in

www.manaraa.com

four school shooters reported that they had felt persecuted, bullied, or attacked by others at their school (Vossektuil, Fein, Reddy, Borum, & Modzeleski, 2002).

The effects of bullying victimization are often immediate, such as when an individual experiences negative emotions like feeling sad, angry, upset, or embarrassed (Moon, Morash, & McCluskey, 2012). The victim of bullying might also choose to lash out, causing immediate harm to others (Reijntjes, Thomaes, Bushman, Boelen, de Castro, & Telch, 2010) or to oneself (Hay & Meldrum, 2010). Additionally, the effects of having been a victim of bullying or a perpetrator of bullying in the past may also have long-term consequences. Over the life course, victims of bullying experience higher levels of depression than those not victimized by bullying (Ttofi, Farrington, Lösel, & Loeber, 2011). Bullying victimization in adolescence is also associated with increased risks for poor physical and mental health and financial and relationship difficulties in adulthood (Wolke, Copeland, Angold, & Costello, 2013). Bullying also has negative effects on the perpetrators over the life course. Bullies are more likely to experience substance use, criminal offending, and increases in periods of unemployment in adulthood (Farrington, Ttofi, & Lösel, 2011).

What is the nature of bullying?

Bullying is different from everyday aggression in that it is intended to harm social relations (Pepler, Craig, Connolly, Yulie, McMaster, & Jiang, 2006; Pepler & Craig, 2011; Veenstra, Lindenberg, Zijlstra, De Winter, Verhulst, & Ormel, 2007; Rodkin, Espelage, & Hanish, 2015). Bullying is intended to cause harm to social status and social belongingness among peers (Baumeister & Leary, 1995; Rodkin, Espelage, & Hanish, 2015) and cause repeated harm over time (Olweus, 1991; 1993; Olweus & Limber,

www.manaraa.com

2010). Bullying is also dynamic in nature; power differentials between bullies and their victims can change in and across relationships over time. Changes in power differentials alter relationship dynamics in school settings between who is a bully, who is a victim, and who is a bully-victim (Rodkin, Espelage, & Hanish, 2015). Bully-victims are individuals who engage in bullying perpetration while experiencing their own bullying victimization.

In addition to the power dynamics tied to bullying, there are also important distinctions among types of bullying (Wang, Iannotti, & Nansel, 2009). For example, physical bullying involves hitting, kicking, or shoving other students. Verbal bullying includes threatening harm or calling others mean names. Relational bullying entails spreading rumors or gossip and excluding others from groups. Cyber bullying is intentionally harming another through electronic means, typically through verbal or relational forms of bullying.

Physical and verbal bullying are said to be direct because they occur face-to-face (Card, Stucky, Sawalani, & Little, 2006). Relational and cyber bullying, on the other hand, are indirect, covert forms of aggression (Wang, Iannotti, & Nansel, 2009). With relational bullying, the attacker is not always known to the victim (Card, Stucky, Sawalani, & Little, 2006). Cyber bullying is more covert and involves the intended and repeated harm of another through electronic means, such as through social media or text messages (Kowalski, Giumetti, Schroeder, & Lattanner, 2014). The most often used source of cyber bullying is Facebook (Felmlee & Faris, 2016). However, as technology changes, so will the media used to engage in cyber bullying.

www.manaraa.com

Recent research has found relational and cyber bullying to be more hurtful than other forms of bullying (Mehari & Farrell, 2018) because the effects of relational and cyber bullying linger and are not easily removable. Van der Wal, de Wit, and Hirasing (2003) also found depression levels to be higher for victims of indirect bullying than for victims of direct forms of bullying. Once information is spread, or groups decide collectively to exclude a particular person, it is difficult for the victim of these bullying types to engage in conflict resolution (Rodkin, Espelage, & Hanish, 2015). Research also suggests that relational and cyber bullying are more closely related than once believed because cyber bullying is essentially relational bullying that occurs within an electronic or multi-media context (Mehari & Farrell, 2018; Modecki, Minchin, Harbaugh, Guerra, & Runions, 2014). Therefore, when investigating these four types of bullying, it is important to make distinctions regarding the nature of the incident and the context in which it occurs.

The three studies that comprise this dissertation seek to test General Strain Theory (GST) by asking under what conditions rejection triggers aggression as opposed to prosocial or asocial behavior? (Agnew, 1992; Richman & Leary, 2009). GST was based on classical strain theory (Merton, 1938) and expanded by Agnew (1992) to better explain how one source of strain, negative relationships with others, may increase the odds of criminal or antisocial coping.

In each study, I integrate concepts across multiple disciplines, including sociology, criminology, and psychology. Study 1 examines risk and protective factors that may increase or decrease the odds of experiencing certain types of bullying victimization compared to other types. Study 2 integrates social support (Cullen, 1994),

www.manaraa.com

or the availability of alternative relationships (Rusbult, 1980), from the sociological, criminological, and psychological literatures to examine the effect of social support on behavioral responses to types of bullying. Study 3 combines the concepts of implicit and explicit power from sociology and psychology to explain the power dynamics involved in relational and physical bullying (Magee & Galinsky, 2008; Blau, 1964; Vaillancourt, Hymel, & McDougall, 2003). While study 1 seeks to explain what factors are associated with a greater odds of experiencing certain types of bullying victimization, studies 2 and 3 seek to better understand whether and how victims of bullying respond differentially to strain based on the type of bullying experienced. Below, research objectives and findings per study are discussed. Policy and implications of these findings are discussed in subsequent chapters and particularly in the discussion chapter of this dissertation.

Study 1

Study 1 aimed to examine risk and protective factors of four types of bullying victimization – physical, verbal, relational, and cyber bullying – while testing vicarious and anticipated strains with bullying victimization as an outcome variable in GST. In doing so, this study examined sociodemographic characteristics, along with risk and protective factors, for each type of bullying victimization. These risk and protective factors are discussed in detail in Chapter II and IV.

The results from Study 1 support Agnew's (2006) proposal that experienced, vicarious, and anticipated strains are correlated with criminal behavior and victimization (Zavala & Spohn, 2013). Experienced strains (as measured in this study) included how socially alienated youth felt over time. Vicarious strains are operationalized as youth witnessing their peers' experiences with the four types of bullying victimization.

www.manaraa.com

Anticipated strains were measured as fearing an attack on or away from school property. While this study did not find that experienced strain in the form of social alienation to explained bullying victimization, vicarious strain (peer victimization) did explain an increased likelihood of youth becoming a victim of that same type of bullying across all four models of bullying victimization. Those who had previously engaged in bullying (across all types of bullying) were more likely to experience that same type of bullying victimization. Anticipated strain (fear of attack) increased the likelihood that youth would experience verbal and cyber bullying victimization. Adult support was found to increase the likelihood of youth experiencing verbal bullying victimization but reduce the likelihood of youth experiencing relational bullying. Peer support was found to increase the odds that youth would become victims of both relational and cyber bullying.

Study 2

Study 2 aims to extend GST by examining situation-based negative emotions and behavioral responses to physical, verbal, relational, and cyber bullying. Based on GST, it was expected that anger may be more likely to be related to antisocial coping. Low self-esteem was expected to be associated with asocial behavior. Further, it was expected that social support would be associated with reductions in antisocial behavior and asocial behavior with increases in prosocial behavior (Cullen, 1994; Grapin, Sulkowski, & Lazarus, 2016) across all four forms of bullying. However, contrary to expectations, the results from this study suggest that sadness was associated with antisocial behavior and anger with asocial responding for physical bullying. Thus, this study provides support that situation based negative emotions should be incorporated into tests of GST. Study 2 also found that anger explained an increased likelihood of youth responding antisocially

www.manaraa.com

and asocially to verbal bullying. Further, low self-esteem was associated with an increased likelihood of responding asocially to verbal bullying. For relational bullying, lower self-esteem was correlated with an increased likelihood of responding asocially and prosocially. Increased anger led to an increased likelihood of responding antisocially and a decreased likelihood of responding prosocially to relational bullying. Lower self-esteem explained an increased likelihood of asocial and prosocial responding to cyber bullying. Youth experiencing anger in response to cyber bullying were significantly less likely to respond prosocially. Interestingly, across all four forms of bullying, social support had a significant relationship with prosocial behavior – youths who felt they had social support at school were more likely to respond prosocially to all forms of bullying victimization. Therefore, this research highlights the strengths of examining both situation-based negative emotions and social support in tests of GST, particularly for bullying victimization.

Study 3

Study 3 considers the role of power in responding to one form of direct bullying and one form of indirect bullying. Specifically, this study considers explicit and implicit relational power dynamics and how these factors differentially affect the likelihood of youth responding antisocially, asocially, or prosocially in response to physical and relational bullying. Explicit power is held by the bully when s/he is perceived as having physical strength or control over others at school. Implicit power is held by a bully when s/he is perceived as having a higher social status or being more well-liked at school relative to others. Generally, when victims perceive high power of their bully, victims of bullying are more likely to respond asocially (Guinote, 2017). However, when victims

www.manaraa.com

perceive the bully as holding explicit power over them, physical bullying is more likely to result while victim perceptions of the implicit power of the bully better explain victimization by relational bullying (Vaillancourt, Hymel, & McDougall, 2003). Further, social support or the availability of alternative relationships should decrease the power of the bully perpetrator (Blau, 1964) and thus be associated with increased prosocial behavior among the victim.

The results from Study 3 suggest that perceptions that the bully had implicit power over the victim explained an increased likelihood of asocial responding to physical bullying; however, when the bully had implicit power over the victim in relational bullying situations, the victim was more likely to respond antisocially or prosocially, but not asocially. Explicit power was not significant in either of the two models. Social support again explained an increased likelihood of responding prosocially to the two forms of bullying victimization while controlling for power dynamics in the models.

www.manaraa.com

CHAPTER II

A REVIEW OF THEORETICAL PREDICTORS OF BULLYING VICTIMIZATION AND BEHAVIORAL RESPONSES TO BULLYING RELATED STRAINS

Statement of the problem

This chapter provides an overview of extant literature on bullying, bullying victimization, responses to bullying victimization, and what works to reduce bullying. Bullying is a problem in all societies. However, some evidence suggests that the rates of bullying in the U.S. are among the highest in the world (Duncan, 1999; Hoover, Oliver, & Hazler, 1992). Specifically, Craig et al. (2009) examined bullying estimates among a sample of 40 countries of adolescents aged 11, 13 and 15 years old, finding rates of physical, verbal, and relational bullying to range from 9% in Sweden to 45% in Lithuania, with the U.S. at approximately 31% (22% for boys, 17% for girls). Recent estimates from a 2016 U.S. national survey suggested that 21% of high school students experienced traditional bullying victimization and 8% experienced cyber bullying within a six-month period of time (Zhang, Musu-Gillette, & Oudekerk, 2016).

Bullying (physical, verbal, relational), however, has decreased over time, with 29% of youth aged 12 to 18 reporting bullying victimization occurring at least once per week from 1999 to 2000 compared to only 12% from 2015 to 2016 (Musu-Gillette, Zhang, Wang, Zhang, Kemp, Diliberti, & Oudekerk, 2018). The decreases in traditional

www.manaraa.com

bullying could be due to improved anti-bullying program implementations over time, and in part, due to the fact that bullying behaviors may be shifting more towards an online context. Between 2015 and 2016, 12% of youth also reported that they had been victimized by cyberbullying at least once a week at school or away from school (Musu-Gillette et al., 2018). Wang, Iannotti, & Nansel (2009) examined the prevalence of bullying victimization by type among a nationally representative sample of school youth (6^{th}-10^{th} grade) and found 21% of youth had been victimized by physical bullying, 54% by verbal bullying, 51% by relational/social bullying, and 14% by cyber or electronic bullying at least once in the past 2 months.

Most instances of bullying occur within school settings (Musu-Gillette et al., 2018) and the prevalence of bullying victimization appears to be higher in middle schools compared to high schools (Musu-Gillette et al., 2018). As many as 22% of middle school students reported being victimized by bullying once per week compared to 15% of high school students (Musu-Gillette et al., 2018). One study found that among 558 (6^{th}-8^{th} grade) students at a large Midwestern middle school, 81% experienced peer victimization (Bosworth, Espelage, & Simon, 1999). Among another sample of 4,263 middle school students from the school district of Maryland, 45% of middle school students reported experiencing bullying victimization at least once per year, with 14% reporting experiencing once or twice per year, and 31% three or more times per year (Haynie et al. 2001).

There is little consensus on whether bullying in the U.S. is more common in rural or urban areas (Wynne & Joo, 2011). Although some studies show that rates of bullying are higher in rural areas (Bradshaw, Sawyer, & O'Brennan, 2009; Dulmus, Theriot,

www.manaraa.com

Sowers, & Blackburn, 2004; Klein & Cornell, 2010; Wolke, Woods, Stanford, & Schulz, 2001), other studies show bullying prevalence in rural areas to be lower than urban areas (Salmon et al., 2018; Wynne & Joo, 2011). For instance, Smokowski, Cotter, Robertson, and Guo (2013) examined bullying victimization among a sample of 3,610 racially diverse middle school students from rural areas where 23% reported experiencing bullying victimization in the past twelve months. In a Mississippi sample of 1,126 middle school students (7^{th}-8^{th} grade) from five school districts, 24% reported being involved as a victim or perpetrator of bullying (Seals & Young, 2003). As many as 13% of youth reported experiencing bullying victimization one or more times per week, while 10% reported bullying perpetration and 1% reported both bullying perpetration and victimization occurring one or more times per week. Further, approximately 45% of 7^{th} and 42% of 8^{th} graders perceived bullying to occur often at their school (Seals & Young, 2003).

When examining types of bullying, Salmon et al. (2018) found youth living in rural areas experienced increased odds of being bullied by taunting or ridicule but reported a decreased odds of experiencing threats or injuries with a weapon when compared with youth living in urban areas. Further, youth in rural areas reported decreased odds of bullying related to one's race or culture. Youth in rural areas were also less likely than youth in urban areas to be asked for personal information over the Internet (Salmon, et al., 2018).

While high school estimates of bullying victimization are lower than middle school estimates, regardless of urban or rural location, the types and outcomes of bullying victimization may differ for high school students (Schneider, O'Donnell, Stueve, &

www.manaraa.com

Coultner, 2012; Williams & Guerra, 2007, Kowalski & Limber, 2007). For example, although cyberbullying generally occurs less frequently than traditional bullying (Williams & Guerra, 2007; Wang, Iannotti, & Nansel, 2009), between 9% and 40% of high school students report being victims of cyberbullying (Tokunaga, 2010; Mitchell, Finkelhor, Wolak, Ybarra, & Turner, 2011; David-Ferdon & Hertz, 2009). Further, one-third to three-quarters of students (ages 10 to 17) bullied online are also bullied offline (Juvonen & Gross, 2008; Twyman, Saylor, Taylor, & Comeaux, 2010; Ybarra, Diener-West, Leaf, 2007). This overlap in online and offline bullying translates to samples of middle and high school students (Hase, Goldberg, Smith, Stuck, & Campain, 2015).

Among a sample of 2,342 high school students (9^{th}-12^{th} grade) in six New York school districts, Klomek, Marrocco, Kleinman, Schonfeld, & Gould (2007) found 9% of high school students to report frequent bullying victimization. Schneider, O'Donnell, Stueve, & Coulter (2012) examined traditional and cyber bullying victimization among a sample of 20,000 high school students (9^{th}–12^{th} grade, from 22 high schools) using the Metro West Adolescent Survey to identify the prevalence, patterns, and correlates of bullying. Schneider et al. (2012) found that within the past twelve months, 26% of youth reported bullying victimization (relational, verbal, physical combined) and 16% reported cyber bullying victimization. This study also found substantial overlap between traditional and cyber bullying victimization; 60% of cyberbullying victims also reported experiencing bullying and 36% of bullying victims also reported being a victim of cyber bullying. Further, youth who experience both traditional and cyberbullying are four times more likely to exhibit depressive symptoms and five times more likely to report suicide attempts than their counterparts who have not been bullied.

www.manaraa.com

Who is most likely to be victimized?

If there is a demographic group most at risk of bullying victimization, that group is non-white males in middle school (Batsche & Knoff, 1994; Fitzpatrick, 1999; Nolin & Davies, 1996; Wynne and Joo, 2011). However, gender and racial demographics have been found to vary according to the larger demographic composition, social norms of schools, and by the type of bullying. Gender and race differences in bullying victimization are affected by youth attitudes towards gender/race and associated scripts for ascribed behaviors. Racial and ethnic differences in bullying victimization are also affected by the larger demographic composition of the school, such that whichever racial/ethnic category makes up the majority in terms of numbers, youth of that race or ethnicity are less likely to be bullied. Thus, some researchers argue, beyond age (where victimization is widely acknowledged to occur most often in middle school), demographics have not typically been reliable predictors of bullying victimization when controlling for the structural composition of the samples (Wynne & Joo, 2011; Peguero, 2012; Swearer, Mebane, & Espelage, 2004). Age, race, and gender-related predictors of bullying victimization and their relationship to larger sample characteristics are detailed in sections to follow.

Age

Youth in middle school are most likely to be victims of bullying. Bullying tends to be more prevalent in childhood, peak in adolescence, and decline in later adolescence years (Nansel et al., 2001; Espelage & Horne, 2008; Pellegrini & Bartini, 2000; Smith, Madsen, & Moody, 1999; Hong & Espelage, 2012; Smokowski, Cotter, Robertson, & Guo, 2013). Hoffman, Phillips, Daigle, and Turner (2017) reported that one in five

www.manaraa.com

children aged 12 and under experienced bullying victimization, while 1 in 30 adolescents between ages 12 and 18 reported bullying victimization. These categories were followed by 1 in 50 youth who reported experiencing chronic bullying victimization throughout childhood and adolescence.

The age that bullying first occurs also has an effect on subsequent victimization experiences and outcomes as an adult (Wong, 2009). Bullying victimization that occurs before age 12 has been found to be significantly associated with running away from home, selling drugs, and engaging in violent- and property-related forms of delinquency (Wong, 2009). Hoffman and colleagues (2017) argue that bullying victimization may differentially impact youth at different developmental ages. The researchers argue that prior literature suggests that if bullying happens in childhood, young children may perceive that they cannot trust others for support and care and that there is little they can do to protect themselves. Young children may also feel hopeless because that they do not perceive that their future can be different from their past. For these reasons, the research team proposed that the life course trajectory of young children who are bullied may be different from young children who are not bullied. In this study, Hoffman et al. (2017) examined children younger than 12, adolescents only (ages 12-18), and both age categories together to assess whether the consequences of experiencing bullying victimization at each developmental phase resulted in different outcomes regarding how youth respond over the life course.

Hoffman et al. (2017) analyzed data from the National Longitudinal Study of Youth 1997 (NLSY97) cohort of 6,748 adults who were interviewed at ages 27 through 29. In doing so, Hoffman and colleagues (2017) found cumulative negative effects for

www.manaraa.com

childhood bullying victimization. Individuals who experienced bullying victimization as a child (defined as age 12 or younger) tended to have higher amounts of arrests, convictions, depression, substance use, and violence than did non-child victims. Childhood bullying victims were typically younger, male, more likely to have higher family home risks (i.e., negative physical environment, poor neighborhood, and poor parenting), be overweight, and have higher scores on delinquency than non-childhood bullying victims.

Studies also find that while risk of traditional bullying victimization, such as physical and verbal bullying, may decrease with age (Wang et al., 2009; Merrill & Hanson, 2016; Napoletano, Elgar, Saul, Dirks, & Craig, 2016; Salmon et al., 2018), risks for relational and cyber bullying victimization tend to increase with age (Orpinas, McNicholas, & Nahapetyan, 2015). Respondent's age is a protective factor when it comes to physical or hate-related verbal bullying (Wynne and Joo, 2011). Hate-related verbal bullying includes calling others mean names based on bias associated with social identities (e.g., gender, race, sexual orientation). However, older youth tend to engage in more gossip than younger youth (Low et al., 2010).

In contrast to previous findings regarding age as a risk factor for bullying and types of bullying, a recent study conducted by Salmon, Turner, Taillieu, Fortier, & Afifi (2018) showed that the odds of experiencing nine types of bullying victimization were higher among 8^{th} – 12^{th} grade students than 7^{th} grade students from Manitoba, Canada. Salmon and colleagues (2018) used data from a sample of 64,174 middle and high school students from the Youth Health Survey to compare frequencies across nine types of bullying by grade and gender. These nine types of bullying included the following: 1)

www.manaraa.com

physical, 2) verbal with weapon, 3) verbal taunting, 4) race or culture, 5) sexual orientation or gender identity, 6) body shape size or appearance, 7) cyberbullying, 8) seeking personal information over the Internet, and 9) feeling unsafe when in contact over the Internet. All nine types of bullying victimization were found to be higher in the 8th through 12th grade sample compared to the 7th grade sample of students. Thus, the type of bullying matters when estimating frequencies of bullying based on age.

Gender

Males are more likely than females to experience bullying victimization (Hong & Espelage, 2012). However, similar to age, the effect of gender depends on the type of bullying victimization being explained (Wang et al, 2009; Olweus, 1993; Salmon et al., 2018). For instance, several studies find boys are more likely to be victims of physical (Guerra, Williams, Sadek, 2011) and verbal bullying (Wang et al., 2009; Wynne & Joo, 2011) and girls are more likely to be victims of sexual (Pellegrini & Long, 2002; Shute, Owens, & Slee, 2008; Meyer, 2008) and relational bullying (Wang et al., 2009). Sexual bullying may include gender or sexual based harassment based on one's physical appearance or previous sexual behavior (Gruber & Fineran, 2007). Other studies have found no gender differences in relational aggression in terms of victimization or perpetration (Card, Stucky, Sawalani, & Little, 2008; Stubbs-Richardson, Sinclair, Goldberg, Ellithorpe, & Amadi, 2018). As a subtype of relational bullying, girls are more likely than boys to be involved in gossiping (as both the victim and perpetrator; Low et al., 2010). However, findings regarding gender as a predictor of bullying victimization are inconclusive when it comes to discriminatory harassment and cyber bullying

www.manaraa.com

(Swearer, 2008; Goldstein, Young, & Boyd, 2008; Card, Stucky, Sawalani, & Little, 2008; Salmon et al., 2008).

Nevertheless, Salmon et al. (2018) also found that gender affected bullying victimization. Boys reported the most common form of bullying victimization to be taunting or ridiculing another (34%) and the least common form being feeling unsafe when in contact with someone over the Internet (6%). Girls reported body shape, size, or appearance-related bullying to be the most common (47%) and being threatened or injured with a weapon being the least common (4%). When it comes to the odds of experiencing bullying victimization, however, girls reported greater odds of experiencing verbal taunting, comments about their body, appearance, or size, and comments about their sexual orientation or gender identity. Girls were also more likely to experience all forms of cyber victimization compared to boys while controlling for school grade and location (i.e., urban versus rural). Boys, on the other hand, had higher odds of experiencing physical threats and threats with a weapon. There were no gender differences for comments about race or culture.

Race

Findings regarding race, ethnicity, and bullying are largely inconclusive and scholars suggest these findings are better explained by the larger sociodemographic composition of schools (Vitoroulis & Vaillancourt, 2015). Some research suggests that racial and ethnic minorities tend to experience bullying victimization more often than whites (Barboza, Schiamberg, Oehmke, Korzeniewski, Post, & Heraux, 2009; Spriggs, Iannotti, Nansel, & Haynie, 2007; Vervoort, Scholte, & Oberbeck, 2010). Blacks were found to be more likely than whites and Hispanics to experience physical and hate-related

www.manaraa.com

victimization (Wynne & Joo, 2011). In contrast, other studies show being Hispanic/Latino or African American in a rural sample serves more of a protective factor when it comes to bullying victimization (Smokowski et al., 2013).

The connection between race and bullying is often complex and is influenced by the racial and ethnic composition of the classroom, school, and community (Espelage & Swearer, Napolitano, 2003; Juvonen, Nishina, & Graham, 2001). Peer victimization has been found to be more prevalent in ethnically heterogeneous classrooms (Vervoort et al., 2010). However, other studies show greater racial diversity to be associated with less bullying victimization for racial minorities (Juvonen, Nishina, & Graham, 2006). Further, racial minorities are at a decreased risk of experiencing bullying victimization when they are in the numerical majority of their school (Agirdag, Demanet, Van Houtte, & Van Avermaet, 2011; Vitoroulis, Brittain, & Vaillancourt, 2016). Thus, researchers conducting a meta-analysis concluded that race and ethnicity are often not strongly associated with bullying victimization (Vitoroulis & Vaillancourt, 2015). Immigrant status, language, and cultural barriers, on the other hand, are often significant predictors of bullying victimization (Mouttapa, Valente, Gallaher, tir, & Unger, 2004; Peguero, 2009; 2012; Qin, Way, & Rana, 2008). Thus, the racial and ethnic composition and contextual features of schools influence the relationship between whether racial and ethnic minorities will experience more bullying victimization than their counterparts (Peguero, 2012).

Sexual orientation

Youth who identify as lesbian, gay, bisexual, transgender or questioning (LGBTQ) are more likely than heterosexuals to experience bullying victimization in high

www.manaraa.com

school (Hong & Espelage, 2012; Kosciw, 2004; Rivers, 2001; Birkett, Espelage, & Koenig, 2009; Poteat, 2008; Schneider, O'Donnell, Stueve, & Coulter, 2012; Espelage, Aragon, Birkett, Koenig, 2008; Russell, Day, Loverno, & Toomey, 2016; Berlan, Corliss, Field, Goodman, & Austin, 2010). A national study shows that LGBTQ youth (ages 12-18) experience traditional bullying more frequently than heterosexual students (34% versus 19%) over the course of a year (Musu-Gillette, Zhang, Wang, Zhang, Kemp, Diliberti, & Oudekerk, 2017). When it comes to cyber bullying, 28% of LGBTQ youth (compared to 14% of their heterosexual counterparts) reported experiencing victimization over a period of one year. When adolescents are targeted for bullying based on their identity, such as sexual orientation, the outcomes are more devastating, including heightened risks of self-harm and suicide ideation (Mueller, James, Abrutyn, & Levin, 2015; Russell, Sinclair, Poteat, & Koening, 2012). When youth are victimized based on their social identity (i.e., sexual orientation), outcomes are often more consequential because many youths internalize that something is wrong with their core selves rather than there being something wrong with the actions of their bully (Mueller, James, Abrutyn, & Levin, 2015; Russell, Sinclair, Poteat, & Koening, 2012).

Individual risk factors

Peer rejection, alienation, and prior victimization

Youth who are socially alienated or chronically rejected are more likely than their counterparts to become victims of bullying (Cook, Williams, Guerra, Kim, & Sadek, 2010; Higgins, Piquero, & Piquero, 2011; Reijntjes, Thomaes, Bushman, Boelen, de Castro, & Telch, 2010). For instance, Wynne and Joo (2011) found that youth who felt rejected by peers at school were five times more likely to experience physical bullying

www.manaraa.com

and verbal hate-related victimization at school (Wynne & Joo, 2011). Across several individual, family, and school correlates of bullying victimization, the variable "often felt rejected at school" was found to be the most significant factor in explaining physical and verbal hate-related victimization at school (Wynne & Joo, 2011). Youth who experienced victimization at other locations beyond school were also more likely to become victims of bullying victimization at school (Wynne & Joo, 2011). Thus, prior rejection or victimization increases the likelihood of future victimization (Wynne & Joo, 2011; Cook, Williams, Guerra, Kim, & Sadek, 2010, Higgins, Piquero, & Piquero, 2011).

Low self-control

Low self-control is a modest yet consistent correlate of bullying victimization and a strong consistent correlate when it comes to non-contact victimization, such as cyber bullying (Kulig, Pratt, Cullen, Chouhy, & Unnever, 2017). The effect of low self-control is reduced in studies that control directly for risky behaviors or lifestyles that theoretically mediate the relationship between self-control and victimization (Pratt & Cullen, 2000). However, recent research suggests that low self-control has a direct effect on bullying victimization (Kulig, Pratt, Cullen, Chouhy, & Unnever, 2017). Agnew, Brezina, Wright, & Cullen (2002) found that individuals with low self-control were more likely to experience high levels of strain and commit acts of delinquency than those with higher levels of self-control. Another study found both low self-control and Attention-Deficit Hyperactivity Disorder (ADHD) to be separate but related risk factors for bullying victimization (Unnever & Cornell, 2003).

www.manaraa.com

Low self-esteem

Low self-esteem is a correlate of bullying victimization (Guerra, Williams, Sadek, 2011; Agnew 2006; Hay & Meldrum, 2010). Youth who hold lower self-esteem are viewed as easier targets for bullying victimization than those who hold high self-esteem (Seals & Young, 2003; Patchin & Hinduja, 2010). Generally, negative self-related cognitions, including low self-esteem, low self-respect, and low self-efficacy are positively correlated with bullying victimization (Cook, Williams, Guerra, Kim, & Sadek, 2010).

Depression and anxiety

Youth who experience depression and anxiety are at a greater risk for experiencing bullying victimization (Espelage, Bosworth, & Simon, 2001; Espelage & Swearer Napolitano, 2003; Klomek et al., 2007; Smokowski, Cotter, Robertson, & Guo, 2013; Bauman, Russell, & Walker, 2013). Internalizing symptoms such as withdrawal and avoidant responses are also correlated with increased odds of experiencing bullying victimization at or away from school (Espelage, Bosworth, & Simon, 2001; Espelage & Swearer Napolitano, 2003; Klomek et al., 2007; Cook, Williams, Guerra, Kim, & Sadek, 2010).

Social competence

Students that lack social competence, or have inadequate social skills, are more likely to experience bullying victimization (Cook, Williams, Guerra, Kim, & Sadek, 2010). Social skills allow youth to learn social norms and use their best judgments in social interactions. Lacking these skills reduces the chances of youth avoiding or

www.manaraa.com

inhibiting behaviors that are deemed socially unacceptable (Cook, Williams, Guerra, Kim, & Sadek, 2010). Further, lacking in social competence also results in difficulties solving social related problems, such as deterring future bullying victimization (Cook, Williams, Guerra, Kim, & Sadek, 2010).

Behavioral factors

Youth who have poor academic performance are more likely to experience traditional bullying victimization (physical, verbal) than are youth who have higher academic performance (Wynne & Joo, 2011; Dake, Price, & Telljohann, 2003; Spriggs, Iannotti, Nansel, & Haynie, 2007). Further, making better grades in school is a known protective factor against bullying victimization (Wynne & Joo, 2011). Youths that have higher computer proficiency and spend more time alone are more likely to be victimized by both cyber bullying and other forms of bullying victimization (Hinduja and Patchin, 2008). Similarly, youth who engage in avoidance behavior were more likely to be victims of physical and verbal bullying victimization at school (Wynne & Joo, 2011). Some externalizing behaviors such as defiant aggressive, disruptive, and noncompliant behavior are also positively correlated with bullying victimization (Cook, Williams, Guerra, Kim, & Sadek, 2010).

School risk factors

Negative school environments are strongly associated with an increased odds of youth experiencing bullying victimization at their school (Cook, Williams, Guerra, Kim, & Sadek, 2010; Meyer-Adams & Conner, 2008; Espelage & Swearer Napolitano, 2003). Negative school environments may be characterized by unfair application of school rules

www.manaraa.com

and students' lack of trust in teachers and adults in the school. Other negative aspects of school climate can include the presence of gangs and availability of drugs, which have been found to increase the likelihood of experiencing physical and verbal hate-related bullying victimization at school (Wynne & Joo, 2011). However, the perception of strict school rule enforcement where rules are applied fairly served as a protective factor against bullying victimization (Wynne & Joo, 2011). Students who attend larger schools (Smokowski et al., 2013) and who report lower attachments to their school (Dake, Price, Telljohann, 2003; Spriggs, Iannotti, Nansel, & Haynie, 2007; Schneider, O'Donnell, Stueve, & Coulter, 2012) are at a greater risk of experiencing bullying victimization than students who attend smaller schools and who report stronger attachments to their school.

Likewise, school connectedness or having a sense of belonging to one's school decreased the likelihood of experiencing bullying victimization (Glew, Fan, Katon, Rivara, & Kernic, 2005; You, Furlong, Felix, Sharkey, & Tanigawa, 2008). Teachers can also decrease the likelihood of bullying in schools when they are positively involved in students' lives and decrease the likelihood that students feel unsafe at school (Hong & Eamon, 2011). Further, students are more likely to seek help when they see teachers intervene in student peer conflicts at school (Aceves, Hinshaw, Mendoza-Denton, & Page-Gould, 2009). Peer relationships also serve as a buffer against bullying victimization at a time when youth seek autonomy from caregivers and instead turn to their friends for social support. However, negative peer relationships and lack of peer support are also known risk factors for bullying victimization (Salmivalli, 2010; Barboza et al., 2009; Holt & Espelage, 2007; Vervoort et al., 2010, Salmivalli, 1999). In sum, peer acceptance is a strong protective factor, particularly for "best friend" friendships or

www.manaraa.com

relationships that are characterized by high quality, trust, and social support. However, youth without a best friend are more at risk of bullying victimization (Boulton, Trueman, Chau, Whitehand, & Amatya, 1999; Demaray & Malecki, 2003).

Family risk factors

Youth whose parents have lower household income are more likely to experience bullying victimization than their counterparts from households with higher income (Fitzpatrick, 1999, Cullen, Unnever, Hartman, Turner, & Agnew, 2008). Youth who are in poverty status are more likely to be exposed to peer violence (Carlson, 2006; Curtner-Smith et al., 2006; Unnever & Cornell, 2003) and peer aggression at school (Unnever & Cornell, 2003) than youth who do not live in poverty. However, more research is needed because few U.S. studies have examined poverty as a risk factor for bullying victimization (Hong & Espelage, 2012).

Students are more likely to be victimized by bullying when they have less stable family structures, such as single parent households (Fitzpatrick, 1999), have negative adult influences in their lives (Espelage, Bosworth, & Simon, 2001), and have parents that are not involved in their lives (Barboza et al, 2009; Flouri & Buchanan, 2003; Georgiou, 2009). Lacking parental support is also a significant risk factor for bullying victimization (Holt & Espelage, 2007). Youth who are not attached to their parent(s) are more likely to develop poor social and problem-solving skills, which help to deter bullying victimization at school (Monks, Smith, Naylor, Barter, Ireland, & Coyne, 2009). Finally, youth who experience child maltreatment (Duncan, 1999; 2004; Yodprang, Kuning, & McNeil, 2009) or witness violence in the home are at a significant risk for experiencing bullying victimization at school (Hong & Espelage, 2012).

www.manaraa.com

Contextual risk factors

Neither school location (rural versus urban) nor school type (public or private) were significantly associated with physical or verbal bullying victimization (Wynne & Joo, 2011). What appears to matter more than location or type of school is if the school climate is deemed to be negative, such that bullying is prevalent and normalized and rules are unfairly enforced (Guerra, Williams, Sadek, 2011; Hong & Espelage, 2012; Kasen, Berenson, Cohen, Johnson, 2004; Olweus, 1993). Youth who come into contact or reside in negative social environments, such as a negative community, family, and/or school environment, are at a greater risk of experiencing bullying victimization (Cook, Williams, Guerra, Kim, & Sadek, 2010). Exposure to violent media (Anderson & Bushman, 2001; Williams & Guerra, 2007) and living in an unsafe neighborhood also increase the odds that youth will experience bullying victimization (Khoury-Kassabri, Benbenishty, Astor, & Zeira, 2004; Espelage, Bosworth, & Simon, 2001).

What are the effects of bullying victimization?

In a nationally representative sample of youth responding to the School Safety Supplement, 19% of youth reported that bullying victimization had at least a somewhat negative effect on how they felt about themselves, with 14% of youth reporting that bullying negatively affected their relationships with friends and family and their school work and physical health (Musu-Gillette et al., 2018). Bullying directly increases negative emotion, which in turn can lead to depressive symptoms, diminished mood, and internalizing behaviors that extend over a period of time (Copeland et al., 2013; Klomek et al., 2007; Lund et al., 2008; Glassner & Cho, 2018). Experiencing bullying

www.manaraa.com

victimization may result in internal pressure for "corrective action" which can increase the likelihood of illegitimate forms of coping (Agnew, 1992; Glassner & Cho, 2018).

Bullying victimization is associated with poor mental and physical health (Bouffard & Koeppel, 2014; Holt et al., 2015), school absenteeism (Grinshteyn & Tony Yang, 2017), hindered student learning and lower academic achievement (Juvonen, Wang, & Espinoza, 2011; Musu-Gillette et al., 2018), substance use (Cullen et al., 2008; Glassner & Cho, 2018), self-harming behaviors (Hay & Meldrum, 2010), subsequent victimization (Bouffard & Koeppel, 2014), juvenile delinquency (Cullen et al., 2008; Higgins et al., 2011), and aggression and violence (Cuevas, Finkelhor, Shattuck, Turner, & Hamby, 2013).

Both traditional and cyber bullying are associated with increased anxiety, depression and psychological distress (Ybarra, Mitchell, Wolak, & Finkelhor, 2006; Juvonen & Gross, 2008; Schneider et al., 2012) which are also risk factors for further bullying victimization (Smokowski, Cotter, Robertson, & Guo, 2013; Bauman, Toomey, & Walker, 2013). Some studies report cyber bullying to cause more serious consequences when compared to traditional bullying (Kowalski & Limber, 2007; Mehari & Farrell, 2018). These consequences include reports of major depression (Ybarra & Mitchell, 2004; Mitchell, Ybarra, & Finkelhor, 2007; Van der Wal, de Wit, & Hirasing, 2003) and increased thoughts of self-harm, and suicide (Klomek, Sourander, & Gould, 2010; Hay & Meldrum, 2010; Hinduja & Patchin, 2010) for victims of cyber bullying when compared to traditional bullying. The effects of bullying victimization may spread further in high school than in middle school due to increased opportunities for more autonomy in high

www.manaraa.com

school, such as spending more time away from guardians and spending more time online (Navarro & Jasinski, 2012).

Further, the effects of bullying victimization can last a lifetime. Ttofi, Farrington, Lösel, and Loeber (2011) found that victims of bullying have increased likelihood of depression and substance use over the life-course as well as a decreased likelihood of holding a stable job. A related study conducted by Wolke, Copeland, Angold, and Costello (2013) found victims of bullying victimization to have a greater likelihood of having poor health, finances, and social relationships into adulthood compared to non-victims of bullying.

How do victims respond to bullying?

Bullying has often been overlooked as a cause of crime and has only recently been noted as a potential cause contributing to the explanation of the victim-offender overlap (DeCamp & Newby, 2015; Marcum, Higgins, Freiburger, & Ricketts, 2013). Therefore, criminological researchers would suggest a need to further understand how victims of bullying cope with crime. Further, educators have long been interested in reducing antisocial behavior, such as aggression, among students and increasing prosocial behavior in response to conflict such as bullying. Asocial behavior, such as withdrawal or internalizing symptoms, is also of concern to educators because such behaviors may lead youths to cope via alcohol or drugs, avoidance behaviors, weapon carrying (Keith, 2018), suicide ideation, or self-harm (Hay & Meldrum, 2010; Hay, Meldrum, & Mann, 2010).

Increasing social support in schools may reduce antisocial and asocial behavior and increase prosocial behavior (Grapin, Sulkowski, & Lazarus, 2016). Social support may include interpersonal or material resources that buffer against adversity. Research

www.manaraa.com

also suggests that having supportive friendships reduces the likelihood of bullying perpetration as a response to bullying (Kendrick, Jutengren, & Stattin, 2012).

One goal of this dissertation is to assess three behavioral outcomes in response to bullying victimization: antisocial behavior, asocial behavior, and prosocial behavior. Antisocial behavior refers to aggression or intentions to cause harm to others. Asocial behavior refers to withdrawal, such as avoiding other people or social events. Prosocial behavior refers to helping others with social support or encouragement of goal attainment (Choi, Johnson, & Johnson, 2011).

Understanding victim responses to bullying can help improve anti-bullying programs. In fact, most programs are more effective at reducing bullying victimization in schools than they are at reducing bullying perpetration in schools (Wong, 2009). As will be reviewed below, most anti-bullying programs rated effective tend to teach students skillsets, such as social competency, conflict resolution, problem solving skills, and self-management techniques. However, most of these programs tend to focus on targeting bullying perpetration behavior (Wong, 2009). Thus, before reviewing what works to reduce bullying, I discuss 1) why youth engage in bullying perpetration in the first place and 2) why bullying perpetration is more difficult to reduce than bullying victimization.

Why do people bully?

Bullying has functional aspects for some youth (Rodkin, Espelage, & Hanish, 2015; Salmivalli, 2010). Youth may engage in bullying for dominance or increases in social status at school (Sidanius & Pratto, 2001; Salmivalli, 2010). While such behavior is effective at increasing dominance, it does not actually increase the amount that peers rate liking the bully (Vaillancourt, Hymel, & McDougall, 2003). In fact, many

www.manaraa.com

adolescents report that they disagree with bullying and that something should be done to stop bullying; however, as many as 44% also indicate that they are not willing to intervene in bullying situations (Ortega & Mora-Merchan, 1999; Salmivalli, 2010). Researchers have argued that this is the reason why some bullying prevention programs for bystander interventions have received lower ratings (Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996; Salmivalli & Voeten, 2004; Pöyhönen, Juvonen, & Salmivalli, 2010). For bystander interventions to work, students need to be taught appropriate ways that they can successfully intervene or tell an adult about the bullying (Salmivalli, 2010; Polanin, Espelage, & Pigott, 2012).

Further, while it is true that many adolescents engage in bullying for dominance (Vaillancourt, Hymel, & McDougall, 2003), many youths are also bully-victims and may hold different motives for engaging in bullying. Bully-victims both experience and engage in bullying in a cyclical process. Such motives for bully-victims might include that of retaliation or revenge (Frey, Pearson, & Cohen, 2015). Victims who are more reactive or lower in self-control are at a greater risk of becoming bully-victims (Jang, Song, & Kim, 2014; Kwak & Oh, 2017). Contextual-level factors such as social support and positive school climate are also important in reducing bullying. Social support might include perceiving the availability of alternatives and receiving acts of kindness or concern for one's well-being (Grapin, Sulkowski, Lazarus, 2015). More research is needed to understand how victims of bullying respond to acts of aggressive behavior characterized by power differentials (Vaillancourt, Hymel, & McDougall, 2003) while considering school and family related risk and protective factors.

www.manaraa.com

What works to reduce bullying?

Meta-analyses on bullying prevention programs

Ttofi and Farrington (2011) conducted a systematic review and meta-analysis of 622 anti-bullying prevention studies – both published and unpublished – between 1983 and 2009 and found anti-bullying programs to reduce bullying by 20–23% and victimization by 17–20%. In their meta-analysis, several types of anti-bullying programs were examined. As a whole, their findings suggested that anti-bullying programs that were more intensive in terms of frequency and duration, involvement of parents, firm disciplinary methods, and improved playground supervision were more effective. However, one type of program rated ineffective was peer-focused programs. In fact, peer programs actually increased the odds of youth experiencing bullying victimization. The authors concluded that future work should develop new programs based on their findings and revise "less effective" or "promising" programs by incorporating factors that work to reduce bullying in schools (Ttofi & Farrington, 2011).

However, a meta-analysis conducted by Polanin, Espelage, & Pigott (2012) examined 11 studies on bystander intervention programs among 12,874 children from schools in the U.S. and Europe. In this study, bystander behavior included the following: 1) intention to intervene or stop bullying, 2) directly intervening to stop bullying, 3) intention to seek teachers help, 4) intention to react against bullying and 5) intention to support the victims of bullying. The bystander programs included in the study also addressed social-emotional learning, skills-training, changing social norms and climate of the school. Polanin et al. (2012) found a 20% increase in bystander behaviors among the treatment group compared to individuals in the control group. Reported empathy levels

www.manaraa.com

for the treatment group were positive but were not significantly different from the treatment group. The researchers also found peer bystander programs to be effective with larger reductions in bullying found among high school students compared to students in kindergarten through 8th grade.

Polanin and colleagues (2012) suggested that bullying bystander programs work better among high school students than middle school students because of more advanced development among high school students (Polanin et al., 2012). The authors further suggested these programs work better when they are supplemented with other components of bullying prevention programs, such as social skills training and social norms change. This study also found program implementation was more effective with facilitators other than teachers (Polanin et al., 2012).

