

DOES SELF-REPORTED BULLYING AND VICTIMIZATION
RELATE TO SOCIAL, EMOTIONAL PROBLEMS
IN ADOLESCENTS WITH AND WITHOUT
CRIMINAL HISTORY

by

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ABSTRACT

This research was conducted to explore predictors and moderators of bullying involvement, social and emotional problems, vocabulary knowledge, and crimes. There was one main research question: (1) Is there a relationship between adolescents with social and emotional problems as measured by the SDQ (Goodman, 1997) and adolescents' self-disclosed status as a bully, a victim, or bully-victim as measured by ROBVQ (Olweus, 1996) beyond demographic variables (i.e., age, gender, social status, vocabulary knowledge)? There were two questions of interest, including: (1) Are crimes a moderator variable between involvement in bullying scores and social and emotional problems scores?; and, (2) What types of crimes are most likely committed (i.e., misdemeanor crime, property crime, violent crime) by adolescents who score high on social and emotional problems scales and have high bullying involvement scores?

This study consisted of 377 adolescents between the ages of 11 and 18. Adolescents were required to complete three questionnaires. The questionnaires were the Revised Olweus Bully/Victim Questionnaire (ROBVQ; Olweus, 1996), Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), and Vocabulary for Achievement (VFA; Richeck, 2005). Regression analyses were conducted as well as qualitative analysis.

The data posited that bully, victim, and bully-victim scores were related to social and emotional problems scores beyond demographic variables (i.e., age, gender, social status, vocabulary knowledge). Vocabulary knowledge and Quadrant 4 (class clown category) were

related to ROBVQ bully and bully-victim scores. Age was found to be related to ROBVQ victim and bully-victim scales. Overall, all three ROBVQ bullying group scores were related to Quadrant 3 (outcast category). ROBVQ bully, victim, and bully-victim scores were related to peer problems and conduct problems scores, while ROBVQ victim and bully-victim scores were related to emotional symptoms scores as well. Furthermore, crime was a moderator for bully scores and social and emotional problems scores, but was not a moderator for victim or bully-victim scores. Lastly, there were subcategories created for the three types of crimes (i.e., misdemeanor, property, violent). These subcategories gave insight into which specific types of crimes were committed by adolescents who had high scores on SDQ subscales and ROBVQ bullying involvement. Overall, this study provided support for previous literature as well as insight on characteristics and a moderator of bullying scores.

DEDICATION

To my loving, caring, and wonderful husband and family for your patience, kindness, support, and encouragement, I would not have been able to complete this without you.

LIST OF ABBREVIATIONS AND SYMBOLS

α	Cronbach's index of internal consistency
ANOVA	Analysis of variance
β	Beta
CI	Confidence Interval
df	Degrees of freedom
F	Fisher's F ratio: ratio of two differences
M	Mean: the average of a measurement or continuous variable
N	Total number in sample
n	Number in subsample
p	Probability
r	Pearson's correlation
R^2	Multiple correlation squared, measures the strength of the relationship
ΔR^2	The change in the multiple correlation squared to determine the strength of the relationship after other variables are entered
SD	Standard Deviation
t	T-score value conducted from a t-test

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CHAPTER 1

INTRODUCTION

Background Statement of the Problem

Bullying has been found to involve 12% to 56.5% of the student population (Haynie et al., 2001; Jankauskiene, Kardelis, Sukys, & Kardeline, 2008; Nansel et al., 2001; Pepler, Jiang, Craig, & Connolly, 2008). With such high prevalence rates, there has been an increased concern for communities, educators, students, parents, and other professional helpers because of the impact of bullying.

Bullying impairs multiple aspects of students' lives, leading to social and emotional problems, criminal behaviors, poor coping skills, and internalized and externalized behaviors (Craig & Pepler, 2003; Ireland, 2002; Liang, Flisher, & Lombard, 2007; Turkel, 2007; van der Wal, 2005). Studies have shown that students' psyches, social and emotional development, social interaction, and coping abilities can be debilitated by bullying, and criminal offenses can increase when bullying is involved. Likewise, bullying involvement has also influenced academic achievement, specifically the language component of learning (Brown & Taylor, 2007; Conti-Ramsden & Botting, 2004; Luciano & Savage, 2007; Woods & Wolke, 2004), suggesting that academics suffer because of bullying. Studies have also suggested that there are specific risk factors and causes for involvement in bullying (Carney, 2008; Craig & Pepler, 2003). Overall, bullying has been found to disrupt, hinder, and affect youth in a multitude of ways. Therefore, interventions, policies, and laws have been created and adopted in schools and by states to assist students with these negative and harmful effects (Hampel, Manhal, & Hayer, 2009; StopBullying.gov Editorial Board, 2011).

The research conducted on bullying has been vast and extensive across many studies. For example, while certain researchers have examined the dimensions of bullying, including variables such as the prevalence, gender, race, and age (Ball et al., 2008; Bauman, 2008; Carlyle & Steinman, 2007; Hsi-Sheng, Jonson-Reid, & Hui-Ling, 2007; Pepler et al., 2008; Shute, Owens, & Slee, 2008), other researchers have chosen to distinguish between the types, including bullies, victims, and bully-victims (Ball et al., 2008; Nation, Vieno, Perkins, & Santinello, 2008). Studies have also investigated how students cope with bullying and the interventions that effectively reduce bullying (Cowie, Hutson, Jennifer, & Myers, 2008; Edmondson & Hoover, 2008; Hampel et al., 2009). In addition, the behaviors linked to bullying have also been discussed extensively (Alikasifoglu, Erginoz, Ercan, Uysal, & Albayrak-Kaymak, 2007; Edmond, Ormel, Veenstra, & Oldenhinkel, 2007; Ivarsson, Broberg, Arvidsson, & Gillberg, 2005; Liang et al., 2007).

Other studies have identified psychosomatic and/or psychological complaints and their effects on bullying (Ng & Tsang, 2008; Sourander et al., 2006; Turkel, 2007). For example, psychosocial aspects have been examined on varying levels such as suicidal ideation and aggressive behaviors (Espelage & Swearer, 2003; Gil, 2002; van der Wal, 2005). Psychosocial health and victimization research has uncovered that students' psychosocial health is affected, particularly victims (Delfabbro et al., 2006; Fekkes, Pijpers, & Fredriks, 2006; Fekkes, Pijpers, Fredriks, Vogels, & Verloove-Vanhorick, 2006; Jankauskiene, et al., 2008; Wilkins-Shurmer et al., 2003). Studies on psychosocial risk factors and causes have noted correlations between student engagement in certain activities, and the increased likelihood of becoming bullies, victims, and/or bully-victims (Carney, 2008; Craig & Pepler, 2003; Marini, Dane, & Bosacki, 2006). Specific internal and external behaviors have been exhibited by those involved in bullying (Haynie et al., 2001; Laukkanen, Shemeikka, Notkola, Koivumaa-Honkanen, &

Nissinen, 2002; Swearer, Song, Cary, Eagle, & Mickelson, 2001). Studies have also focused on adolescents in jail, those who are incarcerated, and/or have criminal offender records (Grennan & Woodhams, 2007; Ireland, 2002; Ireland & Archer, 2004; Ireland & Power, 2004).

Statement of the Problem

Research has supported the relationship between bullying and social and emotional problems across the current decade (Craig & Pepler, 2003; Delfabbro et al., 2006; Fekkes et al., 2006; Gil, 2002; Gini, 2008; Holmberg & Hjern, 2008; Jankauskiene et al., 2008; Ng and Tsang, 2008; Turkel, 2007; van der Wal, 2005). Nonetheless, even though the bullying literature is ample, there are unclear notable findings that need further focus and review, including the following nine concerns offered subsequently.

(1) The bullying literature has been restricted, often dichotomizing bullies with more externalizing traits and behaviors and on the other hand dichotomizing victims with more internalizing traits and behaviors. This is a concern because it is difficult to categorize the third type of bully, the bully-victim, who often exhibits both internalizing and externalizing behaviors.

(2) Researchers have only examined social and emotional problems in relation to bullying and have not assessed social and emotional problems as a risk factor or predictor for an individual involved in bullying. Thus, further research is needed to explore social and emotional problems as a predictor of bullying.

(3) Inconsistent results have indicated that academic achievement, specifically language deficits, as well as gender, age, and social status and bullying are related (Brown & Taylor, 2007; Luciano & Savage, 2007; Woods & Wolke, 2004). This is problematic because no concise answer indicates if vocabulary influences bullying or not. Furthermore, the literature lacks a general exploration of vocabulary in relation to bullies, victims of bullying, and bully-victims. Even less research has expanded on vocabulary, bullying, and social and emotional problems.

Therefore, research is needed to closely examine vocabulary to ensure that it is not contributing to or inflating the relationship between bullying and social and emotional problems.

(4) Other variables such as gender, age, and social status have also lacked consistency within studies to determine their correlation to bullying (Carlyle & Steinman, 2007; Cowie, 2000; Ng & Tsang, 2008; Perren & Alasker, 2006; Thornberg & Knustsen, 2011; Turkel, 2007). Therefore, it is unsure the influence or variance that these variables contribute to the relationship of bullying and social and emotional problems.

(5) Many studies have considered the prevalence and effect of bullying on adolescents in different contexts such as in schools and jails (Ball et al., 2008; Delfabbro et al., 2006; Gil, 2002; Haynie et al., 2001; Ireland, 2002; Turkel, 2007). Yet, research related to schools and jails differs and has a wide statistical range between the frequency of being bullied, bullying others, witnessing bullying, and the severity of bullying as well as the types of bullying. Thus, it is uncertain about the actual prevalence rate of bullying and its effects, which suggests that more research needs to be conducted in order to find consistent prevalence rate and effects.

(6) Bullying has been found to occur in schools and juvenile detention facilities, as well as being linked to criminal behaviors (Ball et al., 2008; Carlyle & Steinman, 2007; Cowie et al., 2008; Grennan & Woodhams, 2007; Ireland, 2002; Swearer, 2003). However, research studies have typically singled out schools or juvenile detention centers as placements for studies and not extensively examined the link between crimes committed by adolescents and bullying. To add to this issue, some adolescents have committed criminal acts, but have not been convicted. Thus, this population has rarely been examined. Current studies on adolescents committing criminal offenses and bullying is limited.

(7) Incarcerated individuals have been found to have social and emotional problems. To the author's knowledge, few studies have considered the social and emotional problems that are

related to bullying for adolescents who have committed criminal offenses. This lack of research raises considerable concern because individuals who have been involved in criminal activity have been found to have social and emotional problems and bullying has often been used as a supplemental reason for the associated problems noted by many incarcerated adolescents (i.e., crimes have not been examined as a sole predictor or moderator for social and emotional problems of adolescents who are involved in bullying).

(8) There has been limited research examining adolescents who have committed crimes and their involvement in bullying outside of jails and prisons. Research has focused on adolescents who reside in juvenile detention centers, jails, and prisons when examining criminal offenses and bullying. This means that misdemeanor offenses or lower class criminal offenses have not been included in previous studies that examined bullying in juvenile detention centers. This is problematic because there is a large population of adolescents who have not been included in the current literature (i.e., because they committed misdemeanor offenses, have never been caught committing a crime, and/or never resided in a juvenile detention center, jail, or prison).

(9) Another deficit has been a lack of attention to specific traits that may predict bullying activities, specifically examining adolescents with social and emotional problems, vocabulary knowledge, and criminal offenses. Previous research has focused on these three traits in pairs, but has not incorporated all three together in one research study. This is problematic because social and emotional problems and criminal offenses have been found to be related in pairs (Ireland, 2002; Ireland & Archer, 2004; Ireland & Rowley, 2007). For example, bullying and social and emotional problems, bullying and vocabulary knowledge, bullying and being incarcerated, and social and emotional problems and being incarcerated have been researched but no trajectories have been explored on all three traits simultaneously.

With these given disparities in the literature, a further examination of bullying is indicated. Such variables that need to be examined, pertaining to bullying are predicting social and emotional problems, using vocabulary as a moderator of bullying and social and emotional problems, and considering crimes committed by adolescents as a moderator of social and emotional problems and bullying. The types of crime committed also have implications for adolescents who are involved in bullying.

Purpose

With the given limitations in the bullying literature, this study had three aims. The three aims are described subsequently.

(1) This study examined if there was a relationship between adolescents with social and emotional problems scores and bullying scores. This study also explored which adolescents were more likely to have social and emotional problems characteristics and having the characteristics of being involved in bullying as a bully, victim, or bully-victim by utilizing questionnaires. Because of the inconsistencies in regard to demographic variables (vocabulary knowledge, age, gender, and social status) and bullying, this study will determine if bullying characteristics are related to social and emotional problems scores beyond demographic variables. Ultimately, this initial research question examines whether bullying involvement scores and social and emotional problems scores were related. This aspect of the study answers the question, “Is there a relationship between adolescents with social and emotional problems scores and involvement in bullying, specifically being a bully, a victim, or bully-victim scores beyond demographic variables (i.e., age, gender, social status, vocabulary knowledge)?”

Because of deficits in the current bullying research, further investigations were necessary in this study. Two secondary purposes of this study are explained and offered below to hopefully shed light on several confounded variables in the bullying literature.

(1) One complex aspect of the bullying literature relates to adolescents with criminal offenses who engage in bullying and are identified as having social and emotional problems. Thus, this study explored if committing crimes was a moderator variable between adolescents with social and emotional problems scores and involvement in bullying as a bully, a victim, or bully-victim scores. Individuals involved in bullying have been found to have social and emotional problems, but it is unclear if there is a moderating variable that contributes to bullying and adolescents with social and emotional problems. The research question was, “Ultimately, are crimes a moderator variable between bullies, victims, and/or bully-victims scores and social and emotional problems scores?”

(2) There has been limited research examining the different types of crimes committed by adolescents (whether they were bullies, victims, or bully-victims). Thus, this study investigated the specific types of crimes committed by adolescents who have been involved in bullying as a bully, a victim, or bully-victim based on their scores. Therefore, the research question was, “Which specific type(s) of crimes are most likely committed by adolescents with higher bullying involvement scores?”

Significance of the Study

The overarching goal of this research was to facilitate a better understanding of adolescents with social and emotional problems who may have characteristics of a bully, a victim, or bully-victim. This study should inform schools, teachers, students, parents, school psychologists, and other helping professionals of methods to interact effectively with adolescents who have characteristics of being involved in bullying, have characteristics social and emotional problems, and/or committed criminal offenses.

Because adolescents with bullying experiences and social and emotional problems need resources to foster coping skills and assistance to decrease bullying behaviors, this study may

offer influence. In this regard, several potential outcomes from this study are worth noting. This study may be able to: (1) offer additional information on the traits of adolescents with social and emotional problems who have been involved in bullying, (2) assist stakeholders in identifying bullies, victims, or bully-victims, (3) contribute to preventative measures to assist bullies, victims, and bully-victims, and (4) classify adolescents who have committed criminal offenses after being involved as bullies, victims, or bully-victims with social and emotional problems. To expand on these four outcomes, a distinct relationship between bullies, victims, and bully-victims and social and emotional relationships beyond demographic variables will assist in identifying as well as determining the preventative measures and/or intervention(s) needed. Therefore, interventions for adolescents with social and emotional problems who engage in bullying activities will be equipped with positive methods of coping and for engaging in social interaction instead of employing bullying behaviors, as well as decreasing their criminal activity by them learning better coping skills and appropriate interpersonal skills. Additionally, this study may offer insight to researchers, educational staff, and/or administrators as they consider the best methods for intervening and preventing bullying behaviors. Furthermore, by focusing on specific types of crimes most likely committed by adolescents (who have characteristics of bullies, victims, or bully-victims), school personnel, juvenile detention center employees, and police officers may have another identifier associated with bullying, potentially leading to possible interventions or deterrents to decrease involvement in criminal activity in the future.

Research Questions

There was one main research question for this study. The main research question was:

(1) Is there a relationship between adolescents with social and emotional problems as measured by the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) and adolescents' self-disclosed status as a bully, a victim, or bully-victim as measured by Revised Olweus

Bully/Victim Questionnaire (ROBVQ; Olweus, 1996) beyond demographic variables (i.e., age, gender, social status, vocabulary knowledge)? There were two exploratory questions or secondary questions of interest. These questions were secondary because crime has been considered as a variable that impacts bullying. However, this population is limited; thus, it could impact the results of the study. Data reported were analyzed to address the two questions. The questions were: (1) Are crimes committed a moderator variable between bullying scores and social and emotional problems scores? (2) What specific types of crimes are most likely committed (i.e., misdemeanor crime, property crime, violent crime) by adolescents with characteristics of social and emotional problems and characteristics of a bully, a victim, and bully-victim?

Brief Summary of the Current Study

This study aimed to examine one main research question pertaining to the relationship between bully, victim, or bully-victim scores and social and emotional problems scores. Exploration areas of interest that were secondary included crimes being explored as a moderator between bullies, victims, or bully-victims scores and social and emotional problems scores as well which specific types of crime were more prevalent among bullies, victims, and/or bully-victims scores with social and emotional problem characteristics.

Definitions

This study included discussions of bullying and types of bullying, bullies, victims, bully-victims, social and emotional problems related to bullying, and criminal offenses (i.e., crime) often related to bullying. This discussion assisted in operationalizing the concepts being examined in this study because the terms have various definitions. How the following terms were defined determined how the findings were interpreted later in this study. Thus, the following concepts were an intricate part of this study. Each was defined.

Bullying. Bullying has been described in the literature over an extensive span of time.

The following description, offered by one of the leading bullying experts in past decades, offered a framework for defining bullying in this present study.

A student is being bullied when another student, or several students say mean and hurtful things or make fun of him or her or call him or her mean and hurtful names, completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose, hit, kick, push, shove around, or lock him or her inside a room, tell lies or spread false rumors about him or her or send mean notes and try to make other students dislike him or her, and other hurtful things like that. When we talk about bullying, these things happen repeatedly, and it is difficult for the student being bullied to defend himself or herself. We also call it bullying, when a student is teased repeatedly in a mean and hurtful way. But we don't call it bullying when teasing is done in a friendly and playful way. Also, it is not bullying when two students of about equal strength or power argue or fight. (Olweus, 1996, p.4)

Bullies, victims, and/or bully-victims. Other research has broadened the understanding of bullying, and has distinguished between a bully, victim, and bully-victim (Nansel et al., 2001, p. 1). These definitions (i.e., bully, victim, and bully-victim) were employed in this study for operational and clarification purposes. “A bully was the aggressor, the person who [engaged] in bullying.” A victim was “the one being bullied [and was] the less powerful person.” A bully-victim was a person who was the aggressor, engaging in bullying, in one situation and then was being bullied and the less powerful person in a different situation.

Different types of bullying. Another researcher, Swearer (2007), identified several types of bullying, including relational, physical, and verbally bullying. While relational bullying was spreading bad rumors about people and keeping certain people out of a group, physical bullying

involves punching, shoving, and other acts that hurt people physically. Verbal bullying was teasing people in a mean and hurtful way so that the victim heard the bully. A commonality between the three types of bullying (i.e., physical, verbal, relational bullying) was the ability to “gang up” on others (Swearer, p.1). Another type of bullying was sexual bullying. It was a gendered power struggle between behaviors of females and males (Shute et al., 2008).

Social and emotional problems. Social and emotional problems were defined as issues with relationships that often involve health-damaging behaviors (e.g., alcohol, smoking, depression, suicidal ideations, anxiety, has headaches, stomach aches, or sickness, nervousness, fears or easily scared, conduct problems, hyperactivity and impulsivity, usually on own, has few to no friends, not being liked by peers or adults, does not engage in prosocial behaviors (Goodman, 1997; Laukkanen et al., 2002; Swearer et al., 2001). More specifically for this study, social and emotional problems were concentrated around hyperactivity, prosocial behavior, peer problems, emotional symptoms, and conduct problems all of which were subscales on the SDQ (Goodman, 1997) that were utilized specifically for measuring social and emotional problems in this study. This definition will be utilized to assist in operationalizing social and emotional problems. Social and emotional problems were included because bullying has been found to be associated with social and emotional problems (Farrow & Fox, 2011; Gil, 2002; van der Wal, 2005). Additionally, juveniles in detention facilities have been found to display social and emotional problems (Ireland, 2002; Ireland & Rowley, 2007). However, these problems in combination of bullying have not been examined as a predictor of committing criminal offenses.

Vocabulary knowledge. Vocabulary knowledge was defined as knowing a word based on its form whether written, spoken, or word parts, meaning associated with form and meaning, concept and referents, and associations, and use concerned with grammatical functions, collocations, and constraints on use (Brown, 2010). The commonsensical method for defining

vocabulary knowledge was learning what a word means. For the basis of the current study, the operational definition of vocabulary knowledge was concerned with meaning, specifically form and meaning, of written words. For example, an adolescent was able to identify a word with a similar meaning or synonym to a target word. This was used to examine if adolescents could identify synonyms. The VFA (Richeck, 2005) will be utilized in identifying adolescents' vocabulary knowledge based on correct and incorrect responses.

Types of crimes. Criminal offenses and crimes were offenses against public law. Misdemeanors were a lesser offense than a felony (e.g., traffic violations, misdemeanor assault, domestic violence, petty theft of merchandise less than \$400, shop lifting, driving under the influence, possession of marijuana, possession of alcohol if under the legal age limit, misdemeanor arson, trespassing), which was punishable with up to a \$2,000 fine and one year in jail (Bramer, n.d.; Alabama Misdemeanor Guidelines, 2009). A felony was punishable by an indictment or by particular proceedings (Hill & Hill, 2008). The different types of felony criminal offenses were categorized as violent crimes (e.g., "murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault") or property crimes (e.g., "burglary, larceny-theft, motor vehicle theft, arson"; U.S. Department of Justice Federal Bureau of Investigation, 2010, p. 1). These definitions were employed to assist in categorizing the different types of crimes.

Assumptions of the Study

This study included the following assumptions. All participants were honest and followed directions. All participants were truthful while answering the questions on the surveys. These assumptions were important to ensure that data were precise and portrayed the adolescents accurately. It was assumed that all adolescents understood and followed the directions related to reading and completing the questionnaires. This assumption was necessary because the data may

not have been accurate if the adolescents do not comprehend the instructions of the proposed study or were not compliant with the expectations.

Overview

In review, this chapter discussed ways in which bullying has been studied. Additionally, the purposes of this study, research questions, definitions, and limitations were identified. Chapter 2 will offer an in-depth review of the literature, which addressed demographic variables, vocabulary, bullies, victims, and bully-victims, social status, physical, verbal, and relational bullying, coping mechanisms to deal with bullying and bullying interventions, behaviors and bullying, internalizing problems and bullying, and jail, incarceration, and offenders. Chapter 3 discussed the methodology of this study, which incorporated the participants, instruments, procedures, and data analyses employed. Chapter 4 discussed the results of this study. Chapter 5 compared the findings to the literature and offered future implications and conclusions.

CHAPTER 2

OVERVIEW OF THE LITERATURE

The bullying literature has been described as complex, often employing multiple variables across bullying, bullies, victims, and bully-victims. By considering, multiple variables involved with bullying, such as coping mechanisms, psychology and bullying, psychosocial aspects of bullying, to name a few, new light can be shed on bullying for school-aged youth. Nonetheless, while compound variables have been associated with bullying in the literature, the examination of bullying across variables has remained a weakness. For example, with the extensive research conducted on bullying, limited focus has been on social and emotional problems, bullying, demographic variables (i.e., age, gender, social status, vocabulary knowledge), and committing criminal offenses, which were variables of interest in this study. This chapter will offer a general overview of the bullying literature, and the limited findings on the bullying variables specific to this study.

Bullying: Differences Across Demographic Variables

Demographic variables have been explored in relation to bullying. Gender has been researched and conclusions have been made indicating that there are differences between males and females, but bullying has been experienced by both genders (Carlyle & Steinman, 2007; Nation et al., 2008; Ng & Tsang, 2008; Smith, Cowie, Olafsson, & Liefooghe, 2002; Turkel, 2007). Another variable that has been examined is age. Specific results elicited that there are differences among different ages in regard to bullying (Carlyle & Steinman, 2007; Hsi-Sheng et al., 2007; Nansel et al., 2001; Nation et al., 2008; Pepler et al., 2008; Smith et al., 2002). Race in relation to bullying indicated that bullying varies across race (Carlyle & Steinman, 2007; Hsi-

Sheng et al., 2007; Langdon & Preble, 2008). There were high prevalence rates of bullying (Ball et al., 2008; Nansel et al., 2001; Pepler et al., 2008).

Gender

Numerous studies have noted the relationship between gender and bullying. Gender has been found to correlate with bullying in various ways (Carlyle & Steinman, 2007; Nation et al., 2008; Ng & Tsang, 2008; Smith et al., 2002; Turkel, 2007). First, males have been found to engage in bullying more often than females (Carlyle & Steinman, 2007; Liang, Flisher, & Lombard, 2007; Nation et al., 2008; Peterson & Ray, 2006; Seals & Young, 2003). Liang and colleagues delved into the prevalence of bullying behavior in adolescents in South Africa and the relationship of these behaviors with levels with violence and risk behavior. The sample included 5,074 8th and 11th Grade students at 72 different schools. The students completed self-reported surveys consisting of participation in bullying, violent, anti-social, and risk behaviors. The study found that over 36% of students were involved in bullying with more than 8% of the students being bullies, over 19% were victims, and almost 9% were bully-victims (Liang et al.). It was concluded that males were most likely to be at risk of both being a bully and a victim, particularly younger males were more vulnerable to be victims. Males had a higher probability of exhibiting violent and anti-social behaviors when compared to students who were not involved in any bullying behavior, the control group. Risk-taking behavior increased for male bullies as well as male bully-victims. However, victims both female and male were more similar to the control group. Furthermore, they concluded that bullying is a common problem for young South African students as well as bullying being a predictor of violent, anti-social, and risk-taking behaviors.

Studies have also shown that males are more likely to engage in physical and verbal bullying than females (Hsi-Sheng, et al., 2007; Ng & Tsang, 2008). Males were also reported as

more likely to be both bullies and victims (Liang et al., 2007; Ng & Tsang). In contrast to males, at least one study has shown that females suffer from bullying in more mental and psychological ways (Ng & Tsang). Also, Kepenekci and Cinkir (2005) found that boys were more likely to engage in and experience physical bullying (e.g., kicking, slapping, assault with knives, rude physical jokes) and more verbal bullying (e.g., name calling, insults with cursing). Girls were more likely to be victims of verbal bullying. Young and Sweeting (2004, pp. 530-531) found that “gender atypical” boys reported being bullied more, more lonely, fewer male friends, and greater distress than their “gender typical” peers. Athanasiades and Deliyanni-Kouimtzis (2010) had similar findings that masculinity and femininity contribute to bullying. Thus, masculinity and femininity increased the likelihood whether a student is involved in bullying as either a bully or a victim.

Smith et al. (2002) examined gender differences of bullying definitions and types of bullying. Six hundred four 8-year-olds and 641 14-year-olds participated. They were asked to partake in a focus group and define bullying based on 25 different stick figure cartoon pictures. It was concluded that there are little differences between boys and girls when they define bullying, which was similar to other studies (Madsen, 1997; Smith & Levan, 1995). However, boys and girls differ in the types of bullying they engage in, which were consistent with Hsi-Sheng et al., Laing et al., and Ng and Tsang. Cowie (2000) concluded other differences between boys and girls. Boys who were victims of bullying failed to report being bullied to another person (i.e., adult or peer), while girls were more likely to report being bullied to at least one person. However, Athanasiades and Deliyanni-Kouimtzis (2010) found that boys and girls do not reveal bullying or victimization to teachers or parents because boys and girls believe that adults were ineffective and indifferent when it comes to bullying.

Dijkstra, Lindenberg, and Veenstra (2007) and O'Brien (2011) expanded on gender bullying research by specifically focusing on same gender bullying in comparison to cross-gender bullying of adolescents. It was thought that socially constructed perspectives of masculinity and femininity impact bullying experiences due to status hierarchies being created. Therefore, imbalances of power play a role in bullying, specifically same gender and cross-gender bullying. A total of 471 students who were enrolled in secondary British schools were recruited and participated in this study. The sample varied in regard to socioeconomic status and ethnicity. The students were divided into 86 gender mixed groups. At which time each group read a short vignette about a same-aged student being bullied by same gender and opposite gender peers. The findings suggested that bullying conforms to gender norms. The least problematic outcome was for boys bullying other boys, while the most problematic was boys physically harming girls, even if the boy was retaliating against a girl bully.

Dijkstra et al. (2007) examined cross gender and bullying as well, but differed from O'Brien (2011). Based on a sample of 11- and 12-year-olds ($n = 1,065$). The students were assessed through peer nominations (e.g., peer acceptance, peer rejection, helping, and bullying). This study found boys accept bullying girls better than girls not involved in bullying, as well as girls accepting help from boys better when being bullied than non-helping boys. Boys were more likely to ignore helping girls when they were being bullied, and girls ignore bullying in boys. Likewise, Athanasiades and Deliyanni-Douimtzis (2010) expanded on this study by indicating that boys should solve bullying on their own, but girls were more likely to tell peers and get help from their peers. However, Cowie (2000) suggested that girls were more willing to be peer supporters of victims who have been bullied when compared to boys. Similarly to Dijkstra and colleagues, Cowie found that boys and girls would prefer a same gendered supporter

in comparison to an opposite gendered peer. Also, it was found that same gender peers were more likely to approach and help in a bullying situation.

Other studies have examined cross-gender bullying, but concentrated on sexual harassment of adolescent females by males in the context of bullying (Shute et al., 2008; Turkel, 2007). Shute and colleagues focused on gender segregated focus groups and interviews of 14- to 15-year-olds that discussed sexual bullying. Seventy-two Australian students participated. They concluded that victimization of females by males is often sexualized, suggesting that males sexually harass females. Verbal and indirect victimization were also indicated to be everyday incidences for females, and almost exclusively sexual. Thus, the term “sexual bullying” appropriately encompasses the gender power structure underlining the behaviors of males with females. Another study investigated bullying and high school dropout rates. There were 1,470 participants in this study. Females were also found to have a higher risk for dropping out of high school when they were bully-victims, in comparison to males (Townsend, Flisher, Chikobvu, Lombard, & King, 2008).

Age

Age is another variable that has been examined closely with bullying. Several studies have shown that age can be a factor in bullying (Carlyle & Steinman, 2007; Hsi-Sheng et al., 2007; Laeheem, Kuning, McNeil, & Besag, 2008; Nansel et al., 2001; Nation et al., 2008; Pepler et al., 2008; Smith et al., 2002). To illustrate, one study surveyed 15,686 students in Grades 6 to 10 across the U.S. and concluded that 29.9% of the students were frequently involved in bullying, while 13% were bullies, 10.6% were victims, and 6% were bully-victims. Bullying occurred at some point between 6th and 10th Grades, but decreased as students aged (Nansel et al.).

Studies have shown that bullying decreases with age, but bullying remains at its most prevalent peak during middle school (Hsi-Sheng et al., 2007; Nation et al., 2008; Pepler et al., 2008; Seals & Young, 2003). Of the aforementioned studies, one study (Carlyle & Steinman, 2007) examined school-aged youth (i.e., Grades 6-12 in 16 school districts across a metropolitan area in the United States) through school-based surveys. Carlyle and Steinman found that bullying tended to be more common among younger students. The research also noted that most youth involved with bullying were either perpetrators or victims, but not both. Similarly, another study reported that bullying among females is slightly more prevalent at age 13 than for ages 11 or 15 (Nation et al.), while younger males are more likely to be victims (Liang et al., 2007). Not only were middle school students more likely to be involved in bullying, but they are more likely to feel bothered, but less likely to intervene than younger children, when bullying was observed (Aboud & Lior, 2007). Contrary to these findings, one study found that sexual bullying is more prevalent among 14 to 15-year-olds than younger ages (Shute et al., 2008). Likewise, Salmivalli and Voeten (2004) stated that bullying does increase with age. For instance, they found that preadolescents and adolescent peer groups have increased powerful influence on bullying behavior. Prosocial behaviors had increased peer pressure around ages 11 to 13, but antisocial behaviors peaked in later ages suggesting that bullying behaviors increase in older ages. Additionally, the older children get the better they were to express and define bullying, which was found to be a reason why bullying decreases with age (Smith et al., 2002).