In a third meta-analysis on anti-bullying prevention programs, Wong (2009) asked whether and how anti-bullying programs are effective at reducing both bullying perpetration and bullying victimization. Wong (2009) found programs to be more effective at reducing bullying victimization than bullying perpetration. In fact, results of the study showed only marginal reductions in bullying perpetration (.109) compared to bullying victimization (.188). Wong (2009) began with an initial pool of 2,330 abstracts and limited the study criteria to include only experimental designs for program, intervention or policy evaluation. Additionally, only studies that used students in grades K-12th had at least one self-report or peer-report outcome variable of either bullying victimization or bullying perpetration for physical, verbal, and psychological bullying, had at least 20 students in an experimental group, and were written in English were included. These criteria resulted in an examination of 23 studies.

www.manaraa.com

The meta-analysis conducted by Wong (2009) found a total of 47 effect sizes with 22 describing bullying perpetration outcomes (in 19 studies) and 25 describing bullying victimization outcomes (in 22 studies). The date range of publications included was 1996–2008. Most studies were peer reviewed (64%); half of the studies were conducted in the U.S. and half in Canada. Most studies had randomized assignment or used quasi experimental design with nonrandom assignment.

The majority of data on bullying perpetration and bullying victimization outcomes came from self-reports with the remaining outcomes coming from peer reports. Sample sizes across studies ranged from 43 to 6,389. Half of the anti-bullying programs for both victimization and perpetration were held at the school level while 45% of them were held at the classroom level, and one study was held at the small group level for victimization only. Students ranged in age from 5-18 years.

As many as 82% of studies examining bullying perpetration held a classroom curriculum component that was designed to reduce bullying perpetration while 84% of studies examining bullying victimization held a classroom curriculum component designed to reduce bullying victimization. Anti-bullying policies were also common, with these used in 41% of anti-bullying perpetration studies and 44% in anti-bullying victimization studies. While many anti-bullying programs were held at the school-level, 52% of studies examining victimization and 46% of studies examining perpetration were held at the classroom level. Other program components commonly used involved teachers as part of the programming efforts (68% for bullying perpetration programs, 76% for bullying victimization). Individualized work with bullies was used for anti-bullying perpetration (50% of the time) and anti-bullying victimization (44% of the time).

www.manaraa.com

Finally, one-third of the anti-bullying programs generally used peer mediation with 41% of anti-bullying perpetration programs involving parents and 52% of anti-bullying victimization programs involving parents. Overall, the programs were rated as having small to medium effects, with victimization programs faring better than perpetration focused programs.

A review of specific anti-bullying programs rated as effective, promising, or ineffective is discussed next. It is important to keep in mind, however, that most anti-bullying programs focus on middle-school students because bullying in more prevalent in middle school than high school (Williford et al., 2011).

Effective Crime Prevention Solutions

According to CrimeSolutions.gov, the clearing house for effective crime prevention solutions, six bullying prevention programs are rated as effective among middle school to high school aged youth. These programs include: 1) Positive Action, 2) Second Step: A Violence Prevention Curriculum for Elementary School (2002 Edition), 3) Steps to Respect®, 4) Stop School Bullying (Greece), 5) SNAP Under 12 Outreach Project, and 6) School-wide Positive Behavioral Interventions and Supports (SWPBIS). Most of these six programs are recommended for elementary and middle schools with Positive Action being recommended for ages zero to eighteen. What these programs have in common is social and emotional skills training. Such skills allow youth to better belong or fit in at school, get along with others, and engage in prosocial self and other related behaviors (Frey et al., 2005; Schick & Cierpka, 2005; Holsen, Smith, & Frey, 2008). Each of these programs are discussed in sections to follow.

www.manaraa.com

Positive action

The Positive Action program is grounded in theories based on improving self-concept through intrinsic motivation for developing positive behavior and social, emotional, and health-related skills. The six content areas of self-development include: 1) positive actions for mental health, 2) positive actions for physical health 3) self-management and responsibility, 4) positive actions for cooperation and belongingness with others, 5) honesty, and 6) overall self-improvement. Positive behavior is defined as engaging in acts of kindness, doing well academically, and maintaining an ethical character. Engaging in positive behavior increases intrinsic motivation for achieving further success. The idea here is that positive actions lead to positive thoughts and positive thoughts lead to positive actions, creating a reinforcing feedback loop referred to as the thoughts-actions-feelings circle.

The program also entails social-emotional learning and addresses an array of youth-related problems, including bullying, substance use, and disruptive and violent behavior. The skills training component of this program covers topics related to problem solving, decision-making, study habits, nutrition, self-control, social skills, honesty, goal setting, and self-management. The Positive Action program comes with scripted lessons in a ready to use tool-kit, and is recommended for schools, families, or communities. The program is recommended for young women and men between the ages of zero and eighteen years old from rural, urban, or suburban areas.

Implementation of the program resulted in students in the treatment group reporting less substance use, problem behaviors, and violent behavior than the control group (Beets et al., 2009; Li et al., 2011). Students in the treatment group also reported a

www.manaraa.com

41% reduction in bullying behaviors compared to 27% reduction for students in the control group (Li et al., 2011). However, findings regarding sexual activity and disruptive behaviors were not statistically significant when comparing the treatment group to the control group. The program has also been found to apply well across demographics, settings, and geography (Office of Justice Programs Positive Action, 2018).

Second step: A violence prevention curriculum for elementary school (2002 edition)

Recommended for young women and men between the ages of five and twelve years old, Second Step is a program that focuses on social competency skills training with the goal of reducing impulsive and aggressive behavior. The targeted population ranges from pre-school to middle school (grades 6^{th}–8^{th}), with teachers and family members serving as educational leaders. The program comes with 15-22 lessons that are 35 minutes in length; lessons are to be scheduled once or twice per week on topics related to social competency skills, decision-making, self-control, and setting goals. The three largest units of lessons consisted of empathy training, impulse control and problem solving, and anger management.

The program has been found to significantly reduce bullying, aggression, and antisocial behavior in the first year of the program with less noticeable effects in Year 2 of the program when tested for effectiveness among 15 elementary schools (seven K – 5^{th} grade schools and eight 6^{th} grade schools) across three cities in Western Washington. Students in the treatment group also scored higher on social competency and prosocial behavior than students in the control group (Frey et al., 2005).

The program has also been found to significantly reduce anxiety, reduce fear associated with a loss of control, and increase perception of peer acceptance in the

www.manaraa.com

treatment group as compared to the control group among a sample of students from 21 elementary schools in Mannheim, Germany (Schick & Cierpka, 2005). In this study, parents also rated students in the treatment group as having less anxiety and depression compared to parents of the control group. However, no significant findings were found regarding teacher's rating of student behaviors. No significant differences were reported for changes in empathy, self-confidence, or self-esteem. Although this program found reductions in aggression for girls and boys in both groups, girls in the treatment group were significantly more likely to engage in aggression than girls in the control group. It could be that through the program training in social competency, social aggression increases for girls but more direct forms of aggression such as physical or verbal bullying do not (Schick & Cierpka, 2005).

Holsen, Smith and Frey (2008) examined the effectiveness of the Norwegian version of this program and found mixed results. Social competency was higher in the treatment group compared to the control group for 6th and 7th grade youth. However, within the 7th grade group, increases in social competency was only significant for girls. Externalizing behaviors decreased significantly in the treatment group compared to the control group for boys in 6th grade with no significant effects found for boys or girls in 7th grade. No significant differences were found for internalizing behaviors in either sample. Since these studies have been conducted, the program was updated in 2011 with revised content for student learning particularly content related to self-control and self-regulation (Low et al., 2015; Office of Justice Programs Second Step, 2018).

www.manaraa.com

Steps to respect

The Steps to Respect program seeks to combat bullying by teaching social and emotional skills to elementary school students who are in 3rd through 6th grade. Early ages are the targeted population because early years in human development are easier to alter attitude and behavioral changes. The goal of the program is to increase children's help-seeking behavior for coping with bullying and related school problems through offering a school wide program guide, staff training, and classroom curriculum for a period of 12 to 14 weeks. As a whole, the program promotes responsible norms and improves social and emotional skills of participating youth. Specifics of the classroom content include identifying types of bullying, teaching nonaggressive responses to bullying and how to report it to adults, and training students to improve empathy, emotion regulation, and conflict resolution skills. The goal of the program is to promote positive behavior, improve relationships at school, and reinforce anti-bullying policies by involving the entire school body from students to school administrators to establish climate change.

The program has been rated effective. Studies generally find fewer bullying incidents were reported by the treatment group as compared to the control group (Frey et al., 2009; Low et al., 2010). No changes in bullying were reported for youth moving from 3rd to 5th grade in the treatment group; however, bullying did increase among the control group. Aggressive behaviors also decreased by 20% in the first year of the program which increased to a reduction of 36% by the second year. Destructive behavior, argumentative behavior, and bullying victimization decreased in the treatment group and either increased or remained the same for the control group. Direct aggression increased

www.manaraa.com

at 18 months post-test for students in 5th but not 4th grade. Indirect aggression increased for the intervention group over time although there were no statistically significant differences between the treatment and control group (Frey et al., 2009).

The Steps to Respect program has been found effective in two additional applications (Low et al., 2010). Low et al. (2010) found the program to reduce gossiping among the treatment group compared to the control group. Brown and colleagues (2011) found that teacher assessments of physical bullying increased for both treatment and control groups after the program had been applied. However, there was no reported difference for non-physical bullying. Teachers also reported little change in social competencies among students in the treatment group. When it came to student reports of bullying perpetration and victimization, no difference was found in the treatment or control group. However, bullying bystander behavior was reported to increase among the treatment group compared to the control group. Finally, students did not report a significant difference in their assessment of bullying-related problems when comparing treatment versus control groups (Office of Justice Programs Steps to Respect, 2018).

Stop school bullying (Greece)

The Stop School Bullying Program (Greece) is partly based on Olweus Bullying Prevention goals and was adapted based on study findings from a pre-test survey among 4th – 6th graders in Greece. This program's goal is to reduce both bullying perpetration and victimization in elementary schools by increasing awareness on the impact of bullying, improving empathy skills, and reducing the effects of bullying (Sapouna, 2008). The program is implemented over an eleven-week period, consisting of structured intervention based on research indicating a greater prevalence of bullying in schools

www.manaraa.com

surveyed. The program offers teachers a two-day training seminar that focuses on the teacher manual to ensure teachers understand how the intervention activities should be implemented. Activities are then implemented under the supervision and guidance of mental health professionals on a weekly basis for 90 minutes at a time for eleven weeks. The activities involved class, group-based discussions, active role-playing games, and other group activities related to bullying prevention. To improve effectiveness, the program includes the entire school body, such as students, teachers, parents, and the community at large. Information packets are distributed to the school body and surrounding areas by printing of materials and hosting a website with materials for download by specific groups, such as teachers or students.

The program, based on the social ecological perspective, considers the multiple factors that influence bullying in schools (Smith et al., 2004). Studies testing the program have found stronger reductions to occur in the treatment group of students compared to the control group. Tsiantis and colleagues (2013) tested the program among 20 randomly selected elementary schools in Attica, Greece. In this study, the researchers found strong significant effects for bullying perpetration reduction, such as a 56% reduction in the experimental group compared to a 15% reduction in the control group. Victimization also decreased by 55% in the experimental group compared to 23% in the control group (Office of Justice Programs Stop School Bullying Greece, 2018).

The Snap under 12 outreach program

The Stop Now and Plan (SNAP) is a family-focused intervention program designed for boys under age twelve who are displaying aggressive and antisocial behaviors, such as bullying, stealing, lying, or cheating. The SNAP program thus seeks to

www.manaraa.com

reduce rule-breaking behavior, conduct problems, and delinquency through social skills and emotion regulation training. With SNAP, at-risk boys are taught how to improve self-control and attain problem-solving skills. The program is also adaptable to meet the needs of the population at risk such as SNAP® Girls Connection and SNAP® for Youth in Custody. The program, although family focused, takes a multisystemic approach by introducing interventions to the family, school, and community, based on the needs of at-risk youth.

The program was rated effective (Augimeri, Farrington, Koegl, & Day, 2007; Lipman, Kenny, Sniderman, O'Grady, Augimeri, Khayutin, & Boyle, 2008). In a sample of 24 boys and 8 girls from Toronto, Ontario, Augimeri et al. (2007) found youth in the treatment group to have significantly fewer aggressive and delinquent behaviors than youth in the control group. Further, in this same evaluation, the research team found the likelihood of criminal conviction at age eighteen was reduced by 57% in the treatment group compared to 31% in the control group. However, there were no statistically significant differences between the two groups in terms of number of convictions. The lack of significant differences in terms of convictions may be due to the fact that SNAP requires children to have had contact with law enforcement within the last six months prior to their initial participation in the program.

Among a sample of 209 students (ages 6 through 11) from Hamilton, Ontario, Lipman and colleagues (2008) found boys in the treatment group to have significantly lower levels of rule-breaking, aggression, and conduct-related problems than the control group. Many students enrolled in the program were considered at-risk and had prior contact with the police. The sessions began in February and were held three times during

www.manaraa.com

the school year. Due to an extensive waiting list, the boys on that list served as the control group. Although rule-breaking aggression, and conduct behavior significantly decreased in the treatment group, no significant improvements in competency skills or teacher rated perceptions of behavior related problems were found among the treatment group compared to the control group (Office of Justice Programs SNAP® Under 12 Outreach Project, 2018).

School-wide positive behavioral interventions and supports (SWPBIS)

The SWPBIS program is designed to reduce problem behaviors that often lead to disciplinary action such as referrals and suspensions among students in grades K-5th grade. The program also seeks to change perceptions of student safety in schools. The program is implemented by a team of 6-10 staff members and an administrator. The selected team members then attend annual training sessions on social learning and organizational principles of behavior. At the annual training, the team develops an action plan and materials for implementation. The team then meets twice a month to discuss and update their school-wide behavior management protocols. Additionally, the selected team refers to an external behavioral support coach for consultation and assistance during implementation of the program at school. Student behavior is continually reinforced with easy to recall language such as, “Be responsible, be safe, be respectful.” Further, lessons developed by school staff are taught to all students at the beginning of the year and then monthly throughout the school year.

For the program to work as intended, positive behaviors must be continually reinforced at the school throughout implementation of the program. Likewise, behavior infractions must be handled consistently in the same manner across classrooms within

www.manaraa.com

each school. Data on discipline referrals is also collected consistently with staff being trained on how to document such discipline problems so that the program can be properly tested for its effectiveness.

Two studies have rated the SWPBIS program effective (Bradshaw, Mitchell, & Leaf, 2010; Horner and colleagues, 2009). Students in the SWPBIS program treatment group received fewer school suspensions than those in the control group. Safety perceptions also improved in schools that implemented SWPBIS but declined in the control groups. In a longitudinal test of 37 public elementary schools from urban, suburban, and rural districts of Maryland, Bradshaw, Mitchell, and Leaf (2010) found SWPBIS to have a medium effect in reducing school suspensions. School suspensions significantly decreased in SWPBIS schools but not in schools without the program implementation. In a separate longitudinal test of the SWPBIS program among 30 elementary schools selected from either Illinois or Hawaii, Horner and colleagues found a large effect on reducing perceptions of safety in school but did not find this effect in schools that did not implement the SWPBIS program (Office of Justice Programs School-wide Positive Behavioral Interventions and Supports, 2018).

Programs rated as promising

The bulk of the anti-bullying programs rated as promising tend to be primarily educational programs targeted at students, teachers, and peers to reduce bullying, violence, and sexual behavior among youth. For example, 4th R Curriculum is targeted towards youth via an interactive classroom curriculum with the goal of reducing dating and youth violence, unsafe sexual behavior and substance use. 4th R has been found to reduce dating violence among boys; although, there was no significant difference

www.manaraa.com

reported for other forms of youth violence, substance use or condom use when comparing the treatment and control groups (Office of Justice Programs 4th R Curriculum, 2018). Other programs, such as Brief Strategic Family Therapy, are designed to alter adolescent problem behaviors, adolescent drug use, and family functioning. However, the program shows significant reduction in some problem behaviors, but no effects were found for adolescent drug use or family functioning (Office of Justice Programs Brief Strategic Family Therapy, 2018). Education programs targeting the school system such as Bully-Proofing Your School and KiVa Antibullying Program are also rated promising. Schools with Bully-Proofing educational intervention showed reductions in bullying perpetration, victimization, and witnessing of bullying behaviors (Office of Justice Programs Bully Proofing Your School, 2018). The same findings were true for the KiVa program with the exception not showing significant effects for peer-reported bullying except for among older students (Office of Justice Programs KiVa Antibullying Program, 2018).

The majority of the programs rated ineffective tend to target one primary population, such the school or family, whereas previous studies have indicated a more holistic approach is needed. In programs rated effective, students, teachers, parents, and administrators tend to have a role in combatting problem behaviors, such as bullying, and these programs tend to produce greater reductions in bullying. Further, what may be missing from many of the education programs that are rated ineffective is the social competency and emotion regulatory skills training that is often present in programs rated effective.

www.manaraa.com

Programs rated as ineffective

Three programs have been rated as no effects. Surprisingly, the revised Second Step Program (2011) edition (Office of Justice Programs Second Step 2011 Edition, 2018) and the Second Step: Student Success through Prevention Middle School Program (2008) Edition were both rated as ineffective (Office of Justice Programs Second Step 2008 Edition, 2018). The third program, Social Aggression Prevention Program (SAPP) was also rated as no effects (Office of Justice Programs Social Aggression Prevention Program, 2018). Although different versions of the first two programs have been rated effective, the differences found in effectiveness may primarily be due to changes in program implementation.

Theoretical perspectives

More research is needed to better understand the causes, processes, and behaviors that may result from rejection (Blackhart, Baumeister, & Twenge, 2006; Richman & Leary, 2009) so that bullying prevention programs can be improved. Among studies testing behavioral responses to forms of rejection, many have focused only on aggressive behavioral outcomes and ignored prosocial and asocial responses (Richman & Leary, 2009). Researchers have argued that when aggression is the only outcome variable being measured, responses indicating aggressive outcomes are likely to be inflated (Blackhart, Baumeister, & Twenge, 2006). This has led researchers within the field of psychology to argue that not all individuals respond to rejection with aggression. In doing so, new questions have been posed, such as: when does rejection trigger aggression, as opposed to prosocial or asocial behavior (Richman & Leary, 2009)?

www.manaraa.com

Interestingly, within the field of criminology, researchers began asking the same question using General Strain Theory (GST) (Agnew, 1992; 2001; 2006; 2013). GST theorists recognize that not all strains result in criminal coping; thus, the question is asked, when and under what conditions does one respond to strain criminally? (Agnew, Brezina, Wright, & Cullen, 2002). This dissertation draws on data from an NIJ funded project (2015-CK-BX-0004) to test additional propositions from the criminological and social psychological literatures to extend General Strain Theory. All three studies in this dissertation seek to test GST (Agnew, 1992; 2001; 2006; 2016).

General strain theory

In General Strain Theory (GST), Agnew (1992) asserts that while all individuals experience some level of strain, some individuals are more likely to experience negative emotion in response to strain. This negative emotion is often associated with a more aggressive or criminal response. In the GST model, negative emotions are more likely to be experienced when the strain is of a long duration, frequent, or more severe in nature. In fact, victimization, and especially repeated victimization, can result in criminal acts ranging from minor to severe offending (Agnew 2006; 2016). For instance, bullying-related strains may result in criminal and self-harm related responses (Agnew, 2006; 2016; Hay, Meldrum, & Mann, 2010; Patchin & Hinduja, 2011).

Built on the foundation of years of stress, health, and aggression-related research, Agnew (1992) argues in GST that there are three types of strain: 1) failure to achieve anticipated or expected positively evaluated goals, 2) removal of anticipated or expected positively valued stimuli, and 3) presence of negatively evaluated stimuli (Agnew 2001; 2006; 2016). Agnew states that there are also differences between objective and

www.manaraa.com

subjective strains. Objective strains are those that are commonly experienced by the majority of people in most situations, while subjective strains involve specific experiences or blockage of goals that are negatively evaluated by certain individuals. Subjective strains should be more likely to produce negative emotions because they are more specifically negatively evaluated by the individual(s) in question (Froggio & Agnew, 2007). Therefore, research on GST has considered the possibility of conditioning effects on negative emotions in response to strain. For instance, bully victims with less social support might perceive bullying to be more consequential than those with more social support (Cullen, 1994; Cullen, Unnever, Hartman, Turner, & Agnew, 2008; Agnew, Brezina, Wright, & Cullen, 2002).

Agnew (2001; 2006; 2016) also suggests that a variety of negative emotions may result in different outcomes. For example, fear explains more avoidance behaviors such as skipping school, while depression is more closely associated with withdrawal types of behavior, such as avoiding people or social events. Also, experiencing several negative emotions, such as anger and depression simultaneously, is correlated with more severe forms of criminal coping, such as aggressively lashing out at others (Reijntjes, Thomaes, Bushman, Boelen, de Castro, & Telch, 2010). Further, when strains are multiplicative and/or endure over some time, negative emotions are found to be associated with outcomes such as suicidal ideation (Hay & Meldrum, 2010), delinquency and crime (Higgins, Piquero, & Piquero, 2010), chronic bullying perpetration (Patchin & Hinduja, 2011), and even school shootings (Leary, Kowalski, Smith, & Phillips, 2003). Multiplicative strains may include several strains occurring simultaneously or strains that

www.manaraa.com

build off of previous strains, such as skipping school and getting caught committing a delinquent act while doing so.

However, because many adolescents have experienced negative emotions in response to strains without lashing out at their peers, research is needed to consider behavioral responses beyond aggression. Extending GST behavioral outcomes to examine prosocial behaviors in addition to antisocial and asocial behaviors allows for an examination of behavior beyond aggression or criminal coping. Assessing behavioral outcomes, including prosocial behaviors, can aid in improving our understanding of what works in bullying prevention programs (Gini, Albiero, Benelli, & Altoe, 2007; Ronel & Elisha, 2011; Ronel & Segev, 2014). Because the goal of this dissertation research is to test an extended version of GST, both predecessors and more recent extensions of GST are discussed in detail below, beginning with Classic Strain Theory (Merton, 1938).

Forerunners of general strain theory

Classic Strain Theory was initially developed by Merton in 1938. The original version of Strain theory (Merton, 1938) sought to explain inconsistencies in goals and goal attainment, particularly for monetary success. For example, Merton argued that an inability to obtain success according to "the American Dream" (e.g., stable job, steady income, family) produces strain, which may result in anomie or normlessness and illegitimate coping in the form of crime and deviant behavior. Specifically, when success could not be obtained through legitimate means, individuals would turn to illegitimate means to achieve that success. In developing classical strain theory, Merton (1938) was particularly concerned with how social structure determined culturally specific goals and behavior for achieving those goals; yet, such goals were not equally achievable for all

www.manaraa.com

social classes. Thus, Merton (1938) argued when goals could not be obtained through legitimate approaches that anomie, or normlessness, occurred. Anomie was argued to then lead individuals to behave in non-conventional ways, which often resulted in deviant or criminal behavior (Merton, 1938).

Cohen (1955) extended Merton's work by suggesting that delinquency can be explained by a failure of lower-class individuals to achieve success according to societal standards. Cohen (1955) explained that gang behavior among youth was a reaction by lower class youth to the dissatisfaction of not being successful in school or work. The lack of success in school and or work was argued to result in alienation which, in turn, led youth to join subcultures of society where other behaviors, such as delinquency, were rewarded. The subculture of gangs allowed youth to seek status attainment and respect through violence and other forms of delinquency.

Cloward and Ohlin's Theory of Delinquent Subcultures (1960; 2013) extended Cohen's (1955) work by arguing that opportunity would influence whether youth would engage in delinquent acts. Cloward and Ohlin (1960) argued that when lower class youth could not obtain success according to societal standards due to the lack of equal opportunity, they would give up on achieving success via legitimate means and instead turn to illegitimate means of success such as delinquency or crime. Cloward and Ohlin (1960) further proposed that there were three types of delinquent subcultures: 1) criminal, 2) conflict, and 3) retreatist. The criminal subculture was said to be found in areas with a larger concentration of working-class family homes. The conflict subculture was found to be more violent in nature characterized by unstable neighborhoods. The retreatist subculture was said to involve more drug use and less violence. Cloward and Ohlin's

www.manaraa.com

Opportunity Theory extended strain theory in that it argued that strain was incomplete without being able to explain why not all youth solve problems criminally.

The original strain theory (Merton, 1938) and its subcultural extensions (Cohen, 1955; Cloward & Ohlin, 1960) were critiqued for only explaining crime among the lower class because middle class individuals were able to obtain monetary success according to the American Dream (Broidy, 2001; Cullen, 1988; Kornhauser, 1978). Classic Strain Theory was further critiqued for not being able to explain juvenile delinquency because it was not jobs or financial success that youth desired (Agnew, 1985; Broidy, 2001; Hirschi, 1969; Hirschi, 1972; Kornhauser, 1978). Instead, Agnew (1985) argued that youth sought nice clothes, status in school, and material things, which were related to parent or caregiver's socioeconomic status, and were considered more immediate goals for youth. Agnew (1985) also argued that another immediate goal for youth was to avoid punishment from parents, teachers, or other adults which might lead youth to desire making good grades and also having healthy relationships with the adults in their lives.

Thus, in Agnew's 1985 article, Classical Strain Theory (Merton, 1938) was expanded to better explain how inconsistencies in goal and goal attainment may result in anger which in turn may increase the likelihood of youth engaging in juvenile delinquency. In doing so, Agnew (1985) also argued that, in addition to the inability to achieve goals, experiencing aversive situations was also a type of strain to be tested by the theory. In a test of the revised theory, Agnew (1985) found strain, such as an aversive environment to be associated with increased anger, with anger then explaining an increased likelihood of youth engaging in delinquency (theft, arson, and fighting). An additional test was provided for the revised Classical Strain Theory where it was found

www.manaraa.com

that strain in the home and school led to an increased odds of delinquency (Agnew, 1989). However, this study also found that delinquent behavior could result in further environmental aversive situations, such as punishment at home or school (Agnew, 1989).

In the first iteration of GST, Agnew (1992) began to further conceptualize types of strains and how negative emotions in response to strain led to an increased likelihood of engaging in criminal or delinquent behavior. In this article, he referred to negative affective states (which could include negative emotions other than anger) and how such negative emotions led to delinquency through a desire for corrective action. The idea behind corrective action was that individuals would engage in some form of behavior to reduce negative affect. Behaviors for corrective action could include prosocial acts, such as meditation or exercise, but such actions might also be antisocial in nature, such as fighting or stealing property. Although it has been argued that anger is particularly conducive to criminal coping, other negative affective states may also be correlated with antisocial outcomes such as feeling frustration, disappointment, and depression in response to strain. Conditioning factors (e.g., social support, coping skills, low self-control) were theorized to affect an individual's tendency towards engaging in legitimate or illegitimate corrective action. In proposing GST, Agnew (1992) added a third type of strain. This strain included the anticipated or actual removal of positive stimuli, such as the ending of a close relationship with a peer (Agnew, 1992). To review, the three major types of strains (as stated in GST) include: 1) "strain as actual or anticipated failure to achieve positively valued goals," 2) "strain as the actual or anticipated removal of positively valued stimuli," and 3) "strain as the actual or anticipated presentation of negatively valued stimuli" (Agnew, 1992, p. 50).

www.manaraa.com

Using data from the Rutgers Health and Human Development Project, the first test of GST was conducted by Agnew and White (1992) to examine several types of strains (e.g., negative life events, family and neighborhood problems) finding each to explain juvenile delinquency more generally as well as drug use among juveniles. However, negative emotions were not measured and included in the analyses. Therefore, this study only tested the direct effect of strain on behavioral coping. Further, some strains (e.g., clothing or occupational) were not found to be associated with significant increases in delinquency. It was also found that strains were more strongly associated with general delinquency than drug use (Agnew & White, 1992). Other tests of the theory found significant effects of negative emotions, particularly that of anger (Aseltine, Gore, & Gordon, 2000; Broidy, 2001). To date, the majority of studies have primarily examined the 1992 version of GST (Agnew & White, 1992; Agnew & Brezina, 1997; Aseltine, Gore, & Gordon, 2000; Broidy, 2001; Hay, 2003; Moon, Morash, McCluskey, & Hwang, 2009; Moon, Morash, & McCluskey, 2012; Schulz, 2016; Moon & Morash, 2017). Recently, however, GST has undergone several extensions which are reviewed in the following paragraphs.

Extensions of general strain theory

After conducting a number of tests on the 1992 version of GST, researchers (Aseltine Gore, & Gordon, 2000; Broidy, 2001; Agnew, 2001; 2006) have continually identified a need to further examine both the types of strains (Froggio & Agnew, 2007) and negative emotions in more detail (Moon & colleagues, 2004; 2008; 2009; 2012; 2017). Critics have also argued that no definition of strain was provided in the 1992 version of the theory. These criticisms led Agnew (2001) to define and further

www.manaraa.com

conceptualize GST to describe types of strains that could explain how individuals may choose to cope, both criminally and/or non-criminally (Agnew, 2006).

In doing so, Agnew (2001) identified several strains, such as child abuse, poor relationships with parents, and peer victimization or bullying that should be associated with an increased odds of engaging in criminal or delinquent acts. In the first extension of GST, Agnew (2001) defined strain as a negative experience that consisted of the three propositions outlined in the 1992 version of the theory: 1) failure to achieve a goal, 2) removal of positive stimuli, and 3) presence of negative stimuli.

Agnew (2001) further argued that strain was the result of negative relationships with others and that strain presents itself in three ways: 1) infliction of strain, 2) evaluation of strain, and 3) emotional reaction to strain. Next, he stated that there are two types of strain: objective and subjective. Objective strain was argued to be disliked by the majority of a population, such as physical pain, whereas subjective strain was disliked especially by a particular individual evaluating the strain. He further suggested that subjective strains that were: 1) higher in magnitude, 2) more severe in nature, duration, frequency, 3) unjust, and 4) associated with low social control would increase the likelihood of criminal coping. Thus, researchers testing this version of the theory agreed that more attention should be paid to subjective strains, with some studies revealing that family and school strains and criminal victimization tended to result in more criminal outcomes compared to other sources of strain (Agnew, 2001; Froggio & Agnew, 2007; Hay, 2003; Higgins, Piquero, & Piquero, 2011; Hollist, Hughes, & Schaible, 2009; Jang & Rhodes, 2012; Moon, McCluskey, & Hwang, 2009; Moon, Morash, & McCluskey, 2012; Slocum, 2010).

www.manaraa.com

GST was next expanded by Agnew, Brezina, Wright, and Cullen (2002). This team of researchers argued that personality traits (particularly negative emotionality and low self-constraint) made criminal coping more likely than non-criminal coping. Negative emotionality is defined as holding pessimistic attitudes towards life. Low self-constraint is defined as not being capable of conforming due to impulsivity or lack of concern for consequences. This version of GST considers these mitigating factors, while seeking to answer the question as to why only some individuals respond to strain with delinquency for corrective action. It is argued that personality traits (i.e., stable perceptions, thoughts, or tendencies) might condition or influence the experience of strain, including behavioral responses to strains. Finally, the researchers recognize that environmental aversion can also be caused by repeated strains resulting in negative emotionality or low self-constraint (Agnew, Brezina, Wright, & Cullen, 2002).

In fact, tests of these two traits (negative emotionality and low self-constraint) are associated with an increased odds of delinquency in response to strain (Agnew et al., 2002). Slocum (2010) found that 1) negative emotionality, and 2) low self-constraint were associated with increased substance use among adolescents. Strain had a greater effect on depression among adults' high in negative emotionality and low in self-constraint (Slowcum, 2010). Johnson and Kercher (2007) also tested the 2002 version while considering attention deficit hyperactivity disorder (ADHD) as the operationalization of low self-constraint. Johnson & Kercher (2007) found those with ADHD to be more likely to respond criminally than those without. Further, researchers have found a need to consider strain and self-control or self-constraint when explaining

www.manaraa.com

the likelihood of engaging in future violence based on previous victimization (Hay & Evans, 2006; Turanovic & Pratt, 2013; Turanovic & Pratt, 2014)

To date, the most recent extension of GST was proposed by Agnew (2013) where he argued for the need to create overall propensity scores to better explain criminal coping as opposed to individually examining each of the known contributors of crime. Agnew believed that this would help to reduce the mixed findings continually found for conditioning factors (e.g., social support, deviant peers). The 2013 version of GST also has the added goal of understanding conditions that led to criminal coping in response to strain. Agnew stated that three conditions increase the likelihood of criminal coping. These conditions include: 1) experiencing a criminogenic strain, 2) being in a situation or environment that is conducive to crime, and 3) holding strong personality or behavioral tendencies towards criminal coping. The goal of this version of GST was to explain more variance in reactions to strains (Agnew, 2013). Agnew also stated that objective strains must be high in magnitude and viewed as unjust, and subjective strains will be evaluated in terms of emotional responses to strains which then explains the likelihood of engaging in criminal or delinquent behavior.

In the first test of the 2013 version of GST, Thaxton and Agnew (2017) found support for Agnew's 2013 version of the theory by testing its propositions among a sample of gang members (using the Gang Resistance Education and Training Dataset; Esbensen, Peterson, Taylor, & Osgood, 2012). Thaxton and Agnew (2017) found gang membership and their criminal propensity index to explain increases in criminal coping. The criminal propensity index consisted of 10 variables that included assessments of individual, family, school, peer, and community risk factors for delinquency. Using a 16-

www.manaraa.com

item scale that assessed general delinquency, Thaxton and Agnew found these risk factors to moderate the relationship between victimization, police strain, school strain and delinquency.

GST researchers that test the 1992 version have also called for a need to further examine the situational aspects of strains, such as situation-based negative emotions (Moon & Morash, 2017; Schulz, 2016; Willits, 2017). For example, Moon and colleagues argue that it is important to examine emotions in direct response to a strain instead of only measuring trait-based emotions (Moon and colleagues, 2008; 2009; 2012; 2017; Willits, 2017). This dissertation seeks to test the 1992 version of Agnew's theory in order to learn more about coping processes and behavioral responses to bullying. Studies conducting situational tests of GST are reviewed next, as a situational test of GST is one of the goals of this dissertation.

Situational tests of general strain theory

Strain is situational and subjective, and so are available coping mechanisms and behavioral responses to strain (Agnew, 2006). For example, some forms of financial, family related stress are likely to be associated with related forms of criminal coping, such as property crime and domestic violence (De Coster & Korn-Butler, 2006; Felson, Osgood, Horney, Wiernik, 2012). Past research testing strain and coping mechanisms as situational have found support for GST (Ganem, 2010; Mazerolle & Piquero, 1997; 1998; Mazerole, Piquero & Capowich, 2003; Scheurman, 2013; Schulz, 2016). These studies often find types of strains and personality factors such as violent propensity or aggressive personality to be correlated with more aggressive reactions to strain (Willits, 2017). Further, situation-based negative emotions are often found to be strongly associated with

www.manaraa.com

aggression or delinquency in response to strain compared to trait based negative emotions (Moon, Morash, McCluskey, & Hwang 2009; Moon & Morash, 2017; Mazerolle, Piquero, & Capowich, 2003). A number of these studies are reviewed in detail below.

Using vignette designs among a sample of 457 college students from a mid-Atlantic state, Mazerolle and Piquero (1997) examined whether anger was associated with injustice and violent coping. The vignette designs included measures of different types of offending scenarios: drunk driving, assault (male only sample), and theft (female only sample). Strain was measured dichotomously in three ways: 1) failure to achieve good grades (receiving unfair grades), 2) the presence of negative family-related stimuli (divorce or family separation), and removal of positive relationships (break-up, loss of friendship). In this study, anger was measured as temperament using four questions from Grasmick et al. (1993)'s self-control scale. In this study, trait anger was found to be associated with feelings of injustice regarding receiving unfair grades. However, anger was found to only be correlated with increases in assault in scenarios involving violence, such as fighting but not for drunk driving or theft related crimes. The three sources of strain, deviant peers and a lack of moral constraints also increased the likelihood of responding to strain with violence and anger was found to mediate this relationship.

Using the same vignette designs as the previous study, Mazerolle and Piquero (1998) further examined the role of anger when it comes to the likelihood of responding to strain with instrumental (property crime), escapist (illicit drug use, drinking and driving), or retaliatory (violent) intentions. In this study, trait anger or holding a predisposition towards aggression and anger were positively correlated with delinquency. In the shoplifting (females only sample), females reported high cumulative strain, anger,

www.manaraa.com

and neighborhood problems. However, the only significant factor for shoplifting was the loss of a friend or significant other. For males in the fighting vignette, the only significant factor for anger was unfairness, such as if the fight was considered unfair. Unfairness in grades in school also led to higher levels of anger in the drunk driving scenario sample. Likewise, gender was a significant predictor of drunk driving; males were more likely to drive drunk than females. Across the models, the cumulative effect of strain was only found to significantly explain shoplifting among the sample of females. Anger led to an increased intention to fight but not shoplift or drink and drive. This study highlighted the importance of types of strains and when and how anger serves as a mediating role between strain and delinquency.

Using similar methods to the previous two studies discussed, Mazerolle, Piquero and Capowich (2003) extended the prior research by examining whether and how situational anger held up in comparison to trait anger in response to strain. In this study, strain was measured in two ways: 1) a composite score of negative life events, and 2) inequitable experiences at school. Trait and situational anger, strain, and other control variables (gender, moral beliefs, prior behavior) were theorized to explain the likelihood of engaging in delinquent acts such as shoplifting, drunk driving, and assault. Using, the same vignette study design as Mazerolle and Piquero (1997; 1998), Mazerolle and colleagues (2003) tested these vignettes among 338 students from a western U.S. university. In doing so, the researchers found situational anger to mediate the relationship between strain and delinquency.

Mazerolle and colleagues (2003) also examined whether the type of offense led to different emotional and behavioral outcomes. Males were found more likely to intend to

www.manaraa.com

shoplift as were individuals experiencing both sources of strain (negative life events and inequity at school). Situational anger partially mediated the relationship between strain and shoplifting. Trait anger was not found to be correlated with higher intentions to shoplift; this finding supports previous research that indicates trait anger is not related to instrumental offenses such as theft. Prior shoplifting, however, did explain intentions to shoplift. When it came to assault, however, situational anger more fully mediated the relationship between strain and assault. Here, males, younger students, and students with higher inequitable sources of strain were more likely to intent to assault another. Situational anger led to increased odds of intentions to assault. Trait anger also increased the odds of assault; however, the effects were smaller (e.g., .16. versus .32) than the effects of situational anger. The researchers concluded that including both measures of anger in tests of GST may be important because situational emotions have better explanatory power, but those who are higher in trait anger are also more likely to experience more strains than those who are lower in trait anger (Mazerolle & Piquero, 1997; 1998; Mazerolle, Piquero, & Capowich, 2003).

Aseltine and colleagues (2000) examined types of strain (family conflict, negative life events) and trait-based emotional states (anger, anxiety), factors affecting coping resources (self-esteem, delinquent peers) and types of delinquent outcomes (aggressive-violent delinquent coping, non-violent delinquent coping, and marijuana use) among 1,208 9^{th}-11^{th} grade students from the Boston metropolitan area. In this study, anger was found to be related to aggression but neither anger nor anxiety were related to marijuana use and other forms of non-violent delinquency. Further, family conflict related strains were most closely associated with anger and violent or aggressive outcomes. Coping

www.manaraa.com

resources such as mastery or one's sense of control or efficacy and self-esteem decreased the odds of delinquent coping while delinquent peers increased the odds of delinquency, particularly violent delinquency.

Moon, Morash, McCluskey, and Hwang (2009) proposed that the effects of situational-based negative emotions versus trait based negative emotions on the relationship between strain and delinquency are undertheorized and less examined in research applications of GST. Thus, Moon and colleagues conducted this study using longitudinal data from a sample 659 South Korean middle school students. Specifically, they examined eight key strains (family conflict, emotional and physical punishment by parents, emotional and physical punishment by teachers, financial stress, exam-related stress, being bullied, gender discrimination, and criminal victimization), conditioning factors (positive parental relationships, parental supervision, problem-solving ability, legitimacy of violence, and association with delinquent peers), and delinquency (violent, property, and status offenses) as the outcome variable to better understand how trait versus situational measures of anger and depression mediated the relationship between strain and delinquency. Situational measures of anger and depression were asked in direct response to experiencing each of the eight types of strains whereas trait-based were measured by asking youth to rate their overall anger and depression related feelings more generally.

Moon and colleagues (2009) found that all of the eight strains were significantly related to trait-based negative emotions. Trait-based anger was related to all three types of delinquent behavior while trait-based depression was not found to be related to any delinquent outcomes. Most of the eight strains, with the expectations of being bullied

www.manaraa.com

were significantly related to at least one of the three types of delinquency. Moon and colleagues (2009) theorized that bullying did not significantly explain delinquency perhaps because "victims of school bullying may be more likely to be isolated, depressed, non-assertive, and physically weak or disabled" (Moon et al., 2009; pg. 205).

In this same study conducted by Moon and colleagues (2009), types of strains were found to closely match related forms of delinquency. For instance, youth who experienced financial strain were more likely to engage in property related forms of delinquency. Likewise, family conflict and punishment were also significantly related to violent and status delinquency. However, positive relationships with parents and higher parental control were both negatively related to delinquent outcomes for youth while higher levels of problem-solving skills were negatively related to property delinquency. Surprisingly, deviant peers did not increase delinquent outcomes.

Moon and colleagues (2009) also found that situation-based negative emotions operated differently than trait-based negative emotions. Situation-based negative emotions mediated the relationship between types of strains and types of delinquency; this was particularly true for violent delinquency. Trait-based negative emotions, on the other hand, did not have mediating effects on the relationship between strain and delinquency. The researchers concluded that measures of situational-based negative emotions in response to particular incidents and types of strain are necessary for extending future tests of GST.

Employing vignette designs to test whether different types of strain brought about different types of emotional responses, Ganem (2010) found some strains to produce more inhibitory reactions to strain while others promoted more aggressive emotions, such

www.manaraa.com

as anger. Specifically, among a convenience sample of undergraduate students from a small liberal arts college, Ganem (2010) found certain types of strains to be correlated with specific types of emotions. For instance, frustration was found to be a more common emotional response to the failure to obtain goals while anger was more related to perceiving injustice or unfairness as related to particular strains. Fear was found to be related to perceiving threat of rejection, danger, or frightening experiences. The researcher also identified significant overlap in the emotions, frustration and anger, leading Ganem (2010) to conclude that the general emotion of frustration likely led to the more specific emotional response of anger.

Moon and Morash (2017) examined whether subjective or objective strains better explained the likelihood of 800 Korean youth engaging in juvenile delinquency. In doing so, Moon and Morash examined the impact of five (objective and subjective) strains: 1) family conflict, 2) parental punishment, 3) criminal victimization, 4) gender discrimination, and 5) teacher punishment. To measure subjective and objective strains, students were asked generally about responses to particular strains as well as about whether they had personally experienced them. Students were also asked to report on their emotions felt in response to particular strains for the negative emotions, anger and depression. This same study also considered the role of a composite index of four risk-promoting factors: 1) negative relationships with parents, 2) low parental control, 3) legitimacy of violence, and 4) association with delinquent peers.

Moon and Morash (2017) found that both objective and subjective strains increased the odds of delinquency but that subjective strains did not improve the variance explained in the models. The one exception to this was subjective family strain, which

www.manaraa.com

was found to be significantly and positively related to delinquency. Conditioning factors that increased the odds of delinquency included legitimacy of violence and association with delinquent peers. Other significant control variables included being male and having poor academic performance. Situation-based negative emotions were not found to be directly related to delinquency with the exception that anger was a more likely response to the objective strain of criminal victimization. The authors concluded that future research should continue to examine context specific objective and subjective strains as well as situation-based negative emotions in response to strain so that the relationship between these two types of strains and delinquency can be further delineated. Furthermore, when it comes to conditioning factors, the authors noted that Agnew (2006) did not specify the expected strengths of association for variables such as delinquent peers and legitimacy of violence on their expected relationship with strain and delinquency. Moon and Morash (2017) suggested the strength of expected associations should be further specified for the conditioning factors in future research.

In this dissertation, a situational test similar to the aforementioned studies will be conducted to explain whether and how types of situational-based negative emotional responses (upset, sad, angry, embarrassed, afraid) are specific to certain types of strain (physical, verbal, relational, cyber bullying), and how students thus differentially respond to the bullying experienced.

General strain theory and bullying

Agnew (2001, 2002) highlighted the importance of examining victimization as a risk factor for delinquency in tests of GST. Specifically, Agnew (2001) argued that the relationship between strains and peer aggression and delinquency has been under

www.manaraa.com

researched. Further, Agnew (2002) argued in a follow up article that victimization is likely a potential cause of delinquency or crime. To test this notion, Agnew and colleagues (2002) used data from the 1981 National Survey of Children and found support for GST such that the strain of bullying victimization was associated with increased odds of engaging in juvenile delinquency.

In response to Agnew's (2001, 2002) call for the need to apply GST to the study of victimization, several studies have been conducted. Findings from these studies suggest that bullying victimization causes substantial strain and negative affect resulting in behavioral forms of internalizing and externalizing deviance (Hinduja & Patchin, 2007). Internalizing forms of deviance in response to bullying include self-harm, suicide ideation, and avoidance behaviors (Hay & Meldrum, 2010; Hay, Meldrum, & Mann, 2010; Keith, 2018). Externalizing forms of deviance in response to bullying include general delinquency, substance use, violent or property delinquency, weapon carrying, and cyberbullying perpetration (Cullen, Unnever, Hartman, Turner, & Agnew, 2008; Hay, Meldrum, & Mann, 2010; Jang, Song, & Kim, 2014; Keith, 2018). These study findings are reviewed in more detail below.

In one of the first tests of GST regarding bullying victimization as a strain, Cullen and colleagues (2008) assessed whether and how traditional bullying could explain youth's involvement in general delinquency and illegal substance use among a sample of 2,437 middle school students. The researchers found bullying victimization to be a risk factor for subsequent offending generally while also finding other criminological theoretical variables to alter the strength of this association. These variables included: self-control, social support, and definitions favorable to crime as based on self-control

www.manaraa.com

theory, social bond theory, and differential association theory. In doing so, this study sought to identify which factors would increase the likelihood of responding to bullying via criminal coping. Results showed that as victimization experiences increased, so did the odds of engaging in general delinquency and illegal substance use. However, the strain of bullying victimization and likelihood of delinquency was stronger for those who held weakened social bonds at school. Further, the relationship between victimization and delinquency was also higher among victims who held aggressive predispositions. Lower self-control, coercive parenting, and weakened parental bonds increased the odds of delinquent coping. Male victims of bullying were substantially more likely to use drugs and alcohol to cope criminally than were females.

Hinduja and Patchin (2007) conducted an online study among 1,388 adolescents to assess whether cyber bullying victimization (a measure that consisted of eight items to assess cyber victimization such as being ignored, disrespected, or having rumors spread) and types of strains (a measure that consisted of nine items to assess different types of stressors such as being treated unfairly, making bad grades, parents divorced, and having been a victim of a crime) led to problem behaviors. Problem behaviors consisted of an 11-item scale representing an array of behaviors such as carrying a weapon, running away from home, and skipping school. This study found support for GST; strain was found to mediate the relationship between cyber victimization and offline problem behaviors.

Both traditional (e.g., physical, verbal) and cyber bullying as types of strains have been found to explain internalizing (i.e., withdrawing to harm the self) and externalizing forms of deviance (i.e., lashing out to seek revenge) among a sample of middle and high

www.manaraa.com

school students from a southeastern state. Specifically, Hay, Meldrum, and Mann (2010) found that the strain of traditional and cyber bullying victimization had a significant association with crime against others, crimes against property, suicidal ideation and acts of self-harm (Hay, Meldrum, and Mann, 2010). Findings were moderated by sex. The effects of bullying on self-harm and suicide ideation were greater for males than females.

In a related study conducted among a rural, southeastern sample of adolescents, Hay and Meldrum (2010) found that traditional and cyber bullying victimization were associated with higher levels of self-harm and suicide ideation. Further, the relationship between being a bully victim and engaging in self-harm or holding suicidal thoughts was partially mediated by negative emotions and moderated by authoritative parenting and self-control. High self-control and authoritative parenting decreased the harmful effects of bullying victimization while reducing self-harm and suicidal thoughts (Hay & Meldrum, 2010).

In addition to self-harm and suicide ideation, traditional and cyber bullying victimization also led to increased weapon carrying and avoidance behaviors. Specifically, in a study conducted using the School Crime Supplement (2009) data from the National Crime Victimization Survey, Keith (2018) examined fear as the negative emotion expected to explain increases weapon carrying and avoidance behaviors. However, although fear was not found to mediate the relationship between bullying and behavioral responses, the direct effect of bullying related strains did increase the likelihood of weapon carrying and avoidance related behaviors.

Baker and Pelfrey (2018) examined whether and how the experienced strain of traditional and cyber bullying victimization and the anticipated strain of feeling unsafe at

www.manaraa.com

school affected drug use and weapon carrying behavior while controlling for the frequency of social media use among a sample of 3,195 middle and high school students (grades 6th-12th). Anticipated strain is perceiving that stressors will continue in severity or chronicity or will produce new forms of strain such as conflict. In conducting this research, Baker & Pelfrey (2018) found cyber bullying victimization and the anticipated strain of not feeling safe at school were associated with hard and soft drug use as well as weapon carrying controlling for the frequency of social media use.

Experiencing bullying victimization has also been found to explain an increased likelihood of youth engaging in bullying perpetration (Java, Song, & Kim, 2014; Patchin & Hinduja, 2011). Patchin and Hinduja (2011) found adolescent specific strains, such as making bad grades or having family disagreements, were associated with traditional and cyber bullying perpetration. Using a nine-item assessment of strain, Patchin and Hinduja (2011) found unfair treatment, making bad grades, family disagreements, moving to a new school, and/or being a victim of a crime to be directly associated with both types of bullying. Further, although these strains led to increased traditional and cyber bullying; the relationships were tied to feeling negative emotions, such as anger and frustration. However, negative emotions were not found to mediate the relationship between strain and traditional and cyberbullying, suggesting that the strains had an influence on both forms of bullying beyond feeling angry or frustrated.

In a sample of Korean youth, Jang, Song, and Kim, (2014) examined whether experiencing offline bullying victimization as a type of strain, coupled with the anonymity of cyberspace, was associated with increased online bullying perpetration. In this study, the researchers examined the following strains: bullying victimization,

www.manaraa.com

parental, school, and financial related strains. They also examined the following control variables: delinquent peers, low self-control, gender and income (Jang, Song, & Kim, 2014). The strains measured in this study were found to be associated with an increased odds of youth engaging in cyberbullying perpetration; however, the strain of bullying victimization on cyberbullying perpetration had much stronger effects compared to the other sources of strain.

Moon and Jang (2014) tested the application of GST to explain types of bullying perpetration: general, physical, and psychological among a sample of 296 middle school students in grades 6th and 7th grades from two middle schools in a southwestern state. Moon and Jang (2014) found the four strains (criminal victimization, racial discrimination, teachers' emotional punishment, and family conflict) that Agnew (2006) argued to be particularly criminogenic were associated with general, psychological, and physical bullying perpetration. However, this study found strains and negative emotions (anger, depression) to be correlated with bullying perpetration with the negative emotions mediating the relationship between strain and the conditioning factors (deviant peers, supportive parent, low self-control). Individuals low in self-control and who had more deviant peers were more likely to engage in all forms of bullying perpetration. Youths with parental support were less likely to engage in bullying perpetration.

For general bullying perpetration, three strains had significant effects: family conflict, racial discrimination, and teachers' emotional punishment. After assessing whether anger and depression mediated the strain and bullying relationship, two strains remained significant: family conflict and teachers' emotional punishment (Moon & Jang, 2014).

www.manaraa.com

For physical bullying perpetration, anger mediated the relationship between strain and bullying perpetration, with teacher emotional punishment remaining significant for physical bullying perpetration. Delinquent peer association and low self-control were positively associated with the likelihood of engaging in bullying perpetration while social support and parental control lessened the likelihood for engaging in physical bullying perpetration (Moon & Jang, 2014).

For psychological bullying, three of four strains (family conflict, teachers' emotional punishment, and racial discrimination) were significant. Anger and depression were also significantly associated with psychological bullying but neither mediated the effects of strain on bullying. Instead, anger by depression mediated the effects of strains on engaging in psychological bullying. Racial discrimination remained a strong risk factor associated with increased odds of psychological bullying perpetration. Additionally, older respondents were more likely than younger respondents to engage in psychological bullying. Further, adolescents low in self-control and high in deviant peers were more likely to engage in psychological bullying than their counterparts (Moon & Jang, 2014).

Moon, Hwang, and McCluskey (2011) examined whether strains and types of trait-based emotions, such as anger and depression, would be associated with an increased likelihood of youth engaging in bullying perpetration. Trait-based emotions are those that are more characteristic of one's personality that generally are consistent over time and across most situations. In a test of GST among 655 South Korean middle school students, Moon et al. (2011) examined whether family conflict, parental punishment, examination-related strain, and criminal victimization explained youth's bullying

www.manaraa.com

perpetration as a way to alleviate these sources of strains. This study found that test-related strain significantly increased the likelihood of bullying perpetration with trait-based depression also being a significant factor but not trait-based anger.

In a related study, Moon, Morash, and McCluskey (2012) used data from a sample of 3,697 Korean middle school students to examine whether seven types of strains, such as part-time work, criminal victimization, and conflict with parents, were associated with bullying perpetration. Their research also considered four conditioning factors: low self-control, delinquent peer association, parental attachment, and positive relationships with teachers. The study found youth who experienced criminal victimization or had weak parental attachments were more likely to bully other students. Trait-based anger, such as holding an aggressive predisposition, was not associated with bullying perpetration, which is contrary to previous findings. This study also did not find mediation of anger between strain and bullying, providing partial support of GST and the need for assessing situation-based negative emotions such as negative emotions found in direct response to experienced strains.

Peer rejection has also been found to be correlated with delinquency (Keily, Bates, Dodge, Pettit, 2000; Ladd & Burgess, 2001; Cullen et al. 2008). Agnew (1997) proposed that GST tests should consider the developmental life course aspects of crime. Thus, Higgins, Piquero, and Piquero (2011) examined whether peer rejection occurring in prior to early adolescence caused developmental changes in trajectories for latter peer victimization and delinquency, and whether these trajectories differed by gender. Higgins, Piquero, and Piquero (2011) argued that peer rejection at earlier ages may be associated with more negative consequences over the life-course.

www.manaraa.com

Specifically, Higgins and colleagues (2011) conducted a test of GST to test developmental trajectories of peer rejection and delinquency among a general sample (n=413) of children and adolescents, a sample of males, and a sample of females from the National Longitudinal Survey of Youth (NLSY79). Overall, high peer rejection as a source of strain was associated with a higher likelihood of delinquency or crime among males but not females. In the overall sample, two trajectories of peer rejection were found: 1) low-level and 2) high-level. Likewise, three trajectories were found for delinquency in response to bullying victimization: 1) high increasing path delinquency, 2) low desisting delinquency, and 3) low and relatively stable path delinquency (Higgins, Piquero, and Piquero, 2011).

Among the sample of only females, two trajectories of peer rejection were found: 1) high less stable path of peer delinquency and 2) stable and low-level path of peer rejection. For female delinquency, two paths were identified: 1) delinquency at ages 15-16 but zero offending by the age of 19-20 and 2) three acts of delinquency at age 15-16 followed by one act at ages 19-20 (Higgins, Piquero, and Piquero, 2011).

Among the sample of only males, two trajectories of peer rejection were found: 1) a low amount of peer rejection, and 2) high amount of peer rejection between the ages 6-8 and 12-14. For male delinquency, three trajectories of delinquency were identified: 1) one act of delinquency between ages 15-16 but high amounts of delinquency through the ages 19-20, 2) fewer than four acts of delinquency with below two occurring by ages 19-20, and 3) more than four acts occurring for ages 15-16 with an increase by more than eight by ages 19-20 (Higgins, Piquero, and Piquero, 2011).

www.manaraa.com

However, once the trajectories were regressed on delinquency, none of the variables had a significant impact on female in delinquency, indicating young women may cope with peer rejection in ways other than delinquency. For males, however, high peer rejection was associated with the second category of delinquency: four acts of delinquency with below two occurring by ages 19-20. In sum, for males, those in the highest peer rejection category were more likely to be found in the highest delinquency category (Higgins, Piquero, and Piquero, 2011).

As can be seen from the studies reviewed here, bullying victimization and peer rejection are correlated with an array of internalizing and externalizing behaviors. Therefore, it is important to better understand when and under what circumstances victims respond prosocially to such acts of harm doing in addition to antisocial and asocial behavioral responses to strain. More research is needed to examine possible prosocial outcomes in response to strain, such as rejection.

According to the need to belong theory (Baumeister & Leary, 1995), individuals' hold the desire to belong or be accepted by others to the same degree that food, water, and shelter are considered basic human needs. Here, it is argued that there is an intrinsic motivation to be socially accepted and to fit into social groups as a means of improving human survival, well-being, and longevity. Thus, when this basic human need is threatened, such as by experiencing social rejection in the form of bullying, the theory asserts that individuals will experience three simultaneous motives in response to rejection. These include: 1) the desire to avoid further rejection, 2) the need for social acceptance, and 3) the need to defend the self. This dissertation incorporates the need to belong theory (Blackhart, Baumeister, & Twenge, 2006; Iffland, Sansen, Catani, &

www.manaraa.com

Neuner, 2014; Richman & Leary, 2009) and rejection literature to extend GST. Likewise, a related goal is to merge this literature with the concept of Positive Criminology where exploring prosocial behaviors as a possible outcome is recommended to improve an array of crime prevention programs (Ronel, 2006; Gredecki & Turner, 2009; Ronel & Segev, 2014).

Situating general strain theory in positive criminology

Positive Criminology is a broad perspective composed of multiple theories. Positive criminology recognizes the effects of positive forces or protective factors (e.g., social support, positive emotions, social acceptance, re-integrative shaming, therapy related programs) on individuals and communities and examines how these positive forces reduce negative affect and crime at the individual and community level (Ronel & Elisha, 2011; Ronel & Segev, 2014). In this dissertation, I seek to situate GST (Agnew, 1992; 2001; 2006) within the goals and objectives of Positive Criminology. In doing so, I will examine whether positive forces (e.g., social support) are more likely to be correlated with individuals responding to strain prosocially as opposed to asocially or antisocially.

The concept of Positive Criminology is built off Positive Psychology studies (Agaibi & Wilson, 2005; Seligman & Csikszentmihalyi, 2000; Seligman, Steen, Park, & Peterson, 2005) that seek to determine what positive factors contribute to the resilience of individuals and communities despite adverse situations or stressors (Ronel & Elisha, 2011). This theory also argues that the study of prosocial outcomes such as desistance from crime are important topics of research to improve prevention and intervention programs. Researchers arguing for this paradigm shift suggest that the field of criminology has focused too much on understanding how negative forces lead to crime

www.manaraa.com

(DeLisi & Vaughn, 2008; Farrington, 1995; Gottfredson & Hirschi, 1990; Laub & Sampson, 1993) with too little attention being paid to how positive forces aid in reducing crime (Ronel & Elisha, 2011; Ronel & Segev, 2014).

Positive forces are also referred to as protective factors when researchers consider risk and protective factor approaches to the study of crime (Andrews & Bonta, 2010). Protective factors include both internal and external controls that allow individuals to reduce criminogenic risk factors and resulting criminal behavior (Andrews & Bonta, 2010; Ronel & Haimoff-Ayali, 2009). Stress can produce negative and positive coping. Thus, this perspective recognizes how strains can also be an opportunity for positive change in growth or development, such as through seeking social support or relational repair (Ronel & Elisha, 2011, Ronel & Segev, 2014).

Research questions and hypotheses

In this dissertation, I aim to test the application of GST to explain bullying victimization and responses to bullying victimization. My research questions for each of the three studies included in this dissertation are outlined below:

Study 1 research questions

1. How prevalent are the four types of bullying victimization?
2. How prevalent are the four types of bullying perpetration?
3. How prevalent are the four types of bullying peer victimization?
4. What are the correlates and causes of the four types of bullying victimization?

Study 1 research hypotheses

H1) Verbal bullying will be the most common form of bullying.

www.manaraa.com

H2) Cyber bullying will be the least common form of bullying.

H3) Relational bullying will be more common than physical bullying.

H4) Males will be more likely than females to experience all four types of bullying.

H5) Because the majority of the students at this school are black, black students will be less likely than non-black students to experience bullying victimization.

H6) Younger students will be more likely than older students to experience physical and verbal bullying victimization.

H7) Older students will be more likely than younger students to experience relational and cyber bullying victimization than younger students.

H8) Youth scoring higher on social alienation will be at a greater risk of experiencing all four types of bullying victimization than will youth who are lower on social alienation.

H9) Prior bullying perpetrators will be at a greater risk of experiencing bullying victimization than those who have not previously been a bullying perpetrator.

H10) Students who report having an adult at school whom they can trust will be less likely to experience all forms of bullying victimization than youth who do not report having an adult at school with whom they can trust.

Study 2 research questions

1. How do responses to bullying victimization differ by the type of bullying?
2. Does social support increase the likelihood of responding prosocially to bullying victimization as opposed to antisocially or asocially?

www.manaraa.com

Study 2 hypotheses

H1) Negative emotions will be higher for relational and cyber bullying than for physical and verbal bullying.

H2) Individuals experiencing higher levels of anger in response to strains will be more likely to respond to bullying with antisocial behavior than will individuals experiencing lower levels of anger in response to bullying victimization.

H3) Individuals reporting lower self-esteem will be more likely than individuals reporting higher self-esteem to respond asocially to bullying.

H4) Individuals reporting higher levels of social support will be more likely to respond prosocially across all forms of bullying than those who report lower levels of social support.

Study 3 research questions

1. How does the power component in bullying affect responses to physical bullying?
2. How does the power component in bullying affect responses to relational bullying?

Study 3 hypotheses

H1) Individuals experiencing negative emotions as a result of their bullying victimization will be more likely than victims who do not experience negative emotions to respond antisocially

H2) Individuals reporting increases in the availability of alternative relationships will be more likely than victims who do not report having increases in alternative relationships to respond prosocially.

www.manaraa.com

H3) Individuals reporting higher perceptions of future availability of alternative relationships will be more likely than victims who do not report higher perceptions of future availability of alternatives to respond prosocially.

H4) Individuals reporting that their aggressor has high implicit power over them will be more likely than victims reporting that their aggressor does not have high implicit power over them to respond prosocially.

H5) Individuals reporting that their aggressor has high explicit power over them will be more likely than victims reporting that their aggressor does not have high explicit power over them to respond asocially.

www.manaraa.com

CHAPTER III

DESCRIPTIVES OF PREVALENCE AND PREDICTORS OF BULLYING VICTIMIZATION

Statement of the problem

In an earlier section, I discussed risk and protective factors of bullying victimization. In this chapter, I will highlight the key findings from the previous chapter and apply those findings in the context of this particular study. The purpose of the current study is to assess theoretical risk and protective factors for four types of bullying victimization: physical, verbal, relational, and cyber. Physical bullying involves hitting, kicking, or shoving others. Verbal bullying includes threatening harm or calling others mean names. Relational bullying includes gossiping about others or excluding others from social groups or cliques. Cyber bullying involves any form of harassment or bullying through electronic means. Physical and verbal bullying are more direct forms of bullying and are more easily detectable by bystanders whereas relational bullying and cyber bullying are more indirect and covert forms where the aggressor may not always be known to the victim of bullying (Rodkin, Espelage, & Hanish, 2015; Wang et al., 2009).

There are many known risk and protective factors of bullying victimization, and most of this research tends to examine these factors for general bullying victimization rather than by the type of bullying (Wynne & Joo, 2011). However, each type of bullying likely has its own set of risk and protective factors. Thus, the first goal of this study is to

www.manaraa.com

examine whether risk and protective factors vary by the type of bullying. The second goal of this study is to examine bullying victimization as an outcome of vicarious strain and other risk and protective factors. To date, few tests of GST assess victimization as an outcome of strain. Specifically, to my knowledge, only one study has assessed the effects of vicarious violent victimization on violent victimization as an outcome of strain (Zavala & Spohn, 2013). Related tests of GST applied to the study of victimization tend to focus on the victim-offender overlap (Lin, Cochran, & Mieczkowski, 2011) including studies where bullying victimization serves as the source of strain that is then associated with increased offending, bullying perpetration, and a host of other negative outcomes (Baker & Pelfrey, 2016; DeCamp & Newby, 2015; Cullen et al., 2008; Glassner & Cho, 2018; Jang, Song, & Kim, 2014). This study seeks to extend previous research of GST where victimization serves as the outcome variable in response to vicarious strains while accounting for risk and protective factors of bullying victimization. In doing so, I examine risk and protective factors for each of the four types of bullying victimization. In sections to follow, the prevalence and risk and protective factors for types of bullying are discussed. I also introduce GST as this study's theoretical framework and discuss research testing victimization as an outcome variable (Zavala & Spohn, 2013).

Literature review

Prevalence of types of bullying

Approximately 30% of middle and high school students between 6th and 10th grade are either victims or perpetrators of bullying (Nansel, Overpeck, Pilla, Simons-Morton, & Scheidt, 2001). This estimate of 30% has also been found in studies of bullying victimization and perpetration in schools (Craig et al., 2009). However, a more

www.manaraa.com

recent nationally-based, representative survey from 2016 indicates that 21% of high school students reported experiencing traditional (offline) bullying and 8% reported experiencing cyber bullying within the last six months (Zhang, Musu-Gillette, & Oudekerk, 2016). When it comes to types of bullying, one study conducted by Wang and colleagues (2009) examined the prevalence of bullying over a two-month timeframe, among a sample of 6th, 7th, 8th, 9th, and 10th graders in a nationally representative sample and found variation across the types of bullying. Specifically, Wang and colleagues (2009) found the majority of youth (54%) report verbal and (51%) relational bullying, followed by physical (21%) and cyber bullying (14%).

A meta-analysis conducted by Modecki, Minchin, Harbaugh, Guerra, and Runions (2014) A meta-analysis conducted by Modecki, Minchin, Harbaugh, Guerra, & Runions (2014) found traditional forms of bullying (physical, verbal, relational) to be reported by 36% of youth with cyber bullying averaging at about 15%. However, recent research suggested that traditional forms of bullying (physical, verbal, relational) have been on the decline. For instance, between 1999 and 2000, 29% of youth between ages 12 and 18 reported becoming a victim of bullying whereas from 2015 to 2016, 12% reported becoming a victim of bullying (Musu-Gillette, Zhang, Wang, Zhang, Kemp, Diliberti, & Oudekerk, 2018). While this may be true, high school only samples seem to report increased odds of bullying with between 9 and 40% of high school students reporting that they have also been victims of cyber bullying (Tokunaga, 2010; Mitchell, Finkelhor, Wolak, Ybarra, & Turner, 2011; David-Ferdon & Hertz, 2009). Thus, it may be that with age, relational bullying occurs more in an electronic context as opportunities for Internet and social media use also increase with age (Mehari & Farrell, 2018; Navarro & Jasinski,

www.manaraa.com

2012). Further, one-third to three-quarters of high school students report overlap between offline and online bullying (Juvonen & Gross, 2008; Twyman, Saylor, Taylor, & Comeaux, 2010; Ybarra, Diener-West, Leaf, 2007).

Consequences of Bullying victimization

Bullying is not without consequences and these consequences likely vary by the type of bullying. Generally, bullying victimization comes with a number of consequences, including negative emotions, harms to self-esteem, and negative outcomes including depression, self-harm, delinquency, and aggressive behavior (Agnew, 2002; Cullen et al., 2008). Over the life-course, bullying victimization is also associated with poorer mental and physical health, poorer finances, and problems developing healthy relationships into adulthood (Farrington, Lösel, & Loeber, 2011; Wolke, Copeland, Angold, & Costello, 2013).

Further, the type of bullying likely matters when it comes to associated risk factors and outcomes. For instance, increased time online is associated with increased risk for experiencing cyber bullying victimization (Navarro & Jasinski, 2012). Relational and cyber bullying have also been found to be more hurtful forms of bullying compared to physical and verbal bullying (Mehari & Farrell, 2018). Thus, depression is higher among youth who experience indirect forms of bullying compared to direct forms (Van der Wal, de Wit, & Hirasing, 2003). However, some research showed substantial overlap between experiencing offline and online forms of victimization so it is also likely that the majority of risk and protective factors overlap with some differences by type existing, particularly for relational and cyber bullying (Baker & Pelfrey, 2016; Kowalski, Morgan, & Limber, 2012; Schneider et al., 2012). Youth that experience both online and offline

www.manaraa.com

bullying victimization have also been found to be at a higher risk for depression and are five times more likely to report attempts in suicide (Schneider et al., 2012).

Risk and protective factors of bullying victimization

Who is most at risk?

Broadly, middle school students (Hoffman, Phillips, Daigle, & Turner, 2017) and young men (Hong & Espelage, 2012) are more likely to experience bullying victimization than are their counterparts. However, the type of bullying often affects this relationship. With age, relational and cyber forms of bullying tend to increase as youth develop into young adults while more direct forms of bullying tend to decrease with age (Low et al., 2010; Merrill & Hanson, 2016; Orpinas et al., 2015; Napoletano, Elgar, Saul, Dirks, & Craig, 2016; Salmon et al., 2018; Wang et al., 2009). Boys are more likely than girls to experience both physical and verbal bullying, and girls are sometimes more likely than boys to be victims of relational bullying (Wang et al., 2009). Both physical and verbal bullying decrease with age, but relational bullying increases. The increase in relational bullying occurs for both boys and girls, and thus in high school samples, many studies do not find gender differences in relational bullying (Card, Stucky, Sawlani, & Little, 2008; Stubbs-Richardson, Sinclair, Goldberg, Ellithorpe, & Amadi, 2018). Likewise, when it comes to cyber bullying, older youth are at an increased odds of experiencing bullying victimization because they have greater access to electronics and digital media than do younger youth (Navarro & Jasinski, 2012). Gender differences in cyber bullying are inconclusive (Kowalski & Limber, 2007; Marcum, Higgins, Freiburger, & Ricketts, 2012; Salmon et al., 2018).

www.manaraa.com

When it comes to race and bullying victimization, the demographic composition of the classroom or school appears to mater more than race as an individual-level risk factor (Vitoroulis & Vaillancourt, 2015). The race that makes up the fewest in numbers is at the greatest risk for bullying victimization at the school or classroom-level. This can be explained from an outgroup perspective – whatever racial category is fewer in numbers is at greater risk for bullying victimization than racial categories that are higher in numbers (Vitoroulis & Vaillancourt, 2015).

Youth who live in rural areas are more likely than those who live in urban areas to experience verbal taunting. This finding could be due to traditional gender norms and roles concentrated in rural, southern areas (Brown, Osterman, & Barnes, 2009; Nisbett & Cohen, 1996). However, youth living in rural areas are at a decreased odds of experiencing verbal threats with weapons and bullying victimization related to race or culture, and cyber victimization such as being asked for personal information over the Internet, compared to urban areas (Salmon et al., 2018). Some research indicates bullying is lower in rural areas compared to urban areas (Salmon et al. 2018; Wynne & Joo, 2011). The following sociodemographic variables in the aforementioned paragraphs will be tested in the current study: 1) gender, 2) race, and 3) age.

What are individual-level risk factors?

Previous peer rejection or victimization is a risk factor for future bullying victimization (Cook, Williams, Guerra, Kim, & Sadek, 2010; Higgins, Piquero, & Piquero, 2011; Wynne & Joo, 2011). Chronically rejected or socially alienated youth are at a greater risk for further victimization than are youth who are not alienated from their peers (Reijntjes, Thomaes, Bushman, Boelen, de Castro, & Telch, 2010). Likewise, youth

www.manaraa.com

who have formerly been a perpetrator are also at an increased odds of becoming a victim of that type of aggression (Zavala & Spohn, 2013). Further, youth who report high trait anger are at a greater risk for future victimization than are youth low in trait anger (Mazerolle, Piquero, & Piquero, 1997; 1998). Trait anger is associated with low self-control, which is also a risk factor of bullying victimization (Kulig, Pratt, Cullen, Chouhy, & Unnever, 2017). Youth high in trait anger and low self-control tend to experience higher levels of strain and thus commit more delinquency than do youth low in trait anger and high in self-control (Agnew et al., 2002; Zavala & Spohn, 2013). Lower levels of self-esteem are correlated with higher levels of bullying victimization because victims are viewed as easier targets than those who hold higher levels of self-esteem (Guerra, Williams, & Sadek, 2011). When it comes to the likelihood of experiencing cyber bullying victimization, computer proficiency and the amount of time spent online are considered risk factors (Hinduja & Patchin, 2008; Navarro & Jasinski, 2012).

The variables discussed above that will be included in the current study include: 1) social alienation, 2) prior perpetration, 3) low self-esteem, and 4) time spent on various forms of electronics and social media.

What are school-level risk factors?

Negative school environments, unfair application of rules, and students' lack of trust in teachers and adults are associated with an increased odds of youth experiencing bullying victimization (Cook, Williams, Guerra, Kim, & Sadek, 2010; Espelage & Swearer Napolitano, 2003). Both a fair application of rules and social support, however, serve as protective factors against bullying victimization (Wynne & Joo, 2011).

www.manaraa.com

In this study, the following protective factors will be examined: 1) whether students report if there is an adult that they can trust at school and 2) whether students report that they have a friend that they can trust at school. This study will also examine vicarious strain and anticipated strain as a part of Agnew's (2006) model of GST. In this study, vicarious strain is measured by asking students how often each of the four types of bullying victimization have happened to their peers. Anticipated strain is measured by examining whether students fear being attacked or threatened outside or on school property.

Theoretical perspectives

This study employs GST to explain risk and protective factors for four types of bullying victimization. In GST, Agnew (1992) asserts that strains such as the failure to achieve one's goals, the removal of positive stimuli, or the presence of negative stimuli create negative emotions which produce a need for corrective action among individuals experiencing strain. Strained individuals then should be more likely to respond via criminal or deviant coping. Agnew (2006) also argued that vicarious strain such as witnessing a family member or friend experience strain such as victimization could also be correlated with deviant or criminal coping.

One area of application that has been less examined through a GST lens is explaining how strains may result in an increased likelihood of victimization through the *offender-victim overlap* (Zavala & Spohn, 2013). Many studies have tested the victim-offender overlap; however, Zavala and Spohn (2013) examined the offender-victim overlap, such as whether and how offending behavior explained victimization through vicarious and anticipated strains. Zavala and Spohn (2013) tested the offender-victim

www.manaraa.com

overlap through the lens of GST using data on a sample of 734 males from the National Survey of Weapon-Related Experiences, Behaviors, and Concerns of High School Youth (Sheley & Wright, 1998).

Zavala and Spohn (2013) examined the role of both anticipated and vicarious strain in explaining both physical perpetration and physical victimization. Anticipated strain included a combined measure of how likely respondents thought they would: 1) be shot by a gun, 2) be stabbed with a knife, and 3) no longer be alive by the time they were age 25. Vicarious strain also included a combined measure of whether: 1) members of their immediate families have been attacked by someone with a gun, 2) their friends have been attacked by someone with a gun, 3) they have any close friends that have been shot, 4) they have been to parties or other social gatherings where others were carrying guns, 5) they have been to parties or other social gatherings where shots were fired, 6) the respondent has ever seen other youths carrying guns in their neighborhood, and 7) the respondent had seen someone severely wounded or killed by a gun, knife, or other weapon.

Victimization was measured by asking respondents how often they have had the following things happen to them while they were on/away from school property in the last 12 months. The list of possible forms of victimization to choose from included the following: 1) threatened with a gun, 2) actually been shot at, 3) been threatened with a knife or other sharp object, 4) actually been stabbed with a knife or other sharp object, 5) been beaten or hit with a bat, board, or other such weapon, 6)threatened with a gun but not shot at, 7) been shot at but not wounded, 8) actually been shot, 9) been threatened with a knife or other sharp object but not stabbed, 10) actually been stabbed with a knife

www.manaraa.com

or other sharp object, 11) been beaten or hit with a bat, board or other such weapon. Respondents answered each of these questions on a five-point Likert scale where, *Never = 0 to Many Times = 4*.

Perpetration was measured similarly where respondents were asked if in the past 12 months they had done any of the following: 1) shown a gun to someone and threatened to shoot them, 2) shown a knife or sharp object to someone and threatened to stab them, 3) actually shot at someone with a gun, 4) actually stabbed someone with a knife or sharp object, 5) used a weapon to stick up a store or person, and 6) hit or tried to injure someone with a bat, board, brick, rock or other object. Respondents answered on a Five-point Likert scale where, *Never = 0 and Many Times = 4*.

Zavala and Spohn (2013) found support in the application of GST to explaining the offender-victim overlap. Specifically, they found vicarious strain to significantly explain an increased likelihood of physical victimization and physical perpetration whereas anticipated strain was found to significantly explain an increased likelihood of physical victimization. Prior delinquency was significant in both the physical victimization and physical perpetration models. The researchers suggested that, in addition to self-control and social learning theories, GST may also explain the overlap between offending and victimization, and that future research should examine this topic.

The current study

In the current study, I seek to extend the work of Zavala and Spohn (2013) by applying Agnew's (2006) GST framework to better explain the outcome variable of four types of bullying victimization while examining an array of risk and protective factors. These risk and protective factors include the following variables: gender, race, age, social

www.manaraa.com

alienation (experienced strain), peer bullying victimization (vicarious strain), fear of harm at or away from school (anticipated strain), prior bullying perpetration, hostility, low self-esteem, time spent on various electronics and social media applications, and perceptions of peer and adult social support at school.

Study 1 research questions

1. How prevalent are the four types of bullying victimization?
2. How prevalent are the four types of bullying perpetration?
3. How prevalent are the four types of bullying peer victimization?
4. What are the correlates and causes of the four types of bullying victimization?

Study 1 hypotheses

H1) Verbal bullying will be the most common form of bullying.

H2) Cyber bullying will be the least common form of bullying.

H3) Relational bullying will be more common than physical bullying.

H4) Males will be more likely than females to experience all four types of bullying.

H5) Because the majority of the students at this school are black, black students will be less likely than non-black students to experience bullying victimization.

H6) Younger students will be more likely than older students to experience physical and verbal bullying victimization.

H7) Older students will be more likely than younger students to experience relational and cyber bullying victimization than younger students.

www.manaraa.com

H8) Youth scoring higher on social alienation will be at a greater risk of experiencing all four types of bullying victimization than will youth who are lower on social alienation.

H9) Prior bullying perpetrators will be at a greater risk of experiencing bullying victimization than those who have not previously been a bullying perpetrator.

H10) Students who report having an adult at school whom they can trust will be less likely to experience all forms of bullying victimization than youth who do not report having an adult at school with whom they can trust.

Methods

The sample

A total of 1,397 students were invited to participate in a survey about bullying and how students respond to bullying in a Southeastern High School. This study used active parental consent and child assent as requirements for study participation. Active parental consent requires that parents and students provide consent prior to their study participation while passive parental consent may entail asking students and or their parents to opt out of the study. All studies included in this dissertation used active parental consent and child assent. Consent form packets were distributed to teachers to pass out to their students across a two-week period. The research team went door-to door to remind teachers and students about the due date for the consent form packets. If consent forms had been returned that day, they were then picked up by the research team. Parents were also contacted via their home telephones to be reminded of the consent form due dates. This multi-wave consent form strategy resulted in a total of 556 students returning consent forms and 495 completing the survey (for a response rate of 40.1%).

www.manaraa.com

After deleting missing data or failure to pass attention check measures (e.g., "what school do you go to?"), 48 participants were dropped from further analyses, leaving a final sample of 447 respondents. Attention check measures were used to make sure that students were closely reading and responding to the survey as opposed to just clicking responses throughout the survey.

Survey design

At the start of the survey, students read the following instructions, "We are interested in how students get along with one another. Please think about your relationship with other students at your school during your last 3 months of school." Next, they were provided with definitions of the four types of bullying (See Table A.1: Adapted Children's Social Behavioral Scale; Crick & Grotpeter, 1995) and were then asked "How often has this happened to you? In response to this question, students could select *Never (0), Once (1), Rarely (2), Sometimes (3), Often (4), or All of the Time (5)*. Students also initially responded whether the bullying type was common in their school and whether they themselves had engaged in the behavior.

In the Year 1 data (Study 1 and Study 2 data), if students responded 2 or above (e.g., rarely, sometimes, often, or all the time), they were asked a series of follow up questions about how the incident made them feel and how they responded to each incident of bullying. In the Year 2 data (Study 3), students were asked a series of follow up questions if they responded 1 or above (e.g., once, rarely, sometimes, often, or all the time). Next, students are asked a series of emotional and cognitive related variables about their experience with bullying victimization.

www.manaraa.com

After emotional and cognitive related variables were asked, the final questions were related to behavioral responses to bullying: antisocial, asocial, and prosocial behavior (See Appendix, Table A.2). Behavioral responses to bullying were not included in study 1 but were included in studies 2 and 3. Here, students were prompted with the Responses to Rejection Scale with, "When someone became _____ aggressive (physical, verbal, relational or cyber) towards me, I have responded by? Students could respond on a scale from *0 Not at All to 4 Definitely* for each type of behavioral outcome (asocial, antisocial, and prosocial) items. Generally, items for these stayed consistent across the Year 1 (Study 2) and Year 2 data (Study 3) with most changes being implemented to improve the reliability of the prosocial items in the Year 2 data.

However, for the purpose of Study 1, the conditional response items such as behavioral responses to bullying are not measured. Instead, only non-conditional question wording included at the back of the survey was used to examine risk and protective factors for each type of bullying victimization.

Dependent variables

Recall, students were provided with definitions of each type of victimization where they were then asked to respond (*0 = never, 1 = once, 2 = rarely, 3 = sometimes, 4 = almost all of the time, and 5 = all of the time*) on a 6-point Likert scale. Survey items were adapted from the Crick and Grotpeter (1995) Children Social Behavioral Scale. The dependent variables in this study include the four types of bullying victimization: physical, verbal, relational, cyber. For the purpose of this study, each dependent variable (physical, verbal, relational, and cyber bullying victimization) was recoded into a dichotomous variable. Students answering that they had experienced bullying (physical,

www.manaraa.com

verbal, relational, cyber), on the scale of 1-5 were coded as 1 whereas students never experiencing bullying were coded as 0. This decision is consistent with previous research studies examining bullying victimization where dichotomous coding was selected because the majority of respondents had not experienced bullying victimization and those that had experienced victimization typically only experienced it once or rarely.

The definitions used as part of the survey for victimization and responses to bullying (e.g., antisocial, asocial, and prosocial behaviors) were provided in the Appendix A (See Tables A.1 and A.2).

Independent variables

The reliability analyses for all independent variables are provided in Tables 3.1 and 3.2. In paragraphs to follow, each of these measures are described. The key strain-related variables, including experienced, vicarious, and anticipated strain, are reported in Table 3.1. Other strain-related risk factors are presented in Table 3.2.

The Jessor's and Jessor's (1977) Social Alienation Scale was used to measure chronic social rejection or alienation as an experienced source of strain. A scale was created using the following items: 1) I often feel left out of things that others are doing; 2) You can't count on other people when you have problems or need help; 3) Most people don't seem to accept me when I'm just being myself; 4) Hardly anyone I know is interested in how I really feel inside; 5) It's hard to know how to act most of the time since you can't tell what others expect; and 6) I often feel alone when I am with other people. Students responded on a five-point Likert scale *(0 = not at all to 4 = definitely)*. Responses to the items were summed to create the social alienation scale ($\alpha = .81$).

www.manaraa.com

Higher scores on this index indicated higher levels of social alienation. This scale ranged from 6 to 24.

Vicarious strain was operationalized as experiencing strain through a peer, such as knowing of a peer's experience with bullying victimization. Here, students were given a definition of each type of bullying (physical, verbal, relational, and cyber) and were then asked the question, "how often has this happened to a friend of yours?" Students responded on a six-point Likert Scale *(0 = never through 5 = all the time)*. Vicarious strain was measured per bullying victimization type where responses ranged from 0 to 5. Higher scores indicated higher levels of peer victimization for that type of bullying.

Anticipated strain was measured by asking students how often they feel afraid that someone will attack or harm them at school or away from school. The two measures come from the National Crime Victimization Survey, and they include asking students the following two questions: 1) How often are you afraid that someone will attack or harm you in the school building or on school property?; and 2) How often are you afraid that someone will attack or harm you on a school bus or on the way to and from school? Students responded on a five-point Likert scale (*1 = Never through 5 = All of the Time*). Higher scores on the anticipated strain scale ($\alpha = .80$) indicated higher levels of anticipated strain. This scale ranged from 0 to 8.

www.manaraa.com

Table 3.1 Scale reliabilities (Cronbach's Alpha) independent variables for responses to bullying

Constructs	***Physical***	***Verbal***	***Relational***	***Cyber***
Items				
Independent Variables				
Experienced Strain – Social Alienation Scale	.81	.81	.81	.81
I often feel left out of things that others are doing.				
You can't count on other people when you have problems or need help.				
Most people don't seem to accept me when I'm just being myself.				
Hardly anyone I know is interested in how I really feel inside.				
It's hard to know how to act most of the time since you can't tell what others expect.				
I often feel alone when I am with other people.				
Anticipated Strain	.80	.80	.80	.80
How often are you afraid someone will:				
Attack/harm you in the school building or on school property.				
Attack/harm you on a school bus or to and from school.				

*Items are measured across types of bullying meaning they are asked at the end of the survey regardless of responses to bullying victimization constructs.

www.manaraa.com

Prior bullying perpetration was measured in a similar manner to students reporting on their experiences with bullying victimization. Students were first provided with a definition of the four types of bullying where they were then asked, in this case, "how often do you do this?" This allows for an assessment of bullying perpetration in addition to bullying victimization. As similar to the previous measure, items were adapted from the Children's Social Behavioral Scale (Crick and Grotpeter, 1995). Students respond on a 6-point Likert scale (*0 = never through 5 = all of the time*). Each item was assessed per bullying type. Across each type of bullying perpetration (physical, verbal, relational, cyber), outcomes range from 0 to 5.

Hostility consisted of four items using the Buss and Perry (1992) shortened Aggression Questionnaire. Items on this scale included the following: 1) When people are especially nice to me, I wonder what they want.; 2) At times I feel I have gotten a raw deal out of life.; 3) I sometimes feel that people are laughing at me behind my back.; and 4) I know that "friends" talk about me behind my back. Students responded on a 5-point Likert scale (*1 = Extremely uncharacteristic of me through 5 = Extremely characteristic of me*). Items were summated to create a composite score. Higher scores on the Hostility scale ($\alpha = .74$) indicated higher levels of hostility. Hostility ranged from 4 to 20.

To measure social support by peers or adults at school, students were asked whether there is an adult/friend that they can talk to who cares about their feelings and what happens to them at school. The two survey items included: 1) At school, there is an adult you can talk to, who cares about your feelings and what happens to you; and 2) At school, you have a friend you can talk to who cares about your feelings and what happens to you. Students responded to these two questions on a 5-point Likert scale (*1 = strongly*

www.manaraa.com

disagree through 5 = strongly agree). Each of these items, adult support and peer support, were measured separately with ranges from 1 to 5.

Students were asked "In the past six months, on average, how many hours per week have you spent using social media/your cell phone to call others/your cell phone to use social media? Students responded on a 7-point Likert Scale (*1 = I do not use through 7 = 21 or more hours*). These three measures were summated to create a scale indicating time spent on electronic and digital media applications ($\alpha = .84$). Higher scores on this scale indicated more time spent on electronic and digital media. Scored ranged from 3 to 21 hours.