Race

Race has been found to have implications for bullying (Carlyle & Steinman, 2007; Hilton, Anngela-Cole, & Wakita, 2010; Hsi-Sheng et al., 2007; Langdon & Preble, 2008). Bullying has been found to have long-lasting effects on both bullies and victims regardless of race based on a sample of Japanese and United States children (Hilton et al.). Langdon and Preble examined

interviews and surveys of 5th through 12th Grade students. Specifically, students' views of respect from adults and peers and occurrence of bullying were assessed. This study showed that minorities experienced higher amounts of bullying (Langdon & Preble). For example, African American and Native American students have been found to engage in bullying more often than other races in the U.S. (Carlyle & Steinman; Peskin, Tortolero, & Markham, 2006). Peskin and colleagues investigated bullying and victimization prevalence by gender, grade level, and ethnicity, specifically of low socioeconomic Black and Hispanic 6th to 12th Grade students. A survey was completed by teachers on the students. They found that Black students were more likely to be involved in bullying than Hispanic students.

Studies in other countries have also highlighted differences across race. For example, a study in Canada concluded that Black students were more likely to be bullies and victims than Caucasian students (Larochette, Murphy, & Craig, 2010). In several studies that examined race, other similarities were shown. For example, in one study in, Taiwanese adolescents experienced bullying by their first semester of middle school (Hsi-Sheng et al., 2007), while Asian students in the United States were more likely to be victims of bullying (Mouttapa, Valente, Gallaher, Rohrbach, & Unger, 2004), when compared to Caucasian American students. On the other hand, students from Germany were less likely to be weekly victims of bullying than students from England (Wolke, Woods, Stanford, & Schulz, 2001).

A few studies have reported contrasting race and bullying findings. For example, 2,377 8-year-old children in England and Germany participated in a study focusing on prevalence rates and school factors of bullying. The children were questioned by a structured interview. English boys were found to engage in bullying less frequently during the week than German boys. However, when controlling for ethnic composition, minority adolescents were victimized less (Wolke et al., 2001). However, research of 2,386 adolescents in the Netherlands focused on

peer-reported bullying and victimization in relation to ethnicity, and if these relationships were moderated by ethnic composition. In more ethnically diverse classes, minority students bullied more than other populations (Vervoort, Scholte, & Overbeek, 2010). No doubt, with bullying and race, there are differences in studies. On the other hand, some research has indicated that ethnicity does not have a significant effect on bullying (Lambert, Scourfield, Smalley, & Jones, 2008; Seals & Young, 2003; Sweeting & West, 2001). One study investigated the prevalence of bullying and victimization among 7th and 8th Grade students (Seals & Young). This study utilized three different surveys. Based on a Chi-square analysis there was no significant differences of students involved in bullying based on ethnicity (Seals & Young).

Prevalence

Bullying has been found by research to have high prevalence rates (Ball et al., 2008; Kepenecki & Cinkir, 2005; Laehheem et al., 2009; Nansel et al., 2001; Pepler et al., 2008). One study found that 12% of students were relentlessly bullied as victims, 13% were chronic bullies, and 2.5% were deeply involved bully-victims. Similarly, research has found that nearly 10% of students reported continually high levels of bullying, while 13% of students indicated early moderate levels of ceasing to almost no bullying by the end of high school, 35% reported frequent moderate levels, and almost 42% indicated that they have never been bullied (Pepler et al.). Another study concluded that over 36% of students were involved in bullying with more than 8% of them being bullies, over 19% victimized, and almost 9% were bully-victims (Liang et al., 2007). Different studies found other prevalence rates (Haynie et al., 2001; Nansel et al., 2001). Nansel et al. found that 29.9% of students indicated consistent or moderate involvement in bullying, 13% students reported bullying others, and 10.6% students indicated being a victim of bullying, while Haynie et al. (2001) concluded almost 31% of students self-disclosed being

victimized three or more times in the past year, 7% reported bullying three or more times over the past year, and more than 50% reported being bully-victims.

Coincidentally, one study found prevalence rates of 56.5% of students being involved in bullying, 12.7% being victims, and 16.3% as bullies (Jankauskiene et al., 2008). A different study concluded that approximately 50% of students were subjected to some type of bullying, while they were at school as well as 10% of the students reporting that they experienced bullying on a daily basis (Delfabbro et al., 2006). Kepenekci and Cinkir (2005) expanded on the prevalent rates by examining the prevalence of the types of bullying. They found that 35% have been bullied verbally, 35.5% experienced physical bullying, 28.3% experienced emotional bullying, and during the academic year 15.6% were bullied sexually at least once. Prevalence rates have even been found between males and females as well. One study found 36% of males and 38% of girls reported victimization weekly (Wilkins-Shurmer et al., 2003). Additionally, Wilkins-Shurmer et al. found that 6% of males and 5% of girls reported being victims of bullying more often than once per week.

Bullies, Victims, and Bully-Victims

It is important to look at the differences between bullies, victims, and bully-victims. Diverse experiences, circumstances, and different factors likely led to becoming a bully, victim, or bully-victim (Ball et al., 2008; Guerra, Williams, Sadek, 2011; Nation et al., 2008). The following research considers variables that are important to this study, and offers information on bullies, victims, and bully-victims, when available.

Biological and Home Factors

Biological and home factors have been linked to bullying (Ball et al., 2008; Mustanoja, Luukkonen, Hakko, Rasanen, Saavala, & Riala, 2011). This research was significant for two reasons. First, home and heredity cannot be controlled and likely influences adolescents'

behaviors. Second, the diverse contexts students interact in have been found to influence bullying behaviors and predisposing them to social and emotional problems all of which are being considered in this study.

There were studies that differentiated between bullies, victims, and bully-victims based on home environment and genetic makeup (Ball et al, 2008; Nation et al., 2008). Ball et al. aimed at examining the origins of elevated emotional and behavioral problems in bully-victims. In a sample of 1,116 families of 10-year-old twins environment and genetic influences on social roles were assessed. It was concluded that children's genetic makeup, as well as their environments impact whether children become victims, bullies, or bully-victims. Thirteen percent of the participants were frequent bullies, 12% were victims of bullying, and 2.5% were bully-victims. Genetic factors accounted for 73% of the variation in victimization and 61% accounted for the variation in bullying, with the remainder explained by environmental factors not shared between the twins. Bully-victims were only accounted for by genetic factors. Some genetic factors influenced victimization and bullying even though genetic factors were also specific to each social role (Ball et al.).

Hilton and colleagues (2010) examined the home environmental factors that contributed to bullying. They concluded that a history of family violence increased the involvement in bullying as both a bully and victim of bullying. Additionally, Pontzer (2010) found that bullying was positively related to a childhood of being exposed to parental stigmatization. Parental stigmatization was significantly correlated with being a bully when compared to victims and bystanders. Also, shame used by parents increased the likelihood that the participants were bullies. Males were more likely to bully females if shame displacement was experienced as well. Exposure to parental moralization and empathy decreased the likelihood of one becoming a bully.

Another study that examined home environmental factors was conducted by Christie-Mizell, Keil, Laske, and Stewart (2010). The sample had 2,000 youth between the ages of 14 and 22. The data were collected from the National Longitudinal Survey of Youth. They concluded that children bully less often when their home environment provided cognitive stimulation, emotional support, and safe physical environment. There was a significant correlation between the parental work hours and adolescents' perceptions of time with parents. They found that maternal full-time work increased the likelihood that children were bullies. Father's work hours were not contributors to whether a child was a bully. However, if children perceived that they were not spending enough time with their fathers, bullying was likely increased. Additionally, the more siblings at home the less likely children engaged in bullying. Consequently, work hours were not the only influential factors of bullying, but socioeconomic status was associated as well.

In another study, Due, Damsgaard, Lund, and Holstein (2009) explored bullying and psychosocial factors, concentrating on depression. In this longitudinal study, the researchers concluded that bullying was significantly related to socioeconomic status. However, socioeconomic status was correlated to low, middle, and high classes who were found to have depression-like symptoms if they experienced bullying. This conclusion was substantiated by Due and colleagues (2009), which found that children who were identified to be in higher socioeconomic families, tended to report being bullies more, while children from poor families were victimized more often.

Home context was also explored by Mustanoja and colleagues (2011). The aim of this research was to consider if there was a relationship between exposure to domestic violence and violence near the home and bullying. The sample consisted of 508 adolescents who were undergoing psychiatric services. The adolescents were interviewed to assess bullying behavior,

exposure to domestic violence or other violence, and psychiatric diagnoses. Boys were more likely to report bullying behavior and witnessing parental violence. Domestic violence was reported more frequently in boy victims of bullying than bullies or noninvolved peers. Overall, domestic violence and other types of violence increased the risk for boys to be victims of bullying. Girls were more likely to be victims of bullying if they witnessed domestic violence.

The Home and School Environment Influences

Totura and colleagues (2009) expanded on Hilton et al. (2010) by not only examining home environments but also school environments. This study assessed mechanisms of students' perceptions of family and school experiences moderated by emotionality and involvement in bullying as either a bully or a victim of bullying. A total of 2,506 middle school students participated. Various measures were utilized for this study that examined home life, school life, and bullying involvement. Totura and colleagues concluded that emotionality and perceptions of family and school environments were associated to being a bully and being a victim of bullying. Internalizing behaviors (e.g., anxiety, depression, moodiness) were associated with victims and externalizing problems (i.e., anger) were associated with bullies. Another study conducted by Swearer et al. (2001) indicated that there was pattern for internalized psychopathology and whether a student was a bully, victim, or bully-victim. Additionally, it coincided with Totura et al. by reporting that victims were more likely to experience anxious symptoms, but bully-victims also experienced anxious symptoms as well as bullies and bully-victims experiencing more depressed symptoms. This led to the conclusion that bully-victims were the more impaired subtype of bullying in respect to depression and anxiety.

Totura and colleagues furthered their exploration of bullying and internalizing and externalizing problems by finding that students' perceptions of aggressiveness in school climate and adult monitoring moderated both internalizing and externalizing problems as well as the

identification of being either a bully or victim of bullying. Both school and home contextual factors were associated to being a bully and being a victim. Environment of school and home have been associated with bullying, but relationships of family, peers, and teachers influenced who became a bully and a victim. Xin (2002) also concluded that a positive disciplinary classroom context and parental involvement decreases bullying.

A previous study explored how interpersonal empowerment with parents, friends, and teachers of adolescents impact the development of bullying and victimization in school (Nation et al., 2008). It was found that disempowered relationships with teachers predicted bullying behavior across all ages, but social competence was higher for 13- and 15-year-old bullies. Victims had different predictors, dependent upon age. Eleven-year-old victims felt less empowered by teachers, while 15-year-old victims of bullying had problems with negotiating cooperative relationships with parents. Disempowerment has been found to increase a negative school climate, particularly negative perceptions of school climate, which increases bullying (Guerra et al., 2011). Negative school climate is significant in increasing bullying, but research has also indicated that bullying most frequently occurs in specific areas in school. For instance, bullying takes place most often in areas with a minimum amount of supervision like playgrounds, hallways, bathrooms, and school buses. Therefore, the context increases bullying (Craig & Pepler, 2003).

Harel-Fisch and colleagues (2011), Scholte, Sentse, and Granic (2010), and Salmivalli and Voeten (2004) results were consistent with Guerra e al.'s (2011) findings, which suggested that negative perceptions and attitudes of school were involved in whether a student was a bully or a victim. Scholte et al. found that bullies are more likely to have a permissive attitude of bullying, while classroom attitudes influenced bullying. Salmivalli and Voeten indicated that attitudes and classroom norms assisted in explaining the variance for bullying behaviors. Girls'

behaviors were more influenced by the classroom norms than the boys in this study. Thus, if anti-bullying norms were being implemented in the classroom, girls would be less likely to be bullies. On the other hand, boys who were being generally more individualistic were less likely to follow the anti-bullying norms.

In another study, Van Goethem, Scholte, and Wiers (2010) examined explicit attitudes, and implicit attitudes when involved in bullying. Explicit attitudes were evaluated by self-reports that measured how students consciously expressed what they feel or think, while implicit attitudes were inferred from students' reaction times. They found that explicit attitudes predicted bullying behavior, but implicit attitudes did not. Children with implicit and explicit attitudes indicated there was a significant interaction with bullying behaviors. Cowie (2000), Thornberg and Knutsen (2011), and Xin (2002) had similar findings to Guerra et al. (2011) as well. Results suggested that school climate affects whether students were victims, bullies, and/or help students who were being bullied. Therefore these studies concluded, children's genetic makeup, as well as their contexts, perceptions of their self, and relationships, potentially impact whether children become victims, bullies, or bully-victims (Ball et al., 2008; Cowie, 2000; Guerra, Williams, & Sadek, 2011; Nation et al., 2008; Thornberg & Knutsen, 2011).

The Impact on Academics and Language

Studies have examined academic achievement and bullying (Brown & Taylor, 2007; Conti-Ramsden & Botting, 2004; Luciano & Savage, 2007; Woods & Wolke, 2004). Overall, research findings suggested a statistically significant relationship between being involved in bullying and academic achievement. One study explored external behaviors of dropping out of school, stunted academic progress, absenteeism, and fear of school because of bullying (Townsend et al., 2008). Bullying was higher amongst boys who dropped out than for girls, but girls were more likely to be involved in bullying while in school. However, more girl bully-

victims were dropouts in school, while boy bullies and boy bully-victims were more likely to be dropouts.

Other studies examined intelligence and language as academic achievement constructs in relation to bullying. Conti-Ramsden and Botting (2004) conducted a study examining 242 children at the ages of 7 and 11. They concluded that there were few correlations between bullying and nonverbal intelligence, overall linguistic skill and gender; however, language difficulties and expressive language deficits were related to bullying victimization. These findings were also corroborated by Woods and Wolke (2004). Although, Woods and Wolke indicated that there was no significant relationship between direct bullying and decrements in academic achievement, but relational bullying was statistically correlated to higher academic achievement. Even students with learning difficulties attending inclusive schools reported more bullying victimization than students without learning disabilities, but if receptive vocabulary was controlled for there was no statistical significance (Luciano & Savage, 2007). In comparison, Brown and Taylor (2007) concluded that involvement in bullying not only affects academic achievement while students are in middle and high school, but bullying involvement indirectly influences wages in adulthood, career, and college educational attainment.

Social Status

Social status has been found to be associated with bullying (Bruyn, Cillessen, & Wissink, 2010; Choi, Johnson, & Johnson, 2011; Cowie, 2000; Guerra et al., 2011; Harel-Fisch et al., 2011; Nation et al., 2008; Perren & Alsaker, 2006; Thornberg & Knutsen, 2011). Research has shown that students were identified by other students as being bullies, victims, bully-victims, or uninvolved in bullying because of their social status. The student's role in bullying can also be influenced by peer perceptions and their social status. From the focus groups, it was noted that

the bullies' normal or high self-esteem was based on their achievement of power or status within a social context (Guerra et al., 2011; Thornberg & Knutsen, 2011).

Students who have peer support groups have been found to be bullied less (Cowie, 2000). The more peer support groups a student had, the more likely he/she was popular. Social identity has been found to influence whether an adolescent is a bully or victim (Guerra et al., 2011). A qualitative study by Thornberg and Knutsen (2011) found that peer attributes that were associated with bullying were group pressure, conflicts with peers, reinforcement from peers, and peers thinking negatively to deviance. This study reported that bullying increased when peers reinforced a student for bullying other students. Further, conflicts with peers increased bullying because peers took certain sides and picked on others. Similar to Thornberg and Knutsen, Nation et al. (2008) noted that bullies were more likely to oppress and control peers, who were victims of bullying.

Perren and Alsaker (2006) concluded that victims of bullying were more submissive, had fewer leadership skills, more withdrawn, isolated, less cooperative, and had fewer playmates when compared to children who were not involved with bullying. Bullies were found to have less prosocial behaviors, more leadership skills, and be a part of larger social clusters as well as bullies being affiliated with other bullies and bully-victims. Choi and colleagues (2011) also found that dominant children were cooperative-prosocial, competitive-aggressive, or individualistic. They found that competitive-aggressive children were more likely to be bullies. Cooperative-prosocial children were more likely to be uninvolved in bullying, while individualistic students were likely to be victims.

Another type of social status influence was examined by researchers (Olthof, Goossens, Vermande, Aleva, & van der Meulen, 2011). Bullying was investigated to determine if bullying was a strategic behavior to obtain or maintain social dominance. The sample consisted of 1,129

children ranging from 9- to 12-years old. The children were categorized into their roles of bullying, specifically based on the use of dominance as coercive or prosocial strategies. Peer nomination was employed to identify bullies and the types of strategies, coercive or prosocial, employed by the bully. The results suggested that bullies used coercive tactics (i.e., taking toys away from another child, threatening others) instead of prosocial strategies (i.e., trading toys, promising friendship in exchange for something). Bullies were also found to be socially dominant. This meant that bullies were more frequently in control and perceived as more popular than non-bullying children. Also, bullies desired to be more dominant than non-bullies. Bully-victims were similar to bullies, meaning that bully-victims initiated bullying and desired dominance as well as control. Victims were found to have low control and perceived popularity. However, victims desired dominance as much as bullies and bully-victims and tried to use coercive strategies as well. These results were consistent with focus groups that found that bullies' normal or high self-esteem was based on them achieving power or status within a social context (Guerra et al., 2011).

Also, victims of bullying have been identified as being called "sissies" and "cowards" by classmates, and more rejected and withdrawn or isolated (Athanasades & Deliyanni-Kouimtzis, 2010). This was expanded on by Harel-Fisch and colleagues (2011), which found that bullying was correlated to students being together, helping and being kind to other peers, and whether that student was accepted or not. Students who were found to be around students more frequently and more accepted were less likely to be victims of bullying, but were at times noted as being bullies. Students who were reported as being helpful and kind to other peers were more likely to be uninvolved in bullying.

Scholte and colleagues (2010) examined social preference and the number of reciprocal friends and bullying. A total of 2,547 completed peer nominations. They found that there was a

positive correlation between reciprocal friendships and bullying. Additionally, they found that social preference was negatively associated with bullying. This means that students who were not socially preferred were more likely bullied. Likewise, if students were socially preferred they were less likely to be bullied. Unlike this study, victims were more preferred more than bullies (Rodkin & Berger, 2008).

Other studies examined students being rejected and accepted. Several studies differed from Scholte et al. (2010) and Veenstra, Lindenberg, Munniksma, and Dijkstra (2010). For example, Veenstra and colleagues examined if bullies were accepted or rejected. A total of 48 students in 5th to 8th Grade participated. Peer nominations were employed as well as students completed the Olweus's Bully/Victim Questionnaire (Olweus, 1991). They found that students who bullied peers were rejected. Students who were more accepted were not involved in bullying. Bruyn and colleagues' (2010) results concurred with Scholte et al. and Veenstra et al., which found that bullying was positively correlated to popularity. Additionally, being a bully and being a victim were predicted by the interaction of acceptance and perceived popularity.

An earlier study by Lee (2009) had similar findings. It concluded that students nominated students who were physically aggressive were reported to be bullies. Additionally, verbal bullying was associated with peer nominations of being a bully. Relational bullying was associated with peer rejection for girls. This was also found in Dijkstra et al. (2007) and Olthof and Goossens (2007). Acceptance was more frequent and gender specific when examining bullying. For instance, Olthof and Goossens (2008) results suggested that girls were more often reported as being victims than boys. Desired and received acceptance was higher for boys than for girls. Bullies were more often rejected. Victims of bullying were less accepted by peers and more defensive.

In comparison, Rodkin and Berger (2008) found that bullies and victims received nominations that were similar and close to average popularity and physical competence, while bully-victims received few nominations. Even though bullies had average popularity, they were least liked and bully-victims were highly disliked, while, victims of bullying were found to receive average levels of dislike. Olthof and Goossens (2008) also found that antisocial behaviors of bullies led to peer nominations of rejection, but acceptance by other peers who engaged in antisocial behaviors for boys. Girls, on the other hand, who engaged in antisocial involvement in bullying wanted acceptance from boys instead of girls. Bullies were found to bully more frequently if they had followers and/or outsiders observing them (because of their desire to be accepted by peers).

Bystanders or outsiders have also been examined (Salmivalli, Voeten, & Poskiparta, 2011). This study concentrated on whether or not bystanders' behaviors reinforced bullies or if bystanders defended victims of bullying. The sample included 6,764 children ranging from 3rd to 5th Graders (9- to 11-years-old). Bullying was evaluated by the Olweus's Bullying/Victim Questionnaire (Olweus, 1991), while bystanders' behaviors were assessed by a participant role questionnaire. Anti-bullying attitudes were also examined by a pro-victim scale as well as empathy toward victims was measured by an empathy questionnaire. The results showed that boys had less empathy and weaker anti-bullying attitudes than girls in regard to bullying. These findings were consistent with Rodkin and Berger (2008), which stated that bullies and victims had similar prosocial behaviors, but bully-victims did not have prosocial behaviors. Victims were noted to be average with relational and overt aggression and prosocial behaviors. However, bullies and bully-victims were rated aggressive and not prosocial. Salmivalli and colleagues (2011) also indicated that there was a positive correlation between bystanders who reinforced peers for bullying other classmates and bullying. Bystanders with empathy for a victim and anti-

bullying attitudes increased the likelihood of a bystander defending a victim of bullying, which decreased bullying. The more often defending victims of bullying was observed the less frequent bullying was in the classroom. Likewise, the more often bullying was reinforced by bystanders the more frequent bullying occurred in the classroom.

Physical, Verbal, and Relational Bullying

Three different types of bullying have been studied often in the literature (i.e., relational, verbal, physical bullying). Studies have explored predictors of who engages in relational, physical, and/or verbal bullying (Curtner-Smith et al., 2006; Dukes, Stein, & Zane, 2010; Sheithauer, Hayer, Petermann, & Jugert, 2006; von Marees & Peterman, 2010). Additionally, researchers have suggested that the different types of bullying are linked to later behavior (Dukes et al., 2010). Furthermore, significant differences in gender and the type of bullying have been reported (Sheithauer et al., 2006; von Marees & Peterman, 2010).

Von Marees and Petermann (2010) explored the prevalence of bullying and predictors of the different types of bullying. In a sample of 550 children between the ages of 6 and 10 participated. The results concluded that boys are more likely to be involved in direct bullying. Relational or indirect bullying was found to be less frequent and occur more often within same gender groups when compared to direct bullying. Also, low parental educational levels predicted whether a student was a bullying, victim, or bully-victim. Earlier results indicated that bully-victims were more likely to be physically bullied (Dukes et al., 2010).

Dukes and colleagues (2010) also examined physical and relational bullying. However, this research concentrated on physical bullying, physical victimization, relational victimization, injury, and weapon carrying. A sample of 1,662 adolescents in Grades 7 to 12 completed a questionnaire about confronting others about bullying. The findings suggested that adolescents who were victims of physical and relational and relational bullies were predicted to experience

injury. For adolescents who were relational bullies were predicted to carry weapons more so than physical bullies. However, physical bullies were significantly predicted to carry weapons as well. Boys were more likely to report more weapon carrying and injury due to engaging in more physical bullying and victimization, while girls were more likely to experience relational bullying.

An earlier study by Scheithauer and colleagues (2006) had similar findings. The researchers used The Revised Version of the Bull/Victim Questionnaire (Olweus, 1996), including 2,086 completed surveys with students from 5th to 10th Grades. The findings suggested that boys reported more physical bullying than girls. This study, however, indicated that victimization was more often reported by younger students regardless of the type of bullying. Class size was not related to the types of bullying displayed.

Curtner-Smith and colleagues (2006) differed from other research when examining the different types of bullying and predictors. A total of 44 mothers and 4-year-old children participated as well as the children's teachers at a Head Start Program. The teachers completed a social behavioral survey which assessed relational bullying and overt bullying, while the mothers were interviewed. Nine percent of the children were found to engage in relational bullying frequently or almost always, while nearly 55% engaged in it occasionally or half of the time. Almost 16% of the children engaged in overt bullying frequently or almost always, while nearly 55% engaged in it occasionally or half of the time. Relational bullying was found to be more associated with parenting than overt bullying. However, direct and relational bullying were found to be strongly related with maternal empathy. Children with mothers who have appropriate developmental expectations were rated by teachers as engaging in less relational bullying than peers who mothers rated their children as having less appropriate developmental expectations. Children's mothers who exerted more control were rated by teachers as engaging

in more frequent relational bullying. Less than optimal parenting accounted for 11% of the variance in teacher reports when examining relational bullying.

Coping Mechanisms to Deal with Bullying

The methods individuals use to cope with bullying impact youth. Studies have shown that children with maladaptive coping skills will be more likely to have psychological problems. With this in mind, studies have examined the interventions employed to assist with coping deficits (Coyle, 2008; Cowie, 2000; Cowie et al., 2008; Edmondson & Hoover, 2008; Hampel et al., 2009; Hunter & Borg, 2006).

Research has been conducted on coping mechanisms with bullying and numerous interventions used to deal with bullying among youth (Coyle, 2008; Cowie et al., 2008; Edmondson & Hoover, 2008; Hampel et al., 2009; Hunter & Borg, 2006). Hampel et al. conducted a study on the relationships on different types of bullying and victimization and coping with bullying. There were a total of 409 students from Grades 6 to 9 who participated in the study. The students completed surveys that examined bullies' and victims' experiences as well as their coping strategies. The researchers concluded that there were adverse effects of direct and relational bullying and victims had poor psychological adjustment. Also, victims' psychological adjustment was found to have maladaptive coping skills (Hampel et al.). Other research has reported how victims of bullying cope. Based on the findings of Hunter and Borg, victimization predicted student reports of using sources of social support (i.e., teachers, peers, family) to assist in coping with bullying. This was also demonstrated by Cowie (2000) suggesting that peer supports have benefits in assisting children in coping with bullying.

Tenebaum, Varjas, Meyers, and Parris (2011) expanded on Hampel and colleagues (2009) and Hunter and Borg (2006). This study interviewed 142 students (4th to 8th Grade) on numerous occasions. The study concluded that victims of bullying used problem-focused coping

strategies. Additionally, victims of bullying utilized specific techniques such as seeking social support. However, the students indicated that their strategies were ineffective in reducing bullying. Overall, this research concluded that coping was vital for dealing with bullying; however, employing effective interventions was just as important.

Cowie (2000) concurred with previous studies, but found that there were no gender differences in coping responses. The most common coping strategy for both boys and girls was “ignore it/endure it” (Cowie, p. 94). Fewer numbers of participants engaged in verbal or physical retaliation, manipulate the social context, and/or did not use any coping strategy. Males were slightly more likely to employ numerous coping strategies in comparison to girls, who tended to employ fewer coping tactics.

Bullying Interventions

Bullying intervention research has emerged in recent years (Athanasades & Deliyanni-Kouimtzis, 2010; Cowie et al., 2008; Coyle, 2008; Edmondson & Hoover, 2008), with particular attention to the effectiveness of interventions. Athanasades and Deliyanni (2010) indicated that the different definitions and interpretations of bullying impacted students’ behaviors and involvement in bullying. Interventions were found to be influenced by these definitions and experiences of bullying.

One study found that the most effective intervention was a whole school approach that utilized the community (Cowie et al.), while different studies by Coyle (2008) and Edmondson and Hoover (2008) implemented another intervention, (e.g., the Bullying Prevention Program; Olweus, 1973). Both interventions had specific components for the school and community to assist in achieving student safety goals and to identify the school culture characteristics that support or interfere with bullying prevention. Coyle concluded that the community and school can impede or promote a bullying intervention and school culture and attributed success to such

characteristics as a sense of family, warmth, and collaboration among staff and students. Edmondson and Hoover (2008) evaluated a school-based violence intervention program, modeled after Olweus' (1973) template, to achieve student safety goals. An evaluation instrument was employed to examine the effectiveness of the bullying prevention program, specifically teachers' responses, perception of students' behaviors, implementation of curricular lessons, and resulting alterations to the school atmosphere. This 3-year longitudinal study had 4 different schools, 52 teachers, and 1,383 students. They concluded by the end of three years that there was a positive change in individual student behavior in combating bullying in schools.

Elinoff, Chafouleas, and Sassu (2004) indicated that there was a need for expanded definitions of bullying, which would assist in interventions of bullying. This led to Bowllan (2011) to implement Olweus's Prevention Program like Coyle (2008) and Edmondson and Hoover (2008). Baseline data was collected on 158 students from Grades 7 and 8. One hundred twelve students in a second cohort were examined after the implementation of the intervention. Seventeen teachers also participated. The Revised Olweus Bully/Victim Questionnaire (Olweus, 1996) and a teacher questionnaire were completed to examine perceptions and prevalence of bullying as well to examine the effectiveness of the intervention to decrease bullying. The 7th Grade students decreased their bullying by 34.4% in relational bullying and 31.1% reduced in being victims of bullying. The 8th Grade students had decreased indirect verbal bullying of 35%. Teachers were more likely to talk to both bullies and victims of bullying in both 7th and 8th Grade. Teachers were more likely to talk to other educators about bullying, intervene when bullying occurred, talk to the class about bullying, and report bullying to assist in making clearer guidelines for bullying, which was similar to Kert, Coddington, Shick, and Shiyan (2009).

Behaviors of Bullies, Victims, and Bully-Victims

Behaviors of students who are bullies, victims, or bully-victims vary. There has been research on behaviors of children in regard to social behavior and risk behaviors (Alikasifoglu et al., 2007; Edmond et al., 2007; Holmberg & Hjern, 2008; Ivarsson et al., 2005; Jablonska & Lindberg, 2007; Liang et al., 2007; Perren & Alsaker, 2006). Bullies, victims, and bully-victims have been found to demonstrate certain behaviors that are specific to their role (Alikasifoglu et al., 2007; Jablonska & Lindberg, 2007; Liang et al., 2007; Perren & Alasker, 2006).

In one study, (Perren & Alasker, 2006), children were categorized as victims, bullies, bully-victims, or non-involved, which was determined by teacher ratings on children's social behavior patterns and peer nominations by social cluster mapping. Social behaviors and peer relationships of 340 5- to 7-year-old children were found to have bully-victim problems during their kindergarten school year. Perren and Alasker (2006) concluded that victims compared to non-involved children were more submissive, had fewer leadership skills, were more withdrawn, were more isolated, were less cooperative, were less sociable, and frequently had no playmates. Additionally, victims' lack of friends was thought to render children psychologically and socially vulnerable; hence they were more prone to being bullied. Another significant finding was that bullies and bully-victims were generally more aggressive than their peers. Bully-victims were similar to victims when compared to non-involved children in relation to being less cooperative, less sociable, and more likely to have no playmates.

Other studies have focused on risk behaviors and bullying (Alikasifoglu et al., 2007; Jablonska & Lindberg, 2007; Liang et al., 2007). These studies consisted of adolescent participants and compared different variables (e.g., levels of violence, two-parent versus one-parent homes, risk behaviors). They all concluded that risk behaviors are increased when bullying is present. Bullies and bully-victims had a higher probability of exhibiting violent and

antisocial behaviors when compared to students who were not involved in any bullying behavior (Liang et al.). Two of the studies found specific risky behaviors (e.g., illicit drugs and smoking, victimization, mental distress, sexual activity) that increased among adolescents who were involved in bullying (Alikasifoglu et al., 2007; Jablonska & Lindberg, 2007; Rusby, Forrester, Biglan, & Metzler, 2005).

Another study focused on risk behaviors, victimization, and mental distress among adolescents in various family structures (Jablonska & Lindberg, 2007). A total of 15,428 9th Grade students participated in this study. The risk behaviors examined included alcohol, illicit drug, and cigarette use. Victimization was assessed by experiences and exposure to bullying and physical violence, while mental distress was evaluated by anxious/depression and aggressive behavior scales. It was found that risk-taking behaviors increased because of family structure. Children in single father homes were found to have a higher risk for alcohol and illicit drug and aggressive behavior when compared to children in single mother homes. Children in one-parent homes (single mother homes and single father homes) were found to engage in more risk-taking behaviors, victimization of bullying, and mental distress in comparison to children in two-parent homes (Jablonska & Lindberg).

Kim, Catalano, Haggerty, and Abbott (2011) expanded on this study, by indicating that poor family management and bullying enhanced later violent behaviors due to adolescents engaging in risk-taking behaviors (i.e., heavy drinking and marijuana use by the age of 21), being impulsive, and associating with antisocial peers. Likewise, Topper, Castellanos-Ryn, Mackie, and Conrod (2011) and Vieno, Gini, and Santinello (2011) concluded that bullying involvement, increased the likelihood of drinking as well as smoking being more frequent with bullying, particularly physical, verbal, sexual, and relational bullying linked to legal substance abuse.

Psychological Disorders and Bullying

Bullying impacts the psyche of students (Hilton et al., 2010; Hjern, Alfven, & Östberg, 2008; Laeheem et al., 2008; Ng & Tsang, 2008; Turkel, 2007). Different types of psychological problems and disorders have been found to arise in individuals who have been involved in bullying. These psychological problems range from psychosomatic concerns to psychiatric diagnoses.