In addition to the variables described, respondents were also asked sociodemographic questions related to gender, race, and age. Gender was measured as an open-ended question. Because only .7% indicated "other," gender was coded as a dichotomous variable (*1 = male and 0 = female*). Regarding race, respondents were asked: "How do you describe your race or ethnic group? (If multi-racial, please check all that apply)." The boxes available for checking included the following: 1) Asian, Native Hawaiian, or Pacific Islander, 2) Black, African American, or of African descent, 3) American Indian, Aleut, Native American, or Alaskan Native, 4) Hispanic, Chicano, Latino, or of Spanish origin, 5) White, Caucasian, or of European descent, and 6) Other. Because the majority of the sample was black (66%), race was recoded as black = 1 and non-black = 0. Age was a continuous variable.

www.manaraa.com

Table 3.2 Scale reliabilities (Cronbach's Alpha) independent variables for responses to bullying types

Constructs	***Physical***	***Verbal***	***Relational***	***Cyber***
Items				
Independent Variables				
Hostility*	.74	.74	.74	.74
Indicate how characteristic or uncharacteristic:				
When people are nice to me, I wonder what they want.				
At times, I feel I have gotten a raw deal out of life.				
I sometimes feel that people are laughing at me behind my back.				
I know that "friends" talk about me behind my back.				
Time Spent on Electronic/Digital Media*	.84	.84	.84	.84
Hours per week using social media				
Hours per week using cell phone to call others				
Hours per week using a cell phone to use social media				

Items with a * indicated they are measured across types of bullying meaning they are asked at the end of the survey regardless of responses to bullying victimization constructs.

www.manaraa.com

Analytical approach

The analyses proceeded in two stages. First, descriptive statistics were conducted. Second, a series of four logistic regression models were conducted per bullying victimization type: one model for explaining risk and protective factors of physical bullying victimization, followed by three additional models for verbal, relational, and cyber bullying. As the data are cross-sectional in nature, all relationships reported in sections to follow are understood to be correlational (rather than causal) in nature.

Results

Descriptive analyses

Descriptive statistics for the dependent and independent variables are provided in Tables 3.3-3.5. Regarding the frequency of types of bullying, hypotheses 1-3 were supported in that verbal bullying (M = .58) was the most common form, cyber bullying was the least common form (M = .26), and relational bullying (M =.52) was more common than physical bullying (M =.39).

Table 3.3 Descriptive statistics for dependent variables

	N	*Minimum*	*Maximum*	*Mean*	*Standard Deviation*
Physical Bullying Victimization	442	0	1	.3891	.48811
Verbal Bullying Victimization	443	0	1	.5779	.49446
Relational Bullying Victimization	438	0	1	.5160	.50032
Cyber Bullying Victimization	436	0	1	.2592	.43868

In Table 3.3, the distribution of experienced, vicarious, and anticipated strain-related independent variables are provided. Youth reported experiencing strain in the form of social alienation at a mean of 6.9 on a scale from 0 to 24. When it came to vicarious strain, such as experiencing the victimization of one's peers, youth reported that

www.manaraa.com

their friends had been victims of bullying once or rarely for physical (M = 1.5), verbal (M = 1.9), relational (M = 1.8) and cyber bullying (M = 1.1). Regarding anticipated strain, youth reported a mean of 1.0 for fear of an attack on their way to and from school.

Table 3.4 Descriptive statistics for experienced, vicarious, and anticipated strain

	N	*Minimum*	*Maximum*	*Mean*	*Standard Deviation*
Experienced Strain:					
Social Alienation	418	0	24	6.9833	5.73576
Vicarious Strain:					
Peer Physical Bullying Victimization	443	0	5	1.5237	1.31859
Peer Verbal Bullying Victimization	444	0	5	1.9167	1.32855
Peer Relational Bullying Victimization	439	0	5	1.7654	1.39211
Peer Cyber Bullying Victimization	433	0	5	1.1085	1.37091
Anticipated Strain:					
Fear of Victimization	431	0	8	1.0209	1.58834

Table 3.5 includes descriptive statistics for prior bullying perpetration, hostility levels, adult and peer support, time spent on digital or electronic media, and descriptive statistics for gender, race, and age. The means for verbal bullying perpetration (M =1.2), relational bullying perpetration (M =.96), physical bullying perpetration (M = .74), and cyber bullying perpetration (M = .52) are reported in Table 3.5. The range on the Hostility scale was 4 to 20 with a mean of 11.8. Students reported that they had an adult (M = 3.6) or friend (M = 4.0) that they could talk to at school who trusted and cared about their feelings. Youth reported spending an average of approximately 13 hours a week on digital and/or electronic media. Approximately 44% of the sample was male, 59% were black, and the average age was 16 years old.

www.manaraa.com

Table 3.5 Descriptive statistics for perpetration, hostility, social support, digital/electronic media use, and demographics

	N	*Minimum*	*Maximum*	*Mean*	*Standard Deviation*
Prior Physical Perpetration	445	0	5	.7461	1.11532
Prior Verbal Perpetration	442	0	5	1.2036	1.34153
Prior Relational Perpetration	438	0	5	.9612	1.25322
Prior Cyber Perpetration	436	0	5	.5229	1.13540
Hostility	413	4	20	11.8232	3.97690
Adult Support	422	1	5	3.6066	1.24513
Peer Support	421	1	5	4.0071	1.07457
Time Spent on Digital or Electronic Media	436	3	21	13.2821	4.86940
Male	445	0	1	.4427	.49726
Black	447	0	1	.5906	.49227
Age (in years)	447	14	19	15.95	1.267

Regression analyses

Binary logistic regression analyses were then conducted to explain the likelihood of experiencing four types of bullying victimization: physical, verbal, relational, and cyber. Odds ratios (Exp[B]) values are interpreted from each of the logistic regression models. For each unit change in the independent variables (e.g., physical, verbal, relational, or cyber perpetration), the odds are reported to change based on the (Exp[B]) value changes in the dependent variables (e.g., physical/verbal/relational/cyber bullying victimization) while holding all other variables constant. The regression models were examined for multicollinearity issues using bivariate correlations and regression diagnostics. Because no bivariate correlation was above .70 and no variance inflation factor score was above 5.0, multicollinearity between the variables was not an issue.

www.manaraa.com

Predictors of physical bullying victimization

Table 3.6 Logistic regression models predicting physical bullying victimization

	B	*SE*	*Exp(B)*	*p*
Experienced Strain:				
Social Alienation	-.020	.031	.980	.517
Vicarious Strain:				
Peer Physical Victimization	.821	.153	2.273	.000***
Peer Verbal Victimization	.222	.164	1.249	.176
Peer Relational Victimization	.015	.151	1.016	.918
Peer Cyber Victimization	-.244	.133	.784	.067
Anticipated Strain:				
Fear of Victimization	.180	.098	1.197	.066
Prior Bullying Perpetration:				
Physical Perpetration	.784	.156	2.190	.000***
Verbal Perpetration	.217	.140	1.243	.120
Relational Perpetration	.041	.134	1.042	.759
Cyber Perpetration	.195	.156	1.216	.212
Hostility	.019	.045	1.019	.674
Adult Support	.239	.161	1.270	.138
Peer Support	.112	.182	1.118	.539
Time Spent on Digital or Electronic Media	-.040	.032	.960	.204
Male	.362	.318	1.437	.254
Black	.349	.325	1.417	.283
Age (in years)	.024	.114	1.024	.836
Constant	-4.897	2.048	.007	.017*
Cox and Snell R^2	.387			
N	369			

The logistic regression model reported in Table 3.6 revealed that both physical peer victimization and prior physical perpetration had a significant association with the likelihood that youth would experience physical bullying victimization. Youth who reported that their friends experienced physical bullying (B = .821, p = .000) were 127% more likely than youth whose peers had not been victimized to experience physical bullying victimization. Youth who had engaged in prior physical perpetration (B = .784, p = .000) were 119% more likely to experience physical bullying victimization.

www.manaraa.com

Predictors of verbal bullying victimization

Table 3.7 Logistic regression models predicting verbal bullying victimization

	B	*SE*	*Exp(B)*	*p*
Experienced Strain:				
Social Alienation	.049	.032	1.050	.124
Vicarious Strain:				
Peer Victimization				
Peer Physical Victimization	.109	.139	1.115	.433
Peer Verbal Victimization	.489	.153	1.631	.001**
Peer Relational Victimization	.032	.144	1.033	.823
Peer Cyber Victimization	-.169	.125	.844	.177
Anticipated Strain:				
Fear of Victimization	.307	.111	1.360	.006**
Prior Bullying Perpetration:				
Physical Perpetration	.033	.164	1.034	.841
Verbal Perpetration	1.061	.166	2.889	.000***
Relational Perpetration	-.038	.139	.963	.787
Cyber Perpetration	-.063	.160	.939	.695
Hostility	-.057	.044	.945	.199
Adult Support	.324	.146	1.382	.026*
Peer Support	.061	.167	1.063	.715
Time Spent on Digital or Electronic Media	-.045	.030	.956	.136
Male	-.071	.303	.932	.815
Black	-.533	.296	.587	.072
Age (in years)	.078	.107	1.081	.463
Constant	-3.386	1.892	.034	.074
Cox and Snell R^2	.362			
N	369			

The logistic regression model reported in Table 3.7 revealed that verbal peer victimization, anticipated strain, prior verbal perpetration, and adult support had significant associations with the likelihood that youth would experience verbal bullying victimization. When youth's peers experienced verbal victimization (B = .489, p = .001), the odds of youth experiencing verbal victimization increased by 63%. For every one unit increase in anticipated strain (B = .307, p = .006), youth were 36% more likely to experience verbal bullying victimization. Youth who had engaged in prior verbal bullying perpetration (B = 1.061, p = .000) were 189% more likely to report experiencing verbal

www.manaraa.com

bullying victimization. Youth who had adult support (B= .324, p=.026) were 38% more likely to experience verbal bullying victimization.

Predictors of relational bullying victimization

Table 3.8 Logistic regression models predicting relational bullying victimization

	B	*SE*	*Exp(B)*	*p*
Experienced Strain:				
Social Alienation	.054	.030	1.055	.076
Vicarious Strain:				
Peer Victimization				
Peer Physical Victimization	.259	.146	1.296	.077
Peer Verbal Victimization	-.264	.160	.768	.099
Peer Relational Victimization	.876	.151	2.400	.000***
Peer Cyber Victimization	-.091	.122	.913	.455
Anticipated Strain:				
Fear of Victimization	-.029	.094	.971	.757
Prior Bullying Perpetration:				
Physical Perpetration	.153	.161	1.165	.344
Verbal Perpetration	-.041	.144	.960	.775
Relational Perpetration	.810	.151	2.247	.000***
Cyber Perpetration	.184	.157	1.201	.242
Hostility	-.011	.042	.989	.788
Adult Support	-.352	.153	.703	.021*
Peer Support	.377	.173	1.457	.030*
Time Spent on Digital or Electronic Media	.014	.030	1.014	.652
Male	.234	.310	1.264	.451
Black	-.726	.305	.484	.017*
Age (in years)	.126	.110	1.134	.252
Constant	-4.373	1.927	.013	.023*
Cox and Snell R^2	.390			
N	369			

The logistic regression model reported in Table 3.8 revealed that relational peer victimization, prior relational perpetration, adult and peer support, and the respondent's race had significant associations with the likelihood that youth would experience relational bullying victimization. Youth who reported that their peers experienced relational bullying (B = .876, p = .000) were 140% more likely than their counterparts to experience relational bullying victimization themselves. Youth who had engaged in prior relational bullying perpetration (B = .810, p = .000) were 125% more likely than youth

www.manaraa.com

who had not engaged in prior relational bullying perpetration to have experienced relational bullying victimization. Youth who reported having adult support (B = -.352, p = .021) were 30% less likely to experience relational bullying victimization than their counterparts. However, youth who reported having peer support (B = .377, p = .030) were 1.457 times more likely to experience relational bullying victimization. The model also shows that black youth (B = -.726, p = .017) were 52% less likely to experience relational bullying victimization.

Predictors of cyber bullying victimization

Table 3.9 Logistic regression models predicting cyber bullying victimization

	B	*SE*	*Exp(B)*	*p*
Experienced Strain:				
Social Alienation	.008	.033	1.008	.815
Vicarious Strain:				
Peer Victimization				
Peer Physical Victimization	.139	.154	1.149	.368
Peer Verbal Victimization	-.146	.171	.864	.393
Peer Relational Victimization	-.025	.158	.975	.872
Peer Cyber Victimization	.597	.129	1.817	.000***
Anticipated Strain:				
Fear of Victimization	.225	.100	1.253	.025*
Prior Bullying Perpetration:				
Physical Perpetration	.070	.177	1.072	.693
Verbal Perpetration	.039	.152	1.040	.798
Relational Perpetration	.187	.138	1.206	.175
Cyber Perpetration	.744	.159	2.105	.000***
Hostility	-.049	.047	.952	.297
Adult Support	.006	.153	1.006	.971
Peer Support	.407	.200	1.502	.042*
Time Spent on Digital or Electronic Media	.053	.034	1.055	.116
Male	-.199	.333	.820	.550
Black	-.636	.321	.529	.047*
Age (in years)	.097	.120	1.102	.419
Constant	-5.773	2.222	.003	.009**
Cox and Snell R^2	.285			
N	370			

The logistic regression model reported in Table 3.9 revealed that cyber peer victimization, anticipated strain, prior cyber perpetration, anticipated strain, peer support,

www.manaraa.com

and race had significant associations with the likelihood that youth would experience cyber bullying victimization. Youth who reported that their friends experienced cyber bullying victimization (B = .597, p = .000) were 82% more likely to experience cyber bullying victimization than their counterparts. Youth who report experiencing anticipated strain such as fear of attack at or away from school (B = .225, p = .025) were 25% more likely to experience cyber bullying victimization than their counterparts. Youth who had been a perpetrator of cyber bullying (B = .744, p = .000) were 111% more likely than youth who had not been a perpetrator to become a victim of cyber bullying. Youth who reported that they had peer support (B = .407, p = .042) were 50% more likely to experience cyber bullying victimization than those without peer support. Black youth (B = -.636, p = .047) were 47% times less likely to experience cyber bullying victimization than non-black youth.

Predictors of bullying victimization

In this section, I discuss which hypotheses were supported across the four logistic regression models. Because gender was not a significant predictor of bullying victimization across the models, support was not found for Hypothesis 4, which predicted that males would be more likely than females to experience the four types of bullying. Hypothesis 5 was partially supported, such that black youth were less likely than non-black youth to experience relational and cyber bullying victimization. Age was not a significant predictor of bullying victimization and thus no support was provided for Hypotheses 6 or 7. Social alienation was not a significant factor across the models and thus Hypothesis 8 was not supported. Support was obtained for Hypothesis 9; youth who had been a prior perpetrator of any type of bullying were found to be more likely to

www.manaraa.com

experience that same type of bullying victimization. Partial support was found for Hypothesis 10; adult support led to decreases in experiencing victimization by relational bullying. Surprisingly, adult support actually led to an increased risk for experiencing verbal bullying victimization. This could be due to other student's perceptions that the victim of bullying is considered the "teacher's pet." Alternatively, it could be that once youth reached out for support, they learned that they did have an adult they could trust and talk to about their problems at school.

Discussion

In sections that follow, I discuss each of the significant factors that explain the likelihood of youth experiencing that type of bullying victimization. Significant variables across these four models are reported in Table 3.10. In sections to follow, I discuss the potential implications of each of the significant factors.

Table 3.10 Summary of significant findings from Study 1

Physical	Verbal	Relational	Cyber
Peer physical victimization (B = .821, p =.000***); Physical perpetration (B = .784, p = .000***)	Peer verbal victimization (B = .489, p = .001**); Anticipated strain: fear of victimization (B = .307, p = .006**); Verbal perpetration (B = 1.061, p = .000); Adult support (B = .324, p = .026*)	Peer relational victimization (B = .876, p = .000***); Relational perpetration (B = .810, p = .000***); Adult support (B = -.352, p = .021); Peer support (B = .377, p = .030); Black (B = -.726, p = .017*)	Peer cyber victimization (B = .597, p = .000***); Anticipated strain: fear of victimization (B = .225, p = .025*); Cyber perpetration (B =.744, p =.000***); Peer support (B = .407, p = .042*); Black (B = -.636, p =.047*)

www.manaraa.com

Implications of predictors of physical bullying victimization

Interestingly, the two variables related to physical bullying, physical peer victimization and prior physical perpetration, led to an increased odds of youth experiencing physical bullying victimization (See Table 3.6). It may be that youth who defend their friends are more likely to then experience physical bullying victimization, or that more direct aggression is common around one's peer group generally. For every unit increase in peer physical victimization, youth were 127% more likely to experience physical bullying victimization themselves. Similarly, for every unit increase in prior physical perpetration, youth were 119% more likely to experience physical bullying victimization than youth who had not engaged in prior physical bullying. Thus, the likelihood of experiencing physical bullying victimization increased the most when the bullying type of peers and one's personal actions were both physical in nature.

Implications of predictors of verbal bullying victimization

In much the same manner as physical bullying, types of peer bullying and prior perpetration explained the increased odds of youth experiencing that type of bullying victimization (See Table 3.7). Youth whose peers experienced verbal victimization and youth who engaged in prior verbal bullying perpetration were significantly more likely to experience verbal bullying victimization themselves. The type of bullying then may be associated with a group's conception of social norms.

Two other variables in this model that explained the odds of experiencing verbal bullying victimization included anticipated strain and adult support. For every one unit increase in anticipated strain, or fear of attack, youth were 36% more likely to experience verbal bullying victimization. For every one unit increase in adult support, youth were

www.manaraa.com

38% more likely to experience verbal bullying victimization. This finding is surprising; however, it may mean that students with more adult support in school are labeled by other students as "teacher's pet," making them more of a target of verbal bullying. Alternatively, it could be that when youth reached out for support, they found an adult who cared about their feelings; one that they could confide in and seek support related to the bullying victimization.

Implications of predictors of relational bullying victimization

The significant factors in explaining the odds of youth experiencing relational bullying victimization included relational peer victimization, prior relational bullying perpetration, adult and peer support, and race (See Table 3.8). Youth who reported that their peers had experienced relational bullying and those who had previously engaged in relational bullying were more likely to be victimized by relational bullying. Given that relational bullying tends to cluster among peer groups (de Bruyn & Cillessen, 2006), it may be that in groups where this form of bullying is more normalized, youth and their peer groups are more at risk for experiencing relational bullying victimization. Interestingly, this finding appears to translate across the types of bullying.

Adult support decreased the odds that youth will experience relational bullying. Given that relational bullying is underrecognized, having adult support and trust should lead to more open communication about this form of bullying and subsequently a decreased odds of youth experiencing relational bullying victimization (Rodkin, Espelage, & Hanish, 2015). However, peer support actually increased the odds that youth would experience relational bullying victimization. Peer support may result in youth repeating gossip or exclusionary behavior which leads to a cycle of retaliatory behavior

www.manaraa.com

on behalf of the original aggressor(s). One explanation for peer support positively correlating with relational bullying could be that bullying victims are more attentive to bullying victimization. These youth may then band together as a support group of victims where they commiserate about their victimization together, which may sometimes result in subsequent aggression on behalf of themselves or their peers. Finally, black youth were less likely to experience relational bullying than non-black youth; this finding is in line with previous research conducted by Simmons (2002) showing that black youth engage in more direct forms of aggression as opposed to the indirect nature of relational aggression.

Implications of predictors of cyber bullying victimization

Significant factors for the cyber bullying victimization model reported in Table 3.9 included the following: cyber peer victimization, anticipated strain, prior cyber perpetration, peer support, and black youth. Similar to other models, youth whose peers experience cyber bullying victimization were significantly more likely to experience cyber bullying victimization than their counterparts. Youth who experience anticipated strain where they report fearing attack on or away from school property were also more likely than youth who did not report anticipated strain to experience cyber bullying victimization. Youth who have engaged in prior cyber bullying perpetration were more likely to experience cyber bullying victimization than were youth who had not engaged in prior cyber bullying perpetration. The model also shows that youth who have peer support were significantly more likely to experience cyber bullying victimization. Witnessing bullying victimization may heighten youth's sensitivity to bullying victimization of themselves and their peers. This heightened attention to bullying

www.manaraa.com

victimization may then lead some youth to commiserate over their bullying victimization and band together for peer support to combat cyber bullying. In doing so, some youth may engage in acts of aggression themselves making the peer support more antisocial in nature rather than prosocial. Thus, peer support may not always be a protective factor when supporting peers are engaged in aggressive retaliation on behalf of their friends. Finally, black youth were less likely to experience cyber bullying victimization than non-black youth. This finding is again similar to previous research suggesting that black youth are less likely to engage in indirect forms of aggression (Simmons, 2002).

Limitations and future research

This study is limited by the sample size of each of the types of bullying victimization. A larger sample size would allow for better estimates of the factors that explain each type of bullying victimization. Further, this study was conducted in a rural, Southeastern high school and thus, the findings here may differ from the results of high schools in other contexts. For example, some evidence indicates gender roles and masculinity as tied to aggression are higher in the South, thus it is likely that there are more positive perceptions of antisocial responses to bullying (Brown, Osterman, & Barnes, 2009; Nisbett & Cohen, 1996). Thus, the desire for establishing respect either for one's peers or one's self through antisocial responding, may be a more common response to bullying (Anderson, 1999; Frey, Pearson, & Cohen, 2015). Thus, the reason peer victimization by bullying is associated with bullying victimization across all four types of victimization may be due to retaliation behaviors on the behalf of one's peers. This may also explain why peer support sometimes serves as a risk factor rather than a protective factor, depending on the bullying type. Future research should examine risk and

www.manaraa.com

protective factors for each type of bullying victimization using a national sample of adolescents across rural, urban, and suburban contexts. Additionally, future research should investigate co-victimization experienced by oneself and one's peers and whether retaliatory responses are associated with further victimization.

Contributions

In this research, I examined whether there were unique predictors based on the type of bullying. As a whole, it appears that types of experiences with a type of bullying, whether it be peer victimization or prior bullying perpetration, increased the odds of experiencing that same type of bullying victimization. Thus, it may be that certain types of bullying occur more in certain friend circles whether through one's relationship with deviant peers or with peer victims of bullying. Consequently, the dynamics of social networks may further explain the prevalence and norms of certain types of bullying. Future research should investigate the social norms surrounding the prevalence of types of bullying and locate the prevalence of bullying within and across social cliques at school. Understanding these dynamics may then allow teachers or school personnel to better understand the social dynamics of bullying so they can prevent and intervene based on the types of bullying occurring within their school contexts.

www.manaraa.com

CHAPTER IV

RESPONSES TO BULLYING AMONG HIGH SCHOOL STUDENTS THROUGH THE LENS OF GENERAL STRAIN THEORY

Statement of the problem

Bullying makes victims feel socially rejected. Rejection in its many forms (e.g., physical, verbal, relational, cyber bullying) threatens the need to belong (Baumeister & Leary, 1995). A threat to this basic need can result in strain that typically produces three motives: 1) the need to restore social acceptance, 2) the need to avoid further rejection, and 3) the need to defend oneself (Agnew, 1992; 2006; Blackhart, Baumeister, & Twenge, 2006; Iffland, Sansen, Catani, & Neuner, 2014; Richman & Leary, 2009). These motives may occur simultaneously and elicit a variety of behavioral responses that vary across experiences with rejection (Richman & Leary, 2009).

In GST, Agnew (1992; 2006) asserted that negative emotion leads to aggressive or criminal coping in response to strain, particularly when the strain is of long duration, frequent or severe. This definition of strain is easily applied to bullying victimization which is characterized by repeated intentional harm doing and power differentials among the bully and victim (Olweus, 1991). Studies have found self-harm and suicidal ideation (Hay & Meldrum, 2010; Hay, Meldrum, & Mann, 2010), avoidance and weapon carrying behaviors (Keith, 2017), and bullying perpetration (Jang, Song, & Kim, 2014; Patchin & Hinduja, 2011) are responses to the strain of bullying victimization.

www.manaraa.com

Among those studies that have assessed responses to bullying victimization, the outcomes have been primarily limited to asocial and antisocial responses (Agnew, 2006; 2016; Hay, Meldrum, & Mann, 2010; Patchin & Hinduja, 2011). However, responses to bullying may also include prosocial responses (Richman & Leary, 2009).

While many adolescents respond to bullying asocially (Hay & Meldrum, 2010) or antisocially (Farrington & Ttofi, 2011; Reijntjes, Thomaes, Bushman, Boelen, de Castro, & Telch, 2010), many adolescents also respond prosocially (e.g., by befriending others; Richman & Leary, 2009; Stubbs-Richardson, Sinclair, Goldberg, Ellithorpe, & Amadi 2017). Further, responses to bullying may depend on a number of situational-based factors, such as the form (Archer & Coyne, 2005; Card, Stucky, Sawalani, & Little, 2008) and the type of bullying. For example, many researchers have found cyber bullying to have more negative consequences than traditional forms of bullying, in part because digital media aids in the spread of information but also because it is difficult to escape (Hinduja & Patchin, 2014). Relational aggression is also said to cause more psychological harm than physical or verbal bullying (Crick & Grotpeter, 1995). Because physical and verbal bullying are more direct forms due to the fact that they occur face-to-face, these forms may result in more immediate, retaliatory behavioral responses while relational and cyber bullying bring more asocial responses.

Likewise, responses to the context in which the bullying victimization takes place may result in a variety of situation-based negative emotions. For instance, anger was found to increase retaliatory responses while feeling sad was found to increase more asocial responses (Beall & Tracy, 2017). Further, other contextual factors may increase the likelihood of a prosocial response to strain, such as the availability of alternative

www.manaraa.com

relationships for social support. Social support has been found to decrease the likelihood of aggressive responding across a range of strains (Agnew, Brezina, Wright, & Cullen, 2002; Agnew, 2006; 2013).

The current study extends GST (Agnew, 1992) via application of two key variables to assess whether and how adolescents differentially respond to four types of bullying. These components include the availability of alternative relationships and prosocial responding. The availability of alternative relationships is the presence of having others to turn to or count on for social support. In doing so, this study expands GST by 1) testing the possible conditioning effect of the availability of alternative relationships, 2) expanding the types of outcomes to also consider prosocial behavior in response to physical, verbal, relational, and cyber bullying, and 3) testing the effects of demographic characteristics on behavioral responses to bullying. In sections that follow, definitions of bullying and its consequences are discussed, followed by an overview of GST and its application to bullying, with proposed extensions of the theory as tested in this study.

Literature review

Definitions, statistics, and consequences of bullying

Bullying, a form of aggression to cause harm to others, comes in many forms: physical, verbal, relational, and cyber. Physical bullying involves hitting, slapping, punching, or shoving others. Verbal bullying occurs when individuals call others names to cause harm in a face-to-face social interaction. Relational bullying includes spreading rumors or gossiping about someone to damage their reputation or self-concept. Cyber

www.manaraa.com

bullying includes harming others through electronic means, such as by spreading inappropriate or hurtful images or messages about someone.

National-level data from the National Center for Education Statistics indicate that as many as 7% of U.S. 8th graders and 15% of 4th graders experienced bullying at least once a month (Zhang, Musu-Gillette, & Oudekerk, 2016). Here, bullying is defined as a list of harmful behaviors, including those occurring through text messages and/or the Internet. Public middle and high school students who were bullied in the past month reported that their experience had a negative effect on their self-esteem (19%), their relationships with friends, family, or school work (14%), and their physical health (9%) (Zhang, Musu-Gillette, & Oudekerk, 2016). However, when bullying was measured based on types of bullying where definitions are provided to respondents, ranges of estimates across types of bullying include: 13–28% for physical, 37%-62% for verbal, 24-43% for relational and 7-11% for cyber bullying (Kowalski & Limber, 2007; Wang et al. 2009).

Discrepancies in the prevalence of bullying are due to sample variations but are also due to how bullying is defined. Bullying is often characterized by power differentials and repeated aggression directed toward victims (Olweus, 1991; Sidanius, & Pratto, 2001). In less traditional forms of bullying, anonymity and rumor spreading may heighten the need to focus on power differentials and repeated aggression as defining concepts. For instance, some studies have found that there are more power dynamics involved in relational and cyber bullying because it is hidden from adults who could intervene to stop the bullying (Nelson, Burns, Kendall, & Schonert-Reichl, 2017). Further, cyber bullying victimization may be worse than victimization by other forms of bullying at school due to

www.manaraa.com

the perceived severity of information spread. The anonymity, permanence of online content, and the broader audience of online bystanders, for example, can result in cyber bullying or relational aggression feeling more consequential to youth's social standing, self-concept, and reputation. In fact, some studies suggest victims of cyber bullying and relational bullying report more distress than those experiencing more traditional forms of bullying such as verbal and physical aggression (Kowalski, Limber, & Agaston, 2008; Williams & Nida, 2009). Further, in a study of middle and high school students in New England, youth reported that having sexual rumors spread about them was the most hurtful type of bullying experienced (Gruber & Finernan, 2008).

As a form of social rejection, bullying has obvious consequences for youth. In fact, social rejection is associated with increases in stress cortisol levels and physical pain receptors (MacDonald & Jensen-Campbell, 2011; Vaillancourt, Clinton, McDougall, Schmidt, & Hymel, 2010). Further, responses to bullying have been linked to a variety of antisocial behaviors (Leary et al., 2003; Sommer, Leuschner, & Scheithauer, 2014; Patchin & Hinduja, 2010). However, not all youth respond aggressively to bullying (Blackhart, Baumeister, & Twenge, 2006). Thus, a question remains; when do youth respond to rejection antisocially versus prosocially or asocially? The current study proposes to test an extension of GST by also examining prosocial behavior in response to physical, verbal, relational, and cyber bullying victimization. Further, one factor that may serve as a conditioning effect on the relationship between strain and prosocial responding is the availability of alternative relationships. In the following sections, GST and literature informing the proposed extension of GST are discussed.

www.manaraa.com

Theoretical perspectives

Bullying and general strain theory

Previous studies have limited the application of GST to primarily examining externalizing behaviors (e.g., violent, property, status delinquency, bullying) as responses to strain (Agnew, 2006; Moon & Morash, 2017; Patchin & Hinduja, 2011). Further, although Agnew (1992) discussed the impact of bullying as a type of strain, few studies have applied GST to an examination of how individuals respond to bullying-related strains (Hay, Meldrum, & Mann, 2010; Hay & Meldrum, 2010; Moon & Morash, 2017; Keith, 2018).

Hay et al. (2010) used GST to examine whether and how those experiencing bullying victimization engaged in self-harm or suicidal ideation. They found that cyber victims fared worse than traditional victims with self-harm and suicidal ideation resulting in greater effects associated with bullying than with delinquency. Females were 70% more likely than males to report internalizing problems. In a similar study, as traditional and cyber bullying increased, so did self-harm and suicidal ideation (Hay & Meldrum, 2010). The relationship between bullying victimization and self-harm or suicide ideation was mediated by negative emotions. Further authoritative parenting and high self-control diminished the effects of bullying victimization on self-harm and suicidal ideation.

Another area of GST that has received little research is situation-based negative emotions (Moon & Morash, 2017). One criticism of GST is that the immediate negative emotions experienced from an event are not often measured. Instead, emotions are measured as separate feelings from the event eliciting them. Agnew (2006) asserted the need to assess situation-based emotions as opposed to trait-based emotions, because the

www.manaraa.com

former better explain responses to strain than general affect. Moon and Morash (2017) examined situation-based negative emotions in response to seven types of strains, including: family conflict, family punishment, teacher punishment, exam stress, financial strain, gender discrimination, and victimization to explain violent, property, and status offending. Agnew (2006) and Broidy and Agnew (1997) determined that types of strains and situation-based negative emotions vary by gender (Moon & Morash, 2017). Specifically, males experienced strains tied to teacher's physical or emotional punishment and criminal victimization whereas females experienced more family related strains. For males, these strains resulted in increased violent and property delinquency whereas family strains for females led to increased status offenses (Moon & Morash, 2017). Thus, it is important that studies consider contextual factors, including demographic factors, types of strains, and situation-based negative emotions.

Keith (2018) used the 2009 School Crime Supplement among a national sample of high school students to examine the effects that both traditional and cyber bullying had on the negative emotion fear and whether this emotion led to avoidance behaviors and weapon carrying. Both forms of bullying were found to increase fear, avoidance behaviors, and weapon carrying. However, fear was not found to mediate the relationship between strain and coping processes. Thus, more research is needed to assess situation-based negative emotions and how these emotions affect behavioral responding.

Proposed extensions of general strain theory

The current study proposes to extend GST by examining the following: 1) prosocial behavior as a response to youth experiences with types of bullying victimization, 2) the effect of situation-based negative emotions on the likelihood of

www.manaraa.com

types of behavioral responses (i.e., antisocial, asocial, prosocial), and 3) the possible conditioning effects of the availability of alternative relationships.

First, the idea that prosocial behavior is a possible response to bullying is borrowed from the stress, rejection, and aggression literature in psychology (Richman & Leary, 2009). Studies in psychology demonstrate that if aggression is the only response outcome measured, estimates of aggressive responding might be inflated, producing less accurate knowledge and understanding of how individuals react to types of strains. Second, the concept of situation-based emotions is well developed in the sociology of emotions and psychology of emotions literature and has been found to be a more accurate factor in explaining how an individual might respond to a particular incident in question (Moon, Morash, McCluskey, & Hwang, 2009). Further, many have critiqued GST on this note. Critics argue that the original theory does not define negative emotions as being grounded in types of strains experienced (Moon & Morash, 2017). Third, while the availability of alternative relationships has often been used as a risk factor regarding relationship maintenance and commitment, it has been less examined in application to friendships when a relationship has been strained where it may serve more as a protective factor (Branje, Frijns, Finkenauer, Engels, & Meeus, 2007; Richman & Leary, 2009). Below, literature for each of these variables is reviewed.

Prosocial behavior

Prosocial behavior may consist of developing new relationships, reaching out to others for social support, or doing nice things for others (Richman & Leary, 2009). Richman & Leary (2009) argue that prosocial behavior is most likely when the rejectee seeks to restore belonging by promoting acceptance with the rejecter. Negative emotions

www.manaraa.com

may also be alleviated if individuals perceive that there is a possibility of alternatives to antisocial behaviors.

Situation-based negative emotions

Agnew (1992; 2006) argued that situation-based emotions had a stronger impact on future behavior than trait-based emotions (i.e., general emotions, mood, personality traits; Moon, Morash, McCluskey, & Hwang 2009). Further, in the sociology of emotion literature, the types of emotions experienced (i.e., sad, upset, angry, embarrassed) are expected to vary by contextual features such as the form of rejection and the availability of alternative relationships or available social support (Stets & Turner, 2014).

The availability of alternative relationships

The availability of others for interpersonal relationships for social support explains social withdrawal behavior in the Investment Model (Rusbult, 1980; 1983; Rusbult, Martz, & Agnew, 1998). Specifically, the investment model seeks to explain relationship stability primarily in romantic relationships by considering three key variables: relationship satisfaction, quality of alternatives, and investments. Studies testing this model find low relationship satisfaction, low investments, and higher quality of alternatives to be associated with an increased likelihood of relationship dissolution. Thus, according to this model, the availability of alternatives actually harms the chances of relational repair when the relationship partner withdraws from the current relationship to seek attention elsewhere. Within tests of the investment model, alternative relationships showed decreased relationship satisfaction and relationship stability, leading researchers (Richman & Leary, 2009) to suggest that the availability of alternative

www.manaraa.com

relationships should explain asocial or withdrawal types of behavior in response to social rejection, such as bullying.

However, the availability of alternative relationships is similar to the concept of social support in the criminology literature. In Criminology, social support means having others one can turn to, count on, or go to for social support. Cullen (1994) argued that social support reduces antisocial behaviors and increases prosocial behaviors. Thus, it is expected that the availability of alternative relationships will be associated with increases in both prosocial and withdrawal responses with decreases in antisocial responses. Moreover, research supports the idea that the availability of alternative relationships is more important for older adolescents than younger, and for girls than boys, in maintaining same-sex friendships (Branje, Frijns, Finkenauer, Engels, & Meeus, 2007). Consequently, stronger effects for prosocial and withdrawal responding are expected to be found among girls and older youth than boys and younger youth.

The current study

Study 2 research questions

1. How do responses to bullying victimization differ by the type of bullying?
2. Does social support increase the likelihood of responding prosocially to bullying victimization as opposed to antisocially or asocially?

Study 2 hypotheses

H1) Negative emotions will be higher for relational and cyber bullying than for physical and verbal bullying.

www.manaraa.com

H2) Individuals experiencing higher levels of anger in response to strains will be more likely to respond to bullying with antisocial behavior than will individuals experiencing lower levels of anger in response to bullying victimization.

H3) Individuals reporting lower self-esteem will be more likely than individuals reporting higher self-esteem to respond asocially to bullying.

H4) Individuals reporting higher levels of social support will be more likely to respond prosocially across all forms of bullying than those who report lower levels of social support.

Methods

The sample

A total of 1,397 students were invited to participate in a self-report survey about bullying and responses to bullying at a Southeastern high school in 2016. To participate in this study, parental active consent and child assent was required. An active consent and assent process required student and parent consent prior to study participation while passive consent procedures typically require notification of study participation unless students or parents opt out of a study. Multiple waves of consent forms were distributed in the school over a two-week period. Teachers were contacted to remind students about the due date of the consent forms. Likewise, parents were contacted via their home telephones and were reminded of the consent form due dates. This process resulted in a total of 556 students returning consent forms with a total of 495 completing the survey (for a response rate of 40.1%). Due to missing data and or failure to pass attention check measures (e.g., what is your school mascot?), 48 participants were dropped, leaving a final sample of 447 respondents. Attention check measures were used to make sure that

www.manaraa.com

students were closely reading and responding to the survey as opposed to just clicking responses throughout the survey.

Survey Design

At the start of the survey, students read the following instructions, "We are interested in how students get along with one another. Please think about your relationship with other students at your school during your last 3 months of school." Next, they were provided with definitions of the four types of bullying (See Table A.1: Adapted Children's Social Behavioral Scale; Crick & Grotpeter, 1995) and were then asked "How often has this happened to you? In response to this question, students could select *0 = never to 5 = all of the time*. In the Year 1 data (Study 1 and Study 2 data), if students responded 2 or above (e.g., rarely, sometimes, often, or all the time), they were asked a series of follow up questions about how the incident made them feel and how they responded to each incident of bullying. Thus, for each of the four types of bullying, students who answered *2, 3, 4, or 5* were then asked follow-up questions to examine how they perceived and responded to the type of bullying experienced.

Dependent variables

The current study includes the following dependent variables: prosocial, asocial, and antisocial responding to four types of bullying victimization: physical, verbal, relational, and cyber (See Table 4.1 and 4.2 for reliability analyses).

For each type of victimization, prosocial measures included the sum of the responses to three items: 1) Go to someone (e.g., parent, teacher, friend) for help, 2) Work things out with the person/persons who were aggressive towards me, and 3) Do nice things for

www.manaraa.com

others. Scores on this prosocial index range from *0 to 12* for each type of bullying victimization. Prosocial reliabilities are reported in Table 4.1 for physical (α = .66), verbal (α = .67), relational (α = .71), and cyber bullying (α = .64). Asocial measures included the sum of responses to four items: 1) Try to avoid situations where I have to be with other people, 2) Keep to myself, 3) Think of ways to avoid seeing people, and 4) Decide to spend more time alone. Scores on this asocial index range from *0 to 16* for each type of bullying victimization. Asocial reliabilities are reported in Table 4.1 for physical (α = .70), verbal (α = .85), relational (α = .85), and cyber bullying (α = .87). Antisocial measures also included the sum of responses to four items: 1) Get angry and argue with the person/persons who hurt me, 2) Doing to others what was done to me, 3) Think of ways to get back at the person/persons who hurt you, and 4) Say negative things about the person/persons to other people. Scores on this antisocial index range from 0 to 16 for each type of bullying victimization. Antisocial reliabilities are reported in Table 4.1 for physical (α = .77), verbal (α = .79), relational (α = .78), and cyber bullying (α = .81). Higher scores on each of these scales indicate behaviors are higher in frequency for prosocial, asocial, and antisocial behavior, respectively.

www.manaraa.com

Table 4.1 Scale reliabilities (Cronbach's Alpha) for responses to bullying

Constructs Items	***Physical***	***Verbal***	***Relational***	***Cyber***
Dependent Variables				
Prosocial Index	.66	.67	.71	.64
Doing nice things for others				
Working things out with the person who was aggressive towards me				
Going to someone for help				
Antisocial Index	.77	.79	.78	.81
Saying negative things about the person to other people				
Thinking of ways to get back at the person who hurt me				
Doing to others what was done to me				
Getting angry and arguing with the person who hurt me				
Asocial Index	.70	.85	.85	.87
Deciding to spend more time alone				
Thinking of ways to avoid seeing people				
Keeping to myself				
Trying to avoid situations where I have to be with other people				

Independent variables

To assess situation-based negative emotions, students were asked the extent (*0 = not at all to 4 = definitely/very much*) to which their experience with bullying made them feel sad, upset, angry, or embarrassed. The situation-based negative emotions were measured individually, where participants were asked to what extent did this experience make them feel: 1) sad, 2) upset, 3) angry, and 4) embarrassed. Responses ranged from 0 to 4.

To measure self-esteem, participants were asked how much the experience: 1) made them feel as though they had few good qualities, 2) harmed their self-esteem, and 3) made them feel bad about themselves. These items were reverse coded and summed to create the variable low self-esteem, where lower scores on the measures indicate lower self-esteem. Scores on the low self-esteem index ranged from *0 to 12*. Low self-esteem

www.manaraa.com

reliabilities are reported in Table 4.2 for physical (α = .83), verbal (α = .88), relational (α = .88), and cyber bullying (α = .89).

Alternative relationships were measured by asking participants the extent to which they felt they had someone they could 1) count on, 2) turn to, or 3) support them. Items were then summed to create a composite score where higher scores indicate students have greater availability of alternative others to turn to for social support. Scores on the Availability of alternative relationships for social support (AARSS) index ranged from *0 to 12* per bullying victimization type. Alternative relationship reliabilities are reported in Table 4.2 for physical (α = .87), verbal (α = .91), relational (α = .94), and cyber bullying (α = .95).

Demographic predictors include gender, race, and age. Gender and race were recoded into dichotomous variables as *male = 1, female = 0, and black = 1, and non-black = 0.* Age was treated as a continuous variable.

Table 4.2 Scale reliabilities (Chronbach's Alpha) independent variables for responses to bullying types

Constructs Items	***Physical***	***Verbal***	***Relational***	***Cyber***
Independent Variables				
Child Social Behavioral Scale (CSBS) Index How often did someone from your school engage in X aggression towards you?	.72	.79	.80	.79
Self-Esteem Index *How much did this experience:* make you feel as though you have a few good qualities? harm your self-esteem? make you feel bad about yourself?	.83	.88	.88	.89
Available Alternative Relationships for Social Support (AARSS) Index *How much do you have other people:* to whom you can turn who you can count on who will support you	.87	.91	.94	.95

www.manaraa.com

Analytical approach

The analyses were conducted in SPSS. Below, I begin by providing descriptive analyses for all of the variables: self-esteem, situation-based negative emotions (e.g., sad, upset, angry, embarrassed), alternative relationships, gender, race, age and response types (antisocial, asocial, prosocial) per type of bullying (physical, verbal, relational, cyber). Second, a series of ordinary least squares regression models explaining antisocial, asocial, and prosocial responses are provided for physical, verbal, relational, and cyber bullying. Because data are cross-sectional, all relationships reported in sections to follow are correlational in nature.

Results

Descriptive analyses

Table 4.3 reveals asocial responding to occur at a mean of 7.4 for physical bullying, a mean of 4.2 for prosocial, and a mean of 5.8 for antisocial behavior. When it comes to behavioral responses to bullying, the mean for prosocial responding appears to be slightly higher for indirect or covert forms of bullying – mean scores were 4.7 for relational and 4.7 for cyber compared to 4.2 for physical and 4.2 for verbal. For asocial responding, the highest reported mean was 7.4 for physical aggression, followed by 6.7 for verbal, 6.5 for relational, and 6.3 for cyber. Likewise, the highest reported mean for antisocial responding was 5.8 for physical aggression followed by 5.5 for verbal, 5.1 for relational, and 5.2 for cyber.

www.manaraa.com

Table 4.3 Descriptive statistics for dependent variables for all types of bullying

	N	*Minimum*	*Maximum*	*Mean*	*Standard Deviation*
Physical					
Antisocial Response	108	0	16	5.82	4.21
Asocial Response	108	0	16	7.43	3.83
Prosocial Response	111	0	12	4.20	2.99
Verbal					
Antisocial Response	172	0	16	5.51	4.20
Asocial Response	170	0	16	6.74	4.86
Prosocial Response	174	0	12	4.22	3.08
Relational					
Antisocial Response	150	0	15	5.10	3.94
Asocial Response	151	0	16	6.52	4.77
Prosocial Response	151	0	12	4.65	3.14
Cyber					
Antisocial Response	63	0	16	5.24	4.16
Asocial Response	67	0	16	6.33	4.62
Prosocial Response	68	0	12	4.68	3.09

Table 4.4 shows that of the total sample of 477 cases, verbal bullying occurred at a mean of 1.4, followed by relational at 1.3, physical at .08, and then cyber at 0.6. Victims of cyber bullying reported a mean of 4.3 for lower self-esteem. Victims of relational bullying reported a mean of 3.1 for lower self-esteem. Verbal bullying victims reported a mean of 3.1 for lower self-esteem and physical bullying victims reported a mean of 3.1 for lower self-esteem. Likewise, feeling sad ($M = 1.9$), upset ($M = 2.2$), angry ($M = 2.4$), and embarrassed ($M = 1.8$) also had the highest reported mean for cyber bullying. The lowest reported mean was 1.1 and this was for feeling sad in response to physical bullying. The mean for perceiving the availability of alternative relationships was similar across victimization types. The sample was 43% male and nearly 60% black (58% for physical, verbal and relational aggression and 57% for cyber bullying). The mean age is 15.2 for physical bullying and 16.0 for verbal, relational, and cyber bullying.

www.manaraa.com

Table 4.4 Descriptive statistics for independent variables for all types of bullying

	N	*Minimum*	*Maximum*	*Mean*	*Standard Deviation*
Physical	173	0	5	0.79	1.19
Low Self-Esteem	109	0	12	3.10	3.66
Situation-based negative emotions					
Sad	113	0	4	1.13	1.39
Upset	113	0	5	1.72	1.54
Angry	113	0	5	2.37	1.57
Embarrassed	113	0	5	1.15	1.40
Alternative Relationships	106	0	12	7.82	3.87
Male	345	0	1	0.43	0.50
Black	347	0	1	0.58	0.49
Age (in years)	347	14	19	15.20	1.28
Verbal	256	0	5	1.35	1.48
Low Self-Esteem	168	0	12	3.12	3.74
Situation-based negative emotions					
Sad	179	0	5	1.28	1.59
Upset	179	0	5	1.73	1.61
Angry	179	0	5	2.16	1.69
Embarrassed	179	0	5	1.29	1.60
Alternative Relationships	159	0	12	7.88	4.23
Male	345	0	1	0.43	0.50
Black	347	0	1	0.58	0.49
Age (in years)	347	14	19	15.96	1.28
Relational	226	0	5	1.25	1.52
Low Self-Esteem	147	0	12	3.07	3.73
Situation-based negative emotions					
Sad	163	0	5	1.39	1.67
Upset	163	0	5	1.86	1.74
Angry	163	0	5	2.16	1.78
Embarrassed	163	0	5	1.45	1.71
Alternative Relationships	148	0	12	7.82	4.28
Male	345	0	1	0.43	0.50
Black	347	0	1	0.58	0.49
Age (in years)	347	14	19	15.96	1.28
Cyber	113	0	12	0.66	1.33
Low Self-Esteem	69	0	12	4.26	3.99
Situation-based negative emotions					
Sad	79	0	5	1.87	1.76
Upset	79	0	5	2.18	1.75
Angry	79	0	5	2.43	1.60
Embarrassed	79	0	5	1.75	1.74
Alternative Relationships	66	0	12	7.29	4.44
Male	345	0	1	0.43	0.50
Black	325	0	1	0.57	0.50
Age (in years)	347	14	19	15.96	1.28

www.manaraa.com

Regression analyses

To address whether and how youth respond differentially to types of bullying strains, four OLS regression models were estimated to assess whether there are unique effects of low self-esteem, situation-based negative emotions, and availability of alternative relationships on each of the responses to strain, while controlling for key demographic correlates (e.g., gender, race, age). The regression models were examined for multicollinearity issues using bivariate correlations and regression diagnostics. Because no bivariate correlation was above .70 and no variance inflation factor score was above 3.0, multicollinearity between the variables was not an issue.

Following Agnew's (1992) argument that strains are subjective, I expected to see unique differences across types of victimization. However, Agnew (1992; 2006) also asserted that anger would be associated with an increased likelihood of antisocial or criminal coping (Agnew, 1992), but it is unclear whether this is true across all forms of bullying victimization.

The results from this analysis indicate this is not always the case. Below, significant findings for each type of bullying victimization (e.g., physical, verbal, relational, cyber) and behavioral response (e.g., antisocial, asocial, prosocial) are presented. The results of these analyses can be seen in Tables 4.5 through 4.8.

Responses to physical bullying victimization

When it comes to being a victim of physical bullying, such as being hit, kicked, or slapped, increases in feeling sad significantly explained antisocial responding whereas increases in feeling angry significantly explained asocial responding (See Table 4.5). None of the situation-based negative emotions had a significant association with

www.manaraa.com

prosocial responding. For physical aggression, low self-esteem was not a significant factor for any type of behavioral responding. As expected, prosocial responding was explained by a greater availability of alternative relationships for coping with physical bullying. Blacks were significantly more likely than non-blacks to respond to physical bullying aggressively. Further, older youth were significantly more likely than younger youth to respond to physical bullying by withdrawing.

Responses to verbal bullying victimization

Among verbal aggression victims, youth with lower self-esteem were significantly more likely to respond asocially than were youth with higher self-esteem, controlling for demographic variables (See Table 4.6). Low self-esteem did not have a statistically significant relationship with any of the other behavioral responses to verbal bullying. Of the situation-based negative emotions, increases in anger had a statistically significant impact on both antisocial and asocial responding. None of the other situation-based negative emotions significantly explained behavioral responses to verbal bullying. The increase in availability of alternative relationships was a significant factor explaining prosocial responding to verbal bullying, but not asocial responding, as originally hypothesized by Richman and Leary (2009).

www.manaraa.com

Table 4.5 OLS regression models explaining behavioral responding to physical bullying victimization

	Antisocial Responding				Asocial Responding				Prosocial Responding			
Variables	b	SE	Beta	p	b	SE	Beta	p	b	SE	Beta	p
Physical												
Low Self-Esteem	0.031	0.171	0.028	0.856	0.11	0.14	0.10	0.467	0.19	0.11	0.25	0.099
SBNE												
Sad	1.04	0.49	0.33	0.038*	-0.26	0.41	-0.09	0.529	0.52	0.32	0.25	0.109
Upset	-0.34	0.51	-0.12	0.509	-0.21	0.43	-0.08	0.623	-0.335	0.33	-0.18	0.310
Angry	0.46	0.36	0.17	0.205	0.98	0.31	0.40	0.002**	0.12	0.23	0.06	0.617
Embarrassed	0.05	0.42	0.02	0.900	0.59	0.36	0.21	0.099	0.05	0.28	0.02	0.864
Alternative Relationships	-0.03	0.11	-0.03	0.778	-0.10	0.10	-0.10	0.289	0.21	0.07	0.29	0.006**
Male	0.52	0.87	0.06	0.547	-0.47	0.73	-0.06	0.520	-0.04	0.57	-0.01	0.951
Black	2.380	0.95	0.261	0.014*	0.025	0.80	0.00	0.975	0.46	0.64	0.08	0.467
Age (in years)	0.475	0.327	0.147	0.15	0.605	0.27	0.21	0.030*	0.21	0.21	0.10	0.321
Constant	-5.353	5.412		0.325	-3.887	4.54		0.395	-2.10	3.52		0.552
Adjusted R2	0.083				0.200				0.10			
N	173				173				173			

www.manaraa.com

Table 4.6 OLS regression models explaining behavioral responding to verbal bullying victimization

	Antisocial Responding				Asocial Responding				Prosocial Responding			
Variables	b	SE	Beta	p	b	SE	Beta	p	b	SE	Beta	p
Verbal												
Low Self-Esteem	0.26	0.14	0.23	0.070	0.43	0.15	0.34	0.01*	0.19	0.10	0.23	0.064
SBNE												
Sad	-0.37	0.41	-0.12	0.378	0.07	0.44	0.02	0.87	0.35	0.29	0.16	0.223
Upset	-0.15	0.37	-0.05	0.687	-0.31	0.39	-0.10	0.43	0.11	0.26	0.05	0.681
Angry	0.61	0.27	0.23	0.024*	0.82	0.28	0.28	0.004**	-0.22	0.18	-0.11	0.245
Embarrassed	-0.03	0.38	-0.01	0.929	-0.02	0.39	-0.01	0.954	-0.18	0.26	-0.09	0.479
Alternative Relationships	0.01	0.09	0.01	0.94	-0.07	0.09	-0.06	0.42	0.20	0.06	0.28	0.001**
Male	1.04	0.73	0.12	0.16	-0.24	0.77	-0.03	0.75	-0.56	0.51	-0.09	0.269
Black	0.91	0.72	0.11	0.21	1.05	0.76	0.11	0.17	0.20	0.50	0.03	0.683
Age (in years)	0.00	0.26	0.00	0.99	0.24	0.27	0.07	0.38	0.10	0.18	0.04	0.581
Constant	3.04	4.29		0.48	0.56	4.50		0.901	0.80	2.97		0.79
Adjusted R2	0.05				0.18				0.11			
N	256				256				256			

www.manaraa.com

Table 4.7 OLS regression models explaining behavioral responding to relational bullying victimization

	Antisocial Responding				Asocial Responding				Prosocial Responding			
Variables	b	SE	Beta	p	b	SE	Beta	p	b	SE	Beta	p
Relational												
Low Self-Esteem	0.189	0.148	0.181	0.202	0.57	0.16	0.47	0.00***	0.26	0.10	0.31	0.01*
SBNE												
Sad	0.154	0.459	0.051	0.739	-1.10	0.49	-0.31	0.03*	0.19	0.33	0.08	0.57
Upset	-0.046	0.419	-0.018	0.913	0.69	0.45	0.22	0.13	-0.10	0.31	-0.05	0.75
Angry	0.63	0.307	0.261	0.042*	0.27	0.33	0.09	0.42	-0.53	0.23	-0.28	0.02*
Embarrassed	-0.569	0.39	-0.195	0.147	0.15	0.42	0.05	0.72	-0.31	0.28	-0.14	0.27
Alternative Relationships	-0.068	0.081	-0.073	0.404	-0.10	0.09	-0.09	0.24	0.28	0.06	0.37	0.00***
Male	0.578	0.697	0.073	0.408	-1.50	0.74	-0.16	0.04*	-0.65	0.51	-0.10	0.20
Black	1.128	0.687	0.143	0.103	1.70	0.73	0.18	0.02*	-0.37	0.51	-0.06	0.46
Age (in years)	0.124	0.271	0.041	0.648	-0.09	0.29	-0.03	0.75	0.32	0.20	0.13	0.11
Constant	1.48	4.378		0.736	6.13	4.64		0.19	-1.70	3.20		0.60
Adjusted R2	0.058				0.25				0.19			
N	226				226				226			

www.manaraa.com

Table 4.8 OLS regression models explaining behavioral responding to cyber bullying victimization

	Antisocial Responding				Asocial Responding				Prosocial Responding			
Variables	b	SE	Beta	p	b	SE	Beta	p	b	SE	Beta	p
Cyber												
Low Self-Esteem	-0.142	0.272	-0.136	0.604	0.744	0.288	0.68	0.013*	0.44	0.17	0.59	0.01*
SBNE												
Sad	-0.723	0.68	-0.248	0.293	-0.379	0.814	-0.116	0.644	0.17	0.43	0.08	0.70
Upset	0.499	0.598	0.185	0.409	0.469	0.643	0.16	0.47	-0.09	0.38	-0.05	0.82
Angry	0.901	0.464	0.311	0.058	-0.428	0.501	-0.137	0.397	-0.64	0.29	-0.31	0.03*
Embarrassed	0.443	0.654	0.141	0.501	-0.888	0.744	-0.268	0.239	-0.03	0.41	-0.13	0.47
Alternative Relationships	0.229	0.128	0.248	0.08	-0.016	0.139	-0.016	0.909	0.23	0.08	0.34	0.01*
Male	1.053	1.198	0.127	0.384	-0.91	1.3	-0.101	0.487	-0.11	0.75	-0.02	0.88
Black	1.017	1.161	0.122	0.385	-0.098	1.27	-0.011	0.939	-0.68	0.73	-0.11	0.36
Age (in years)	-0.549	0.466	-0.17	0.244	0.757	0.501	0.218	0.137	0.52	0.30	0.22	0.08
Constant	9.198	7.061		0.199	-6.83	7.622		0.375	-5.17	4.48		0.25
Adjusted R2	0.083				0.085				0.29			
N	113				113				113			

www.manaraa.com

Responses to relational bullying victimization

Among youth experiencing relational bullying, such as being gossiped about or excluded from groups, lower self-esteem had a statistically significant impact on both asocial and prosocial responding (See Table 4.7). Youth who felt increases in sadness were significantly less likely to respond asocially. However, feeling sad was not a significant factor in explaining the likelihood of responding antisocially or prosocially to relational bullying. Youth with increased anger, on the other hand, were significantly more likely to respond asocially, whereas increases in anger decreased the likelihood youth would respond prosocially. As expected, the availability of alternative relationships was a significant positive factor in explaining prosocial responding. Males were also significantly less likely than females to respond to relational bullying asocially and blacks were more likely to respond asocially to relational bullying than non-blacks. None of the other variables had a statistically significant association with how youths responded to relational bullying victimization.

Responses to cyber bullying victimization

Among cyber bullying victims, youth with lower self-esteem were significantly more likely to respond both asocially and prosocially than were youth with higher self-esteem (See Table 4.8). Low self-esteem was not a significant factor in explaining the likelihood of antisocial responding. Youth who reported experiencing more anger in response to cyber bullying were significantly less likely to respond prosocially. Lastly, the availability of alternative relationships significantly explained prosocial behavior in response to cyber bullying.

www.manaraa.com

Discussion

The purpose of this study was to extend GST by examining not only aggressive behavioral outcomes, but to also consider asocial and prosocial outcomes. Further, as Agnew (1992) argues that strains are subjective, this study considers whether youth respond differently to four types of bullying (e.g., physical, verbal, relational, cyber). In doing so, this study examined whether and how the effects of situational-based negative emotions (e.g., feeling sad, upset, angry, embarrassed), low self-esteem, the availability of alternative relationships, and demographics impacted responses to bullying by the type of bullying experienced.

In this sample, the majority of students were victims of verbal bullying (n = 256), followed by relational (n = 226), physical (n = 173), and then cyber bullying (n = 113). Cyber bullying was associated with more negative emotion and affect than any other form of bullying. However, perceiving alternative relationships to be available for social support was relatively equal across the bullying types. Interestingly, prosocial behavior was a slightly more common response to relational and cyber bullying when compared to the more traditional forms of bullying (e.g., physical, verbal bullying). This may be due to the anonymity and indirect nature of these two types. For example, it may be more difficult to detect the source of gossip and confront the aggressor(s) which might lead youth to vent or reach out to others for social support. Youth who experience physical aggression, on the other hand, are more likely to respond asocially than youth who experience verbal, relational or cyber aggression. This may be out of fear; thus, future studies should consider the role fear plays in explaining behavioral responding to these four types of bullying. The impact of fear on responses to bullying is examined in the

www.manaraa.com

next chapter. However, the highest reported mean for antisocial responding across bullying types was for direct forms of bullying (physical, verbal) rather than indirect (e.g., relational) or covert forms of bullying (e.g., cyber). Given the context of direct forms of bullying occurring face-to-face, when youth are angry and there are fewer available coping resources in the moment, youth may lash out in the heat of the moment. With relational and cyber, sometimes the bully is not known when the nature of the incident is related to gossip. These covert and indirect forms of bullying while arguably are more hurtful (Mehari & Farrel, 2018), they also allow youth more time to consider how they may respond behaviorally and the associated consequences that their behavior may have for them in the long run. The extended time period that youth have to think about their actions with relational and cyber bullying, then, likely explains the decrease in antisocial responding.

Overall findings from the OLS regression models (See Table 4.9) indicated that the four forms of bullying result in unique coping mechanisms and responses. Of interest is that different types of situation-based negative emotions are uniquely associated with behavioral responses according to the type of bullying victimization. Table 4.9 depicts a summary of significant variables including their association with antisocial, asocial, and prosocial responses to physical, verbal, relational, and cyber bullying. Implications of these findings are discussed next.

www.manaraa.com

Table 4.9 Summary of significant findings from Study 2.

	Antisocial responding	Asocial responding	Prosocial responding
Physical bullying	Sad (b = 1.04, p = 0.038*); Black (b = 2.380, p = .014*)	Angry (b = 0.98, p = .002**); Age (b = 0.605, p = 0.030)	Alternative relationships (b = 0.21, p = .006)
Verbal bullying	Angry (b = 0.61, p = 0.024*)	Low self-esteem (b = 0.43, p = 0.01); Angry (b = .082, p = 0.004)	Alternative relationships (b = 0.20, p = 0.001)
Relational bullying	Angry (b = 0.63, p = 0.042*	Low self-esteem (b = 0.57, p = 0.00***); Sad (b = -1.10, p = 0.03*); Male (b = -1.50, p = 0.04*)	Low self-esteem (b =0.26, p = 0.01*); Angry (b = -0.53, p = 0.02*) Alternative relationships (b = 0.28, p = 0.00***)
Cyber bullying		Low self-esteem (b = 0.744, p = 0.013*)	Low self-esteem (b = 0.44, p = 0.01*); Angry (b = -0.64, p = 0.03*); Alternative relationships (b = 0.23, p = 0.01*)

Implications of responses to physical bullying findings

Victims of physical bullying who reported increases in feeling sad were significantly more likely to respond antisocially but this was not found for anger as Agnew (1992) would have hypothesized. Instead, increases in anger was significantly more likely to be correlated with asocial responding. The fact that feeling sad is associated with antisocial responding may indicate individuals were "playing the long game" in seeking revenge on their aggressors. It could be that individuals felt hurt and or physically injured in the moment, but engaged in retaliation at a later date, after they had recovered physically from their bullying victimization. The fact that anger led to an increased likelihood of asocial responding may have occurred due to power relations,

www.manaraa.com

such as not wanting to pick a fight with someone physically larger or stronger than the victim. It is interesting that none of the situation-based emotions explained prosocial behavior in response to physical bullying, but the availability of alternative relationships did. This may mean that individuals who have others to turn to for support may also assist in breaking up a potential fight, such as students or adults in school. Further, blacks were found to be significantly more likely to retaliate than were non-blacks in response to physical bullying. Further, older youth were more likely to respond asocially than younger youth; this is likely due to greater coping skills developed with age (Card, Stucky, Sawalani, and Little 2008).

Implications of responses to verbal bullying findings

For youth experiencing verbal bullying, those with lower self-esteem were more likely to withdraw. Similar to physical bullying, those experiencing increases in anger in response to verbal bullying were more likely to respond both asocially and antisocially. These findings might be explained by an unmeasured variable, such as self-control (Gottfredson and Hirschi 1990), where individuals with lower self-control would be more likely to respond antisocially when angered, and individuals with higher self-control would be more likely to respond asocially when angered. Increases in the availability of alternative relationships for social support led to significant increases in prosocial responding to verbal bullying. Thus, it may be that some victims of verbal bullying dismiss the slight or threat because they have others who can fulfill their emotional and physical needs (Rusbult, 1980).

www.manaraa.com

Implications of responses to relational bullying findings

Similar to victims of verbal bullying, youth reporting lower self-esteem were more likely to respond asocially. However, victims of relational bullying with lower self-esteem were also more likely to respond prosocially. Those with lower self-esteem likely feel they do not have others they can count on and may feel they need to maintain a relationship with their aggressor. Further, increases in feeling sad explained youth being less likely to respond asocially. This may be because youth who respond asocially internalize the rumor or exclusion and thus seek to avoid future forms of rejection. The choice to withdraw more generally may be due to the indirect nature of the bullying where the victim may not know who started rumors or who tried to exclude them from a group. Further, this type of bullying is more common in friend groups than the other forms; thus, despite the fact that the victim may be motivated to do so, it is likely more difficult for the victim to retaliate against their aggressor (Crick & Grotpeter, 1995).

Increases in feeling anger, on the other hand, led to both significant increases in antisocial responding and significant decreases in prosocial responding. Initially, youth may confront their aggressor(s) to seek the truth or reasons for their aggression in an attempt to repair the relationship. However, once the aggressor(s) is confronted, depending on how the aggressor responds, the situation may escalate into new forms of aggression. For instance, research has indicated relational aggression may result in verbal or physical aggression when victims choose to confront their aggressor(s) (Rodkin, Espelage, & Hanish, 2015).

As was true for the previous two forms of bullying, those with available relationships for social support were more likely to respond prosocially to relational

www.manaraa.com

bullying. Demographic variables were also significant for this form of bullying. Males were less likely than females to respond to relational bullying asocially. This finding might be explained by the fact that females are sometimes more likely to be victims of relational aggression than are males when it comes to the subtype of being gossiped about, thus the behavior is more normalized and young women may find withdrawing to be the most appropriate behavioral response (Crick & Grotpeter, 1996; Rodkin, Espelage, & Hanish, 2015). Blacks were more likely to respond to this form of bullying asocially than non-blacks. This may also be due to the fact that this form of bullying is much less commonly perpetrated among blacks than non-blacks (Simmons, 2002).

Implications of responses to cyber bullying findings

Similar to low self-esteem youth experiencing verbal and relational bullying, cyber bullying victims who reported lower self-esteem were more likely to respond asocially. Interestingly, cyber victims with lower self-esteem were also more likely to respond prosocially than are those with higher self-esteem. This may be due to the public nature of cyber bullying, where a larger audience is made aware of such victimization. In this case, prosocial behavior might entail reporting the victimization to a trusted adult or friend for social support. Bully victims of this type report experiencing increases in negative emotion more generally, and those who report significant increases in anger were much less likely to respond prosocially. Victims may lash out at their aggressors in an online setting as opposed to turning to others for social support. Finally, as has been true for experiencing all forms of bullying, the availability of alternative relationships led to prosocial behavior in response to cyber bullying. Thus, youth with a stronger social

www.manaraa.com

support networks may have others who can defend them or protect them from further rejection on their behalf.

Limitations and future research

Future studies should expand on this approach in testing GST by considering additional conditioning factors tested across the forms of bullying. For instance, this study measured alternative relationships as the perception that an individual has someone to count on or turn to for support. However, the availability of alternative relationships could also be measured by the perception that one can formulate new relationships for social support. This is tested in study 3. Further, low self-control may substantially affect the likelihood that a youth responds antisocially as opposed to asocially, and should be included in future tests. Future research should also include measures of interpersonal and cognitive skills, including academic excellence or verbal scores, as these may impact responses to bullying. Finally, power differentials may significantly increase the likelihood that a youth responds asocially and prosocially rather than antisocially. In cases where power differentials exist, however, the decision to respond asocially and or prosocially may not adequately reflect how individuals feel, so alternative relationships may be a key coping mechanism for dealing with power dynamics. For example, it may be that when individuals perceive someone has a lot of power over them that they respond asocially to prevent further harm to their social status at school. Power differentials remain under examined in the bullying literature, despite the fact that it is a core part of the definition of bullying across many studies (Vailliancourt, Hymel, and McDougall 2003). These variables are important to include and understand for further development of anti-bullying campaigns as it has been noted that part of the reason for

www.manaraa.com

unsuccessful anti-bullying programs is that bullying increases social standing or social status of the aggressor(s). Future research should further explore these variables along with power differentials and low self-control so that anti-bullying programs may be improved.

Contributions

This study extended GST by examining four types of bullying victimization and three types of behavioral responses while considering the conditioning effects of the availability of alternative relationships, situation-based negative emotions, and low self-esteem, controlling for demographic factors. Further, this study identifies the importance of considering situational-based negative emotions in response to strain as these negative emotions differentially affect how individuals respond to bullying. Additionally, it demonstrates the strength of examining subjective strains (i.e., forms and types of bullying) in explaining an array of behavioral responding to bullying victimization. This study highlights the importance of the availability of alternative relationships for victims of bullying. Future programs should incorporate social support or the availability of alternative relationships into anti-bullying prevention programs.

www.manaraa.com

BUT WHAT ABOUT POWER RELATIONS? A CRITICAL GENERAL STRAIN THEORY EXAMINATION OF BEHAVIORAL RESPONSES TO BULLYING

Statement of the problem

Bullying is characterized by power differentials between the bully and victim with a repeated intention to cause harm to the victim (Olweus, 1991). Thus, bullying often occurs against victims who cannot easily defend themselves (Espelage, Gutgsell, & Swearer, 2010; Olweus, 1993; Peguero, 2012). As many as 21% of youth report being victims of bullying while 8% report being victims of cyberbullying (Zhang, Musu-Gillette, & Oudekerk, 2016). While many studies define bullying as including power differentials, the effect of power in bullying is often ignored (Vaillancourt, Hymel, & McDougall, 2003).

Power can be defined as having control over valuable resources in and across social relations (Magee & Galinsky, 2008; Blau, 1964; 1977; Thibaut & Kelley, 1959). This dissertation seeks to address this gap in the literature by addressing the power dynamics in bullying. Additionally, I also examine whether (and how) the strain of physical and relational bullying affect how youth choose to behaviorally (e.g., antisocial, asocial, prosocial) respond to bullying. Further, as proposed by some researchers (Agnew, Brezina, Wright & Cullen, 2002; de Bruyn & Cillessen, 2006; Willitis, 2017), I also examine whether the 1) availability of alternative relationships and the 2) power a

www.manaraa.com

perpetrator(s) holds over the victim affect behavioral responses to these two forms of bullying.

Bullying, victimization, power dynamics, and responses to provocation

Bullying consists of repeated, intentional aggression with the presence of power differentials and can take on a variety of forms, including physical, verbal, relational, and cyber bullying (Wang et al., 2009). Although not all bullying victims are of lower social status than their bully, in a high school setting where groups compete for social power, bullying victims often have a lower status than the bully during the time that aggression takes place (Rodkin, Espelage, & Hanish, 2015). Bullying may result because lower status individuals are dependent upon higher-powered individuals to increase their rewards and minimize social costs (Magee & Galinsky, 2008; Emerson, 1962). However, when lower status individuals have alternative relationships, the power of the higher status person or bully is decreased (Blau, 1964). This dynamic is one aspect that allows for fluidity in power relations, particularly among popular groups in high school settings. Power differentials are found in all four forms of bullying, but the nature of relational and covert forms of aggression actually increases the presence of power differentials because these forms are by nature covert and leave little room for others, such as adults, to first recognize and then intervene without increasing the consequences of bullying for victim(s) (Nelson, Burns, Kendall, & Schonert-Reichl, 2017).

Traditional forms of bullying include physical and verbal bullying. Physical bullying is defined as hitting, kicking, or shoving another person. Verbal bullying includes threats of social or physical harm as well as calling others mean names. Both physical and verbal bullying are direct forms of aggression and are easily visible to

www.manaraa.com

bystanders. Relational bullying includes group exclusion, social manipulation, and spreading rumors or gossip about a person. Cyber bullying includes any form of bullying that can occur in an online or electronic context, such as through text message, online social applications, and in social media. Some researchers have argued that cyber bullying is merely relational bullying occurring in an online context (Mehari & Farrell, 2018). Both cyber and relational bullying have been characterized as indirect forms of aggression because they do not occur face to face and are more difficult to detect and report (Archer & Coyne, 2005). Researchers suggest that because relational bullying is more difficult to detect, this form of bullying presents greater power differentials than other forms of bullying, such as physical and verbal bullying (Nelson, Burns, Kendall, & Schonert-Reichl, 2017). They find that relational bullying occurs more often in the context of friendship, involves social exclusion, and includes keeping secrets from teachers, all of which increase the power differentials between the bully and victim (Nelson, Burns, Kendall, & Schonert-Reichl, 2017). Indeed, some studies show that cyber and relational bullying harm victims more than physical and verbal bullying. However, this topic is still being debated (Kowalski et al., 2014; Mehari & Farrell, 2018).

Bullying results in many consequences, some of which include negative affect, negative mood, anxiety, depression, health problems, and academic difficulties (Arseneault, Walsh, Trzesniewski, Newcombe, Caspi, & Moffitt, 2006; Gini & Pozzoli, 2009; Nishina, Juvonen, & Witkow, 2005; Espinoza, Gonzales, & Fuligni, 2013; Esbensen & Carson, 2009). Negative affect can extend over a substantial period of time with the victim internalizing the distress (Malecki, Demaray, Coyle, Geosling, Rueger, & Becker, 2015). In some instances, then, bullying is correlated with suicidal ideation, acts

www.manaraa.com

of self-harm, and suicide (Hay & Meldrum 2010; Hay, Meldrum, & Mann, 2010). Powerlessness and feelings of social alienation may also bring about other negative behaviors, such as aggression. For instance, bullying victimization and ostracism can result in a host of behaviors where victims lash out at their aggressors, seek retaliation (Reijntes, Thomaes, Bushman, Boelen, de Castro, & Telch, 2010), or engage in criminal offending (Cullen, Unnever, Hartman, Turner, & Agnew, 2008; Williams, Forgas, & Von Hippel, 2005). In fact, previous bullying victimization has been identified as a factor in about three-fourths of school shooting cases (Leary, Kowalski, Smith, & Phillips, 2003; Sommer, Leuschner, & Scheithauer, 2014; Vossekuil, 2002).

While vulnerability is related to victimization, the desire for power often encourages adolescents to engage in bullying perpetration (Guerra, Williams, Sadek, 2011). Victims can be targeted because they have physical abnormalities, because their behavior steps outside of the norm, or because they are perceived as too weak or too confident. Power relations are dynamic and evolving, and popular groups are not immune to the effects of bullying (Rodkin, Espelage, & Hanish, 2015). Bullying prevention efforts should thus begin then with a recognition of power structures, social hierarchies, and inequality (de Bruyn & Cillessen, 2006; Pascoe, 2013).

Some research suggests that bullying disproportionately affects minorities (e.g., racial, ethnic, or LGBT status) as well as those with physical or mental disabilities (Juvoven & Graham, 2014; Graham, Bellmore, Bishina, & Juvonen, 2009; Peguero & Williams, 2013). Bullies often seek out targets who are of lower social status or power than themselves. By targeting lower status individuals, bullies may reduce the chance of retaliation (Farmer, Petrin, Robertson, Fraser, Hall, Day, & Dadisman, 2010). However,

www.manaraa.com

in some cases, bullies have also been victims of bullying (i.e., bully-victims) themselves and may be seeking revenge on their aggressor(s). Revenge-seeking is more likely to be "effective" when the bully and victim are of equal power (Farmer et al., 2010). Consequently, social acceptance, friendship and being in a larger friendship group should serve as protective factors from retaliation. However, victims who fight back against bullies of a higher social status often find themselves becoming repeat victims of bullying victimization and become socially alienated or ostracized from their peer groups. In sum, bullies target individuals who step outside of the social norms, and then they employ social groups at school to reinforce or aid in their aggression attempts (Guerra, Williams, & Sadek, 2011; Salmvialli, Lagerspetz, Bjorkqvist, Osterman, & Kaukiainen, 1996; Salmivalli, 2010). In doing so, inequality of the social order is reaffirmed, reinforcing the hierarchy of social cliques (Peguero, 2012; Salmivalli, 2010).

Within these social hierarchies, some individuals (e.g., those scoring high on social dominance) strive to climb the social ladder within and across their peer groups regardless of any perceived social or physical costs associated with their actions (Salmivalli, 2010). Bullying does provide some individuals with the means to climb the ranks, particularly in a setting characterized by dominant and well-known social hierarchies, such as those commonly found in high school settings (Garandeau, Lee, & Salmivalli, 2014).

Further, although most bullies target individuals of lower social status at school, some bullies also target popular kids. In fact, reports indicate popular students also experience a large amount of bullying (Salmivalli, Lagerspetz, Bjorkqvist, Osterman, & Kaukiainen, 1996). Research also demonstrates that popular students may direct their

www.manaraa.com

aggression towards other popular students as a means of climbing the social ladder (Salmivalli et al., 1996). Eddy de Bruyn and Antonius Cillessen (2006) have also found support for a distinction between populistic and prosocial-popular groups. They argue that the populistic group was found to use their power for evil but the prosocial group was found to use their power for good. The populistic group tends to obtain their social status through dominance and coercion with the goal of obtaining the highest rank in their school. Thus, they are less liked by their classmates but nevertheless still in the top ranks. The prosocial-popular group, on the other hand, is well liked and accepted but may also fall into a secondary social status on the social hierarchy.

Despite these trends, targets of bullying are most likely to be those of lower social status compared to their aggressor(s) (Olweus, 1993). Bullies target "submissive victims" who are reportedly lower in self-esteem or confidence and who appear anxious, shy, or insecure; these characteristics cause individuals to be perceived by the bully as easier targets (Hodges & Perry, 1999; Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001; Nation, Vieno, Perkins, & Santinello, 2008). These vulnerable personality traits of "submissive victims" are also consequences and outcomes of being a victim of bullying (Juvonen & Graham, 2014; Olweus, 1993). "Provocative victims" are chronic targets of bullying who respond aggressively to bullying, thus continuing the cyclical process (Olweus, 1993). In fact, Perry, Williard, and Perry (1990) noted that responding to bullying with aggression may be associated with experiencing repeated bullying victimization, particularly when retaliation is targeted towards more powerful bullies by less powerful bullies.

www.manaraa.com

Likewise, Farmer and associates (2010) argued that there was a distinction between submissive and provocative victims. Similar to the populistic and prosocial-popular groups, these two groups of submissive victims and provocative victims (i.e., bully-victims) were found to vary in their social influence and aggression attempts. Submissive victims had lower power than provocative victims, but provocative victims had less power than bullies. Further, provocative victims were more likely to engage in retaliation than victims, and victims were more likely to engage in prosocial behavior than bully-victims. This same study found bullies are simultaneously liked and disliked while bully-victims are more strongly disliked by peers (Farmer et al., 2010).

Bullying can provoke violence as it threatens identity as well as a loss of status or power when individuals feel humiliated or angry (Tedeschi & Felson, 1994, pg. 25; Belmi, Barragan, Neale, & Cohen, 2015). These negative emotions often are associated with antisocial behavior such as aggression or revenge-seeking behavior (Anderson & Bushman, 2002; Anderson & Berdahl, 2002; Agnew, 1992; 2006; 2013). Two main types of provocation believed to be correlated with antisocial behavior include physical and verbal bullying (Schulz, 2016; Nelson, Burns, Kendall, & Schonert-Reichl, 2017). However, the present study also considers reactions to relational bullying, as researchers have argued that more power is actually present in relational bullying because of its greater likelihood to 1) occur in friendship groups, 2) involve social exclusion from groups, and 3) be covert in nature and hidden from adults (Nelson, Burns, Kendall, & Schonert-Reichl, 2017).

An array of behavioral responses and coping mechanisms are available to individuals beyond that of aggression and retaliation (Blackhart, Baumeister, & Twenge,

www.manaraa.com

2006). This study tests Agnew's (1992) GST to explain why (and under what circumstances) individuals are more likely to respond antisocially to their bullying victimization. Sections to follow will cover the topic of bullying, theoretical integration, the key variables of explicit and implicit power, and the availability of alternative relationships or social support, which are considered key to this study.

Literature review

The effects of power on bullying

Although not always popular, bullies are often perceived as having greater social power at school than those who are not bullies (Caravita, Di Blasio, & Salmivalli, 2009; Juvonen & Galvan, 2008; Vaillancourt, Hymel, & McDougall, 2003). Therefore, even though most youth disagree with the acts of bullying, they often ignore or engage in compliant or encouraging behavior in response to the bully (Boulton, Trueman, & Flemington, 2002; Rigby & Johnson, 2006; Salmivalli et al., 1998). The social power of the bully is problematic because it decreases defending behavior among victims and bystanders (Boulton, Trueman, & Flemington, 2002; Rigby & Johnson, 2006). Power dynamics involved in bullying thus decrease the likelihood of bystanders aiding victims of bullying with social support or responding prosocially to bullying victimization (Juvoven & Galvan, 2008; Peets, Pöyhönen, Juvonen, & Salmivalli, 2015). This may be partly explained by the bystanders' perceptions of costs associated with intervening in bullying. These costs include losses in personal status, reputation, or physical safety at school (Juvonen & Galvan 2008; Salmivalli, 2010). When bullies have greater social power, the costs for responding to bullying victimization are higher unless the bully

www.manaraa.com

defender(s) also have social power themselves (Caravita, Di Blasio, & Salmivalli, 2009; Peets, Pöyhönen, Juvonen, & Salmivalli, 2015; Pöyhönen, Juvonen, & Salmivalli, 2010).

Furthermore, bullies are not necessarily lacking social skills as was once believed (Olweus, 1978). Rather, bullies have a set of social skills, lack of empathy for others, and often enjoy a high status or popularity that helps them to carry out intended acts of aggression against others (Bjorkqvist, Osterman, & Kaukiainen, 2000, Gini, Albiero, Benelli, & Altoè, 2007; Jolliffe & Farrington, 2006; Sutton, Smith, & Swettenham, 1999). This set of social skills is particularly needed when it comes to engaging in relational bullying, where the goal is to manipulate others' social relationships or reputation at school without the knowledge of adults who could intervene (Crick & Grotpeter, 1996). Relational bullies seek to dominate socially and obtain a high social status at their school (Rodkin Farmer, Pearl, & Acker, 2006). It is also important to note that bullies often receive positive (rather than negative) feedback from their peers in reaction to bullying incidents (Boulton, Trueman, & Flemington, 2002; O'Connell Pepler, & Craig, 1999).

Explicit and implicit power in bullying and responses to bullying

There are two sources of power that bullies may either hold or be seeking: 1) implicit and 2) explicit power. LaFreniere and Charlesworth (1983) first made the distinction between explicit and implicit power in social relationships. They argue that explicit power entails achieving power through force (such as through dominance or aggression) whereas implicit power entails attaining power through competencies, skills, or social status. For those that do not have implicit power because of their skills or social status, explicit power can be achieved through making victims feel afraid, thus giving the

www.manaraa.com

bully power or ability to influence or change the behaviors of other people (Vaillancourt & Hymel, 2006; Vaillancourt, McDougall, Hymel, & Sunderani, 2010). These two distinct forms of power are also uniquely associated with types of bullying; explicit power is more strongly connected to physical bullying whereas implicit power is connected to relational bullying (Vaillancourt, McDougall, Hymel, & Sunderani, 2010). Explicit power then involves subordination whereas implicit power requires obtaining approval for a particular status through associated social networks.

Vaillancourt, Hymel, and McDougall (2003) applied these concepts to examine how differences in explicit and implicit power affected perceptions of a bully's status. Around this time, researchers began to note that it was not the stereotypical, marginalized youth who aggressed against their peers; bullies were often popular kids rather than unpopular kids (Cillessen & Borch, 2006; Cillessen & Mayeux, 2004; deBruyn & Cillessen, 2006; Vaillancourt & Hymel, 2006). This finding is explained by the fact that youth seek to maintain the status quo through power structures at their school. Thus, youth use both explicit and implicit power to maintain the desired level of acceptance within their social hierarchy (Vaillancourt, Hymel, & McDougall, 2003; Dijkstra, Lindenberg, Verhulst, Ormel, & Veenstra, 2009). Hawley (2003) suggests that children as early as pre-school age may learn to use explicit power (aggression) and implicit power (social skills) to maintain their social status, liking, and control over others at school.

While a large body of research demonstrates how power shapes bullying perpetration, less is known about how power (or lack of power) affects responses to bullying victimization across direct and indirect forms of bullying. Some evidence

www.manaraa.com

suggests that the power effect on bullying is inhibitory (Deng, Guinote, Cui, 2018; Guinote, 2017; Keltner, Gruenfeld, & Anderson, 2003), but this likely varies depending on the context and the individual's perception of power differentials, individual differences, and perceptions regarding the potential for change in the bullying situation.

Power relationship dynamics consist of asymmetric power relationships (implicit) and unequal, coercive power relationships (explicit). Surprisingly, the power components of bullying are often not measured in research (Vaillancourt, Hymel, & McDougall, 2003). However, what is known is that relationships characterized by implicit power are less likely to result in aggressive or retaliatory behavioral responses. Less is known about behavioral reactions to coercive power relationships (Vaillancourt & Hymel, 2006). Some research suggests that coercive power relationships tend to result in an experienced chronic cycle of bullying victimization among a subset of bully victims who repeatedly have less power in relationships over time (Farmer et al., 2010). Further, youth who are constantly rejected or bullied often feel socially alienated, a factor which may be associated with increased aggression over time (Jessor & Jessor, 1977; Reijntjes, Thomaes, Bushman, Boelan, de Castro, & Telch, 2010). More research is needed to further explore these power relationship dynamics in relation to bullying (Rodkin, Espelage, & Hanish, 2015).

Theoretical perspectives

Although the primarily theoretical test for the proposed study remains GST (Agnew, 1992; 2013), this study also integrates key measures of power dynamics from the bullying literature (Pratto, Sidanius, Stallworth, & Malle, 1994) to test the power dynamics associated with responses to strain. The current study asks, how do explicit and

www.manaraa.com

implicit power structures affect how youth respond to types of bullying strains? Additionally, this study examines situations when bullying triggers aggression rather than other types of coping behavioral strategies.

General strain theory

In GST, Agnew (1992; 2013) asserts that strains (subjective, objective) lead to negative emotion that produce a need for corrective action. This need for corrective action can lead to criminal coping but it may also result in other forms of internalizing or externalizing behaviors (Richman & Leary, 2009; Card, Stucky, Sawalani, & Little, 2008). This study expands previous tests of GST by looking at whether (and how) rejection explains prosocial, asocial, and antisocial responding more generally. Previous outcomes of bullying behavioral responses have been more specific to harmful internalizing and externalizing behaviors (Keith, 2017; Hay & Meldrum, 2010; Patchin & Hinduja, 2010), and have ignored prosocial outcomes (Richman & Leary, 2009). Further, the role of power in explaining behavioral responses to bullying remains unexamined. To understand the power dynamics involved in bullying, it is important to understand the nature of status hierarchies and groups in high school settings.

Status hierarchies, power dynamics, and bullying

Social groups are organized around social hierarchies where individuals compete for status, power, and income. The existence of hierarchy is supported by ideologies supporting inequality such as the belief that "people get what they deserve" and the perception that inequality in and across groups is "fair" and "legitimate" (Marx & Engels, 1846; 1970). In some higher status hierarchies, those at the top seek to maintain and/or

www.manaraa.com

increase their social status despite social costs they accrue from that activity. Higher status persons endorse inequality more than lower status persons while lower status persons internalize inequality (Jost, Banaji, & Nosek, 2004).

Applied to bullying behaviors, status hierarchy research and power dynamics suggests that those that seek dominance strive to maintain the status quo, and are more likely to engage in bullying perpetration as a means to maintain their power and reputation at school. For instance, when an individual perceives a threat to his or her power, he or she is more likely to respond in maladaptive or antisocial ways (Maner, Miller, Schmidt, & Eckel, 2008). However, when the likelihood of future harm seems high, individuals become more submissive to those higher in power (Ohman, 1986).

Social hierarchies include both implicit and explicit rank orders of individuals and groups (Magee & Galinsky, 2008). Hierarchies are often delineated by rules, order, and sometimes consensus, but they are also subjective and conflict based (Magee & Galinsky, 2008). Informal hierarchies within (and across) groups often form within seconds based on stereotypes or expectations of individuals based on gender, race, age, class, and other characteristics (Ridgeway, Boyle, Kuipers, & Robinson, 1998).

Power has also been found to corrupt "ordinary" people and make them engage in social harm as a means to protect their social identities (Belmi, Barragan, Neale, & Cohen, 2015; Kipnis, 1976; Keltner, Gruenfeld, & Anderson, 2003). High power leads some to seek opportunities to exploit others whereas low power leads to avoidance behaviors (Magee & Galinsky, 2008; Keltner, Gruenfeld, & Anderson, 2003). Lower power individuals also tend to reinforce the hierarchy due to their fear, avoidance, and compliant behaviors in response to social threats because they receive the bulk of their

www.manaraa.com

resources from the power holder (Haslam, Reicher, & Platow, 2010). Consequently, lower status persons remain more attuned and concerned with how others interpret their identity and or behavior (Guinote, 2007). When compared to lower status individuals, high power individuals also display a wider range of variability in behavioral responses that can be equated with freedom of choice (Guinote, Judd, & Brauer, 2002). In conclusion, power transforms individuals' affect, cognitions, and behaviors for those both low and high in power (Keltner, Gruenfeld, & Anderson, 2003; Guinote, 2017).