Behavioral Disorders/Symptoms

Behavioral disorders have been examined. Particularly, the relationship between Attention Deficit Hyperactivity Disorder (ADHD) and bullying in peer groups at school (Holmberg & Hjern, 2008). Five hundred sixteen 10-year-old students participated in this study. The data were collected by an ADHD rating scale. It was found that pervasive ADHD was diagnosed in 9.5% of the males and 1.6% of the females. ADHD was related to bullying other students, as well as being a victim of bullying. Bullies had high scores in parental ratings of behavioral problems at school entry, but being a victim of bullying was not associated to behavioral problems at school entry. Hence, this study displays a link between ADHD and bullying in the peer group at school. Beyond Holmberg and Hjern (2008), other researchers have investigated peer relationships and behavior.

Other research examined ODD and ACD in relation to bullying. Edmond et al. (2007) used a behavior scale to predict preadolescent and adolescent disruptive behavior. More specifically, it investigated 1,943 Dutch students' social understanding and difficult behaviors such as a hot temper, disobedience, bossiness, and bullying to predict ODD and ACD. The children were measured at 10- to 12-years of age and again at 13- to 15-years of age. It was found that there was not a difference between males and females and the results were similar for preadolescents (10- to 12-year-olds) and early adolescents (13- to 15-year-olds) outcomes. Poor

preschool social understanding and difficult behaviors were found to later predict ACD but not ODD. They deduced that bullying was significantly linked to adolescent ACD, but not ODD.

Similarly, Viding, Simmonds, Petrides, and Frederickson (2009) examined conduct problems that arise from bullying. More specifically, it focused on callous-unemotional (CU), lack of empathy and guilt, manipulative, shallow emotions, small subgroup of children with conduct problems, insensitivity to punishment, and similar to adults diagnosed with psychopathy with antisocial personality disorder, traits that influence the risk of engaging in bullying. A total of 704 adolescents participated. They completed an Inventory of Callous-Unemotional Traits (Frick, 2003), peer nomination assessments, and the Strengths and Difficulties Questionnaire (Goodman, 1997). The results of the study suggested that the higher the levels of CU the higher levels of direct bullying occurs, which was higher than conduct problems and bullying. Direct and indirect bullying can be predicted when CU and conduct problems interact together.

Internalizing Disorders/Symptoms

One study explored 2,588 Scandinavian students between the ages of 10 to 18 years who reported psychosomatic pain and had psychological complaints in relation to the school environment (Hjern et al., 2008). They found that school stressors such as bullying by peers, schoolwork pressure, and being treated poorly by teachers were linked to psychosomatic pain and psychological complaints (i.e., sadness, irritability, feeling unsafe, nervousness). Bullying was concluded to be a significant predictor for psychosomatic pain. Two other studies elicited similar findings, as described subsequently.

Similar to Hjern et al. (2008), Gini (2008) investigated whether bullying or being a victim of bullying was correlated to emotional and social problems, specifically psychosomatic, emotional, and behavioral concerns. The sample consisted of 565 elementary students ranging from 3rd to 5th Grade. The completed bullying behavior and victimization scales as well as

discussed their health symptoms and reported whether or not they had those symptoms. Lastly, teachers rated children on the Strengths and Difficulties Questionnaire (Goodman, 1997). The results suggested that victims of bullying and health complaints were significantly related when compared to bullies and uninvolved peers. Bullies and bully-victims also had a significant amount of health complaints than uninvolved peers, commensurate with Laukkanen et al. (2002). These findings suggested that externalizing problems were linked to health-damaging behaviors.

Additionally, Gini (2008) stated that bullies were reported by teachers to be more hyperactive than victims or uninvolved peers. Bullies and bully-victims, though, reported more sleep problems and feeling tense as well as bully-victims feeling tired and complaining of dizziness when compared to victims and uninvolved peers. Overall, bully-victims had more problems, particularly a higher risk for conduct problems and hyperactivity than bullies, victims, and uninvolved peers. Likewise, O'Brien and colleagues (2011) concluded that students involved in bullying who had sleep disorders more likely to have conduct disorder. Furthermore, conduct disorder and discipline referrals were associated with being involved in bullying, which was a method for identifying those engaged in bullying.

Sourander and colleagues (2007) and Turkel (2007) conducted studies in regard to the psychological effects of bullying. Sourander et al. had a total of 2,540 boys born in 1981, who participated in a longitudinal study. At the age of 8, bullying and victimization information was obtained. Later, when the boys were between the ages of 18 to 23, psychiatric disorders information was obtained through the army registry. It was found that bullying and being victimized by bullies in early childhood was predictive of psychiatric disorders in early adulthood. These findings were thought to have implications for early recognition of psychiatric concerns. It was suggested to evaluate children who demonstrate frequent bullying behavior for psychiatric problems.

Paralleling this study, Turkel (2007), demonstrated that bullies and their victims have potential psychiatric disorders because of bullying. It was concluded that causes of bullying are related to desire to control, revenge, envy, and emotional distress. Also, findings demonstrated a pattern that predicted primary physical violence in children that later becomes relational aggression in adolescents, and often appears in the form of sexual harassment in adulthood. Similarly, Ng and Tsang (2008) and Turkel found that gender relationships and gender differences exist in bullying and psychological components. For example, in a sample of 364 adolescents completed a bullying scale, a health questionnaire, and a psychosocial scale to assess bullying's effect on mental health. Ng and Tsang found that girls suffered from more mental health problems than males when bullying was involved. In relation to the psyche and bullying research conducted, other research has been performed in regard to the psychosocial aspect of bullying.

Psychosocial Wellness and Bullying Behavior

There has been a copious amount of literature on psychosocial areas (i.e., psychosocial adjustment, psychosocial health, psychosocial problems) and bullying (Gil, 2002; van der Wal, 2005). These studies have shown how bullying impacts psychosocial wellness. More specifically, how bullying produces negative psychosocial adjustment, which later develops into a poor overall psychosocial wellness.

Studies have focused on the prevalence of bullying behavior and psychosocial adjustment. Hilton et al. (2010) concluded that bullies and victims of bullying were likely to have psychological disorders. Similarly Nabuzoka, Ronning, and Handegard (2009) found that students who were victims of bullying (not bystanders or uninvolved) experienced significantly more internalizing behaviors. Additionally, victims of bullying, specifically boys, were more likely to report retaliation and vengeance than girls.

Psychosocial adjustment and bullying were previously examined by Gil (2002). Over 15,500 students participated. The study concluded that bullying was a prevailing and serious issue warranting interventions for bullying in relation to psychosocial adjustment. Additionally, psychosocial problems (e.g., depression, suicidal ideation, and delinquent behavior) have been studied. Haynie et al. (2001) found that bully-victims scored less favorably on a psychosocial measure because of external behaviors (i.e., problem behaviors, attitudes toward deviance, peer influences, depressive symptoms, school-related functioning). Similar findings by Klomek and colleagues (2011) suggested that victims who were bullied frequently and were identified as at-risk for suicide were more likely to develop depression and suicidal ideation. Both depression and suicidal ideation were noted to last for an extended period of time when bullying was involved.

Van der Wal (2005) expanded on Gil's (2002) study by focusing on the different types of bullying and psychosocial wellbeing. A total of 4,721 7th and 8th Grade students completed a questionnaire on bullying and being a victim of bullying. Results were: (1) depression and suicidal ideation were more common among reactive bullies (e.g., occurs when a victim reacts to being bullied by bullying either the same person or someone else), (2) suicidal ideation was slightly more common among proactive bullies (e.g., incurs that a child demonstrates bullying behavior without being the victim of a bully), and (3) delinquent behavior was common in both reactive and proactive bullies.

Ivarsson and colleagues' (2005) results concurred with van der Wal's (2005) conclusions. The findings suggested that bullies had externalizing symptoms such as delinquency and aggression, while victims and bullies experienced externalizing and internalizing symptoms and high levels of suicide. Additionally, victims were found to have psychiatric symptoms and to lack socialization. Another study expanded on the psychosocial and bullying relationship.

When Espelage and Swearer (2003) examined the correlation between psychosocial and bullying, four insights were offered for future research. The insights were: (1) illustration of the complexity of bullying and consensus that a definition for bullying is difficult, (2) bully-victim behaviors fall along a continuum (e.g., no longer classifying bullies, victims, or bully-victims in one static group, but as bullies, aggressive bullies, victims, bully-victims, bystanders, and normal controls), (3) relational aggression does not account for sex differences because bullying is on a continuum, and (4) a need to view bullying from a social-ecological perspective. This study identified how the social-ecological perspective impacts the psychosocial wellbeing of students when bullying is present. Hence, it is essential for researchers and school professionals to acknowledge and understand the complex ecological systems in which students reside, particularly when it pertains to bullying, and then construct an ecological system as a foundation for prevention and intervention programs to assist in psychosocial adjustment and health. The ecology has a great deal of influence on the psychosocial wellbeing of students, so does victimization.

Psychosocial Health and Victimization

Several studies have revealed the importance of students' psychosocial health. They have explored how bullying affects the psychosocial health of students who are victims of bullying (Delfabbro et al., 2006; Fekkes et al., 2006; Jankauskiene et al., 2008; Wilkins-Shurmer et al., 2003). Victims of bullying have been found to be vulnerable to mental health problems.

Farrow and Fox (2011) examined other psychosocial factors related to bullying. They explored emotional adjustment, restrained eating, and body dissatisfaction in 11- to 14-year-olds. There were 376 adolescents who participated. The adolescents completed self-report measures that focused on bullying experiences, eating behaviors, a body dissatisfaction scale, and a body mass index. There was a significant positive correlation among all types of bullying (i.e., verbal,

physical, social bullying) and emotional symptoms, restrained eating, and body dissatisfaction. Females were more likely to experience these variables than males due to reporting being victimized more frequently. Emotional symptoms were found to mediate the influence of verbal bullying when females had body dissatisfaction. Body dissatisfaction, restricted eating, and emotional adjustment have not been the only variables explored in studies which victims of bullying experience.

Emotional problems were also researched by Hsi-Sheng and Williams (2009). The sample consisted of 219 Taiwanese 7th graders. There were various measures employed. They concluded that instrumental and emotional aggression was positively correlated to bullying. Instrumental aggression was found to be linked to peer victimization. Additionally, psychological maladjustment, depression, anxiety, and loneliness were associated with victimization. Victimization of instrumental aggression and emotional aggression were correlated with aggressiveness, hostility, and Machiavellianism.

Another study investigated 1,284 secondary students who were victims of bullying (Delfabbro et al., 2006). Students completed self-report surveys about teacher and peer bullying, psychosocial adjustment, and personality. Students reported that peer victimization led students to display high levels of social alienation, poor psychological functioning, and poor self-esteem and self-image. Guerra and colleagues (2011) had similar findings, they suggested that the lack of self-esteem predicted victims of bullying, specifically victims who were vulnerable to low self-esteem, while bullies were found to have normal or higher self-esteem.

Similar to Delfabbro et al. (2006) and Guerra et al. (2011), Fekkes (2006) explored whether victimization of bullying preceded psychosomatic and psychosocial symptoms (i.e., depression, anxiety, bedwetting, headaches, sleeping problems, abdominal pain, poor appetite, and feelings of tension or tiredness), or whether these symptoms preceded victimization. Results

suggested that bullying victimization contributed to children developing new psychosomatic and psychosocial problems. However, it was noted that some psychosocial symptoms preceded bullying victimization. Children who were depressed or anxious and less assertive were perceived as easy targets by bullies because they were less likely to or less expected to stand up for themselves when victimized. This study shed light on the significance of how children's psychosocial health was adversely affected due to victimization of being bullied. Several studies concurred with Fekkes' work (Laukkanen et al., 2002; van der Wal, de Wit, & Hirsing, 2003). For example, bullying was found to influence poor perceived health and a low level of exercise, mental symptoms, and problems with social relationships (Laukkanen et al.). Additionally, suicidal ideation was found to be increased if children were victims of bullying (van der Wal et al.).

Suicidal ideation was explored in relation to bullying in another study (Skapinakis et al., 2011). The sample consisted of 5,614 adolescents ranging from 16- to 18- years old. An interview was utilized to assess suicidal ideation and psychiatric disorders, while a bullying questionnaire was employed to evaluate bullying involvement and identify bullies, victims, and bully-victims. They concluded that victims of bullying were more likely to express suicidal ideation. The correlation was even stronger for victims who have been bullied on a weekly basis regardless of the diagnosis of psychiatric disorders. Suicidal ideation for victims of bullying was higher for males than for females. Bullies were not found to have any type of suicidal ideation.

In contrast to Fekkes et al. (2006), Jankauskiene et al. (2008) considered a different research stance in regard to psychosocial health of students and bullying. The researchers aimed to determine the relationship of bullying behavior at school with indicators of psychosocial health such as self-esteem, happiness, relationships with family members and teachers, and the use of alcohol and smoking in association with social demographics such as age, gender, and

socioeconomic status. The participants were 6th, 8th, and 11th Grade students. The sample consisted of 1,162 students. Results suggested that bullies were most associated with tobacco smoking, lower self-esteem, and family teasing about appearance. Similarly, victims of bullying were most associated lower self-esteem, unhappiness, and family teasing about appearance.

Jankauskiene and colleagues along with other studies, such as Wilkins-Shurmer et al. (2003), found similar results about how bullying negatively affects psychosocial health. Wilkins-Shurmer et al. examined the frequency of being bullied. The results elicited astounding findings of 36% of boys and 38% of girls reported being bullied weekly. Also, 6% of boys and 5% of girls reported being victims of bullying more often than once per week, and the more a student was bullied the more negative the psychosocial effects were on the student. Bullying, thus, has a negative impact on students' psychosocial well-being (Wilkins-Shurmer et al.). To add, psychosocial health and victimization are strongly positively correlated as demonstrated by multiple studies (Delfabbro et al.; 2006, Fekkes et al., 2006; Jankauskiene et al., 2008; Wilkins-Shurmer et al., 2003).

Psychosocial Risk Factors and Causes

Psychosocial causes and risk factors in connection to bullying are significant to research because of the negative behaviors individuals display later in life. Studies explored psychosocial causes or risk factors that are associated with bullying (Ando, Asakura, & Simons-Morton, 2005; Carney, 2008; Craig & Pepler, 2003; Marini et al., 2006; Rusby et al., 2005). For instance, Laeheem and colleagues (2008) found that bullies are more likely to prefer action cartoons, which was considered a risk factor for identifying bullies.

Ando et al. (2008) expanded on Laeheem and colleagues (2008) examining risk factors, investigating Japanese adolescents to identify the psychosocial factors (e.g., deviant peer influence, less serious attitude in school, poor self-control of aggressiveness and impulsiveness)

associated with physical, verbal, and indirect bullying. The study found that all types of bullying related to engaging in delinquent peer pressure, less serious attitude in school, poor self-control of aggressiveness and impulsiveness, poor assertive efficacy against bullying, and euphemistic thinking. These were common psychosocial behaviors associated with the causes of bullying. They found that psychosocial factors substantially overlapped with the different types of bullying (i.e., physical, relational, verbal bullying). Hence, they argued that interventions could focus on modifiable common factors to prevent adolescent bullying.

In a longitudinal study, students who experienced frequent peer harassment in middle school had a greater problem behavior concurrently and prospectively in high school (Rusby et al., 2005). Thus, frequent harassment was associated with more aggression and antisocial behavior, having deviant peers, and the use cigarettes during middle school, when compared to those who experienced some or no harassment. Verbal harassment predicted antisocial behavior, alcohol consumption, and deviant peer association in high school, while physical harassment elicited later antisocial and aggressive behavior, deviant peer association, and multiple problem behavior. To add, van der Wal and colleagues (2003) elicited similar findings, offering information about how bullying others was directly related to delinquent behavior. This literature was commensurate other research that investigated psychosocial risk factors that differentiated direct and indirect bully-victims from bullies, victims, and bystanders found that indirect bully-victims and victims were similar in showing more severe internalizing problems and peer relational problems (Marini et al., 2006). Male adolescents involved in indirect bullying indicated a higher level of normative beliefs legitimizing antisocial behavior (Marini et al.).

Decreasing psychosocial risk factors and causes. Craig and Pepler's (2003) research, expanding on Laeheem et al. (2008), examined interventions for certain risk factors related to bullying and victimization. Craig and Pepler found that students with a long history of bullying

and/or victimization were more likely to be in a stable group with the most risk for problems and to require the most intense interventions. Fundamentally, the more a child was exposed to bullying and/or victimization, the more likely he/she had more social, emotional, psychological, educational, and physical problems, resulting in a need for more intense interventions. Another important outcome of this study was the discussion of how bullying and victimization occur in many diverse contexts, making interventions more complex.