Some insights can be gleaned from three famous studies (e.g., Zimbardo, Asch, Milgram) on how power and authority tied to social roles can explain expectations and behavior of those both low and high in power. Here, the situational pressures of both implicit and explicit power are placed on expected behaviors tied to certain social roles, such as guards and prisoners. For instance, in the famous Zimbardo Prison Study (Haney, Banks, and Zimbardo, 1973) where guards and prisoners were randomly assigned to one of the two roles, the guards were found to apply harsh and detrimental treatment of the "prisoners." The prisoners complied, as did the parents who visited the prison. The prisoners even began to internalize their identity where they thought of their identity in terms of their inmate number rather than using their personal names. When individuals feel as though they have no control over a situation or outcome, they are likely to comply with authority or powerful figures, even when they can see that they are causing harm to another individual (Milgram, 1974). Further, individuals are unlikely to go against the group when the group agrees on something, even if the individual knows that information is wrong (Asch, 1952; 1956). A meta-analysis on the Asch experiments (N = 133 studies) has found conformity to decline over time, with conformity being higher in collectivistic

www.manaraa.com

societies than individualistic societies (Bond & Smith, 1996). Thus, conformity and responses to authority fluctuate as culture changes perceptions of upholding the status quo.

Although these perceptions have changed over time, they may still be more prevalent in high school settings where youth compete for social power on a daily basis (Salmivalli, 2010). For example, some studies have found bullying to be more prevalent in classrooms with greater inequality compared to classrooms characterized by more egalitarian relationships (Garandeau, Lee, Salmivalli, 2014). In relation to bullying, previous research has also found that individuals holding a competitive predisposition are more likely to engage in aggression while those with cooperative predispositions are more likely to engage in prosocial behaviors. Cooperation was also found to increase with age (Eisenberg & Fabes, 1991) and few gender differences have been reported (Choi, Johnson, & Johnson, 2011).

The current study

The purpose of the current study is to examine both implicit and explicit power dynamics in determining how individuals respond to two types of bullying victimization. In doing so, this study tests GST to identify when youth who experience strain respond aggressively versus prosocially or asocially to bullying victimization.

Study 3 research questions

1. How does the power component in bullying affect responses to physical bullying?
2. How does the power component in bullying affect responses to relational bullying?

www.manaraa.com

Study 3 hypotheses

H1) Individuals experiencing negative emotions as a result of their bullying victimization will be more likely than victims who do not experience negative emotions to respond antisocially

H2) Individuals reporting increases in the availability of alternative relationships will be more likely than victims who do not report having increases in alternative relationships to respond prosocially.

H3) Individuals reporting higher perceptions of future availability of alternative relationships will be more likely than victims who do not report higher perceptions of future availability of alternatives to respond prosocially.

H4) Individuals reporting that their aggressor has high implicit power over them will be more likely than victims reporting that their aggressor does not have high implicit power over them to respond prosocially.

H5) Individuals reporting that their aggressor has high explicit power over them will be more likely than victims reporting that their aggressor does not have high explicit power over them to respond asocially.

Methods

The sample

In 2017, 1,366 students from a Southeastern high school were invited to participate in a study about school climate and bullying. Active parental consent and child assent were required for study participation. Active consent requires signatures for consent/assent prior to study participation while passive consent often entails requiring potential participants to opt out of studies. Multiple waves of consent packets and

www.manaraa.com

reminders were sent home to parents over a period of two weeks. The research team went door to door to collect consent form packets. In doing so, the research team also reminded teachers of the consent form due dates, one day each week of the consent form distribution process. About 1 in 3 students returned parental consent forms (n = 576). Of that number, 525 agreed to participate in the research and 414 completed the full survey (for a response rate of 38%). In total, there were 816 reported cases of victimization. Of those cases, 39 cases of victimization were excluded due to missing data and or respondent's failure to pass attention checks (e.g., what school do you attend?). Deletion of these cases resulted in 777 cases of victimization for analyses. Attention check measures were used to make sure that students were closely reading and responding to the survey as opposed to just clicking responses throughout the survey.

Survey design

At the start of the survey, students read the following instructions, "We are interested in how students get along with one another. Please think about your relationship with other students at your school during your last 3 months of school." Next, they were provided with definitions of the four types of bullying (See Table A.1: Adapted Children's Social Behavioral Scale; Crick & Grotpeter, 1995) and were then asked "How often has this happened to you? Student responses ranged from *0 = never to 5 = all of the time*. In the Year 2 sample data, if students checked once or more they were then asked the same series of follow up questions. Immediate follow up items asked students about situational-based negative emotions in response to the type of strain (i.e., bullying) that they experienced. Students were asked, "To what extent the experience

www.manaraa.com

made them feel _____ (Sad, upset, angry, embarrassed, or afraid). The emotion afraid was added in the Year 2 data.

After emotional and cognitive related variables were asked, the final questions were related to behavioral responses to bullying: antisocial, asocial, and prosocial behavior (See Appendix, Table A.2). Here, students were prompted with the Responses to Rejection Scale with, "When someone became _____ aggressive (physical, verbal, relational or cyber) towards me, I have responded by? Students could respond on a scale from *0 Not at All to 4 Definitely* for each type of behavioral outcome (asocial, antisocial, and prosocial) items. Generally, items for these stayed consistent across the Year 1 (Study 1 and 2) and Year 2 data (The Current Study: Study 3) with most changes being implemented to improve the reliability of the prosocial items in Year 2 data. For example, the following items were added to the prosocial measure in Year 2: 1) Try to help others deal with a similar problem, 2) Get involved in new activities, 3) Try to make new friends, and 4) turn to work or other activities to help you manage things.

In sum, the survey design consisted of providing students with definitions of four types of bullying. Once provided with the definition, students were then asked to respond from *never =0 to all of the time = 5* as to how often they experienced each type of bullying. After asking about types of bullying victimization, the survey asked follow-up questions about perceptions of the bullying incident for students who indicated that the incident had happened at least once or more. Some of these questions asked about negative emotions, explicit and implicit power dynamics within the victim and aggressor relationship, availability of alternative relationships, key demographic predictors (e.g.,

www.manaraa.com

gender, race, age) and behavioral responses (e.g., antisocial, asocial, prosocial behaviors) to the types of bullying.

To conduct reliability assessments of scale items, one SPSS file was created for each type of bullying as recommended by Nunnally and Bernstein (1994). These assessments are depicted in Table 4.10 through 4.12 per victimization type.

Dependent variables

The dependent variables (See Table 4.10) include behavioral responses (prosocial, antisocial, and asocial) to both physical and relational bullying on a scale reporting from *0 = never to 5 = all of the time*. Items were summated per each of the three behavioral scales with higher scores indicating higher prosocial, asocial, or antisocial behaviors. The prosocial scale reliabilities are reported in Table 4.10 for physical ($\alpha = .70$) and relational bullying ($\alpha = .70$). Antisocial scale reliabilities include .84 for physical and .84 for relational bullying. Asocial scale reliabilities include .81 for physical and .90 for relational bullying. Descriptions of each of these variables is provided next.

Prosocial responses to bullying were operationalized by creating an index of responses to the following items asking the student whether they would respond to bullying by: 1) Go to someone (e.g., parent, teacher, friend) for help, 2) Work things out with the person/persons who were aggressive towards me, 3) Try to help others deal with a similar problem, 4) Forgive the person(s) who hurt me, 5) Get involved in new activities, 6) Try to make new friends, and 7) Turn to work or other activities to help you manage things. Responses were summated to create a scale ranging from *0 to 28* per responses to physical and relational bullying. Higher scores on the index thus indicate a greater likelihood of prosocial responses to bullying.

www.manaraa.com

Table 4.10 Scale reliabilities (Cronbach's Alpha) for behavioral responses to bullying

Constructs	***Physical***	***Relational***
Dependent Variables		
Prosocial Index -Forgiving the person who hurt me. -Trying to help others deal with a similar problem -Working things out with the person who was aggressive towards me. -Going to someone for help	.70	.70
Antisocial Index -Saying negative things about the person to other people -Confronting the person who hurt me -Doing to others what was done to me -Saying mean things to the person who hurt me -Figuring out a way to get back at them	.84	.84
Asocial Index -Trying to disappear -Thinking of ways to avoid seeing people -Keeping to myself -Trying to avoid situations where I have to be with other people -Staying away from the person/group who was aggressive towards me	.81	.90

Asocial responses to bullying were operationalized by creating an index that included the following items: 1) Try to avoid situations where I have to be with other people, 2) Keep to myself, 3) Think of ways to avoid seeing people, 4) Decide to spend more time alone, and 5) Stay away from the person(s)/group who was aggressive towards me. Responses were summated to create a scale ranging from *0 to 20* per bullying victimization type. Higher scores on the index indicate a greater likelihood of responding asocially to bullying.

Antisocial measures to bullying were operationalized to include an index of the following items: 1) Get angry and argue with the person/persons who hurt me, 2) Doing to others what was done to me, 3) Think of ways to get back at the person/persons who hurt you, and 4) Say negative things about the person/persons to other people. Antisocial

www.manaraa.com

responses were summated to create a scale ranging from *0 to 20* per bullying victimization type. Higher scores on this index indicate higher odds of antisocial responding to bullying.

Independent variables

The independent variables (See Table 4.11) for this study include measures representing situation-based negative emotions, the current and perceived availability of alternative relationships, explicit power relations between victim and perpetrator of bullying, and implicit power relations between victim and perpetrator of bullying. Demographic predictors of responses to bullying include gender, race, and age. The operationalization of each of these variables is discussed below.

To assess situation-based negative emotions, students were asked the extent (*0 = not at all to 4 = definitely/very much*) to which their experience with bullying made them feel sad, upset, angry, embarrassed, or afraid. Responses to these items were summated to create a scale of situation based negative emotions per bullying victimization type. Higher scores indicate increases on the Situation-Based Negative Emotions (SBNE) index where scores ranged from *0 to 12*. The situation-based negative emotion scale reliabilities are reported in Table 4.11 for physical ($\alpha = .85$) and relational bullying ($\alpha = .88$).

www.manaraa.com

Table 4.11 Scale reliabilities (Cronbach's Alpha) for negative emotions, social support, and perception of future alternative relationships

Constructs	***Physical***	***Relational***
Independent Variables		
Situation-based Negative Emotions (SBNE) Index How much did this experience make you feel: -embarrassed -angry -upset -sad -afraid	.85	.88
Social Support Index How much do you have other people: -to whom you can turn -who you can count on -who will support you	.88	.95
Perception of Future Alternative Relationships (PFAR) Index To what extent can your relationship needs be met elsewhere? -Need for intimacy (sharing secrets, thoughts) can be met elsewhere -Need for companionship (enjoying company) can be met elsewhere -Need for security (trust) can be met elsewhere - Need for emotional involvement (attachment) can be met elsewhere	.91	.94

Social support was measured in two ways: 1) current availability of social support and 2) perceptions of whether relationship needs could be met in alternative relationships per each of the two bullying victimization types. First, students were asked about their current availability of alternatives for social support via the following three questions: 1) To what extent do you have other people to whom you can turn to? 2) To what extent do you have other people who you can count on? and 3) To what extent do you have other people who will support you? This measure is intended to reflect currently available relationships for social support. Students responded on a scale where *0 = never and 4 = very much/a lot*. Items were summated to reflect a scale of social support with higher numbers indicating increases in the availability of social support. Scores on the Social Support index ranged from *0 to 12* per bullying victimization type. Scale reliabilities for

www.manaraa.com

social support are provided for physical (α = .88) and relational bullying (α = .85) in Table 4.11.

Second, students were also asked the extent (*0 = none/not at all to 4 = very much/a lot*) to which their needs for 1) intimacy (sharing personal thoughts, secrets), 2) companionship (doing things together, enjoying each other's company), 3) security (feeling trusting, comfortable in a stable relationship), and 4) emotional involvement (feeling emotionally attached, feeling good when another feels good) can be fulfilled in alternative relationships. Items were summated with higher scores indicating higher perceptions in future alternatives for relationship replacement. Scores on the Future Alternatives ranged from *4 to 16*. The previous measure examines current availability of alternatives while the latter measures perceptions of future alternatives for fulfilling relationship needs (Rusbult & Farrell, 1983). Scale reliabilities for future alternatives are provided for physical (α = .88) and relational bullying (α = .85) in Table 4.11.

To assess explicit and implicit power relations, previous peer nomination scales used by Vaillancourt, Hymel, and McDougall (2003) were turned into survey question items. First, victims of bullying were asked about their relationship with the perpetrator and whether they needed to have a relationship with the person that bullied them.

In response to the question, "To what extent do you feel you need/not need to have a relationship with the person/persons who did this to you?," students were asked two sets of questions to measure implicit and explicit power. Responses were scored (*0 to 4, where 0=none/not at all and 4=definitely)*. Responses to the first and second conditional question – "Why do you need/not need to maintain a relationship with the

www.manaraa.com

person/persons who did this to you?" – were used to create an implicit and explicit power scale.

For both data sets (physical bullying victims and relational bullying victims), exploratory factor analysis using principal axis factoring and oblimin rotation, was conducted for the set of variables designed to operationalize implicit and explicit power. An oblimin rotation provided the best defined factor structure. For the physical bullying dataset, the first three questions assessing why students did not need/needed to maintain a relationship with their bully based on the bully's implicit power loaded on a separate, uncorrelated factor than the next three questions designed to measure the same factor. Thus, I chose to only include three items for the Implicit Power Scale for those that didn't need a relationship with their bully as well as three items for those who did need a relationship with their bully.

The following three items were included for students who responded that they did not need a relationship with their bully because 1) the bully was less known at school, 2) the bully was unpopular, and 3) the bully was disliked by most students at the school. Loadings for these three variables (for victim did not need relationship) ranged from .430 to .939 for physical bullying victims. The dropped items included the following: 1) I would not lose social status if this relationship ended, 2) I can easily form new relationships to replace this damaged one, and 3) We do not share the same friend group. The following three items were included for students who responded that they did need a relationship with their bully because 1) the bully was well known at school, 2) the bully was popular, and 3) the bully was liked by most students at the school. Loadings for these three variables (victim needed relationship) ranged from .784 to .919. The dropped items

www.manaraa.com

included the following: 1) I would lose social status if this relationship ended, 2) I cannot easily form new relationships to replace this damaged one, and 3) We share the same friend group.

Thus, the Implicit Power Scale used in this study includes the sum of responses for the following 6 items: 1) The person/persons are well-known at school, 2) The person/persons are popular at school, 3) The person/persons are liked by most people at my school, 4) The person/persons are less known at school 5) The person/persons are unpopular at school, and 6) The person/persons are disliked by most people at my school. Items were summated with higher scores indicating greater implicit power differentials between the bully and victim. Scores ranged from *3 to 12* on the scale.

The factor analysis conducted for the relationship need explicit power showed pattern matrix values ranging from .602 to .853. The not need explicit power scale also showed factor loadings with pattern matrix values ranging from .753 to .858. Thus, all explicit power items were summated to create a scale for this study to examine responses to both physical and relational bullying[1]. Thus, explicit power includes the sum of responses to the following twelve items: 1) The person/persons have power over others at

[1] A factor analysis was also run on the relational bullying dataset, however factors in this dataset loaded on both explicit and implicit in the power scale. Thus, for consistency, and because the Cronbach's alpha remained high ranging from .892 to .875 for implicit power need/not need relationship and .912 and .921 for explicit need/not need relationship, I chose to use the same scales for both physical bullying victims and relational bullying victims.

www.manaraa.com

school, 2) The person/persons have power over me at school, 3) The person/persons have power over my friends at school, 4) The person/persons can pressure others into doing things at school, 5) The person/persons would try to cause me harm if our relationship ended, 6) The person/persons could turn others against me, 7) The person/persons have zero power over others at school, 8) The person/persons have zero power over me at school, 9) The person/persons have zero power over my friends at school, 10) The person/persons cannot pressure others into doing things at school, 11) The person/persons would not try to cause me harm if our relationship ended, and 12) The person/persons would not be able to turn others against me. Items were summated with higher scores indicating greater explicit power differentials between the bully and victim. Scores on this scale ranged from *6 to 24*.

In Table 4.12 reliabilities are provided for Implicit Power Relational Need (α = .88 for physical, α = .89 for relational) and Implicit Power Relational Not Need (α = .74 for physical, α = .87 for relational). Table 4.12 also provided reliabilities for Explicit Power Relational Need (α = .92 for physical, α = .91 for relational) and Explicit Power Relational Not Need (α = .92 for physical, α = .92 for relational).

www.manaraa.com

Table 4.12 Scale reliabilities (Cronbach's Alpha) for implicit and explicit power relationship dynamics

Constructs	***Physical***	***Relational***
Independent Variables		
Implicit Power Relational Need (IPRN) Index:	.88	.89
Why you NEED to maintain this relationship:		
-the person is well known		
-the person is popular		
-the person is well liked		
Implicit Power Relational Not Need (IPRNN) Index:	.74	.87
Why do you NOT NEED to maintain this relationship:		
-the person is less known		
-the person is unpopular		
-the person is disliked		
Explicit Power Relational Need (EPRN) Index	.92	.91
Why you NEED to maintain this relationship:		
-the person has power over others at school		
-the person has power over me at school		
-the person has power over my friends at school		
-the person can pressure others into doing things.		
-the person would try to cause me harm.		
-the person could turn others against me		
Explicit Power Relational Need (EPRN) Index	.92	.92
Why you NOT NEED to maintain this relationship:		
-the person has zero power over others at school		
-the person has zero power over me at school		
-the person has zero power over my friends at school		
-the person cannot pressure others into doing things.		
-the person would not try to cause me harm.		
-the person could not turn others against me		

Demographic predictors are also included in this study. Gender was an open-ended response. A total of 99.3% of the sample indicated they were male or female, thus gender was coded as a dichotomous variable where *1 = male, 0 = female*. For race, respondents could report multiple races via checking all that apply. However, because the majority of respondents were either black or white, race was recoded as black = 1 and non-black = 0. Age is a continuous variable.

www.manaraa.com

Analytical approach

The analytic approach consists of two parts. First, I present descriptive statistics for the sample under study. Second, Ordinary Least Squares (OLS) Regression analyses are conducted to assess how physical and relational bullying strains, social support, perceptions of future alternative relationships, and power explain antisocial, asocial, and prosocial behavior. Due to the cross-sectional nature of the data, it is important to remember that all relationships reported in the results and discussion section are correlational in nature.

Results

Descriptive analyses

Statistics for the dependent and independent tables are provides in Tables 4.13 through 4.14. As can be seen in Table 4.13, the mean for prosocial behavior in response to physical bullying was 11.0. For asocial, the mean was 8.7, and for antisocial responses to physical bullying the mean was 7.5. For relational bullying, students responded with a mean of 11.3 for prosocial responding and a mean of 7.7 for asocial and a mean of 6.4 for antisocial responding.

Table 4.13 Descriptive statistics for dependent variables for physical and relational bullying

	N	*Minimum*	*Maximum*	*Mean*	*Standard Deviation*
Physical					
Antisocial Response	171	0	20	7.4678	5.58389
Asocial Response	171	0	20	8.7135	5.57777
Prosocial Response	168	0	28	11.0060	6.79335
Relational					
Antisocial Response	199	0	20	6.3769	5.28134
Asocial Response	200	0	20	7.7150	6.31531
Prosocial Response	188	0	28	11.3723	6.69022

www.manaraa.com

In Table 4.14, descriptive statistics for the independent variables are provided. On a scale from 0 to 20, the mean reported for the negative emotions scale for physical bullying was 7.2 whereas this was 7.7 for relational bullying. For social support, a mean of 7.0 was reported for physical bullying and 7.4 for relational bullying. Perceiving future alternatives also had similar means across the types of bullying: physical (M = 9.4) and relational (M = 9.9) on a scale ranging from 4 to 16. The mean scores for implicit power for physical bullying was 5.3 and for relational bullying it was 5.2. For explicit power, physical bullying and relational bullying also had similar means (10.7 and 11.1). For the physical bullying dataset, 46% of the sample was male, 66% black, with an average age of 16 years old. For the relational bullying dataset, 42% of the sample was male, 56% black, with an average age of 16 years old.

Table 4.14 Descriptive statistics for independent variables for physical and relational bullying

	N	*Minimum*	*Maximum*	*Mean*	*Standard Deviation*
Physical	194	1	5	2.186	1.0853
Negative Emotions	172	0	20	7.1802	5.73866
Social Support	164	0	12	7.0122	4.15200
Perception of Future Alternatives	133	4	16	9.3835	3.77536
Implicit Power	171	3	12	5.3041	2.59432
Explicit Power	135	6	24	10.7630	5.48432
Male	159	0	1	.4591	.49990
Black	165	0	1	.6606	.47495
Age (in years)	163	14	28	16	1.583
Relational	224	1	5	2.536	1.2451
Negative Emotions	203	0	20	7.7586	6.12945
Social Support	197	0	12	7.4264	4.44822
Perception of Future Alternatives	137	4	16	9.8759	3.90408
Implicit Power	205	3	12	5.2146	2.71935
Explicit Power	181	6	24	11.1436	5.62251
Male	195	0	1	.4256	.49571
Black	201	0	1	.5473	.49900
Age (in years)	199	14	28	15.92	1.473

www.manaraa.com

Regression analyses

OLS regression was conducted to examine the likelihood of antisocial, asocial, or prosocial responding in response to the strains of physical and relational bullying. This study specifically sought to examine whether the implicit and explicit power of a bully and relationship alternatives influences how youth respond to one direct form of bullying – physical and one indirect form of bullying – relational. The regression models were examined for multicollinearity issues using bivariate correlations and regression diagnostics. Because no bivariate correlation was above .70 and no variance inflation factor score was above 3.0, multicollinearity between the variables was not an issue.

Responses to physical bullying victimization

When it comes to responding antisocially to physical bullying, none of the variables in the model had a statistically significant association with asocial responses to physical bullying (See Table 4.15). However, youth who perceived that the bully has implicit power, such that they are popular or well-known at school, were significantly more likely to respond asocially ($b = .824$, $p = .008$) to physical bullying. The only factor that predicted prosocial behavior in response to physical bullying was social support ($b = .513$, $p = .013$); victims of physical bullying who had others to count on or turn to during time of need were more likely to respond prosocially.

Responses to relational bullying victimization

For antisocial responses to relational bullying, the only significant factor in explaining the likelihood was implicit power (See Table 4.15). When youths perceived that their bully was popular or well-known at school in response to relational bullying,

www.manaraa.com

victims of relational bullying were actually more likely to respond antisocially (b = .618, p = .029). None of the variables explaining asocial responding were significant for relational bullying. However, two factors explained prosocial responding to relational bullying. First, youth who perceived that they had social support at school (b = .527, p = .001) were more likely to respond prosocially than youth who did not have social support. Additionally, youth that perceived their victimizer had implicit power (the bully was popular or well-known at school) were significantly more likely to responding prosocially to relational bullying (b = .797, p = .009).

www.manaraa.com

Table 4.15 OLS regression models predicting behavioral responding to physical and relational bullying victimization

	Antisocial Responding				Asocial Responding				Prosocial Responding			
Predictor	b	SE	Beta	p	b	SE	Beta	p	b	SE	Beta	p
Physical												
Situation-based negative emotions	.028	.162	.028	.862	.212	.135	.200	.122	.308	.171	.238	.078
Social Support Index	-.178	.185	-.137	.341	-.001	.157	-.001	.996	.513	.200	.309	.013*
PFAR Index	.093	.246	.068	.707	.372	.197	.257	.064	-.001	.251	.000	.998
Implicit Power	.448	.357	.215	.215	.824	.300	.373	.008**	.749	.383	.277	.055
Explicit Power	.262	.166	.267	.121	.060	.138	.057	.667	.061	.175	.048	.727
Male	1.123	1.441	.099	.439	-.057	1.220	-.005	.963	-1.585	1.554	-.107	.312
Black	1.380	1.859	.112	.461	2.049	1.525	.156	.184	-1.860	1.940	-.115	.341
Age (in years)	-.004	.554	-.001	.995	-.427	.458	-.102	.355	-.917	.579	-.177	.119
Constant	.263	9.094		.977	3.203	7.476		.670	16.605	9.520		.086
Adjusted R2	.107				.404				.363			
N	194				194				194			
Relational												
Situation-based negative emotions	.072	.109	.076	.510	.157	.122	.148	.202	.100	.117	.090	.395
Social Support Index	.111	.145	.089	.448	.058	.167	.041	.732	.527	.157	.366	.001**
PFAR Index	.177	.157	.134	.263	.046	.176	.031	.793	.092	.171	.061	.590
Implicit Power	.618	.279	.305	.029*	.272	.306	.123	.376	.797	.298	.341	.009**
Explicit Power	.007	.137	.007	.961	.236	.152	.214	.124	-.037	.146	-.032	.800
Male	1.471	1.079	.137	.177	-.193	1.220	-.016	.875	1.678	1.162	.135	.152
Black	1.680	1.187	.152	.160	1.646	1.332	.134	.220	2.084	1.278	.163	.107
Age (in years)	-.822	.451	-.181	.072	-.142	.497	-.029	.776	-.342	.482	-.066	.479
Constant	11.307	7.331		.127	2.619	8.087		.747	5.089	7.822		.517
Adjusted R2	.123				.112				.259			
N	224				224				224			

www.manaraa.com

Discussion

Significant variables found for the association between bullying victimization and responses to each type are provided below in Table 4.16. The implications of these findings are discussed in sections to follow.

Table 4.16 Summary of significant findings in study 3

	Antisocial responding	Asocial responding	Prosocial responding
Physical bullying		Implicit power (b = .824, p = .008**)	Social support (b = .513, p = .013*)
Relational Bullying	Implicit power (b = .618, p = .029*)		Social support (b = .527, p = .001**); Implicit power (b = .797, p = .009)

Implications of responses to physical bullying victimization

Power dynamics do not appear to explain antisocial responses to physical bullying. However, power components do appear to explain asocial responses to physical bullying. This is important as youth who internalize their behaviors are still at risk for depression and self-harm related behaviors (Hay & Meldrum, 2010). The goal of anti-bullying programs should be to reduce the harm experienced from types of bullying through emotion-skills training. Further, youth who withdraw may also be experiencing increased levels of fear, depression, and avoidance that need to be addressed through counseling services in schools and by making schools and school related events safer places for youth to attend. While asocial responses do make future victimization less

www.manaraa.com

likely compared to antisocial responses, the negative affect associated with the experience remains to be addressed.

Further, although bullying is often defined as having a power component, the power relationships in bullying actually are unmeasured in most studies. Thus, this component is lacking when it comes to the potential of improving anti-bullying prevention programs. Another factor that significantly explained prosocial responses to physical bullying was social support or having others to count on in times of need. Forms of social support might include confiding in trusted adults as well as close friends that are in or away from school. Further, social support (Grapin, Sulkowski, & Lazarus, 2016) has been found to improve prosocial behavior and overall safety concerns in schools.

Implications of responses to relational bullying victimization

Youth who perceived that their bully had implicit power were significantly more likely to respond antisocially to relational bullying. This finding makes sense in the context of relational bullying. Relational bullying is intended to harm others social relationships by altering power dynamics or one's social status or reputation (Rodkin et al., 2015). In other words, if a victim experiences relational bullying themselves, revenge seeking may seem like an easier solution than engaging in prosocial behavior, such as reporting the behavior to adults, particularly when it is difficult to document and physically see relational bullying.

However, this study also found that implicit power explained an increased likelihood of prosocial responding. This finding also makes sense given that this form of aggression is known to be more common among popular groups where youth strive to reach their peak in popularity thus in some groups, relational aggression may be more of

www.manaraa.com

the norm (Cillessen & Rose, 2005). It is also true that when relational bullying occurs in the context of the same peer group, youth may feel that they have to respond prosocially for fear of losing other friendships within that peer group (de Bruyn & Cillessen, 2010). This study also showed that youth who reported having social support at school were more likely to respond prosocially to relational bullying. As was mentioned previously, social support is a vital component to reducing aggression and increasing prosocial behavior and perceptions of safety in schools, and this appears to be true across types of bullying (Grapin, Sulkowski, & Lazarus, 2016).

Limitations and future research

This study is not without limitations. First, this study used a cross-sectional research design making it difficult to interpret causality. Second, this sample of data comes from a Southeastern high school; thus, the generalizability of results to other samples may be limited. Third, the factor analysis conducted among the victims of physical bullying did not match the analyses for victims of relational bullying. This is a limitation of the Explicit and Implicit power scale; however, it may be that power (more generally) is a concern when it comes to relational bullying given the nature of this type being characterized by damaging social relations, such as the reputation or social status of others (Nelson, Burns, Kendall, & Schonert-Reichl, 2017). Future research should examine how the Explicit and Implicit Scale fared for other forms of bullying, namely verbal and cyber bullying.

Future research should also replicate this study among samples of high school students from other states. In the interest of replication, each of these studies should be conducted using data from 2016 and 2017 to see if findings translate over time. That is,

www.manaraa.com

future research should compare the findings for the first two studies with data from the third study to see if findings in study 1 and 2 are replicated in study 3. Further, models should be conducted separately by gender and race to see whether predictors vary for each type of bullying victimization. It would also be interesting to test for effects of a southern culture on bullying behavior, such as by examining gender and race related attitudes along with the Honor of Ideology Scale as this scale has been linked to higher levels of aggression in rural contexts (Brown, Osterman, & Barnes, 2009; Nisbett & Cohen, 1996). Finally, it would be interesting to see whether these findings translate to college campuses, including the four types of bullying, hazing, and sexual assault related behaviors. Further, future tests of explicit and implicit power for how victims respond to types of bullying should be tested in work-place settings.

Contributions

This study is the first to adapt a peer nomination scale (Vaillancourt, Hymel, & McDougall, 2003) intended to measure power relations to apply to a questionnaire about victim's experiences with bullying. Bullying is often defined as having the requirement that the bully have more power over the victim, but is rarely measured in studies (Vaillancourt, Hymel, & McDougall, 2003). Further, research on bullying often fails to consider prosocial behavior as a possible outcome. Prosocial responding is equally important to understanding the behavioral responses to bullying so that anti-bullying programs can be improved. Further, the power component needs to be further tested and better understood so that bullying prevention programs can be improved to help students cope with bullying even when their actions are not necessarily in line with their feelings in response to the bullying experienced. This study has also shown that responses vary

www.manaraa.com

according to the intricacies associated with each type of bullying. This also needs to be addressed and incorporated into bullying prevention programs.

www.manaraa.com

CHAPTER V

DISCUSSION AND FUTURE DIRECTIONS: TYING IT ALL TOGETHER

Purpose of this dissertation

The purpose of this dissertation was to examine the negative consequences and theoretical predictors of bullying victimization. The goal of Study 1 was to examine risk and protective factors for four types of bullying victimization. The goal of Study 2 was to examine the role of social support and how it affects youth's responses to four types of bullying. The goal of study 3 was to examine the effect of power in bullying to determine how youth respond to one direct form of bullying (i.e., physical) and one indirect form of bullying (i.e., relational) while controlling for social support. The ultimate, overarching goal in conducting this research was to apply this new knowledge to improving what works in anti-bullying prevention programs. Therefore, in sections that follow, I summarize the similarities and differences in findings across the three studies included in this dissertation. I then discuss the limitations, future directions, and unique contributions of this research from a theoretical and practical policy standpoint. In doing so, I close this dissertation with specific policy recommendations for improving anti-bullying prevention programs.

Summary of research findings: Similarities

Verbal and relational bullying were the two most prevalent forms of bullying across the two samples; physical bullying and cyber bullying occurred less frequently.

www.manaraa.com

This order in prevalence is consistent with other studies examining bullying victimization by type (Wang et al., 2009). These findings in prevalence also held across reports of peer bullying victimization, with most youth reporting that their peers were victimized either once or rarely. Likewise, the most prevalent form of bullying perpetration was verbal bullying, followed by relational bullying, physical bullying, and cyber bullying. Cyber bullying victims had the highest average score on the negative emotions and low self-esteem scales, when compared to all other forms of bullying. Thus, this research confirms previous findings that cyber bullying hurts more than other methods of bullying (Mehari & Farrel, 2018).

Another consistent finding across all three studies was that social support had similar significant effects across types of bullying. Across all forms of bullying, victims who perceived they had social support at school had an increased likelihood of prosocial responses to bullying. Interestingly, even when controlling for implicit and explicit power, social support significantly explained prosocial responding for physical and relational bullying, the two forms of bullying examined in study three.

Generally, these studies showed that prosocial responding was slightly more common when victims were exposed to indirect and covert forms of bullying. Asocial responses to victimization were most likely for physical bullying; antisocial responses were the most common outcome for physical bullying followed by verbal bullying, relational bullying, and cyber bullying victimization. Thus, antisocial responses to bullying victimization were more prevalent in response to direct forms of victimization while prosocial responses were most likely to occur in response to indirect or covert forms of victimization. This could be explained by the fact that direct, face-to-face

www.manaraa.com

bullying results in stronger, immediate reactions to perceived threats whereas when youth are victimized by relational or cyber bullying, they have time to think about how they should respond, thus they choose more prosocial behaviors. It is also true that with relational bullying, the source of original gossip or attempts at group exclusion are not always known, making it more difficult to respond anything but prosocially. This is also true for cyber bullying given that cyber bullying is essentially relational bullying occurring in an online context (Mehari & Farrel, 2018).

When considering the power dynamics in bullying, youths who felt that the bully had implicit power over them were significantly more likely to respond prosocially and antisocially to relational bullying while asocially to physical bullying. Youth may choose to respond asocially to physical bullying due to the fear that their popular bully will bring friends with him or her to back them up in a fight. Youth likely respond prosocially to relational bullying given that this form of bullying occurs more in peer groups, thus youth may feel they have to maintain a "friendship" with their aggressor for the sake of not losing other friends within or across their peer group. The antisocial responding to relational bullying can be explained by the fact that many youths engage in acts of relational bullying to damage social relations. As a form of revenge, then, youth may seek to respond with relational bullying themselves by gossiping to others about their bully as an attempt to stop the bullying while also harming their perpetrator's social status.

Additional similarities throughout this dissertation were that prior perpetrators of specific types of bullying were most at risk for becoming a victim of that type of bullying. This was consistently found across all four forms of bullying. Relatedly, youth

www.manaraa.com

whose peer(s) had experienced a particular form of bullying were much more likely to become a victim of that same form of bullying. This finding can be explained from a social norms approach. That is, bullying in certain forms is likely deemed acceptable and even expected as a rite of passage for some social cliques in school.

Summary of research findings: Differences and contradictions

Some of the more contradictory findings were related to the type of social support received. For example, adult support reduced the likelihood of experiencing relational bullying but increased the odds of youth experiencing verbal bullying. This is contrary to expectations, as previous research indicates more broadly that social support, particularly from adults, should lower the odds of bullying victimization (Grapin, Sulkowski, & Lazarus, 2016). It may be that adult support sometimes increases verbal bullying because students are teased for being the teacher's pet or are ridiculed for having a close relationship with their parent(s) or caregiver(s) around a time when youth are expected to become more autonomous in their decision-making. It is important to remember that youth are bullied for all sorts of reasons so this could be a potential cause explaining this relationship. This finding could also be due to the cross-sectional nature of the study. It is possible that youth who experienced verbal bullying at school reported that victimization to an adult, who supported them emotionally and psychologically through that victimization experience. Thus, the victimization may have led them to discover they had the support of an adult at school, where students not experiencing that same victimization may not have discovered that relationship. Whatever the cause of this finding, future research should attempt to better understand this relationship.

www.manaraa.com

The fact that adult support reduces the likelihood of experiencing relational bullying is more intuitive. When adults show support to youth and are actively involved in their lives, youth may feel that they can open up and talk about the issues they are facing at school. Further, having a strong supporting adult relationship (whether in or outside of school) may help youth increase in skills needed to reduce bullying such as social competence, conflict resolution, and emotional-skills improvement. It is also true that because relational bullying is often not recognized by adults, youth who have an adult in whom they can confide may learn of ways to avoid relational bullying victimization and/or how to de-escalate the situation should it happen. Given that relational bullying is the form least recognized by adults, it is perhaps an even more of a meaningful protective factor for this type of bullying victimization (Nelson, Burns, Kendall, & Schonert-Reichl, 2017).

Some cited reasons for the lack of adult understanding are that relational bullying is harder to physically see and detect and it occurs more in the context of friend groups while the larger conceptions of bullying tend to characterize bullies as coming from an outside group (Nelson, Burns, Kendall, & Schonert-Reichl, 2018). This form of bullying is also stereotyped as "a female phenomenon" when in fact, studies show no gender differences in relational bullying (Card, Stucky, Little, & Sawalini, 2008; Stubbs-Richardson, Sinclair, Goldberg, Ellithorpe, & Amadi, 2018) and that with age both boys and girls tend to engage in equal amounts of relational aggression (Orpinas, McNicholas, & Nahapetyan, 2015). The lack of adult insight and understanding of more indirect and covert forms of bullying (i.e., relational and cyber) should be addressed in anti-bullying programs by addressing myths and facts for this type of bullying. In doing so, efforts

www.manaraa.com

should consist of involving community members, including parents, teachers, and school personnel.

Other contradictory findings surround the type of social support. For instance, peer support, especially social acceptance, is sometimes found to be a protective factor against bullying more broadly (Salmivalli, 2010; Holt & Espelage, 2007; Vervoort et al., 2010). Nevertheless, results from this study found peer support to be a risk factor (not a protective factor) for relational and cyber bullying. It could be that peer support leads to efforts of retaliation of behalf of one's peer group (Frey, Pearson, & Cohen, 2015). That is, peer support may not always be "supportive" when peers are actually engaged in aggressive retaliation on behalf of their friends. This finding could be explained by the fact that bullying victims unite to create a social support group where they then commiserate about their personal experiences with that form of bullying victimization. Youth who experience bullying victimization may also be more attentive to their peer's victimization along with their personal victimization. This banding together of victims may sometimes result in aggressive retaliation on the behalf of one's peer group. Thus, it is important to distinguish between prosocial bystander peer behavior and antisocial bystander peer behavior in future research. That is, if someone is bullied online, sticking up for a friend should not have to entail engaging in cyberbullying perpetration to aid in the situation.

However, relational and cyber bullying are the two forms of bullying least recognized and understood by adults (Rodkin, Espelage, & Hanish, 2015). This is often the case because relational and cyber bullying tend to operate in spaces with less adult supervision and occur more in the context of friendship groups than the other forms of

www.manaraa.com

bullying (Navarro & Jasinski, 2012; Rodkin, Espelage, & Hanish, 2015). Nevertheless, youth need adult support to aid them in understanding how to better engage in conflict resolution for assisting their peers in more prosocial ways. It makes sense then that adult support serves as such a strong protective factor against relational bullying.

Another finding contrary to expectations was related to the power dynamics in bullying. Explicit power was hypothesized to be more closely tied to physical bullying because this form of bullying is more dominant and coercive in nature. On the other hand, implicit power was hypothesized to be more closely related to relational bullying because relational bullies use power to alter others' status and reputation. However, implicit power (or the perception that the bully has high social status or is more well liked at school) had a significant impact on both physical and relational models of bullying while explicit power was not significant in either model. Perceiving that one's bully is popular led to asocial responding for physical bullying and both antisocial and prosocial responding for relational bullying.

Given the context of these two forms of bullying victimization, it makes sense that youth would respond asocially to the implicit power of the bully in the case of physical aggression and antisocially and prosocially in the case of relational bullying. For example, popular bullies may have more friends to back them up in a fight, causing the victim to choose withdrawal. Relational bullying, on the other hand, is characterized by altering power and relationships with others through gossip and exclusion. In many cases, youth may feel responding prosocially to signs of implicit power in relational bullying is the safest way to avoid further harm because relational bullying is prevalent in certain friendship circles (Rodkin, Espelage, & Hanish, 2015). Further, youth who choose to

www.manaraa.com

respond antisocially to bullies with implicit power may be seeking to climb the social ladder themselves by making their bully look bad for engaging in aggression in the first place (de Bruyn & Cillessen, 2006). Further, it is interesting that the factor analysis scale did not show the two forms of power to be distinct for relational bullying. It may be that, when it comes to relational bullying, all perceptions of power are heightened, including implicit and explicit power.

Limitations and future directions

There are a number of limitations to this research. This study is cross-sectional; thus, any findings uncovered in this research are correlational, rather than directional. This is particularly important when considering relationships between bullying victimization, power, self-esteem, and support, where these factors and perceptions may have occurred after the bullying victimization, not before. Further, the sample size of each type of bullying is relatively small, thus reducing the explanatory power of the models. The sample itself is also a limitation because it is difficult to generalize findings beyond the context of findings revealed from this rural, southeastern high school. For example, one concern might be that forms of retaliation are higher in southern, rural samples given the higher scores of the honor of ideology and culture of honor in previous research for both adults and adolescent samples (Brown, Osterman, & Barnes, 2009; Nisbett & Cohen, 1996). Finally, sample selection bias is another limitation; for example, many of those most likely to respond antisocially to bullying were not included in the study because they failed to return consent forms or were absent from school which could be due to truancy or out-of-school suspension.

www.manaraa.com

Nevertheless, while the limitations of this research may reduce its generalizability, findings presented here likely are generalizable in many cases. For instance, across four types of bullying, social support was found to be correlated with prosocial responding. Even after controlling for power, social support remained a significant factor explaining an increased likelihood of prosocial responses to bullying.

Future research should aim to replicate and extend these research findings across samples, locations, and variations in demographics and use longitudinal data to do so. For instance, where possible, it would be useful to conduct these same research designs among a nationally representative sample of youth. Nevertheless, within the context of the limitations of this sample, this research suggests that the role of social support is crucial to reducing antisocial responding to bullying, and thus subsequent forms of victimization.

However, it is also important to recognize that not all social support is created equally. Because structural power and inequality are inherent in every social institution, including schools, inequality is also deeply embedded in the micro "interactive relations of informal help-seeking" behaviors (Lemert, 1997, pg. 306). Some studies show help-seeking behavior can lead to unintended negative consequences, such as when victims are blamed for their victimization or expected to cope with their victimization based on others' definitions of the situation and prescription for actions (Lempert, 1997; Sylaska & Edwards, 2014). Further, sometimes social support can serve as a negative influence when it is antisocial in nature. This likely explains why peer support sometimes leads to antisocial responding to bullying victimization. It is likely that victims' band together to discuss their negative experiences with said bullies and then develop revenge-seeking

www.manaraa.com

related "remedies." Future research should distinguish between prosocial and antisocial bystander behavior in responses to bullying victimization. Future studies should also examine whether becoming a victim of one type of bullying leads to an increased likelihood of becoming a victim of similar or different types of bullying.

Theoretically speaking, another limitation to these studies is that the data are secondary data; thus, questions could not be designed to specifically assess concepts of GST. However, the studies did a fairly strong job of actually improving some measures (e.g., situation-based negative emotions) by use of secondary data. Because of the secondary nature of these data, however, Study 1 could not conduct a full test of GST as the survey was designed to examine victim's responses to bullying victimization. Thus, the measures of situation-based negative emotions were contingent upon being a victim whereas Study 1 examined what risk and protective factors increased the likelihood of becoming a victim. Study 2 and 3 served as better examples of employing secondary data sources then, as these two studies focused on bullying victims' emotional and behavioral reactions to four types of bullying.

Unique contributions and theoretical implications

Despite the limitations, this research makes strong contributions to the literature given its exploratory nature. Many of the research questions and findings in this study offer innovative solutions to addressing gaps in the literature across fields of research that have yet to be examined or are currently underexamined in the literature. First, few research studies consider the role of power in bullying, despite the fact that it is defined as a required component across studies (Vaillancourt, Hymel, & McDougall, 2003). Second, few research studies have applied GST to the study of victimization as an

www.manaraa.com

outcome variable (e.g., see Zavala & Spohn, 2013). Third, no research has examined the role of social support in GST in explaining the likelihood of increasing prosocial responding. Cullen (1994) hypothesized that social support should be associated with decreased antisocial and decreased asocial responding. Thus, it is informative that social support also is associated with increased prosocial responding to strain. The unique contributions and theoretical implications from each study are discussed in detail below.