An intervention for risk factors (for bullying and victimization) was demonstrated by Craig and Pepler (2003), while other bullying studies have explored the effects of exposure. Carney (2008) examined 6th Grade participants who completed a survey on a bullying scenario and the Impact of Event Scale (Horowitz, Wilner, & Alvarez, 1979), a self-report measurement on trauma. The most significant outcome was the increase in frequency of exposure to bullying in association to levels of trauma one experiences. Trauma was predicted through gender, bullying type (e.g., physical, verbal, relational bullying), and exposure to bullying. These results about bullying exposure were similar to Rusby et al. (2005), which examined concurrent and predictive relationships between peer harassment and problem behavior. Psychosocial risk factors and causes as well as interventions to deter these behaviors have been explored in a variety of different ways by several researchers (Ando et al., 2005; Carney, 2008; Craig & Pepler, 2003; Jankauskiene et al., 2008; Marini et al., 2006; Rusby et al., 2005); however, risk factors have been found to lead individuals to engage in criminal behaviors (Farrington, Ttofi, & Losel, 2011).

Bullying Associated with Criminal Behavior

Bullying has been associated with criminal behavior (Farrington et al., 2011; Jiang, Walsh, & Augimeri, 2011; Ragatz, Anderson, Fremouw, & Schwartz, 2011). Antisocial development was examined in relation to bullying by Bender and Losel (2011). Sixty-three

males participated in this study at ages 15 and 25. They completed a bully questionnaire to measure delinquency, violence, aggression, drug use, impulsivity, and psychopathy. The results suggested that self-reported violence, delinquency, and other antisocial outcomes were predicted by bullying. Physical bullying was a stronger predictor of delinquency and violence than verbal or relational bullying. Bullying was a substantial predictor for antisocial outcomes.

Antisocial behavior and involvement in bullying was also investigated (Renda, Vassallo, & Edwards, 2011). Bullying was found to be linked to later on antisocial behavior. Males were had a stronger prediction of developing antisocial behavior than females in the study. Additionally, they concluded that contact with the police and courts were predicted by both bullying and later antisocial behaviors.

In another study, Ragatz et al. (2011) explored psychological attributes and criminal behavior, contrasted by examining the different roles involved in bullying, being a bully, victim of bullying, bull-victim, or uninvolved children using a sample of 1,707 undergraduate students at a university. They completed a personality questionnaire and the Revised Olweus Bully/Victim Questionnaire (Olweus, 1996), an illegal behavior checklist, a psychopathy scale, a criminal thinking scale, and an aggression questionnaire. Bullies were found to have more aggression, criminal thinking, and psychopathy in comparison to victims of bullying and uninvolved peers. Additionally, bully-victims and bullies had more criminal infractions such as violent and property crimes. Bully-victims engaged and reported more criminal thinking, reactive aggression, and secondary psychopathy attributes in comparison to bullies. Bullies and bully-victims engaged in proactive aggression when compared to victims of bullying and uninvolved peers.

Another study by Sourander et al. (2006) reported that 22.2% of boys had at least one criminal offense other than minor traffic violations and that bullying others independently

predicted criminal offenses. Jiang and colleagues (2011) expanded on this by associating bullying behaviors in early childhood to committing criminal offenses. In a longitudinal study of 949 youth, a behavior checklist, an early risk assessment, criminal record data and their criminal record were examined between 12- and 18-years-old. They found that 9.2% of bullies were convicted of at least one official criminal conviction before they were 18-years-old. The majority of the criminal charges included assault, breaking and entering, theft, weapon, mischief, and drugs. Additionally, bullies and non-bullies committed their first crime at 14.4-years-old. Of the non-bullies in the study, 5.1% were found to have committed criminal offenses before 18-years-old. Overall, bullies were two times more likely to have committed one or more criminal convictions by 18-years-old than the non-bullies. These results were similar to Farrington and colleagues (2011), which suggested that bullying predicts criminal offenses. Additionally, criminal offenses and bullying behaviors were related to antisocial personality.

Sourander and colleagues (2011) agreed with the previous two studies. They reported that 51% of frequent male bullies were found to have committed at least one criminal offense by ages 23- and 26- years-old, while 38% of male participants who bullied sometimes committed at least one crime by the age of 23 and 26. Twenty-eight percent of male participants who were never involved in bullying committed at least one crime.

Coincidentally, another study posited that 29% of bullies commit crime (Luukkonen, Hakko, & Rasanen, 2011). Furthermore, in this same vein, Sourander et al. (2011) found that whether or not males were involved in repeated crimes was predicted by bullying. Additionally, parental education and psychopathology predicted the types of crimes committed by males as well as if one was a bully. Male victims of bullying were found to engage in criminal behavior and both violent and property offenses. Females did not have a significant correlation between bullying and committing crimes. Frequent bullies were predicted to have more than 5 crimes.

Another study focused specifically on victims of bullying and committing criminal offenses, specifically violent crimes (Luukkonen et al., 2011). Violent crimes were significantly associated with individuals involved in bullying. Repeated crimes were also significantly correlated to bullying. Victims started their criminal careers later than bullies, bully-victims, and uninvolved participants. Bullies were four times more likely to commit criminal offenses than victims of bullying. Victims of bullying who had affective disorders, anxiety disorders, substance-related disorders and Attention Deficit Hyperactivity Disorder and/or Oppositional Defiant Disorder, and psychotic disorders had approximately 50% of the variance that increased risks for committing criminal offenses. Bullying has also been found to infiltrate juvenile detention centers and/or jails.

Jail, Incarceration, and Offenders and Bullying

Bullying in jails and among offenders has been found (Biggam & Power, 1999; Grennan & Woodhams, 2007; Ireland, 2002; Killias & Rabasa, 1997; Kinlock, Battjes, & Gordon, 2004; Sourander et al., 2006; Viljoen, O'Neill, & Sidhu, 2005). Research in jails, individuals who have been incarcerated, and criminal offenders in connection to bullying were important because the majority of those incarcerated have experienced social and emotional problems. This area of research was significant because it shed light on bullying, crimes, and social and emotional problems individuals face while incarcerated.

Prevalence of bullying in jails and juvenile detention centers. Juvenile offenders have been researched in regard to bullying and depression and anxiety (Grennan & Woodhams, 2007), prevalence and types (Ireland, 2002; Viljoen, O'Neill, & Sidhu, 2005), interventions (Killias & Rabasa, 1997; Kinlock, Battjes, & Gordon, 2004; Biggam & Power, 1999), and predicting violent offenses (Sourander et al., 2006). Research has explored the involvement in bullying, psychological distress, and coping strategies with males in young offenders by using various

surveys (Grennan & Woodhams, 2007). More than 60% of prisoners were involved in bullying as either a victim or a bully, and prisoners who were bullies, victims, or bully-victims were significantly more depressed, developed stress, and experienced psychological distress and anxiety (Grennan & Woodhams; Viljeon et al., 2005).

Other studies also examined behaviors associated with bullying (Viljeon et al., 2005). It was found that bullies were more likely to have been previously incarcerated and affiliated with gangs, and bully-victims had the highest rates of previous abuse, peer victimization in the community, drug use, and suicide attempts while in being incarcerated. All involved in bullying reported high rates of bullying others in the community.

Similarly, Ireland (2002) concluded that the prevalence of bullying was higher with juvenile offenders than with young offenders. It was found that 37% of the adolescents identified themselves as bully-victims, 32% as bullies, 23% as not involved in any type of bullying, and 8% as victims, while females were more likely to report being involved with bullying in some capacity, usually as victims, and being bullied by sexual touching and comments than male participants (Viljeon et al., 2005). Juveniles reported a significant more amount of physical and verbal bullying behavior. Differences were found between young offenders and juvenile offenders in regard to prisoners who were likely to become victims (Ireland, 2002).

Offenders' behaviors related to bullying. Offenders' behaviors have been found to be related to bullying (Archer, Ireland, & Power, 2007; Farrington et al., 2011; Ireland & Archer, 2004; Ireland & Power, 2004; Ireland, Power, Bramhill, & Flowers, 2009). This specific population was significant to this study due to criminal offenses being examined. More specifically, crimes were examined to predict bullying. Additionally, offenders and bullying behaviors were significant because social and emotional problems have been found to be related.

Ireland and colleagues (2009) concluded that inmates have been found to have negative views towards victims and bullies as well as bullying. However, bullies have been perceived as strong and skilled; and bullies were respected and accepting of the consequences of their actions. Victims were found to be attention-seekers, which was the reasoning for why they were bullied. Bullies also perceived victims as deserving of being bullied. Aggression was approved in prison by inmates (assuming that aggression proved loyalty to a prisoner group).

Archer et al. (2007) expanded on earlier studies. They concluded that bullies were more likely to respond with direct verbal and physical aggression, indirect aggression, displaced verbal and physical aggression, and revenge plans and fantasies than non-bullies. Additionally, bullies were more likely to have lower fear and avoidance than non-bullies, but bullies displayed more impulsiveness. Victims of bullying engaged in more fear and avoidance, displaced physical aggression, and impulsiveness than non-victims of bullying. Females were more likely to engage in fear and avoidance than males, but males engaged in direct physical aggression more often than females. Males were also more likely to use revenge, indirect aggression, and direct verbal aggression than females. Similarly, Ireland and Archer (2004) found that bullies were associated to aggression, specifically physical and verbal aggression as well as anger and hostility. Bullies and bully-victims reported more frequent physical and verbal aggression than victims and uninvolved offenders. Bully-victims had higher levels of hostility and anger than bullies, victims, and uninvolved offenders.

Personality traits and personality disorders have been found to be significantly related to bullying and aggressive behaviors (Ireland & Archer, 2004; Ireland & Rowley, 2007; Turner & Ireland, 2011). For instance, Turner and Ireland (2011) also found that bullies' personalities were lower in agreeableness, conscientiousness, and openness to experience, but higher neuroticism were found to be associated with higher aggression levels and aggressive behaviors.

Bullies and bully-victims had higher instrumental aggression than victims of bullying.

Likewise, Ireland and Rowley suggested that offenders diagnosed with personality disorders were predicted to engage in aggressive behaviors even in secure and safe contexts were more likely to be bully-victims than bullies, victims, or uninvolved offenders.

Interventions in jails and juvenile detention centers. Studies have implemented interventions into juvenile facilities because of its prevalence. One study examined an intervention that focused on arresting those engaged in a violent lifestyle (Killias & Rabasa, 1997), while another intervention examined adolescent substance abuse treatment that would deter adult criminal careers (Kinlock et al., 2004). They found that adolescent violent behavior was correlated with the possession of weapons, violent victimization, former involvement in school bullying, and attitudes favorable to violent solutions (Killias & Rabasa, 1997). The other intervention found a relationship between the severity of the crime increasing and gender (e.g., males), engaging in risk taking behaviors (e.g., use of drugs other than alcohol and marijuana, having unprotected sex), bullying, being physically cruel to people, higher levels of deviant behavior among peers, and school problems (Kinlock et al., 2004).

Another study inspected an intervention to assist with psychological distress in a group of young, incarcerated offenders, whom had a difficult time adjusting to the prison regime (Biggam & Power, 1999). The findings suggested that there is a hierarchy of problem-solving deficits and psychological distress that were most pronounced in the inmates in suicidal supervision. The importance of the status of the individuals was related to their adjustment to prison, but interventions were promoted to assist in adjustment to prison life among vulnerable inmates. These interventions were essential in decreasing bullying among incarcerated adolescents.

Summary

A diverse number of bullying studies have been discussed in Chapter 2 (Ball et al., 2008; Dukes et al., 2010; Ireland, 2002; Olthof & Goossens, 2008; Swearer et al., 2008; Turkel, 2007). Specific demographic variables (i.e., gender, age, race, prevalence of bullying, social status) were included in this chapter because each of these were control variables that were indicated by the adolescent participants on a demographic form. These variables were significant because the literature has not been clear on certain demographic variables that influence whether bullying occurs, who becomes a bully or victim, and the specific type of bullying used (Carlyle & Steinman, 2007; Guerra et al., 2011; Hsi-Sheng et al., 2007; Langdon & Preble, 2008; Nation et al., 2008; Olthof & Goossens, 2008; Perren & Alsaker, 2006; Thornberg & Knutsen, 2011). Therefore, demographic variables were controlled for to examine the relationship of bullying and social and emotional problems beyond demographic variables. Likewise, academic achievement and language have been discussed because vocabulary knowledge or verbal ability was a control variable for this study to insure that bullying and social and emotional problems are not being influenced by vocabulary knowledge. Bullies, victims of bullying, and bully-victims were assessed in this study because each group has different experiences at home and school and biological components contribute to whether an adolescent was a bully, victim, or bully-victim (Ball et al., 2008; Bruyn et al., 2010; Nation et al., 2008; Totura et al., 2009).

Previous research has discussed the physical, relational, and verbal bullying and who was more likely to engage in the different types of bullying (Dukes et al., 2010; Sheithauer et al., 2006). The operational definition of bullying includes all three types. The three types of bullying were important to this current study because there were varying gender differences within the different types of bullying. Thus, due to gender being a covariate the different types

of bullying were significant. Additionally, physical, verbal, and relational bullying research was reviewed because each were methods of bullying that were explored by the bully questionnaire.

Coping mechanisms were included because children who were involved in bullying had poor psychological adjustment and coping skills as well as there being specific interventions that were more effective than others to decrease bullying (Cowie, 2000; Hampel et al., 2009; Tenebaum et al., 2011). This was significant to this study because it has been found that adolescents who were involved in bullying can have poor coping mechanisms and few to no interventions assist in alleviating bullying. Thus, adolescents who lack coping skills were more likely to have social and emotional problems. Because social and emotional problems were a variable in this study the method(s) in which adolescent cope influenced their involvement in bullying.

Different behaviors, psychological problems, and social and emotional problems have been found to be related to bullying (Alikasifoglu et al., 2007; Fekkes et al., 2006; Gil, 2002; Liang et al., 2007; Ng & Tsang, 2008; Rusby et al., 2005; Swearer, et al., 2001; Townsend et al., 2008; Turkel, 2007), which were evaluated in this study by the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) and the Revised Olweus Bully/Victim Questionnaire (ROBVQ; Olweus, 1996). Social and emotional problems included psychiatric diagnoses such as ADHD, ODD, ACD, anxiety, depression, psychosomatic disorders, suicidal ideations/behaviors, and social isolation. The SDQ specifically examined overall social and emotional problems, conduct problems, emotional symptoms, hyperactivity, peer problems, prosocial behaviors, and the impact these problems may have on an adolescent's life all over which were variables that were examined in this study. This was consistent with the literature due to the literature finding that bullying is related to such behaviors. As stated previously, this research was related to this current study because of the focus on social and emotional problems

and bullying. The ROBVQ measures involvement in bullying as a victim, bully, or bully-victim. This was significant because the research questions specifically examine the category of bullying involvement. Psychosocial risk factors and causes were significant to this current study because of the literature support that these causes and factors influence bullying. Criminal behavior, juvenile detention facilities, jail, prisons, criminal offenders and bullying were correlated (Grennan & Woodham, 2007; Ireland, 2002; Jiang et al., 2011; Ragatz et al., 2001; Viljoen et al., 2005). Criminal offenses were examined in this study to explore if they were moderators of adolescents with social and emotional problems and bullying as well as what types of crimes were committed by adolescents with social and emotional problems who were identified as bullies, victims, or bully-victims as an exploration question.

Criminal behavior and bullying was important to this study because these were two variables that were being examined as a secondary question of interest. One of the study's exploration questions aimed to predict if being a bully, victim, or bully-victim with social and emotional problems were moderated by criminal offenses. Additionally, misdemeanor, violent, and property crimes were being examined and categorized based on adolescents' responses as well as their indication of being bullies, victims, or bully-victims. Research of incarcerated individuals, crimes committed, and criminal offenders in relation to bullying were important to this study because criminal offenses were being used as an exploratory research question. More specifically, bullies, victims, and bully-victims with social and emotional problems who have committed crimes and the type of crimes are variables in this study.

In Chapter 3, there will be descriptions of the specific methodology employed in this study. The chapter revisits the research questions and operationalized definitions. There is discussion about the participants, instruments, procedures, and specific data analyses conducted.