Study 1

Study one applied GST to examine risk and protective factors for four types of bullying victimization. In doing so, this research extended Agnew's (2006) and Zavala's and Spohn's (2013) work on the role of experienced, vicarious, and anticipated strains in explaining victimization. Few studies examine victimization as the outcome variable of strain. One study has tested effects of vicarious violent victimization on violent victimization (Zavala & Spohn, 2013) while others have considered the victim-offender overlap (Lin, Cochran, & Mieczkowski, 2011). This study extended this line of work by examining bullying victimization as the outcome variable in response to experienced strain (social alienation), vicarious strain (peer victimization), and anticipated strain (fear of an attack), while accounting for additional risk and protective factors. Experienced strain was measured with social alienation or how often youth had been rejected or made to feel like an outsider. Vicarious strain was measured as how often peers experienced each of the four types of bullying victimization. Anticipated strain was measured as fear of being attacked or threatened outside or on school property.

This study found verbal bullying to be the most common form of bullying for victimization, peer victimization, and perpetration. Youth reported similar rates of

www.manaraa.com

trusting adults and friends at school and most youth reported spending an average of 13 hours a week on digital or electronic media. This study found that all four types of peer bullying victimization (e.g., physical, verbal, relational, cyber) led to an increased likelihood of youth experiencing that same type of victimization themselves. This was true across all four forms of bullying. The same was found for prior engagement in bullying perpetration. That is, if youth engaged in prior physical/verbal/relational/cyber bullying, the type of bullying perpetrated increased the odds of experiencing that type of bullying as a victim.

Study 1 did not find support for experienced strain in the form of social alienation to be associated with a greater likelihood of experiencing bullying victimization of any form. However, anticipated strain (fear of attack) had a significant relationship with both verbal and cyber bullying victimization. Surprisingly, adult support was correlated with an increased likelihood of youth experiencing verbal bullying victimization but a decreased likelihood of youth experiencing relational bullying victimization. Peer support was positively correlated with increased odds of both relational and cyber bullying victimization. Thus, these findings suggest, more adult involvement is needed when it comes to indirect and covert forms of bullying so that youth can learn appropriate ways of responding to these forms of victimization. Black youth were significantly less likely to experience both relational and cyber bullying victimization; this finding is line with findings from previous research (Simons, 2002).

Taken as a whole, these findings suggest a need to look further at the types of bullying and how this might alter what policies should be suggested. For relational and covert forms of bullying, it seems as though more work is needed to explore the

www.manaraa.com

dynamics of social networks, the prevalence of bullying as it occurs within and across certain peer groups, and how social norms can be altered to reduce bullying.

Study 2

Study 2 sought to extend GST by examining situation-based negative emotions, such as emotions occurring in direct response to strains. Second, this study extended previous research by examining the role of social support in explaining prosocial behavior in response to strain in addition to asocial and antisocial behavior. Third, this study examined the role of situation-based negative emotions and social support in influencing how youth respond to four types of bullying victimization. Situation-based negative emotions have been found to better explain the link between strain and aggressive or criminal coping compared to trait based negative emotions (Moon, Morash, McCluskey, & Hwang 2009; Moon & Morash, 2017; Mazerolle, Piquero, & Capowich, 2003).

Agnew (1992) asserted that anger should result in antisocial or criminal coping. However, the results of Study 2 suggest that negative emotions vary by the type of bullying victimization. For example, this study found feeling sad significantly was associated with an increased likelihood of antisocial responding to physical bullying victimization whereas feeling angry significantly explained asocial responding. Black youth were more likely to respond antisocially to physical bullying than non-black youth and older youth were more likely to respond asocially than younger youth. For verbal bullying, low self-esteem was associated with asocial responding while feeling anger in direct response to one's victimization led to an increased likelihood of responding both antisocially and asocially. Likewise, low self-esteem was associated with an increased likelihood of asocial and prosocial responding while feeling sad led to an increased

www.manaraa.com

likelihood of responding asocially. Anger, on the other hand, was correlated with antisocial responding and a decreased likelihood of prosocial responding to relational bullying. Males were less likely than females to respond to relational bullying in an asocial manner while black youth were more likely to respond asocially to relational bullying than non-blacks. When it comes to cyber bullying, youth with lower self-esteem were more likely to respond asocially or prosocially than were youth with higher self-esteem. For cyber bullying, anger led to a decreased odd of responding prosocially.

Of interest to literature on bullying prevention is the fact that social support, or the availability of alternative relationships, led to increased prosocial behavior across all four forms of bullying. Thus, it appears that social support is associated with reductions in antisocial and asocial behavior (Cullen, 1994) with increases in prosocial behavior (Grapin, Sulkowski, & Lazarus, 2016) across all four forms of bullying. This finding contributes to the goals of Positive Criminology, which examines the effects of positive forces and protective factors in reducing or desisting youth from antisocial and criminal behavior (Ronel & Elisha, 2011; Ronel & Segev, 2014). Researchers within this paradigm argue that criminologists have focused too much on the negative forces and need to better examine how positive forces shape the likelihood of desistance from antisocial behavior (DeLisi & Vaughn, 2008; Farrington, 1995; Gottfredson & Hirschi, 1990; Laub & Sampson, 1993). Thus, it is important to remember that stressors can elicit both positive and negative coping styles. Therefore, strains might also present youth with opportunities for growth through positive change or development, such as by seeking out new friendships, repairing damaged ones, or resolving a conflict at school.

www.manaraa.com

Therefore, the results from study 2 contribute to the understanding of negative emotions in reaction to specific strains (types of bullying). It is interesting that different types of situation based negative emotions led to different types of behavioral responses to bullying. This study also contributes by examining the positive force of social support and how this factor reduced negative affect, asocial, and antisocial behavior, while increasing prosocial behavior in responses to bullying. Prosocial behavior is more likely when the rejectee can restore social acceptance. Therefore, improving the role of social support in schools, should reduce retaliation, isolation, and increase prosocial behavior in schools (Grapin, Sulkowski, & Lazarus, 2016). Nevertheless, the fact that some variables explained both antisocial and asocial behavior hints at the role of power that likely varies by the type of bullying and relationship dynamics at play. Study 3 addresses this literature gap.

Study 3

Study 3 addressed the role of power dynamics in behavioral responses to bullying while testing GST. Specifically, this study assessed whether (and how) explicit and implicit power affect responses to physical and relational bullying while controlling for social support. Social support or having alternative relationships with others can reduce the power of the higher status person (Blau, 1964). Thus, this study teased out the effects of power along with social support in explaining the likelihood of antisocial, asocial, and prosocial behavior in response to two types of bullying, one direct form– physical, and one indirect form – relational.

The results of study three indicated that implicit power explained the likelihood of youth responding asocially to physical bullying. Thus, it may be that youth fear popular

www.manaraa.com

or well-known bullies due to fear of having to fight more than one perpetrator. In these cases, withdrawing may result in less harm in the moment of experiencing a physical punch, kick or being shoved by another. Even after controlling for explicit and implicit power, social support remained a significant factor explaining prosocial responding. None of the variables in the model explained antisocial behavior for physical bullying. Thus, it might be that, in addition to examining situation based negative emotions, there is more value in assessing each emotion separately rather than collectively as a scale.

Implicit power also explained both antisocial and prosocial responses to relational bullying while social support again led to an increased likelihood of prosocial behavior. Some youth may feel they have to respond prosocially due to fear of losing relationships with other peers in the same friend circle (de Bruyn & Cillessen, 2010). However, this model did not explain asocial responding. Thus, again, the model may have explained more variation had the emotions been included individually in the model as opposed to collectively as a scale. For example, recall study 2 showed that feeling sad led to increased antisocial responding to physical bullying while feeling anger led to increased asocial responding. Likewise, feeling sad led to an increased likelihood of asocial responses to relational bullying. Thus, future tests should consider not only direct emotions in response to strains but also the type of emotion (e.g., feeling sad vs. angry) in response to strains.

So, what do we know?

The results of these research studies suggest that situation-based negative emotions, social support, and the role of implicit power are important for future research applications in the area of bullying and GST. As a whole, we can use information from

www.manaraa.com

these three studies to extend future applications of GST to the study of bullying. First, GST applies well to explaining types of bullying victimization particularly when it comes to vicarious and anticipated strains. Future research should examine other forms of experienced strains, such as family, financial, or school related strains.

Second, the contribution of situation-based negative emotions is important for future research testing GST (Moon, Morash, & McCluskey, 2012). The research showed that feeling sadness in response to physical bullying actually led to antisocial behavior while feeling angry led to asocial behavior. This is contrary to Agnew's (1992) suggestions that anger is the primary emotion that triggers antisocial or criminal coping. Depending on the type of strain, then, this may not always be the case. Further, several studies have shown the importance of examining emotions in direct response to strain as opposed to trait-based emotions; this study adds to the literature highlighting the importance of employing an examination of types of situation-based negative emotions in tests of GST (Moon & Morash, 2004; Moon, Blurton, & McCluskey, 2008; Moon, Morash, McCluskey, & Hwang, 2009; Moon, Morash, & McCluskey, 2012).

Third, two of the three studies highlight the importance of considering social support in reducing the negative effects of four types of bullying victimization. Social support was found to reduce antisocial and asocial behavior in some cases, and across all four forms of bullying, social support led to increased prosocial behavior. Thus, it is clear that having others one can count on or turn to during times of distress is crucial to the improvement of anti-bullying programs (Grapin, Sulkowski, & Lazarus, 2016). Therefore, social support should be incorporated into existing programs rated as effective. Schools should work towards developing positive school climates where

www.manaraa.com

students feel supported. In many school climates, students do not feel they can talk to teachers about the problems faced at school. Schools should seek to establish open door policies where students can come in and speak to trusted adults about the problems they may encounter on or away from school property (Grapin, Sulkowski, & Lazarus, 2016; May, 2014).

Fourth, for the most part, these studies highlight a lack of demographic differences in responses to bullying victimization. However, there were a few differences found across the three studies. Black youth were significantly less likely to experience relational and cyber bullying than were non-black youth. These findings are consistent with previous research suggesting that popular female black youth engage in more direct forms of aggression and less forms of indirect aggression than popular female white youth (Simons, 2002). Thus, this study replicates this previous research, although the sample under study here is not focused on popular female groups only. Black youth were more likely than non-black youth to respond antisocially to physical bullying. Males were less likely than females to respond asocially to relational bullying. While some studies show that there are no gender differences in perpetration of this type of bullying (Stubbs-Richardson, Sinclair, Goldberg, Ellithorpe, & Amadi 2018), some research suggests that girls experience this form of bullying more than boys when it comes to the subtype of gossip (Card, Stucky, Little, & Sawalini, 2008; Low et al., 2010). Therefore, it may be that males react more strongly to being gossiped about or excluded than females because it is less within the norms of their experiences. Finally, older youth are more likely than younger youth to respond asocially to physical bullying. Research shows developmentally that with age and maturity, youth should be more likely to withdraw or

www.manaraa.com

learn to pick and choose their battles compared to younger youth (Card, Stucky, Little, & Sawalini, 2008; Hoffman, Phillips, Daigle, & Turner, 2017; Wong, 2009). Future research should run models separately by gender and race to see if predictors vary.

Fifth, this research sheds light on the role of power differentials in bullying. Surprisingly, implicit power was found to matter more than explicit power in explaining responses to bullying across physical and relational bullying. In study 3, a new scale was developed based on a former peer nomination scale (Vaillancourt, Hymel, & McDougall, 2003) on perceptions of the power of bullies to examine how these power differentials affected victims' responses to bullying. For physical bullying, perceptions of implicit power, or signs that the bully had greater social status than the victim, led to asocial responses. However, implicit power explained both antisocial and prosocial responses to relational bullying. Further, it is interesting that the factor analysis showed implicit and explicit power to load on separate factors for physical bullying but these factor loadings were different in the sample of relational bullying victims. It may be that when it comes to relational bullying, a type of bullying intended to harm social relationships and one's status or reputation, all perceptions of power matter equally, whether this be perceptions of popularity or perceptions of dominance and coercion. Future research should seek to conduct a factor analysis of this scale among verbal and cyber bullying victims. In sections to follow, unique theoretical implications per study 1, 2, and 3 are discussed.

Study 1 revealed partial support for applying GST to the study of bullying victimization. In this study, anticipated strains (or fear of attack) explained two forms of bullying victimization: verbal and cyber. Experienced strain was not significant across the models. However, vicarious strain (peer victimization) was significant across all four

www.manaraa.com

models of bullying victimization. Future research should examine whether prior bullying victimization explains bullying perpetration to see if this follows the same consistent pattern regarding the type of bullying for explaining bullying victimization.

Study 2 revealed the importance of the role of social support in reducing antisocial and asocial behavior in addition to increasing prosocial behavior. This is the first study to my knowledge to examine the role of social support in GST while incorporating prosocial behavior as an outcome variable. Results indicate that social support plays an important role in reducing the negative effects across types of bullying victimization. As many of the situation-based negative emotions led to a variety of behavioral outcomes (e.g., both antisocial and asocial behavior) for some types of bullying, it seems a potential missing component was measuring the power component of bullying. Study 3 seeks to extend study 2 by incorporating explicit and implicit power into the models.

Study 3 revealed the importance of implicit power or perceiving that one's bully is popular or has a high social status at school. Implicit power led to withdrawal behavior for physical bullying while it led to antisocial and prosocial responding for relational bullying. This study further highlights the importance of examining the types of bullying when it comes to behavioral responses. One weakness of this study is that situation-based negative emotions were measured as a scale. Future research could benefit from examining each of the situation-based negative emotions (e.g., upset, sad, angry) separately to tease out the effects of implicit power in the models. Further, this study could be extended by also conducting this research design among victims of verbal and cyber bullying to see how the scale of implicit and explicit power holds up across samples of victims.

www.manaraa.com

Theoretical implications

I believe the results of this study partially support GST. While Agnew would argue that the negative emotions measured in these studies should regularly explain antisocial behaviors across samples and across measurement techniques, the results from these studies only partially support GST. In some cases (study 2, Tables 4.5 – 4.8), students that were upset were no more likely than any other student to respond to bullying antisocially or in any other form. Students who were embarrassed had the same lack of responses. If strain theory were correct, most negative emotions should explain an increased likelihood of antisocial responding. However, this was not found in this study. Aspects of strain theory, then, were partially supported. For example, anger, the emotion Agnew proposed would be more likely to lead to antisocial or criminal coping was significant for verbal (Table 4.6) and relational bullying (Table 4.7). However, feeling angry also significantly resulted in asocial behavior for physical bullying while feeling sad explained antisocial behavior (Table 4.5). Nevertheless, the research extends GST by testing situation-based negative emotions, the role of social support, and power components in bullying for explaining how youth respond to types of bullying.

How can this research improve anti-bullying prevention programs?

Based on prior reviews of effective anti-bullying prevention programs, I recommend combining social support with social emotional learning programs, such as Positive Action, to reduce antisocial responses to all types of bullying. Social emotional learning programs allow youth to develop skillsets that reduce antisocial behavior and improve belongingness and prosocial behavior at school (Frey et al., 2005; Schick & Cierpka, 2005; Holsen, Smith, & Frey, 2008). While prevention programs need to

www.manaraa.com

consider the effects of types of bullying, what has remained clear across these studies is that social support reduces antisocial and asocial behavior for some types of bullying while it increases prosocial behavior for all types of bullying. Thus, programs that teach youth skillsets such as conflict resolution, social competence, and emotional skills training combined with the role of social support are key to anti-bullying prevention. Social support needs to include improving overall school climate as well as improving the perceived and actual support of trusted adults and peers in school settings (Grapin, Sulkowski, & Lazarus, 2016).

Social support programs should incorporate changes to school climate so that students feel their school is safe and that they can confide in trusted adults both inside and outside of their school. Therefore, as previous programs suggest, the whole community (e.g., parents, teachers, and administrators) needs to be involved in order to make programs more successful (Ttofi & Farrington, 2011). In addition to involving adults, research on bystander programs shows that while they are generally not effective among middle school students, they are among high school students (Polanin, Espelage, & Pigott, 2012). Ratings of peer bystander programs also indicate that for them to work successfully, students need to be taught appropriate ways to intervene or tell adults about bullying (Salmivalli, 2010; Polanin, Espelage, & Pigott, 2012). Therefore, it would be worthwhile to teach not only individuals skillsets for coping with bullying but also groups or social cliques in school settings. This suggestion is in line with the KiVa Anti-bullying program.

Although the KiVa Anti-bullying program is rated as promising on Crime Solutions, it may be that the program needs to be supplemented with social skills training

www.manaraa.com

to receive more effective ratings. Further, the promising rating of the program was found for use among middle school students, thus it may be more effective among high school students (Polanin, Espelage, & Pigott, 2012). However, recall that previous studies showed that peer support actually increased the likelihood of youth experiencing relational and cyber bullying. This could be that victims commiserate about their victimization and when seeking to stand up to their bullies, youth may use forms of aggressive or anti-social responding as opposed to asocial or prosocial responding. Through social skills training and the involvement of adults, these effects found in this dissertation could likely be reduced. Currently, these forms of bullying operate in spaces less recognized and less supervised by adults; consequently, programs should involve the community, including parents, teachers, and school personnel in better understanding and detecting the nature and prevalence of these two forms of bullying (Rodkin, Espelage, & Hanish, 2015; Ttofi & Farrington, 2011).

Further, the results of study 3 highlight the importance of considering the element of power in bullying. Previous research has shown that those with more power have more freedom in responses to bullying than those with less power (Guinote, Judd, & Brauer, 2002; Salmivalli, 2010). Therefore, it is important that bullying bystander programs involve popular students in their programs (Salmivalli, 2010). This could be accomplished via a survey or peer nomination scale to identify popular students in schools, and then invite them to be a part of the larger school wide program. The KiVa program recognizes the power and group component in bullying and suggests that changes in group behaviors and social norms can reduce the likelihood of bullying. Components of this program could be social and emotional skills training that might offer

www.manaraa.com

a nice starting point for program adaptation based on the results of these studies. KiVa has been found promising among a sample of middle school students; with these changes, future tests might find it to be more effective among a high school sample where students are more developed and matured (Salmivalli, 2010).

Further, it is also true that many programs are not successfully implemented as designed (May, 2014). This is often because schools are handed over programs and expected to follow them in full while also managing daily operations (May, 2014). Research further shows that programs are best run by members outside of the school setting (Bradshaw, Mitchell, & Leaf, 2010). Thus, any developed programs should be run by either researchers or practitioners in the field who are familiar with the programs designed and their level of effectiveness.

The results of Study 1 also suggest that peer victimization and prior perpetration are strong indicators that youth will experience certain types of bullying victimization. Thus, perhaps anti-bullying programs should consider measuring outcomes of peer victimization to test the effectiveness of programs as well. Study 1 indicated taking into consideration peer victimization and previous perpetration by type as strong indicators of experiencing that type of bullying victimization. This finding provides support for taking a social norms approach to reducing the specific types of bullying that tend to be a problem in schools. The challenge to social norms in group settings can be addressed via the KiVa Anti-bullying Program.

This dissertation also demonstrated that different methods of social support work differently by the type of bullying. For instance, for some reason adult support increases the odds of verbal bullying but lowers the odds for relational bullying. Further, while peer

www.manaraa.com

support is sometimes helpful (Salmivalli, 2010; Barboza et al., 2009; Holt & Espelage, 2007; Vervoort et al., 2010, Salmivalli, 1999), this study shows that peer support actually increases the odds of experiencing relational and cyber bullying. It could be because these forms are indirect, confiding in a friend actually further spreads the information or "drama" among friend circles exacerbating the problem. Victims of bullying then may be more attentive to bullying victimization and may thus band together to combat bullying on behalf of their peers and in doing so they may be more likely to respond aggressively. This aggression may then increase the odds that they themselves will engage in subsequent aggression and experience future bullying victimization. Training for adults on types of bullying would allow parents and school personnel to serve more supporting roles for helping youth cope emotionally and behaviorally to different types of bullying.

Summary of policy recommendations

In closing, the policy implications recommended here are to integrate social emotional learning programs, such as Positive Action, with elements of social support, including changes to school climate and incorporating bystander prevention programs, such as KiVa. Positive action was found to apply well across demographics, settings, and geography for ages 0 to 18 (Office of Justice Programs Positive Action, 2018). KiVa is a specific bystander program that considers the role of power and groups in bullying. KiVa has been rated promising for middle school students (Office of Justice Programs KiVa, 2018). However, meta-analyses of anti-bullying bystander prevention programs suggests that they are less effective for middle school students compared to high school students. Thus, this program might be rated effective if tested among high school samples. Finally,

www.manaraa.com

multi-level social support programs come highly recommended for both middle and high school students (Grapin, Sulkowski, & Lazarus, 2016).

In integrating these three programs, it would be important that the adaptation of these programs require training sessions for adults and school administrators on the nature of physical, verbal, relational, and cyber bullying. Such training sessions need to also cover the element of power in bullying including discussions of inequality created in status hierarchies that are prevalent in high school settings and how to combat them. It is important to remember that, although power differentials may be associated with certain types of behavioral responses, this doesn't mean that youth have emotionally dealt with the strain of bullying. Thus, the strength of both social support and social emotional learning programs is that both programs offer unique benefits in improving coping with the various consequences associated with types of bullying. Further, recall even when controlling for power, study 3 found the role of social support to explain prosocial behavior across physical and relational bullying. Thus, social support and social emotional skills training are vital components to successful anti-bullying programs.

Further, it is important to recall that one reason prior programs have been ineffective is that bullying increases power (implicit and explicit) for those engaged in the perpetration of it. Recall that Wong (2009) found anti-bullying programs to be more effective at reducing bullying victimization than bullying perpetration (Wong, 2009). Therefore, programs should seek to directly address the role of power in bullying when offering training sessions to the school body. Further, programs should seek to incorporate students who are of higher social standing in bystander efforts to prevent bullying (Salmivalli, 2010).

www.manaraa.com

Finally, it is important to remember that most bullying programs focus on middle school students compared to high school students (Williford et al., 2011). The results from this study, when taken in the context of the larger body of bullying research, suggest that more anti-bullying programs are needed to address the negative consequences of bullying for high school students, particularly as bullying is associated with an array of negative consequences, such as negative emotions, depression, antisocial behavior, bullying perpetration (Java, Song, & Kim, 2014; Patchin & Hinduja, 2011), weapon carrying (Keith, 2018), criminal coping (Cullen et al., 2008) or self-harm related responses (Hay & Meldrum, 2010; Hay, Meldrum, & Mann, 2010). In fact, it can be argued that high school students need anti-bullying programs just as much as middle school students. High school students are in a period of time where they are transitioning from adolescence to adulthood, thus learning how to improve their coping and conflict resolution skills during a time that youth are expected to have increased autonomy is vital. Such programs may help youth to make improved decisions on a daily basis, subsequently improving their resiliency and ability to cope with stressors throughout their life course.

www.manaraa.com

REFERENCES

Abbotts, J. E., Williams, R. G., Sweeting, H. N., & West, P. B. (2004). Is going to church good or bad for you? Denomination, attendance and mental health of children in West Scotland. *Social Science & Medicine, 58*(3), 645-656.

Aceves, M. J., Hinshaw, S. P., Mendoza-Denton, R., & Page-Gould, E. (2010). Seek help from teachers or fight back? Student perceptions of teachers' actions during conflicts and responses to peer victimization. *Journal of Youth and Adolescence*, *39*(6), 658-669.

Agaibi, C. E., & Wilson, J. P. (2005). Trauma, PTSD, and resilience: A review of the literature. *Trauma, Violence, & Abuse*, *6*(3), 195-216.

Agirdag, O., Demanet, J., Van Houtte, M., & Van Avermaet, P. (2011). Ethnic school composition and peer victimization: A focus on the interethnic school climate. *International Journal of Intercultural Relations, 35*(4), 465-473.

Agnew, R. (1985). A revised strain theory of delinquency. *Social Forces, 64*(1), 151-167.

Agnew, R. (1989). A longitudinal test of the revised strain theory. *Journal of Quantitative Criminology, 5*(4), 373-387.

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology, 30*(1), 47-88.

Agnew, R. (1997). Stability and change in crime over the life course: A strain theory explanation. In T. P. Thornberry (Ed.), *Advances in Criminological Theory* (pp. 101-132). New Brunswick, NJ: Transaction.

Agnew, R. (2001). Building on the foundation of general strain theory: Specifying the types of strain most likely to lead to crime and delinquency. *Journal of Research in Crime and Delinquency, 38*(4), 319-361.

Agnew, R. (2006). General strain theory: Current status and directions for further research. In (Eds.) Cullen, F. T., Wright, J. P. & Blevins, K. R. *Taking stock: The Status of Criminological Theory* (pp 101-123). New Brunswick, U.S. and London, U.K.: Transaction Publishers.

Agnew, R. (2006). *Pressured into Crime: An Overview of General Theory of Crime.* Los Angeles, CA: Roxbury.

Agnew, R. (2013). When criminal coping is likely: An extension of general strain theory. *Deviant Behavior, 34*(8), 653-670.

www.manaraa.com

Agnew, R. "General Strain Theory." In Teasdale, B., and Bradley, M. S. (Eds.). (2016). *Preventing Crime and Violence.* Springer International Publisher.

Agnew, R., & Brezina, T. (1997). Relational problems with peers, gender, and delinquency. *Youth & Society, 29*(1), 84-111.

Agnew, R., Brezina, T., Wright, J. P., & Cullen, F. T. (2002). Strain, personality traits, and delinquency: Extending general strain theory. *Criminology, 40*(1), 43-72.

Agnew, R., & White, H. R. (1992). An empirical test of general strain theory. *Criminology, 30*(4), 475-500.

Anderson, E. (1999). *Code of the street*. New York: Norton.

Anderson, C., & Berdahl, J. L. (2002). The experience of power: Examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology, 83*(6), 1362-1377.

Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology, 53*, 27–51.

Andrews, D. A., & Bonta, J. (2014). *The Psychology of Criminal Conduct*. New York, NY: Routledge.

Archer, J., & Coyne, S. M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review, 9*(3), 212-230.

Arseneault L, Walsh E, Trzesniewski K, Newcombe R, Caspi A, Moffitt TE. (2006). Bullying victimization uniquely contributes to adjustment problems in young children: a nationally representative cohort study. *Pediatrics 118*, 130–38

Aseltine Jr, R. H., Gore, S., & Gordon, J. (2000). Life stress, anger and anxiety, and delinquency: An empirical test of general strain theory. *Journal of Health and Social Behavior*, 41(3), 256-275.

Asch, S. E. (1952). Group forces in the modification and distortion of judgments. In (Ed.) S. E. Asch, Social Psychology (pp. 450-501). Englewood Cliffs, NJ, US: Prentice-Hall, Inc.

Asch, S. E. (1956). Studies of independence and conformity: I. A minority of one against a unanimous majority. *Psychological Monographs: General and Applied, 70*(9), 1-70.

Augimeri, L. K., Farrington, D. P., Koegl, C. J., & Day, D. M. (2007). The SNAP™ under 12 outreach project: Effects of a community-based program for children with conduct problems. *Journal of Child and Family Studies*, *16*(6), 799-807.

Baker, T., & Pelfrey Jr, W. V. (2016). Bullying victimization, social network usage, and delinquent coping in a sample of urban youth: Examining the predictions of general strain theory. *Violence and Victims*, *31*(6), 1021-1043.

Barboza, G. E., Schiamberg, L. B., Oehmke, J., Korzeniewski, S. J., Post, L. A., & Heraux, C. G. (2009). Individual characteristics and the multiple contexts of

www.manaraa.com

adolescent bullying: An ecological perspective. *Journal of Youth and Adolescence, 38*(1), 101-121.

Batsche, G. M., & Knoff, H. M. (1994). Bullies and their victims: Understanding a pervasive problem in the schools. *School Psychology Review, 23*, 165-175.

Bauman, S., Toomey, R. B., & Walker, J. L. (2013). Associations among bullying, cyberbullying, and suicide in high school students. *Journal of Adolescence*, *36*(2), 341-350.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497-529.

Beall, A. T., & Tracy, J. L. (2017). Emotivational psychology: How distinct emotions facilitate fundamental motives. *Social and Personality Psychology Compass*, *11*(2), e12303, 1-17.

Beets, M. W., Flay, B. R., Vuchinich, S., Snyder, F. J., Acock, A., Li, K. K., ... & Durlak, J. (2009). Use of a social and character development program to prevent substance use, violent behaviors, and sexual activity among elementary-school students in Hawaii. *American Journal of Public Health, 99*(8), 1438-1445.

Belmi, P., Barragan, R. C., Neale, M. A., & Cohen, G. L. (2015). Threats to social identity can trigger social deviance. *Personality and social psychology bulletin, 41*(4), 467-484.

Berlan, E. D., Corliss, H. L., Field, A. E., Goodman, E., & Austin, S. B. (2010). Sexual orientation and bullying among adolescents in the growing up today study. *Journal of Adolescent Health, 46*(4), 366-371.

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*(7), 989-1000.

Blackhart, G. C., Baumeister, R. F., & Twenge, J. M. (2006). Rejection's Impact on Self-Defeating, Prosocial, Antisocial, and Self-Regulatory Behaviors. In (Eds.), K. D. Vohs & E. J. Finkel (Eds.), *Self and Relationships: Connecting Intrapersonal and Interpersonal Processes* (pp. 237-253). New York, NY, US: Guilford Press.

Blau, H. (1964). The impossible theater: a manifesto. New York, NY: Macmillan.

Blau, P. M. (1977). Inequality and heterogeneity: A primitive theory of social structure (Vol. 7). New York, NY: Free Press.

Bjorkqvist K, Osterman K, & Kaukiainen A. (2000). Social intelligence − empathy = aggression? *Aggression and Violent Behavior. 5*, 191–200.

Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological Bulletin, 119*(1), 111-137.

www.manaraa.com

Bosworth, K., Espelage, D. L., & Simon, T. R. (1999). Factors associated with bullying behavior in middle school students. *The Journal of Early Adolescence*, *19*(3), 341-362.

Bouffard, L. A., & Koeppel, M. D. (2014). Understanding the potential long-term physical and mental health consequences of early experiences of victimization. *Justice Quarterly*, *31*(3), 568-587.

Boulton, M. J., Trueman, M., Chau, C. A. M., Whitehand, C., & Amatya, K. (1999). Concurrent and longitudinal links between friendship and peer victimization: Implications for befriending interventions. *Journal of Adolescence*, *22*(4), 461-466.

Boulton, M. J., Trueman, M., & Flemington, I. (2002). Associations between secondary school pupils' definitions of bullying, attitudes towards bullying, and tendencies to engage in bullying: Age and sex differences. *Educational Studies, 28*(4), 353-370.

Branje, S. J., Frijns, T. O. M., Finkenauer, C., Engels, R., & Meeus, W. I. M. (2007). You are my best friend: Commitment and stability in adolescents' same-sex friendships. *Personal Relationships, 14*(4), 587-603.

Bradshaw, C. P., Sawyer, A. L., & O'Brennan, L. M. (2009). A social disorganization perspective on bullying-related attitudes and behaviors: The influence of school context. *American Journal of Community Psychology*, *43*(3-4), 204-220.

Bradshaw, C., Mitchell, M., & Leaf, P. (2010). Examining the Effects of Schoolwide Positive Behavioral Interventions and Supports on Student Outcomes. *Journal of Positive Behavior Interventions 12*(3), 133-148.

Broidy, L. M. (2001). A test of general strain theory. *Criminology, 39*(1), 9-36.

Broidy, L., & Agnew, R. (1997). Gender and crime: A general strain theory perspective. *Journal of Research in Crime and Delinquency, 34*(3), 275-306.

Brown, E. C., Low, S., Smith, B. H., & Haggerty, K. P. (2011). Outcomes from a school-randomized controlled trial of Steps to Respect: A bullying prevention program. *School Psychology Review*, *40*(3), 423-443.

Brown, R. P., Osterman, L. L., & Barnes, C. D. (2009). School violence and the culture of honor. *Psychological Science, 20*(11), 1400-1405.

Caravita, S., Di Blasio, P., & Salmivalli, C. (2009). Unique and interactive effects of empathy and social status on involvement in bullying. *Social development, 18*(1), 140-163.

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*(5), 1185-1229.

Carlson, K. T. (2006). Poverty and youth violence exposure: Experiences in rural communities. *Children & Schools*, *28*(2), 87-96.

www.manaraa.com

Choi, J., Johnson, D. W., & Johnson, R. (2011). Relationships among cooperative learning experiences, social interdependence, children's aggression, victimization, and prosocial behaviors. *Journal of Applied Social Psychology, 41*(4), 976-1003.

Cillessen, A. H., & Borch, C. (2006). Developmental trajectories of adolescent popularity: A growth curve modelling analysis. *Journal of Adolescence, 29*(6), 935-959.

Cillessen, A. H., & Mayeux, L. (2004). From censure to reinforcement: Developmental changes in the association between aggression and social status. *Child Development, 75*(1), 147-163.

Cloward, R. A., & Ohlin, L. E. (1960). *Delinquency and Opportunity: A Study of Delinquent Gangs* (Vol. 6, 2013), New York, NY: Free Press.

Cohen, A. (1955). *Delinquent Boys.* New York, NY: Free Press.

Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly, 25*(2), 65.

Copeland, W. E. D., Wolke, A. Angold, and E. J. Costello. (2013). Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *JAMA Psychiatry 70*(4), 419–426.

Craig, W., Harel-Fisch, Y., Fogel-Grinvald, H., Dostaler, S., Hetland, J., Simons-Morton, B., ... & Pickett, W. (2009). A cross-national profile of bullying and victimization among adolescents in 40 countries. *International Journal of Public Health, 54*(2), 216-224.

Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child development, 66*(3), 710-722.

Crick, N. R., & Grotpeter, J. K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology, 8*(2), 367-380.

Cuevas, C. A., Finkelhor, D., Shattuck, A., Turner, H., & Hamby, S. (2013). *Children's Exposure to violence and the intersection between delinquency and victimization.* Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Cullen, F. T. (1988). Were Cloward and Ohlin strain theorists? Delinquency and opportunity revisited. *Journal of Research in Crime and Delinquency*, *25*(3), 214-241.

Cullen, F. T. (1994). Social support as an organizing concept for criminology: Presidential address to the Academy of Criminal Justice Sciences. *Justice Quarterly, 11*(4), 527-559.

Cullen, F. T., Unnever, J. D., Hartman, J. L., Turner, M. G., & Agnew, R. (2008). Gender, bullying victimization, and juvenile delinquency: A test of general strain theory. *Victims and Offenders, 3*(4), 346-364.

www.manaraa.com

Curtner-Smith, M. E., Culp, A. M., Culp, R., Scheib, C., Owen, K., Tilley, A., Murphy, M., Parkman, L., & Coleman, P. W. (2006). Mothers' parenting and young economically disadvantaged children's relational and overt bullying. *Journal of Child and Family Studies*, *15*(2), 177-189.

Dake, J. A., Price, J. H., & Telljohann, S. K. (2003). The nature and extent of bullying at school. *Journal of School Health, 73*(5), 173-180.

David-Ferdon, C., & Hertz, M. F. (2009). *Electronic media and youth violence: A CDC issue brief for researchers.* Centers for Disease Control and Prevention.

DeCamp, W., & Newby, B. (2015). From bullied to deviant: The victim–offender overlap among bullying victims. *Youth Violence and Juvenile Justice, 13*(1), 3-17.

De Coster, S., & Kort-Butler, L. (2006). How general is general strain theory? Assessing determinacy and indeterminacy across life domains. *Journal of Research in Crime and Delinquency, 43*(4), 297-325.

De Bruyn, E. H., & Cillessen, A. H. (2006). Popularity in early adolescence: Prosocial and antisocial subtypes. *Journal of Adolescent Research, 21*(6), 607-627.

DeLisi, M., & Vaughn, M. G. (2008). The Gottfredson–Hirschi critiques revisited: Reconciling self-control theory, criminal careers, and career criminals. *International Journal of Offender Therapy and Comparative Criminology, 52*(5), 520-537.

Demaray, M. K., & Malecki, C. K. (2003). Perceptions of the frequency and importance of social support by students classified as victims, bullies, and bully/victims in an urban middle school. *School Psychology Review*, *32*(3), 471-490.

Deng, M., Guinote, A., & Cui, L. (2018). When low power meets status: Powerlessness triggers behavioral inhibition only under low status. *Social Cognition, 36*(1), 134-166.

Dijkstra, J. K., Lindenberg, S., Verhulst, F. C., Ormel, J., & Veenstra, R. (2009). The relation between popularity and aggressive, destructive, and norm-breaking behaviors: Moderating effects of athletic abilities, physical attractiveness, and prosociality. *Journal of Research on Adolescence, 19*(3), 401-413.

Dulmus, C. N., Theriot, M. T., Sowers, K. M., & Blackburn, J. A. (2004). Student reports of peer bullying victimization in a rural school. *Stress, Trauma, and Crisis, 7*(1), 1-16.

Duncan, R. D. (1999). Maltreatment by parents and peers: The relationship between child abuse, bully victimization, and psychological distress. *Child Maltreatment*, *4*(1), 45-55.

Duncan, R. D. (2004). The impact of family relationships on school bullies and victims. In Espelage, D. L. & Swearer, S. M. (Eds.), *Bullying in American Schools: A Social-ecological Perspective on Prevention and Intervention*, (pp. 227-244). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

www.manaraa.com

Dupper, D. R., Forrest-Bank, S., & Lowry-Carusillo, A. (2015). Experiences of religious minorities in public school settings: Findings from focus groups involving Muslim, Jewish, Catholic, and Unitarian Universalist youths. *Children & Schools*, *37*(1), 37-45.

Eisenberg, N., & Fabes, R. A. (1991). Prosocial behavior and empathy: A multimethod developmental perspective. In M. S. Clark (Ed.), *Review of Personality and Social Psychology, Vol. 12. Prosocial behavior* (pp. 34-61). Thousand Oaks, CA, US: Sage Publications, Inc.

Elisha, E., Idisis, Y., & Ronel, N. (2013). Positive criminology and imprisoned sex offenders: Demonstration of a way out from a criminal spin through acceptance relationships. *Journal of Sexual Aggression, 19*(1), 66-80.

Ellison, C. G., Bartkowski, J. P., & Segal, M. L. (1996). Conservative Protestantism and the parental use of corporal punishment. *Social Forces*, *74*(3), 1003-1028.

Emerson, R. M. (1962). Power dependence relations. *American Sociological Review*, *27*, 31–41.

Esbensen, F. A., & Carson, D. C. (2009). Consequences of being bullied: Results from a longitudinal assessment of bullying victimization in a multisite sample of American students. *Youth & Society, 41*(2), 209-233.

Esbensen, F. A., Peterson, D., Taylor, T. J., & Osgood, D. W. (2012). Results from a multi-site evaluation of the GREAT program. *Justice Quarterly, 29*(1), 125-151.

Espelage, D. L., Aragon, S. R., Birkett, M., & Koenig, B. W. (2008). Homophobic teasing, psychological outcomes, and sexual orientation among high school students: What influence do parents and schools have? *School Psychology Review*, *37*(2), 202.

Espelage, D. L., Bosworth, K., & Simon, T. R. (2001). Short-term stability and prospective correlates of bullying in middle-school students: An examination of potential demographic, psychosocial, and environmental influences. *Violence and Victims*, *16*(4), 411-426.

Espelage, D. L., Gutgsell, E. W., & Swearer, S. M. (Eds.). (2010). *Bullying in North American schools.* New York, NY: Routledge.

Espelage, D. L., & Horne, A. M. (2008). School violence and bullying prevention: From research-based explanations to empirically based solutions. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (pp. 588-598). Hoboken, NJ, US: John Wiley & Sons Inc.

Espelage, D. L., & Swearer Napolitano, S. M. (2003). Research on school bullying and victimization: What have we learned and where do we go from here? *School Psychology Review, 12*(3), 365-383.

Espinoza, G., Gonzales, N. A., & Fuligni, A. J. (2013). Daily school peer victimization experiences among Mexican American adolescents: associations with

www.manaraa.com

psychosocial, physical and school Adjustment. *Journal of Youth and Adolescence, 42*(12), 1775 – 1788.

Farmer, T. W., Petrin, R., Robertson, D., Fraser, M., Hall, C., Day, S., & Dadisman, K. (2010). Peer relations of bullies, bully-victims, and victims: The two social worlds of bullying in second-grade classrooms. *The Elementary School Journal, 110*, 364–392. http://dx.doi.org/10.1086/648983

Farrington, D. P. (1995). The development of offending and antisocial behaviour from childhood: Key findings from the Cambridge study in delinquent development. *Journal of Child Psychology and Psychiatry*, *6*(36), 929-964.

Farrington, D. P., & Ttofi, M. M. (2011). Bullying as a predictor of offending, violence and later life outcomes. *Criminal Behaviour and Mental Health, 21*(2), 90-98.

Farrington, D. P., Ttofi, M. M., & Lösel, F. (2011). School bullying and later criminal offending. *Criminal Behaviour and Mental Health, 21*(2), 77-79.

Felmlee, D., & Faris, R. (2016). Toxic ties: networks of friendship, dating, and cyber victimization. *Social Psychology Quarterly, 79*(3), 243-262.

Felson, R. B., Osgood, D. W., Horney, J., & Wiernik, C. (2012). Having a bad month: General versus specific effects of stress on crime. *Journal of Quantitative Criminology, 28*(2), 347-363.

Fitzpatrick, K. M. (1999). Violent victimization among America's school children. *Journal of Interpersonal Violence, 14*, 1055-1069.

Flouri, E., & Buchanan, A. (2003). The role of mother involvement and father involvement in adolescent bullying behavior. *Journal of Interpersonal Violence*, *18*(6), 634-644.

Frey, K. S., Hirschstein, M. K., Edstrom, L. V., & Snell, J. L. (2009). Observed reductions in school bullying, nonbullying aggression, and destructive bystander behavior: A longitudinal evaluation. *Journal of Educational Psychology*, *101*(2), 466.

Frey, K. S., Nolen, S. B., Edstrom, L. V. S., & Hirschstein, M. K. (2005). Effects of a school-based social–emotional competence program: Linking children's goals, attributions, and behavior. *Journal of Applied Developmental Psychology, 26*(2), 171-200.

Frey, K. S., Pearson, C. R., & Cohen, D. (2015). Revenge is seductive, if not sweet: Why friends matter for prevention efforts. *Journal of Applied Developmental Psychology, 37*, 25-35.

Froggio, G., & Agnew, R. (2007). The relationship between crime and "objective" versus "subjective" strains. *Journal of Criminal Justice, 35*(1), 81-87.

Ganem, N. M. (2010). The role of negative emotion in general strain theory. *Journal of Contemporary Criminal Justice, 26*(2), 167-185.

www.manaraa.com

Garandeau, C. F., Lee, I. A., & Salmivalli, C. (2014). Inequality matters: Classroom status hierarchy and adolescents' bullying. *Journal of Youth and Adolescence, 43*(7), 1123-1133.

Georgiou, S. N. (2009). Personal and maternal parameters of peer violence at school. *Journal of School Violence*, *8*(2), 100-119.

Gini, G., Albiero, P., Benelli, B., & Altoè, G. (2007). Does empathy predict adolescents' bullying and defending behavior? *Aggressive Behavior, 33*(5), 467-476.

Gini G, Pozzoli T. 2009. Association between bullying and psychosomatic problems: A meta-analysis. *Pediatrics 123*, 1059–65

Glassner, S. D., & Cho, S. (2018). Bullying victimization, negative emotions, and substance use: utilizing general strain theory to examine the undesirable outcomes of childhood bullying victimization in adolescence and young adulthood. *Journal of Youth Studies*, 1-18.

Glew, G. M., Fan, M. Y., Katon, W., Rivara, F. P., & Kernic, M. A. (2005). Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine*, *159*(11), 1026-1031.

Gottfredson, M. R., & Hirschi, T. (1990). *A General Theory of Crime.* Stanford, CA: Stanford University Press.

Graham, S., Bellmore, A., Nishina, A., & Juvonen, J. (2009). "It must be me": Ethnic diversity and attributions for peer victimization in middle school. *Journal of Youth and Adolescence, 38*(4), 487-499.

Grapin, S. L., Sulkowski, M. L., & Lazarus, P. J. (2016). A multilevel framework for increasing social support in schools. *Contemporary School Psychology, 20*(2), 93-106.

Grasmick, H. G., Tittle, C. R., Bursik Jr, R. J., & Arneklev, B. J. (1993). Testing the core empirical implications of Gottfredson and Hirschi's general theory of crime. *Journal of Research in Crime and Delinquency, 30*(1), 5-29.

Gredecki, N., & Turner, P. (2009). Positive psychology and forensic clients: Applications to relapse prevention in offending behaviour interventions. *The British Journal of Forensic Practice*, *11*(4), 50-59.

Grinshteyn, E., & Tony Yang, Y. (2017). The association between electronic bullying and school absenteeism among high school students in the United States. *Journal of School Health*, *87*(2), 142-149.

Gruber, J. E., & Fineran, S. (2008). Comparing the impact of bullying and sexual harassment victimization on the mental and physical health of adolescents. *Sex Roles, 59*(1-2), 1-13.

Guerra, N. G., Williams, K. R., & Sadek, S. (2011). Understanding bullying and victimization during childhood and adolescence: A mixed methods study. *Child Development, 82*(1), 295-310.

www.manaraa.com

Guinote, A., Judd, C. M., & Brauer, M. (2002). Effects of power on perceived and objective group variability: Evidence that more powerful groups are more variable. *Journal of Personality and Social Psychology, 82*(5), 708-721.

Guinote, A. (2007). Power affects basic cognition: Increased attentional inhibition and flexibility. *Journal of Experimental Social Psychology, 43*(5), 685-697.

Guinote, A. (2017). How power affects people: activating, wanting, and goal seeking. *Annual Review of Psychology, 68*, 353-381.

Haney, C., Banks, W. C., & Zimbardo, P. G. (1973). A study of prisoners and guards in a simulated prison. *Naval Research Reviews, 9*(1-17).

Hase, C. N., Goldberg, S. B., Smith, D., Stuck, A., & Campain, J. (2015). Impacts of traditional bullying and cyberbullying on the mental health of middle school and high school students. *Psychology in the Schools, 52*(6), 607-617.

Haslam, S. A., Reicher, S. D., & Platow, M. J. (2010). *The New Psychology of Leadership: Identity, Influence and Power.* London: Psychology Press.

Hawley, P. H. (1999). The ontogenesis of social dominance: A strategy-based evolutionary perspective. *Developmental Review, 19*(1), 97-132.

Hawley, P. H. (2003). Strategies of control, aggression, and morality in preschoolers: An evolutionary perspective. *Journal of Experimental Child Psychology, 85*(3), 213-235.

Hawley, P. H., Stump, K. N., & Ratliff, J. (2011). Sidestepping the jingle fallacy. In (Eds.) Espelage, D. L. & Swearer, S. M. *Bullying in North American Schools*, (pp 101-116).. New York, NY: Routledge.

Hay, C. (2003). Family strain, gender, and delinquency. *Sociological Perspectives, 46*(1), 107-135.

Hay, C., & Evans, M. M. (2006). Violent victimization and involvement in delinquency: Examining predictions from general strain theory. *Journal of Criminal Justice*, *34*(3), 261-274.

Hay, C., & Meldrum, R. (2010). Bullying victimization and adolescent self-harm: Testing hypotheses from general strain theory. *Journal of Youth and Adolescence, 39*(5), 446-459.

Hay, C., Meldrum, R., & Mann, K. (2010). Traditional bullying, cyber bullying, and deviance: A general strain theory approach. *Journal of Contemporary Criminal Justice, 26*(2), 130-147.

Haynie, D. L., Nansel, T., Eitel, P., Crump, A. D., Saylor, K., Yu, K., & Simons-Morton, B. (2001). Bullies, victims, and bully/victims: Distinct groups of at-risk youth. *The Journal of Early Adolescence*, *21*(1), 29-49.

Higgins, G. E., Piquero, N. L., & Piquero, A. R. (2011). General strain theory, peer rejection, and delinquency/crime. *Youth & Society, 43*(4), 1272-1297.

www.manaraa.com

Hinduja, S., & Patchin, J. W. (2007). Offline consequences of online victimization: School violence and delinquency. *Journal of School Violence, 6*(3), 89-112.

Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior*, *29*(2), 129-156.

Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research*, *14*(3), 206-221.

Hinduja, S., & Patchin, J. W. (2014). *Bullying Beyond the Schoolyard: Preventing and Responding to Cyberbullying.* Thousand Oaks, CA: Corwin Press.

Hirschi, T. (1969). A control theory of delinquency. In F. P. Williams & McShane (Eds.), *Criminology theory: Selected Classic Readings* (pp. 289-305). New York, NY: Routledge.

Hirschi, T. (1972). Social class and crime. *Issues in Social Inequality*. (pp. 503-514). Boston: Little, Brown.

Hodges, E. V., & Perry, D. G. (1999). Personal and interpersonal antecedents and consequences of victimization by peers. *Journal of Personality and Social Psychology, 76*(4), 677-685.

Hoffman, C. Y., Phillips, M. D., Daigle, L. E., & Turner, M. G. (2017). Adult consequences of bully victimization: Are children or adolescents more vulnerable to the victimization experience? *Youth Violence and Juvenile Justice, 15*(4), 441-464.

Hollist, D. R., Hughes, L. A., & Schaible, L. M. (2009). Adolescent maltreatment, negative emotion, and delinquency: An assessment of general strain theory and family-based strain. *Journal of Criminal Justice, 37*(4), 379-387.

Holsen, I., Smith, B. H., & Frey, K. S. (2008). Outcomes of the social competence program Second Step in Norwegian elementary schools. *School Psychology International*, *29*(1), 71-88.

Holt, M. K., & Espelage, D. L. (2007). Perceived social support among bullies, victims, and bully-victims. *Journal of Youth and Adolescence, 36*(8), 984-994.

Hong, J. S., & Eamon, M. K. (2012). Students' perceptions of unsafe schools: An ecological systems analysis. *Journal of Child and Family Studies, 21*(3), 428-438.

Hong, J. S., & Espelage, D. L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and Violent Behavior, 17*(4), 311-322.

Hoover, J. H., Oliver, R., & Hazler, R. J. (1992). Bullying: Perceptions of adolescent victims in the Midwestern USA. *School Psychology International*, *13*(1), 5-16.

Horner, R. Sugai, G., Smolkowski, K., Eber, L., Nakasato, J. Todd, A., & Esperanza (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. *Journal of Positive Behavior Interventions 11*(3):133-144

المنارة للاستشارات

www.manaraa.com

Iffland, B., Sansen, L. M., Catani, C., & Neuner, F. (2014). The trauma of peer abuse: Effects of relational peer victimization and social anxiety disorder on physiological and affective reactions to social exclusion. *Frontiers in Psychiatry, 5*(26).

Jang, S. J., & Johnson, B. R. (2003). Strain, negative emotions, and deviant coping among African Americans: A test of general strain theory. *Journal of Quantitative Criminology, 19*(1), 79-105.

Jang, S. J., & Rhodes, J. R. (2012). General strain and non-strain theories: A study of crime in emerging adulthood. *Journal of Criminal Justice, 40*(3), 176-186.

Jang, H., Song, J., & Kim, R. (2014). Does the offline bully-victimization influence cyberbullying behavior among youths? Application of general strain theory. *Computers in Human Behavior, 31*, 85-93.

Jessor, R., & Jessor, S. L. (1977). *Problem Behavior and Psychosocial Development: A Longitudinal Study of Youth.* (pp. 1-281). New York, NY: Academic Press.

Johnson, M. C., & Kercher, G. A. (2007). Adhd, strain, and criminal behavior: A test of general strain theory. *Deviant behavior, 28*(2), 131-152.

Jolliffe, D., & Farrington, D. P. (2006). Examining the relationship between low empathy and bullying. *Aggressive Behavior, 32*(6), 540-550.

Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology, 25*(6), 881-919.

Juvonen, J., & Galvan, A. (2008). Peer influence in involuntary social groups: Lessons from research on bullying. In M. J. Prinstein & K. A. Dodge (Eds.), *Duke series in child development and public policy. Understanding peer influence in children and adolescents* (pp. 225-244). New York, NY, US: Guilford Press.

Juvonen, J., & Graham, S. (2014). Bullying in schools: The power of bullies and the plight of victims. *Annual Review of Psychology, 65*, 159-185.

Juvonen, J., Graham, S., & Schuster, M. A. (2003). Bullying among young adolescents: The strong, the weak, and the troubled. *Pediatrics*, *112*(6), 1231-1237.

Juvonen, J., & Gross, E. F. (2008). Extending the school grounds?—Bullying experiences in cyberspace. *Journal of School Health*, *78*(9), 496-505.

Juvonen, J., Nishina, A., & Graham, S. (2006). Ethnic diversity and perceptions of safety in urban middle schools. *Psychological Science*, *17*(5), 393-400.

Juvonen, J., Wang, Y., & Espinoza, G. (2011). Bullying experiences and compromised academic performance across middle school grades. *The Journal of Early Adolescence*, *31*(1), 152-173.

Kasen, S., Berenson, K., Cohen, P., & Johnson, J. G. (2004). The effects of school climate on changes in aggressive and other behaviors related to bullying. In D. L. Espelage & S. M. Swearer (Eds.), *Bullying in American schools: A social-*

www.manaraa.com

ecological perspective on prevention and intervention (pp. 187-210). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Keith, S. (2018). How do Traditional Bullying and Cyberbullying Victimization Affect Fear and Coping among Students? An Application of General Strain Theory. *American Journal of Criminal Justice, 43*(1), 67-84.

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110*(2), 265.

Kendrick, K., Jutengren, G., & Stattin, H. (2012). The protective role of supportive friends against bullying perpetration and victimization. *Journal of Adolescence, 35*(4), 1069-1080.

Khoury-Kassabri, M., Benbenishty, R., Astor, R. A., & Zeira, A. (2004). The contributions of community, family, and school variables to student victimization. *American Journal of Community Psychology*, *34*(3-4), 187-204.

Kipnis, D. (1976). *The Powerholders.* Oxford, England: U Chicago Press.

Klein, J., & Cornell, D. (2010). Is the link between large high schools and student victimization an illusion?. *Journal of Educational Psychology*, *102*(4), 933.

Klomek, A. B., F. Marrocco, M. Kleinman, I. S. Schonfeld, and M. S. Gould. 2007. Bullying, depression, and suicidality in adolescents. *Journal of American Academy of Child and Adolescent Psychiatry 46*, 40–49.

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*(5), 282-288.

Kornhauser, R. R. (1978). Social sources of delinquency: An appraisal of analytic models. (pp. 1-286). Chicago, IL: University of Chicago Press.

Kosciw, J. G., Greytak, E. A., Palmer, N. A., & Boesen, M. J. (2004). *The 2003 national school climate survey: The school-related xpereiences of our nation's lesbian, gay, bisexual and transgender youth.* GLSEN (Gay, Lesbian and Straight Education Network).

Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin, 140*(4), 1073.

Kowalski, R. M., & Limber, S. P. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health, 41*(6), S22-S30.

Kowalski, R. M., Limber, S. P., & Agatston, P. W. (2008). *Cyber Bullying: The New Moral Frontier.* (pp. 1 – 218). Oxford, UK: Blackwell Publishing Ltd, 10, 9780470694176.

www.manaraa.com

Kowalski, R. M., Morgan, C. A., & Limber, S. P. (2012). Traditional bullying as a potential warning sign of cyberbullying. *School Psychology International, 33*(5), 505-519.

Kraatz-Keily, M., Bates, J. E., Dodge, K. A., & Pettit, G. S. (2000). A cross-domain analysis: Externalizing and internalizing behaviors during 8 years of childhood. J*ournal of Abnormal Child Psychology, 28*, 161–179.

Kulig, T. C., Pratt, T. C., Cullen, F. T., Chouhy, C., & Unnever, J. D. (2017). Explaining bullying victimization: Assessing the generality of the low self-control/risky lifestyle model. *Victims & Offenders, 12*(6), 891-912.

Kwak, M., & Oh, I. (2017). Comparison of psychological and social characteristics among traditional, cyber, combined bullies, and non-involved. *School Psychology International, 38*(6), 608-627.

Ladd, G. W., & Burgess, K. B. (2001). Do relational risks and protective factors moderate the linkages between childhood aggression and early psychological and school adjustment?. *Child development*, *72*(5), 1579-1601.

LaFreniere, P. & Charlesworth, W. R. (1983). Dominance, attention, and affiliation in a preschool group: A nine-month longitudinal study. *Ethology and Sociobiology, 4*, 55 – 67.

Laub, J. H., & Sampson, R. J. (1993). Turning points in the life course: Why change matters to the study of crime. *Criminology*, *31*(3), 301-325.

Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior, 29*(3), 202-214.

Lempert, L. B. (1997). The other side of help: Negative effects in the help-seeking processes of abused women. *Qualitative Sociology, 20*(2), 289-309.

Li, K-K., Washburn, I. J., DuBois, D. L., Vuchinich, S., Ji, P. Brechling, V., Day, J., Beets, M. W., Acock, A. C., Berbaum, M., Snyder, F. J. & Flay, B. R. (2011). Effects of the Positive Action Program on problem behaviors in elementary school students: A matched-pair randomized control trial in Chicago. *Psychology & Health, 26*(2):187–204. DOI: 10.1080/08870446.2011.531574.

Lin, W. H., Cochran, J. K., & Mieczkowski, T. (2011). Direct and vicarious violent victimization and juvenile delinquency: An application of general strain theory. *Sociological Inquiry, 81*(2), 195-222.

Lipman, E. L., Kenny, M., Sniderman, C., O'Grady, S., Augimeri, L., Khayutin, S., & Boyle, M. H. (2008). Evaluation of a community-based program for young boys at-risk of antisocial behaviour: Results and issues. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *17*(1), 12-19.

Low, S., Frey, K. S., & Brockman, C. J. (2010). Gossip on the playground: Changes associated with universal intervention, retaliation beliefs, and supportive friends. *School Psychology Review, 39*(4), 536-551.

www.manaraa.com

Lund, R., Nielsen, K. K., Hansen, D. H., Kriegbaum, M., Molbo, D., Due, P., & Christensen, U. (2008). Exposure to bullying at school and depression in adulthood: A study of Danish men born in 1953. *The European Journal of Public Health, 19*(1), 111-116.

MacDonald, G. E., & Jensen-Campbell, L. A. (2011). *Social pain: Neuropsychological and health implications of loss and exclusion.* (pp. 1-258). American Psychological Association.

Magee, J. C., & Galinsky, A. D. (2008). 8 Social Hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals, 2*(1), 351-398.

Malecki, C. K., Demaray, M. K., Coyle, S., Geosling, R., Rueger, S. Y., & Becker, L. D. (2015, February). Frequency, power differential, and intentionality and the relationship to anxiety, depression, and self-esteem for victims of bullying. In *Child & Youth Care Forum* (Vol. 44, No. 1, pp. 115-131). US: Springer.

Maner, J. K., Miller, S. L., Schmidt, N. B., & Eckel, L. A. (2008). Submitting to defeat: Social anxiety, dominance threat, and decrements in testosterone. *Psychological Science, 19*(8), 764-768.

Marcum, C. D., Higgins, G. E., Freiburger, T. L., & Ricketts, M. L. (2014). Exploration of the cyberbullying victim/offender overlap by sex. *American Journal of Criminal Justice, 39*(3), 538-548.

Marx, K., & Engels, F. (1970). The German Ideology (Vol. 1). New York, NY: International Publishers Co.

May, D. C. (2014). *School Safety in the United States: A Reasoned Look at the Rhetoric*. Durham, NC: Carolina Academic Press.

Mazerolle, P., & Maahs, J. (2000). General strain and delinquency: An alternative examination of conditioning influences. *Justice Quarterly, 17*(4), 753-778.

Mazerolle, P., & Piquero, A. (1997). Violent responses to strain: An examination of conditioning influences. *Violence and Victims, 12*(4), 323-343.

Mazerolle, P., & Piquero, A. (1998). Linking exposure to strain with anger: An investigation of deviant adaptations. *Journal of Criminal Justice*, *26*(3), 195-211.

Mazerolle, P., Piquero, A. R., & Capowich, G. E. (2003). Examining the links between strain, situational and dispositional anger, and crime: Further specifying and testing general strain theory. *Youth & Society*, *35*(2), 131-157.

Mehari, K. R., & Farrell, A. D. (2018). Where does cyberbullying fit? A comparison of competing models of adolescent aggression. *Psychology of Violence, 8*(1), 31-42.

Merrill, R. M., & Hanson, C. L. (2016). Risk and protective factors associated with being bullied on school property compared with cyberbullied. *BMC Public Health, 16*(1), 145-155.

Merton, R. K. (1938). Social structure and anomie. *American Sociological Review, 3*(5), 672-682.

www.manaraa.com

Meyer, E. (2008). A feminist reframing of bullying and harassment: Transforming schools through critical pedagogy. *McGill Journal of Education/Revue des sciences de l'éducation de McGill*, *43*(1), 33-48.

Meyer-Adams, N., & Conner, B. T. (2008). School violence: Bullying behaviors and the psychosocial school environment in middle schools. *Children & Schools*, *30*(4), 211-221.

Milgram, S. (1974). *Obedience to authority. An Experimental View.* New York, NY: Harper and Row.

Mitchell, K. J., Finkelhor, D., Wolak, J., Ybarra, M. L., & Turner, H. (2011). Youth internet victimization in a broader victimization context. *Journal of Adolescent Health, 48*(2), 128-134.

Mitchell, K. J., Ybarra, M., & Finkelhor, D. (2007). The relative importance of online victimization in understanding depression, delinquency, and substance use. *Child Maltreatment*, *12*(4), 314-324.

Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health, 55*(5), 602-611.

Monks, C. P., Smith, P. K., Naylor, P., Barter, C., Ireland, J. L., & Coyne, I. (2009). Bullying in different contexts: Commonalities, differences and the role of theory. *Aggression and* Violent Behavior, *14*(2), 146-156.

Moon, B., Blurton, D., & McCluskey, J. D. (2008). General strain theory and delinquency: Focusing on the influences of key strain characteristics on delinquency. *Crime & Delinquency, 54*(4), 582-613.

Moon, B., Hwang, H. W., & McCluskey, J. D. (2011). Causes of school bullying: Empirical test of a general theory of crime, differential association theory, and general strain theory. *Crime & Delinquency*, *57*(6), 849-877.

Moon, B., & Jang, S. J. (2014). A general strain approach to psychological and physical bullying: A study of interpersonal aggression at school. *Journal of Interpersonal Violence, 29*(12), 2147-2171.

Moon, B., & Morash, M. (2004). Adaptation of theory for alternative cultural contexts: Agnew's general strain theory in South Korea. *International Journal of Comparative and Applied Criminal Justice, 28*(2), 77-104.

Moon, B., & Morash, M. (2017). Gender and general strain theory: A comparison of strains, mediating, and moderating effects explaining three types of delinquency. *Youth & Society, 49*(4), 484-504.

Moon, B., Morash, M., & McCluskey, J. D. (2012). General strain theory and school bullying: An empirical test in South Korea. *Crime & Delinquency, 58*(6), 827-855.

Moon, B., Morash, M., McCluskey, C. P., & Hwang, H. W. (2009). A comprehensive test of general strain theory: Key strains, situational-and trait-based negative

www.manaraa.com

emotions, conditioning factors, and delinquency. *Journal of Research in Crime and Delinquency, 46*(2), 182-212.

Mouttapa, M., Valente, T., Gallaher, P., Rohrbach, L. A., & Unger, J. B. (2004). Social network predictors of bullying and victimization. *Adolescence*, *39*(154), 315-335.

Mueller, A. S., James, W., Abrutyn, S., & Levin, M. L. (2015). Suicide ideation and bullying among US adolescents: Examining the intersections of sexual orientation, gender, and race/ethnicity. *American Journal of Public Health*, *105*(5), 980-985.

Musu-Gillette, L., Zhang, A., Wang, K., Zhang, J., Kemp, J., Diliberti, M., & Oudekerk, B. A. (2018). *Indicators of School Crime and Safety: 2017.* National Center for Education Statistics. Institute of Education Sciences.

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*(16), 2094-2100.

Napoletano, A., Elgar, F. J., Saul, G., Dirks, M., & Craig, W. (2016). The view from the bottom: Relative deprivation and bullying victimization in Canadian adolescents. *Journal of Interpersonal Violence, 31*(20), 3443-3463.

Nation, M., Vieno, A., Perkins, D. D., & Santinello, M. (2008). Bullying in school and adolescent sense of empowerment: An analysis of relationships with parents, friends, and teachers. *Journal of Community & Applied Social Psychology, 18*(3), 211-232.

Navarro, J. N., & Jasinski, J. L. (2012). Going cyber: Using routine activities theory to predict cyberbullying experiences. *Sociological Spectrum*, *32*(1), 81-94.

Nelson, H. J., Burns, S. K., Kendall, G. E., & Schonert-Reichl, K. A. (2018). The factors that influence and protect against power imbalance in covert bullying among preadolescent children at school: a thematic analysis. *The Journal of School Nursing*, *34*(4), 281-291.

Nisbett, R. E., & Cohen, D. (1996). *Culture of honor: The psychology of violence in the South*. Hachette UK.

Nishina A, Juvonen J, Witkow MR. (2005). Sticks and stones may break my bones, but names will make me feel sick: the psychosocial, somatic, and scholastic consequences of peer harassment. *Journal of Clinical Child and Adolescence, 34*(1), 37–48

Nolin, M. J., & Davies, E. (1996). Student victimization at school. *Journal of School Health, 66*, 216-222.

Nunnally, J. C., & Bernstein, I. H. (1994). Validity. *Psychometric Theory*. New York, NY: McGraw-Hill.

O'Connell, P. A. U. L., Pepler, D., & Craig, W. (1999). Peer involvement in bullying: Insights and challenges for intervention. *Journal of Adolescence, 22*(4), 437-452.

www.manaraa.com

Office of Justice Programs. 4th R Curriculum. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=109].

Office of Justice Programs. Brief Strategic Family Therapy. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=245].

Office of Justice Programs. Bully Proofing Your School. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=403].

Office of Justice Programs. KiVa Antibullying Program. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=100].

Office of Justice Programs. Positive Action. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=113].

Office of Justice Programs. School-wide Positive Behavioral Interventions and Supports (SWPBIS). Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=385].

Office of Justice Programs. Second Step: A Violence Prevention Curriculum for Elementary School (2002 Edition). Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=221].

Office of Justice Programs. Steps to Respect®. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=279].

Office of Justice Programs. Second Step 2008 Edition. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=569].

Office of Justice Programs. Second Step 2011 Edition. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=570].

Office of Justice Programs. SNAP® Under 12 Outreach Project. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=231].

Office of Justice Programs. Social Aggression Prevention Program. Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=429].

Office of Justice Programs. Stop School Bullying (Greece). Retrieved [August 26, 2018 profile was accessed], from CrimeSolutions.gov, [https://crimesolutions.gov/ProgramDetails.aspx?ID=415].

www.manaraa.com

Öhman, A. (1986). Face the beast and fear the face: Animal and social fears as prototypes for evolutionary analyses of emotion. *Psychophysiology, 23*(2), 123-145.

Olweus, D. (1978). Aggression in the schools: Bullies and whipping boys. Oxford, England: Hemisphere.

Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. *The Development and Treatment of Childhood Aggression, 17*, 411-448.

Olweus D. (1993). *Bullying at School: What We Know and What We Can Do.* Oxford, UK/Cambridge, MA: Blackwell

Olweus, D. (2001). *Olweus' core program against bullying and antisocial behavior: A teacher handbook.* Bergen, Norway: Research Center for Health Promotion.

Olweus, D., & Limber, S. P. (2010). Bullying in school: Evaluation and dissemination of the Olweus Bullying Prevention Program. *American Journal of Orthopsychiatry, 80*(1), 124-134.

Orpinas, P., McNicholas, C., & Nahapetyan, L. (2015). Gender differences in trajectories of relational aggression perpetration and victimization from middle to high school. *Aggressive Behavior, 41*, 401– 412. doi:10.1002/ab.21563.

Ortega, R., & Mora-Merchan, J. (1999). Spain. In P.K. Smith, Y. Morita, J. Junger-Tas, D. Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. *The Development and Treatment of Childhood Aggression, 17*, 411-48.

Pascoe, C. J. (2013). Notes on a sociology of bullying: Young men's homophobia as gender socialization. *QED: A Journal in GLBTQ Worldmaking,* (1), 87-103.

Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and self-esteem. *Journal of School Health*, *80*(12), 614-621.

Patchin, J. W., & Hinduja, S. (2011). Traditional and nontraditional bullying among youth: A test of general strain theory. *Youth & Society, 43*(2), 727-751.

Peets, K., Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2015). Classroom norms of bullying alter the degree to which children defend in response to their affective empathy and power. *Developmental Psychology, 51*(7), 913.

Peguero, A. A. (2009). Victimizing the children of immigrants: Latino and Asian American student victimization. *Youth & Society, 41*(2), 186-208.

Peguero, A. A. (2012). Schools, bullying, and inequality: Intersecting factors and complexities with the stratification of youth victimization at school. *Sociology Compass, 6*(5), 402-412.

Peguero, A. A., & Williams, L. M. (2013). Racial and ethnic stereotypes and bullying victimization. *Youth & Society, 45*(4), 545-564.

www.manaraa.com

Pellegrini, A. D., & Bartini, M. (2000). A longitudinal study of bullying, victimization, and peer affiliation during the transition from primary school to middle school. *American Educational Research Journal, 37*(3), 699-725.

Pellegrini, A. D., & Long, J. D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *British Journal of Developmental Psychology, 20*(2), 259-280.

Pepler, D. J., Craig, W. M., Connolly, J. A., Yuile, A., McMaster, L., & Jiang, D. (2006). A developmental perspective on bullying. *Aggressive Behavior, 32*(4), 376-384.

Pepler, D., & Craig, W. (2011). Promoting relationships and eliminating violence in Canada. *International Journal of Behavioral Development, 35*(5), 389-397.

Perry, D. G., Williard, J. C., & Perry, L. C. (1990). Peers' perceptions of the consequences that victimized children provide aggressors. *Child Development, 61*, 1310–1325.

Polanin, J. R., Espelage, D. L., & Pigott, T. D. (2012). A Meta-Analysis of School-Based Bullying Prevention Programs' Effects on Bystander Intervention Behavior. *School Psychology Review, 41*(1), 47-65.

Poteat, V. P. (2008). Contextual and moderating effects of the peer group climate on use of homophobic epithets. *School Psychology Review*, *37*(2), 188-201.

Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2010). What does it take to stand up for the victim of bullying?: The interplay between personal and social factors. *Merrill-Palmer Quarterly, 56*(2), 143-163.

Pratt, T. C., & Cullen, F. T. (2000). The empirical status of Gottfredson and Hirschi's general theory of crime: A meta-analysis. *Criminology*, *38*(3), 931-964.

Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*(4), 741.

Qin, D. B., Way, N., & Rana, M. (2008). The "model minority" and their discontent: Examining peer discrimination and harassment of Chinese American immigrant youth. *New Directions for Child and Adolescent Development*, *2008*(121), 27-42.

Reijntjes, A., Thomaes, S., Bushman, B. J., Boelen, P. A., de Castro, B. O., & Telch, M. J. (2010). The outcast-lash-out effect in youth: Alienation increases aggression following peer rejection. *Psychological Science, 21*(10), 1394-1398.

Richman, L., & Leary, M. R. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: a multimotive model. *Psychological Review, 116*(2), 365-383.

Ridgeway, C. L., Boyle, E. H., Kuipers, K. J., & Robinson, D. T. (1998). How do status beliefs develop? The role of resources and interactional experience. *American Sociological Review, 63*(3)331-350.

www.manaraa.com

Rigby, K., & Johnson, B. (2006). Expressed readiness of Australian schoolchildren to act as bystanders in support of children who are being bullied. *Educational Psychology, 26*(3), 425-440.

Rivers, I. (2001). The bullying of sexual minorities at school: Its nature and long-term correlates. *Educational and Child Psychology*, *18*(1), 32-46.

Rodkin, P. C., Espelage, D. L., & Hanish, L. D. (2015). A relational framework for understanding bullying: Developmental antecedents and outcomes. *American Psychologist, 70*(4), 311-321.

Rodkin, P. C., Farmer, T. W., Pearl, R., & Acker, R. V. (2006). They're cool: Social status and peer group supports for aggressive boys and girls. *Social Development, 15*(2), 175-204.

Ronel, N. (2006). When good overcomes bad: The impact of volunteers on those they help. *Human Relations, 59*(8), 1133-1153.

Ronel, N., & Elisha, E. (2011). A different perspective: Introducing positive criminology. *International Journal of Offender Therapy and Comparative Criminology, 55*(2), 305-325.

Ronel, N., & Haimoff-Ayali, R. (2010). Risk and resilience: The family experience of adolescents with an addicted parent. *International Journal of Offender Therapy and Comparative Criminology*, *54*(3), 448-472.

Ronel, N., & Segev, D. (2014). Positive criminology in practice. *International Journal of Offender Therapy and Comparative Criminology, 58*(11), 1389-1407.

Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology, 16*(2), 172-186.

Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology, 45*(1), 101-117.

Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships, 5*(4), 357-387.

Russell, S. T., Sinclair, K. O., Poteat, V. P., & Koenig, B. W. (2012). Adolescent health and harassment based on discriminatory bias. *American Journal of Public Health*, *102*(3), 493-495.

Salmivalli, C. (1999). Participant role approach to school bullying: Implications for interventions. *Journal of Adolescence, 22*(4), 453-459.

Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior, 15*(2), 112-120.

www.manaraa.com

Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior, 22*(1), 1-15.

Salmivalli, C., Lappalainen, M., & Lagerspetz, K. M. (1998). Stability and change of behavior in connection with bullying in schools: A two-year follow-up. *Aggressive Behavior, 24*(3), 205-218.

Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms, and behaviour in bullying situations. *International Journal of Behavioral Development, 28*(3), 246-258.

Salmon, S., Turner, S., Taillieu, T., Fortier, J., & Afifi, T. O. (2018). Bullying victimization experiences among middle and high school adolescents: Traditional bullying, discriminatory harassment, and cybervictimization. *Journal of Adolescence, 63*, 29-40.

Sapouna, M. (2008). Bullying in Greek primary and secondary schools. *School Psychology International*, *29*(2), 199-213.

Schick, A., & Cierpka, M. 2005. Faustlos: Evaluation of a Curriculum to Prevent Violence in Elementary Schools. *Applied and Preventive Psychology, 11*, 157–65.

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*(1), 171-177.

Schulz, S. (2016). 'Don't blow your cool': Provocation, violent coping, and the conditioning effects of self-control. *Journal of Quantitative Criminology, 32*(4), 561-587.

Seals, D., & Young, J. (2003). Bullying and victimization: prevalence and relationship to gender, grade level, ethnicity, self-esteem, and depression. *Adolescence*, *38*(152), 735-747.

Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5-14.

Seligman, M. E., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: empirical validation of interventions. *American Psychologist*, *60*(5), 410-421.

Sheley, J. F., & Wright, J. D. (1998). *High school youths, weapons, and violence: A national survey*. Retrieved from: https://www.ncjrs.gov/pdffiles/172857.pdf

Shute, R., Owens, L., & Slee, P. (2008). Everyday victimization of adolescent girls by boys: Sexual harassment, bullying or aggression?. *Sex Roles*, *58*(7-8), 477-489.

Sidanius, J., & Pratto, F. (2001). Social dominance: An intergroup theory of social hierarchy and oppression. Cambridge, UK: Cambridge University Press.

Simmons, R. (2002). *Odd girl out: The hidden culture of aggression in girls.* New York, NY: Houghton Mifflin Harcourt.

www.manaraa.com

Slocum, L. A. (2010). General strain theory and the development of stressors and substance use over time: An empirical examination. *Journal of Criminal Justice, 38*(6), 1100-1112.

Smith, P. K., Madsen, K. C., & Moody, J. C. (1999). What causes the age decline in reports of being bullied at school? Towards a developmental analysis of risks of being bullied. *Educational Research*, *41*(3), 267-285.

Smith, D. J., Schneider, B. H., Smith, P. K., & Ananiadou, K. (2004). The effectiveness of whole-school antibullying programs: A synthesis of evaluation research. *School Psychology Review*, *33*(4), 547–60.

Smokowski, P. R., Cotter, K. L., Robertson, C. I., & Guo, S. (2013). Anxiety and aggression in rural youth: Baseline results from the Rural Adaptation Project. *Child Psychiatry & Human Development*, *44*(4), 479-492.

Sommer, F., Leuschner, V., & Scheithauer, H. (2014). Bullying, romantic rejection, and conflicts with teachers: The crucial role of social dynamics in the development of school shootings–A systematic review. *International Journal of Developmental Science, 8*(1-2), 3-24.

Spriggs, A. L., Iannotti, R. J., Nansel, T. R., & Haynie, D. L. (2007). Adolescent bullying involvement and perceived family, peer and school relations: Commonalities and differences across race/ethnicity. *Journal of Adolescent Health, 41*(3), 283-293.

Stets, J. E., & Turner, J. H. (2014). *Handbook of the Sociology of Emotions* (2nd ed.). New York, NY: Cambridge University Press.

Strayer, F. F., Strayer, J., & Chapeskie, T. R. (1980). *The perception of social power relations among preschool children. In Dominance Relations: An Ethological View of Human Conflict and Social Interaction.* New York, NY: Garland STPM Press.

Stubbs-Richardson, M., Sinclair, H. C., Goldberg, R. M., Ellithorpe, C. N., & Amadi, S. C. (2018). Reaching out versus lashing out: Examining gender differences in experiences with and responses to bullying in high school. *American Journal of Criminal Justice, 43*(1), 39-66.

Sutton, J., Smith, P. K., & Swettenham, J. (1999). Social cognition and bullying: Social inadequacy or skilled manipulation? *British Journal of Developmental Psychology, 17*(3), 435-450.

Sylaska, K. M., & Edwards, K. M. (2014). Disclosure of intimate partner violence to informal social support network members: A review of the literature. *Trauma, Violence, & Abuse, 15*(1), 3-21.

Swearer, S. M., (2008). Relational aggression: Not just a female issue. *Journal of School Psychology*, *46*, 611-616.

Swearer, S. M., Espelage, D. L., Vaillancourt, T., & Hymel, S. (2010). What can be done about school bullying? Linking research to educational practice. *Educational Researcher, 39*(1), 38-47.

www.manaraa.com

Swearer, S. M., Mebane, S. E., & Espelage, D. L. (2004). Gender differences in bullying: Moving beyond mean level differences. In *Bullying in American schools* (pp. 37-58). Routledge.

Tedeschi, J. T., & Felson, R. B. (1994). *Violence, aggression, and coercive actions*. Washington, DC: American Psychological Association.

Thaxton, S., & Agnew, R. (2017). When criminal coping is likely: An examination of conditioning effects in General Strain Theory. *Journal of Quantitative Criminology, 0*(0), 1-34.

Thibaut, J. W., & Kelley, H. H. (1959). *The Social Psychology of Groups.* New York, NY: Wiley.

Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, *26*(3), 277-287.

Tsiantis, A. C. J., Beratis, I. N., Syngelaki, E. M., Stefanakou, A., Asimopoulos, C., Sideridis, G. D., & Tsiantis, J. (2013). The effects of a clinical prevention program on bullying, victimization, and attitudes toward school of elementary school students. *Behavioral Disorders*, *38*(4), 243-257.

Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review. J*ournal of Experimental Criminology, 7*(1), 27-56.

Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011). Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research, 3*(2), 63-73.

Turanovic, J. J., & Pratt, T. C. (2013). The consequences of maladaptive coping: Integrating general strain and self-control theories to specify a causal pathway between victimization and offending. *Journal of Quantitative Criminology, 29*(3), 321-345.

Turanovic, J. J., & Pratt, T. C. (2014). "Can't stop, won't stop": Self-control, risky lifestyles, and repeat victimization. *Journal of Quantitative Criminology, 30*(1), 29-56.

Twyman, K., Saylor, C., Taylor, L. A., & Comeaux, C. (2010). Comparing children and adolescents engaged in cyberbullying to matched peers. *Cyberpsychology, Behavior, and Social Networking*, *13*(2), 195-199.

Unnever, J. D., & Cornell, D. G. (2003). Bullying, self-control, and ADHD. *Journal of Interpersonal Violence*, *18*(2), 129-147.

Unnever, J. D., & Cornell, D. G. (2003). The culture of bullying in middle school. *Journal of School Violence*, *2*(2), 5-27.

Vaillancourt, T., Clinton, P., McDougal, L., Schmidt, & Hymel, S. (2009). The neurobiology of peer victimization and rejection. In (Eds.) S. R. Jimerson, S. M.

www.manaraa.com

Swearer, & D. L. Espelage, *Handbook of Bullying in Schools: An International Perspective* (pp. 267 – 293). New York, NY: Routledge.

Vaillancourt, T., Hymel, S., & McDougall, P. (2003). Bullying is power: Implications for school-based intervention strategies. *Journal of Applied School Psychology, 19*(2), 157-176.

Vaillancourt, T., & Hymel, S. (2006). Aggression and social status: The moderating roles of sex and peer-valued characteristics. *Aggressive Behavior, 32*(4), 396-408.

Vaillancourt, T., McDougall, P., Hymel, S., & Sunderani, S. (2010). Respect or fear? The relationship between power and bullying. *Handbook of bullying in schools: An international perspective*, 211-222.

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*(6), 1312-1317.

Veenstra, R., Lindenberg, S., Zijlstra, B. J., De Winter, A. F., Verhulst, F. C., & Ormel, J. (2007). The dyadic nature of bullying and victimization: Testing a dual-perspective theory. *Child Development, 78*(6), 1843-1854.

Vervoort, M. H. M., Scholte, R. H. J., & Overbeek, G. (2010). Bullying and victimization among adolescents: The role of ethnicity and ethnic composition of school class. *Journal of Youth and Adolescence, 39*(1), 1-11. doi:http://dx.doi.org/10.1007/s10964-008-9355-y

Vitoroulis, I., Brittain, H., & Vaillancourt, T. (2016). School ethnic composition and bullying in Canadian schools. *International Journal of Behavioral Development*, *40*(5), 431-441.

Vitoroulis, I., & Vaillancourt, T. (2015). Meta-analytic results of ethnic group differences in peer victimization. *Aggressive Behavior*, *41*(2), 149-170.

Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. (2002). *U.S.S.S safe school initiative: The final report and findings of the Safe School Initiative.* Retrieved from: https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf

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*(4), 368-375.

Williams, K. D., Forgas, J. P., & Von Hippel, W. (Eds.). (2005). *The Social Outcast: Ostracism, Social Exclusion, Rejection, and Bullying.* New York, NY: Psychology Press.

Williams, K. R., & Guerra, N. G. (2007). Prevalence and predictors of internet bullying. *Journal of Adolescent Health*, *41*(6), S14-S21.

Williams, K. D., & Nida, S. A. (2009). Is ostracism worse than bullying? In M. J. Harris (Ed.), *Bullying, Rejection, and Peer Victimization: A Social Cognitive*

www.manaraa.com

Neuroscience Perspective (pp. 279 – 296). New York, NY, U.S.: Springer Publishing Co.

Williford, A., Boulton, A., Noland, B., Little, T. D., Kärnä, A., & Salmivalli, C. (2012). Effects of the KiVa anti-bullying program on adolescents' depression, anxiety, and perception of peers. *Journal of Abnormal Child Psychology, 40*(2), 289-300.

Willits, D. (2017). Violent propensity, strain, and violent intentions: A test of Agnew's revised conditioning hypothesis. *Deviant Behavior, 0*(0), 1-16.

Wolke, D., Copeland, W. E., Angold, A., & Costello, E. J. (2013). Impact of bullying in childhood on adult health, wealth, crime, and social outcomes. *Psychological Science, 24*(10), 1958-1970.

Wolke, D., Woods, S., Stanford, K., & Schulz, H. (2001). Bullying and victimization of primary school children in England and Germany: Prevalence and school factors. *British Journal of Psychology*, *92*(4), 673-696.

Wong, J. S. (2009). *No bullies allowed: Understanding peer victimization, the impacts on delinquency, and the effectiveness of prevention programs.* Pardee Rand Graduate School. http://www.rand.org/pubs/rgs_dissertations/RGSD240.html

Wynne, S. L., & Joo, H. J. (2011). Predictors of school victimization: individual, familial, and school factors. *Crime & Delinquency, 57*(3), 458-488.

Ybarra, M. L., Diener-West, M., & Leaf, P. J. (2007). Examining the overlap in Internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health*, *41*(6), S42-S50.

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*(7), 1308-1316.

Ybarra, M. L., Mitchell, K. J., Wolak, J., & Finkelhor, D. (2006). Examining characteristics and associated distress related to Internet harassment: Findings from the Second Youth Internet Safety Survey. *Pediatrics*, *118*(4), e1169-e1177.

Yodprang, B., Kuning, M., & McNeil, N. (2009). Bullying among lower secondary school students in Pattani Province, Southern Thailand. *Asian Social Science*, *5*(4), 46-53.

You, S., Furlong, M. J., Felix, E., Sharkey, J. D., Tanigawa, D., & Green, J. G. (2008). Relations among school connectedness, hope, life satisfaction, and bully victimization. *Psychology in the Schools*, *45*(5), 446-460.

Zavala, E., & Spohn, R. E. (2013). The role of vicarious and anticipated strain on the overlap of violent perpetration and victimization: A test of general strain theory. *American Journal of Criminal Justice, 38*(1), 119-140.

Zhang, A., Musu-Gillette, L., & Oudekerk, B. A. (2016). *Indicators of school crime and safety: 2015.* Retrieved from: https://nces.ed.gov/pubs2016/2016079.pdf

www.manaraa.com

Zhang, A., Wang, K., Zhang, J., & Oudekerk, B. A. (2017). *Indicators of school crime and safety: 2016.* Retrieved from: https://nces.ed.gov/pubs2018/2018036.pdf

www.manaraa.com

APPENDIX A

OVERVIEW OF SURVEY METHODOLOGY

www.manaraa.com

All survey content and study materials are available via the Open Science Framework at https://osf.io/. In the tables below, an overview of definitions per bullying victimization type are reported in Table A.1 while the operationalization for behavioral responses to bullying are provided in Table A.2.

Table A.1 Definitions of types of bullying provided in survey of students

Physical Bullying	Some students engage in physical aggression, such as hitting, kicking, and shoving other students. Physical aggression may also include any other attempts that have the potential to cause physical harm to another person.
Verbal Bullying	Some students engage in verbal aggression, which includes face-to-face attempts to harm another person's self-concept." Examples include: calling others names or making fun of others
Relational Bullying	Some students engage in social aggression, such as spreading rumors about other students, purposely leaving people out of social groups or social events, turning people against each other, or giving the silent treatment. Social aggression may also include any other attempts to cause social harm
Cyber Bullying	Some students engage in cyber aggression, which includes virtual attempts to cause harm through social or digital media." Examples include: posting negative things about others online, posting unflattering pictures online, sending negative messages or threats via texts or the internet (e.g., Facebook), or sharing unflattering messages or pictures by text message or other social apps

www.manaraa.com

Table A.2 Definitions of types of behavioral responses to bullying provided in survey of students

Asocial	1) Try to avoid situations where I have to be around people.; 2) Keep to myself.; 3) Think of ways to avoid seeing people.; 4) Try to "disappear."; and 5) Stay away from the person(s)/group who was aggressive towards me.
Antisocial	1) Confront the person/persons who hurt me.; 2) Do to others what was done to me.; 3) Say negative things about the person/persons to other people.; 4) Say mean things to the person(s) who hurt me.; and 5) Figure out a way to get back at them.
Prosocial	1) Try to help others deal with a similar problem.; 2) Go to someone (e.g., parent, teacher, friend) for help.; 3) Work things out with the person/persons who were aggressive towards me.; 4) Forgive the person(s) who hurt me.; 5) Get involved in new activities.; 6) Try to make new friends.; and 7) Turn to work or other activities to help you manage things.

www.manaraa.com