CHAPTER 3

METHODOLOGY

Research Questions

The main research question was: (1) Is there a relationship between adolescents with social and emotional problems as measured by the SDQ (Goodman, 1997) and adolescents' self-disclosed status as a bully, a victim, or bully-victim as measured by ROBVQ (Olweus, 1996) beyond demographic variables (i.e., age, gender, social status, vocabulary knowledge)? The two exploration or secondary questions of interest were: (1) Are crimes committed a moderator variable between involvement in bullying scores and social and emotional problems scores? (2) What types of crimes are most likely committed (i.e., misdemeanor crime, property crime, violent crime) by adolescents characterized with social and emotional problems who have higher bullying scores?

Operationalization of Concepts

The methodology research design was quantitative and qualitative. The Revised Olweus Bully/Victim Questionnaire (ROBVQ; Olweus, 1996) and Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), instruments, were used with a randomized sample. A bully was defined as the aggressor, while the victim was the one being bullied and is the less powerful person. Bullies, victims, and bully-victims were determined by the score they received on the (ROBVQ; Olweus, 1996). The ROBVQ score was used for calculating adolescents' involvement in bullying as either a bully or victim of bullying. Social and emotional problems were operationally defined as one who has emotional symptoms, conduct problems, hyperactivity, peer problems, and/or poor prosocial behaviors, which are all categories on the

SDQ (Goodman, 1997). This was determined by the score an adolescent received on the SDQ in each category as well as the overall score. The Vocabulary for Achievement Test (VFA; Richeck, 2005) was employed to assess adolescents' vocabulary knowledge or the amount of vocabulary words known, which was operationalized by the number of correct responses on the test. The setting included middle school and high school adolescents from a state in the southeast. Demographic information was collected to assist in data analyses examining gender, age, race, and social status. This information was indicated by the adolescents when they completed the demographic page.

Participants

Three hundred seventy-seven adolescents, who attended middle or high schools located in the Southeastern US, participated in this study. The target number of adolescents was determined by a statistical power equation, $n \geq [(Z_{\alpha}/2) (*\sigma)] / E^2$ (where Z was the portion of the bell curve which signified the critical value needed, σ signified the estimate population *SD*, and E signified the sampling error). Schools were randomly selected to assist in ensuring that this sample could be generalized to a larger population as well as assisted in an equal representation of adolescents and assisted in meeting the criteria for using regression as a data analysis.

Randomized sampling of the schools was conducted by a software program called Research Randomizer (Urbaniak & Plous, 2012). The participants ranged between the ages of 11 to 18 (i.e., 6 to 12 Grade). The average age was 14.63 years. There were 155 males and 222 females in this study. Racial background consisted of adolescents that were Caucasian, African American, Hispanic American, and/or Asian American. The demographic data collected included grade level, age, whether they have committed a crime (i.e., if so, the type), duration of time in a detention facility (if applicable), if they have social and emotional problems, and if they were involved in bullying. The reason why this particular sample was selected was due to

bullying occurring most frequently between the ages of 11 and 18. Thus, adults were not selected to participate in this study nor children younger than 11- and older than 18-years of age due to the complexity of the social and emotional questions for the younger ages and the bullying survey being designed for the specific age range of 12- to 18-years old. Additionally, bullying has been found across gender and race. Lastly, this sample was most vulnerable to committing crimes and being convicted of crimes when compared to younger children. See Table 3.1 for descriptive statistics of gender, age, and race.

There were two school districts that participated in the study. One district was considered to be an urban school setting and the other was considered rural school setting, according to information found on the department of education website (in the state in which the schools are located). According to statistics on the website, the urban school district consisted of 236 ($n = 9,829$ of total students). Adolescents receiving free and reduced lunch included was 236 ($n = 5,115$). In the rural school district, there were 140 students ($n = 2,784$). Adolescents receiving free and reduced lunch included 140 ($n = 709$). See Table 3.1 for descriptive statistics of adolescents.

Instruments

Revised Olweus Bully/Victim Questionnaire

The Revised Olweus Bully/Victim Questionnaire (ROBVQ; Olweus, 1996), a self-report rating scale, was utilized in this study. See Appendix A for approval to use questionnaire. ROBVQ has been used in studies to assess the nature and extent of bullying and victimization as well as the contexts of where bullying occurs, the different types of bullying (e.g., physical, verbal, relational), demographic comparisons, and outcomes of bullying (Griffin & Gross, 2004; Kyriakides, Kaloyirou, & Lindsay, 2006; Olweus, 2008; Solberg & Olweus, 2003; Solberg, Olweus, & Endresen, 2007; Wang, Iannotti, & Nansel, 2009).

Table 3.1
Descriptive Statistics of Gender, Age, and Race (N = 377)

	<i>M</i>	<i>SD</i>	Percentage	Range	<i>n</i>
Female			58.6%		221
Male			41.4%		156
Age	14.62	2.20		11 - 18	
Caucasian			46.4%		175
African American			45.9%		173
Hispanic American			1.6%		6
Asian American			0.3%		1
Native American			1.6%		6
Biracial			4.0%		15
Middle Eastern			0.3%		1

The ROBVQ (Olweus, 1996) has four versions, so the researcher determined which version was best suited for the adolescents. The different versions were for Grades 3 to 5 (English and Spanish versions) entitled the “Junior Version” and Grades 6 to 12 (English and Spanish versions) called “Senior Version.” The Senior Version – English was utilized for this study and offered a 39-question survey, self-report measure of experiences with different types of bullying (e.g., physical, verbal, relational, racial, sexual, etc.), forms of bullying other students, places bullying occurs, attitudes of bullying, and how the adolescents are aware, informed, and respond to bullying. To aid students in completing the ROBVQ, a detailed definition of bullying was given at the beginning of the administration to assist adolescents in assessing one specific definition of bullying. The ROBVQ has three different sections (i.e., being bullied by other students, being the bullying, school-specific questions). The first section, “Being Bullied by Other Students,” has 23-items. This section was comprised of a Likert-type scale. Because of copyright laws, and the author’s request, no examples of this questionnaire are given in this document.

The second section, “Bullying Other Students,” had 16-items. This section was comprised of a Likert-type scale. Due to copyright laws, and the author’s request, test items cannot be exhibited.

The third section, “School-Specific Questions,” included 8-items. This section was comprised of questions that ask about places in the school where a student bullies or is bullied, how prevalent it is in the school, how well teachers intervene with bullying, and others questions that address bullying in the school. It was also scored on a Likert-type scale. Because of copyright laws, and the author’s request, no examples of this questionnaire are printed in this document.

Studies conducted on the ROBVQ indicated that the psychometric data have implications for assisting professionals in identifying students involved in bullying, contexts of where bullying occurs, and the effects bullying has on those involved as well as the measure having a variety of uses in research, interventions, and clinical settings. The ROBVQ has been typically used for Grades 3 through 12 with students who have at least one year of reading instruction and above. Previous studies’ data have been collected on 20,000 participants. The internal consistency for the ROBVQ with 20,000 participants found $\alpha = .80$ or higher on the sections of victimization and bullying others (Olweus, 1994). The ROBVQ has been validated by using construct validity when examining the dimensions of “being victimized” and “bullying others” with the degree of victimization and the degree of bullying others. The findings suggested that there was a strong linear relationship between degree of being victimized and depression, poor self-esteem, and peer rejection. For instance, peer rejection or perceived social segregation was found $\alpha = .76$, which was associated to students’ degree of social rejection that was explored by 4-items of the ROBVQ (Alsaker, 2000; Alsaker & Flammer, 1996; Solberg & Olweus, 2003). Six-items on the ROBVQ that examined the degree of students’ negative self-perceptions were

found to be related to self-esteem ($\alpha = .84$; Alsaker & Olweus, 1986; Solmberg & Olweus). Lastly, the ROBVQ has 7-items pertaining to the degree of sadness and worthlessness that were found to be related to depressive tendencies ($\alpha = .78$; Alsaker, Dundas, & Olweus, 1991; Solmberg & Olweus).

Additionally, the results demonstrated that there was a stronger correlation between antisocial behavior such as aggressive behavior and degree of bullying others (Bendixen & Olweus, 1999; Kyriakides, Kaloyirou, & Lindsay, 2006; Olweus, 2005). Antisocial behavior (i.e., skipping school for a whole day, graffiti on the school building, not paying for things, break others' belongings or school property, break into a building) was found to be measured by 17-items, which was found to have a reliability of Cronbach's alpha of .84 (Bendixen & Olweus, 1999). Aggression was measured by 9-items on the ROBVQ finding $\alpha = .84$ (Solberg & Olweus, 2003).

Furthermore, other research has supported the validity of the ROBVQ (Olweus, 1978; Olweus, 1977; Olweus 1991; Olweus, 1994). Approximately 3 to 5 items on the self-report ratings of being bullied and bullying others sections of the ROBVQ were correlated ($r = .40$ to $.60$) with peer ratings (Olweus 1978; Perry, Kusel, & Perry, 1988). Additionally, after implementation of the Olweus Prevention Program students completed the ROBVQ on several different occasions to determine if there was a decrease of bullying in schools in comparison to those who did not have the intervention. Olweus (1999) concluded that social climate of classrooms was enhanced, classroom management was improved, fewer behavioral referrals were given, and there were more positive attitudes toward schoolwork, school life, and the school building. The ROBVQ has demonstrated that it measures bullying because empirical relationships have been established between bullying and other variables (i.e., hyperactivity, antisocial behavior, depression, aggression, anxiety, social relationships, behavioral referrals).

The ROBVQ has also been found to identify the effects of bullying. Lastly, multiple studies have employed this questionnaire that elicited similar results between bullying and various variables such as definitions of bullying and intervention effectiveness, coping mechanisms, and psychological attributes and criminal behavior (Bowllan, 2011; Coyle, 2008; Edmondson & Hoover, 2008; Ragatz et al., 2011).

This study reported the ROBVQ Total Bully score, ROBVQ Total Victim score, and the ROBVQ Total Bully-Victim score. The Total ROBVQ score was not included in this study because this score includes items that were not focused on bullies, victims, and bully-victims. Taken together, the study included the ROBVQ bully score, the ROBVQ victim score and the ROBVQ bully-victim score that represents a composite of bully and victim scores.

Strengths and Difficulties Questionnaire

Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) has been employed by multiple studies (Goodman, Ford, Simmons, Gatward, & Meltzer, 2003; Goodman, Meltzer, & Bailey, 2003; Goodman & Scott, 1999; Mathai, Andersen, & Bourne, 2004; Muris, & Maas, 2004; Muris, Meesters, Eijkelenboom, & Vincken, 2004; van Widenfelt, Goehart, Treggers, & Goodman, 2003; Verlag, 2000). Approval to use this instrument is in Appendix B. The SDQ is a brief social and emotional behavioral screening questionnaire used for children. Specifically, this measure provides information on emotional symptoms, conduct problems, hyperactivity, peer problems, and prosocial behaviors. This instrument can be completed through self-report, teacher, or parent ratings. The self-report SDQ can only be completed by children between the ages of 11- to 17-years-old. There are three different versions. The single-sided version only has 25-items that examine five categories (i.e., emotional symptoms, conduct problems, hyperactivity, peer problems, prosocial) and the overall total, Total Difficulties. The second version was a follow-up version, which is employed after an intervention has been implemented

to examine the effectiveness of the intervention. The last self-report version is a double-sided version with impact supplement SDQ, which was administered in this study. The reason why this version was selected was because the impact supplement indicated the severity of an adolescent's problems in the five categories. There are a total of 30 items on the version selected for this study. Twenty-five items are divided into five scales, Emotional Symptoms Scale, Conduct Problems Scale, Hyperactivity Scale, Peer Problems Scale, and Prosocial Scale. A maximum score of 10 for each of the subscales indicated the magnitude of problems in each area. The higher the scores on the subscales, except for the Prosocial Scale, reflected higher problem areas. Because of copyright laws, and the author's request, no examples of this questionnaire are given in this document. Additionally, there are 5 items that examine the duration and intensity of behaviors and feelings. Items were not exhibited because of copyright laws. The Total Difficulties score has a maximum of 40, which was calculated by summing the scores of the following subscales Emotional Symptoms Scale, Conduct Problems Scale, Hyperactivity Scale, and Peer Problems Scale. If a score was missing from a subscale the total was pro-rated. However, if more than one answer was omitted both the subscale and the Total Difficulties score were considered missing. According to Goodman (2001), 80% of the adolescents needed to fall within the normal range, 10% in the borderline range, and 10% in the abnormal or clinical range. Adolescents were categorized as clinical or abnormal if they scored below the 10th percentile, and adolescents between the 11th and 20th percentile were categorized in the borderline range. Those in the 80th percentile were categorized in the normal range.

Reliability and validity of the SDQ has been supported by studies that attend to behavioral, emotional, and social problems such as depression, hyperactivity, anxiety, impulsivity, and peer relationships. Taken together, findings have indicated that the reliability and validity of this instrument was good. The test-retest reliability of the SDQ has a Cronbach's

alpha 0.82 for the overall SDQ score, Total Difficulties. The internal reliability for each subscale had $\alpha = 0.77$ for Conduct Problems, $\alpha = 0.75$ for Emotional Symptoms, $\alpha = 0.68$ for Peer Problems, $\alpha = 0.65$ for Prosocial Behavior, and $\alpha = 0.65$ for Hyperactivity. Additionally, the SDQ has been found to have significant correlations with the other behavior measures, Child Behaviour Checklist ($r = 0.7$), Child Depression Inventory ($r = 0.73$), Revised Children's Manifest Anxiety Scale ($r = 0.72$), and ADHD Questionnaire ($r = 0.67$; Muris, Meesters, & van den Berg, 2003), which demonstrates concurrent validity due to the SDQ demonstrating significant correlations with other behavioral instruments.

This study used one of the subscale scores (i.e., Emotional Symptoms Scale, Conduct Problems Scale, Hyperactivity Scale, Peer Problems Scale, Prosocial Scale). The Total Difficulties score was not used because the interest of this study is on the relationship between specific problems and bullying status. Furthermore, it is noted that the previous literature also concentrates on specific behaviors and psychosocial problems and not the overall score. (i.e., depression, hyperactivity, aggression, social isolation, peer problems, anxiety, etc.) that adolescents engage in (Due et al., 2009; Frick, 2003; Gil, 2002; Grennan & Woodham, 2007; Laukkanen et al., 2002; Luukkonen et al., 2011; van der Wal, 2005).

Vocabulary for Achievement Test

The Vocabulary for Achievement Test (VFA; Richeck, 2005) is a verbal ability measure for students in Grades 6 to 12. Validity has been established by comparing VFA scores with standardized tests such as state, ACT, and SAT tests. Additionally, the utility of the measure was supported by assessments of word frequency in school and test-based materials. These assessments indicated that 80% of the words were found in various academic subject areas and on SAT word lists. The VFA consists of 100 words. Twenty-five out of 100 words were selected from the VFA to be used in this study. Words were randomly selected from a computer-

based program, Research Randomizer (randomizer.org). Scoring for the measure was based on the number correct. Specifically, correct items were given a value of one and were summed across words. Thus, scores ranged from 0 – 25. The VFA has been implemented in various states and employed as an evaluation tool for interventions, which has been found to increase vocabulary among students in Grades 6 to 12 (Houghton Mifflin Harcourt, 2004). Items of this measure could not be demonstrated because of copyright laws. See Appendix C for letter of approval.

Demographics

A demographic page was added to gather supplemental data such as race, age, gender, grades, etc. about the adolescents who will be participating in this study. This was important for this study to answer the research questions and to have a better understanding of the adolescents who participated in this study. See Table 3.2 for the Demographics page.

Procedures

This study was submitted to The University of Alabama’s Institutional Review Board (IRB) for approval (see Appendix D for a copy of the approval letter). Following the institutional IRB approval all of the included school systems were asked to approve the study. Only upon obtaining system-wide approval were principals at the various high schools and middle schools contacted to obtain consent for conducting this study in that particular school site.

Data collection was not conducted until the adolescents were in school for at least one month due to the requirement that the ROBVQ be administered to adolescents after long breaks or holiday periods. The researcher explained the current study to the adolescents during either an elective class or Physical Education (P.E.). After the study was explained and any questions the adolescents had were answered, informed consent was sent home with the adolescents for parents or guardians to sign allowing adolescents to participate in the current study. See Appendix D for

the informed consent. A total of 1,500 informed consents were sent home. These informed consents were returned to the researcher the following day at school or on the specified date that was agreed upon by the principal and the investigator. Of the informed consents distributed, 25% were returned. The informed consents returned across the schools ranged from 8% to 41.5%. Anonymity was insured by only having names of adolescents on the informed consent and assent forms. See Appendix D for assent form. The signed informed consents and assents were placed in a confidential folder at the school then locked in a file cabinet upon returning from the school site. Once permission was received from parents, the researcher took students to an empty classroom to administer the questionnaires. The assent form was read to adolescents to insure comprehension. Once signed, the assent forms were collected and the participating adolescents were given the questionnaires. Those who chose not to participate had the option of writing on blank paper provided by the researcher, read a book, or return to class. Only one student chose not to participate.

The ROBVQ, SDQ, and VFA were administered and completed via paper and pencil format. Administration of the questionnaires took approximately 30 to 60 minutes. Specifically, the VFA took 5 to 10 minutes, the SDQ took approximately 10 minutes, and the ROBVQ took about 10 to 40 minutes. In addition, the demographic page took approximately 2 minutes to fill out. Each adolescent was given the questionnaire as a group and all participants took the measures in a pre-specified order: demographic page, VFA, SDQ, and ROBVQ. Adolescents voluntarily completed the demographic page, VFA, SDQ, and ROBVQ, while the researcher was present. To insure compliance and honesty while completing the questionnaires the researcher made a statement to the adolescents' that their answers were confidential and anonymous. The bullying definition was verbally read by the researcher along with the directions of the ROBVQ and the SDQ. Also, the researcher orally read each item on the questionnaires as well as

answered any questions there was about an item. The researcher walked around the room to answer questions that arose during the completion of the questionnaires. Additionally, the researcher paused between items to observe if any adolescents were becoming distressed during the completion of the questionnaires. Once an adolescent finished the questionnaires, he/she turned it into the researcher. At this point the questionnaires were given an identification number to assist in data management and analysis. The questionnaires were placed in a confidential folder, separate from parental informed consent and assent forms. All study materials were kept in a locked file cabinet in a locked office to ensure confidentiality. Once all the questionnaires were collected at the different middle and high schools they were computed and analyzed as well as coded.

In order to determine the location of the adolescent in their social space, participant self-descriptions of their social group were coded using Brown's (1990) theoretical framework. In this model two dimensions are used to array the individual groups. These dimensions are peer culture and adult orientation. For example, high on both dimensions would include groups such as "popular" and "jocks". By contrast, "druggies" and "Goths" would be low on both dimensions. The other quadrants in the model would identify nerds and brains as high on the adult but low on the peer dimensions whereas class clowns, and performers, would be defined as higher on the peer and lower on the adult dimension. Effect coding was 0 and 1 was used for each social status quadrant for statistical purposes in order for adolescents to be placed in one of quadrants. Note that at adolescents who indicated "I don't know" were treated as missing values.

Likewise, self-reports of committing a crime was coded as committing a crime or not committing a crime, which was dummy coded as 1 and 0. The number 0 signified adolescents who did not commit a crime, while 1 represented adolescents who did commit a crime. Also, the

number of categories for the types of crimes committed were reduced to 3 categories (i.e., misdemeanor, property, violent) instead of 8 categories (i.e., misdemeanor, property, violent, misdemeanor and property, misdemeanor and violent, property and violent, all crimes). These three crime categories were dummy coded. Specifically, 0 and 1 were used.

Additionally, specific qualitative methods were employed to examine the second exploration question, what specific types of crimes were most likely committed (i.e., misdemeanor crime, property crime, violent crime) by adolescents with traits of social and emotional problems who have higher bullying involvement scores. The different criminal offenses were counted and coded to examine specific types of crimes that are categorized under misdemeanor (e.g., traffic violations, misdemeanor assault, domestic violence, petty theft of merchandise less than \$400, shop lifting, driving under the influence, possession of marijuana, possession of alcohol if under the legal age limit, misdemeanor arson, trespassing) and felony property crimes (e.g., burglary, larceny-theft, motor vehicle, theft, arson) or felony violent crimes (e.g., murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault).

The types of coding that were employed included open, axial, and selective coding. Additionally, peer debriefing or individuals who were familiar with criminal offense types and qualitative research were employed to ensure that the crimes committed were coded appropriately. This increased the validity of the qualitative portion of this study because other expert researchers either concurred or rejected the subcategories and classification of the crimes committed under the categories of misdemeanor, felony property, and felony violent.

Data Analysis

The ROBVQ measure was scored using the Bully/Victim Questionnaire-Statistics (BVQ-STAT) computer scoring program. Similarly, the SDQ Likert-type scale was computed by an

online computer scoring program (<http://www.sdqscore.org/>) created by Goodman (2010). These scores were then combined with the other variables in a single data file for statistical analysis.

According to the research questions, subscales (e.g., Emotional Symptoms Scale, Conduct Problems Scale, Hyperactivity Scale, Peer Problems Scale, Prosocial Behavior Scale) on the SDQ were independent variables. The dependent variables included the ROBVQ Total Bully score, ROBVQ Total Victim score, and ROBVQ Total Bully-Victim score, and as control variables: gender, age, social status, and criminal offenses. Furthermore, the VFA was used as a control variable to assess whether vocabulary knowledge or verbal skills could account for any obtained relationships between the involvement in bullying and social and emotional problems.

In order to answer the main research question: Is there a relationship between adolescents with social and emotional problems as measured by the SDQ and adolescents' self- disclosed status as a bully, a victim, or bully-victim as measured by ROBVQ beyond demographic variables (i.e., age, gender, social status, vocabulary knowledge) a hierachal regression approach was employed. Specifically, in step one of the hierarchy, demographic information (i.e., age, gender, social status, vocabulary knowledge) was entered. In the second step of the analysis the SDQ scores were entered as a set. Using this approach, the presence or absence of a relationship between ROBVQ and SDQ scores while controlling for the set of demographic variables can be directly assessed. Finally, using the statistical tests associated with the beta weights of the SDQ scores the specific social and emotional problems associated with ROBVQ defined bullying/victims can be identified.

Table 3.2
Demographic Page

To put your answers into context, I'd like to gather some background information from you. This information will be kept private and will only be used for research purposes. Do not put your name on this to ensure secrecy.						
Gender (Circle one): female male						
Age: _____						
Grade (Circle only your current grade):						
6	7	8	9	10	11	12
Race: (Check One)		<input type="checkbox"/> White/Caucasian <input type="checkbox"/> Latino/Hispanic <input type="checkbox"/> Native American <input type="checkbox"/> Eastern European <input type="checkbox"/> Biracial (Please Specify):		<input type="checkbox"/> Black/African American <input type="checkbox"/> Asian American <input type="checkbox"/> Middle Eastern <input type="checkbox"/> Asian <input type="checkbox"/> Other: _____		
How well do you do in your schoolwork? On your last report card, if you think of all of your subjects, what did you get (Check one)?		<input type="checkbox"/> Mostly A's <input type="checkbox"/> Mostly B's <input type="checkbox"/> Mostly C's <input type="checkbox"/> Mostly D's		<input type="checkbox"/> A's and B's <input type="checkbox"/> B's and C's <input type="checkbox"/> C's and D's <input type="checkbox"/> D's and lower		
How do your peers perceive you? For example, as a jock, as a nerd, as a skater, as an outcast, etc. Please specify:						
Have you ever committed a crime (Check one)?						
<input type="checkbox"/> Yes <input type="checkbox"/> No						
If yes to the previous question, what type of crime did you commit:		<input type="checkbox"/> Misdemeanor <input type="checkbox"/> Violent <input type="checkbox"/> Property Describe: _____				
Time spent in juvenile detention facility (if appropriate):						

A moderated regression analysis was conducted in order to answer the exploratory question, is criminal offense a moderator variable between being a bully, victim, or bully-victim scores and social and emotional problems scores? Moderated regression was selected to

determine a relationship between the independent and dependent variables to indicate if these variables were moderated or influenced by another variable. Therefore, exploring the degree to which the relationships of ROBVQ bully, victim of bullying, or bully-victim scores and SDQ social and emotional problems scores vary by criminal offense committed (while using covariates, specifically age, gender, vocabulary knowledge, and social status). This was accomplished by adding a third step in the hierarchical regression to include cross-products formed by crossing the crime variable and the SDQ subscale scores (e.g., Crime*Emotional Symptoms, Crime*Conduct Problems, Crime*Hyperactivity, Crime*Peer Problems, and Crime*Prosocial). Variables that were not significant were excluded and analyses were conducted again for all three steps if main effects and/or cross products were found to be significant. This analysis was employed to assist in creating a model between crime, being a bully, victim, or bully-victim scores, and social and emotional problems scores.

Summary

Chapter 3 was a detailed account of how the research study was conducted. It concentrated on the definitions of social and emotional problems, vocabulary knowledge, and bullies, victims, and bully-victims. Additionally, it examined the participants and their demographic information. The instruments were depicted and described to elicit how scores were obtained and the validity and reliability of them. Procedures were then discussed to assist in precise replication of the study. Lastly, the various data analyses that were used in this study were discussed. In the next chapter, the results will be presented and each research question will be answered.

CHAPTER 4

RESULTS

Introduction

The current study examined the relationship between social and emotional problems scores and ROBVQ bullies, victims, and bully-victims scores, while controlling for participant characteristics and verbal knowledge. In addition, two exploratory research questions are assessed. The first question focuses on crime as a moderator of bullying scores and social and emotional problems scores relationships. The second question reports on which crimes were associated with bullies, victims, and/or bully-victims and social and emotional problems scores. Three hundred seventy-seven adolescents between the ages of 11 and 18 participated in this study. Participants completed three different measures (i.e., SDQ, ROBVQ, VFA) and demographic information.

Descriptive Statistics

Demographic Statistics

Descriptive statistics were computed on all demographic information as well as for all questionnaires involved in this study. There were a total of 377 adolescents who participated in this study. The participants ranged between the ages of 11 to 18 (i.e., 6th to 12th Grade). Table 3.1 represents the descriptive statistics of gender, age, and race.

Adolescents reported various categories of social status. There was a broad distribution of categories, meaning no one category was overly represented in this sample. See Table 4.1 for descriptive statistics of social status.

Given this broad range of social statuses these categories were collapsed using Brown's (1990) two factor model of adolescent peer status. This process resulted in placing the social statuses of the adolescents into four quadrants or groups. Quadrant 1 included: smart or nerd, gamers, normal, and innocent, quiet, and preppy, while the Quadrant 2 had adolescents who endorsed themselves as popular, jocks, social/outgoing, and cool. Outcasts or odd, devil or gothic, thug or gangster, skaters or rock stars, druggies, and rednecks were in Quadrant 3, and class clowns, dancers or cheerleaders, and mean were in the Quadrant 4. Adolescents who indicated that they did not know ($N = 10$) were not included in any of the quadrants. See Table 4.2 for descriptive statistics of the quadrants.

Out of the 377 adolescents in the study, 57 or 15.2% indicated that they had committed a crime. Out of those 57 adolescents, 33 or 8.8% stated that they committed a misdemeanor, 6 or 1.6% indicated they committed a violent crime, and 9 or 2.4% committed property crimes. Additionally, three adolescents committed misdemeanor, property, and violent crimes, while one adolescent stated he/she committed a misdemeanor and violent crime and three adolescents recorded themselves as committing both misdemeanor and property crimes. Two adolescents indicated that they had committed both violent and property crimes.

Of the adolescents, 363 recorded that they had never spent time in a juvenile detention facility. Of the adolescents with time in a facility, five spent one day in a juvenile detention facility, one spent 3 days, one spent 18 days, one spent 30 days, one spent 45 days, one spent 60 days, one spent 91 days, one spent 365 days, one spent 395 days, and one spent 435 days in a juvenile detention facility. The average time spent in a juvenile detention facility by the adolescents who have been in a facility was 3.84 days.

Due to the broad number of different types of crimes committed, the crimes were collapsed into three categories. These three categories were misdemeanor, property, and violent

crimes. If more than one crime was committed the investigator used the more severe crime for that individual. For instance, those who committed misdemeanor and violent crimes were coded as violent, while misdemeanor and property crimes were coded as property. Those who committed all crimes and property and violent crimes were coded as violent. For the purposes of the analysis these categories were dummy coded into three variables.

Table 4.1

Descriptive Statistics of Social Status (N = 377)

Social Status	Percentage	n
Jocks	19.6%	74
Popular	4.2%	16
Odd or outcast	12.5%	47
Class Clowns	4.5%	17
Cool	6.4%	24
Outgoing or social	11.7%	44
Skater or rock star	2.4%	9
Nerd or smart	11.9%	45
Druggies	0.3%	1
Cheerleaders or dancers	1.3%	5
"I don't know"	2.7%	10
Normal	16.4%	62
Innocent, quiet, preppy	3.2%	12
Gamers	0.5%	2
Mean	0.5%	2
Rednecks	0.8%	3
Devil or gothic	0.8%	3
Thug or gangster	0.3%	1
Total	100%	377

Table 4.2

Descriptive Statistics of Quadrants

	Percentage	n
Quad. 1	32%	121
Quad. 2	41.9%	158
Quad. 3	16.9%	64
Quad. 4	6.4%	24
Total	97%	367

*Note: Adolescents who indicated "I don't know," were not included. Quad. means Quadrant.

SDQ Statistics

The descriptive statistics for the SDQ variables are presented in Table 4.3. Overall, the results indicate that the resulting scale scores are consistent with previous norms and fall within the expected Normal range.

Table 4.3
SDQ Descriptive Statistics

Source	M	SD	Score Range	Labeled Range	N (377)
Emotional Symptoms Scale	3.493	3.24	0 - 10	Normal	334
Conduct Problems Scale	2.411	2.031	0 - 10	Normal	321
Hyperactivity Scale	3.968	2.263	0 - 9	Normal	336
Peer Problems Scale	2.629	1.877	0 - 8	Normal	320
Prosocial Scale	7.143	2.111	0 - 10	Normal	293

*Normal range needs to account for 80% of the sample. This sample is consistent with the ranges (Normal, Borderline, Abnormal).

ROBVQ Statistics

Descriptive statistics were computed for the ROBVQ, which are presented in Table 4.4. The Total Bully, Total Victim, and Total Bully-Victim scores were normally distributed in the sample. Norms in previous literature indicated that 13% were chronic bullies, 12% victims, and 9% bully-victims (Haynie et al., Pepler et al., 2008), which were similar to this study.

VFA Statistics

Descriptive statistics were computed for the VFA. The *mean* percentage for the VFA was 40.73%. This value indicated that the average vocabulary of the adolescents was approximately equivalent to the 8th Grade level. The obtained percentages obtained in this sample ranged from 0% to 88%. The *standard deviation* was 16.38. Some adolescents left some of the items blank. Following standard procedures, blanks were considered missed items and included in the analysis. These scores were a normally distributed and consistent with this sample.

Table 4.4
ROBVQ Descriptive Statistics

Source	<i>M</i>	<i>SD</i>	Score Range	Percentage	<i>N</i> (377)
ROBVQ Total					
Bully	4.260	7.037	0 – 46	8.80%	33 Bullies
ROBVQ Total					66
Victim	11.085	14.256	0 – 74	18.30%	Victims
*ROBVQ Total					82 Bully-
Bully-Victim	15.220	18.454	0 – 120	21.80%	Victims

*Note: the RQBVQ Total Bully-Victim is a sum of the individual bully and victim scales

Analyses of Research Questions

Research Question 1: Is there a the relationship between adolescents with social and emotional problems as measured by the SDQ (Goodman, 1997) and adolescents' self-disclosed status as a bully, a victim, or bully-victim as measured by RQBVQ (Olweus, 1996) beyond demographic variables (i.e., age, gender, social status, vocabulary knowledge)?

The bivariate relationship was first assessed between the primary variables (see Table 4.5). There is a consistent pattern of statistically significant relationships among the primary variables in the sample.

However, due to uncertainty of whether the effect was secondary to the individual characteristics or ability another analysis was employed. Therefore, to test this possibility a multiple regression was conducted to determine the relationship between social and emotional and self-ratings of bully, victim, or bully-victim status beyond demographic variables.

Bully analysis. The RQBVQ Total Bully score was utilized in determining bullies, while subscale scores of the SDQ were used in determining levels of social and emotional functioning. The control variables included social status (effect coded), age, gender, and vocabulary knowledge. In step one, the RQBVQ Total Bully score was regressed on demographic variables, ($R^2 = .062$, $F(6, 369) = 4.094$, $p = .001$).

Table 4.5
Pearson's Correlation Matrix of Bully, Victim, and Bully-Victim Scores, Demographics, and Social and Emotional Problems Scores

	Bully	Victim	Bully-Victim	Emotional Symptoms	Conduct Problems	Hyperactivity	Peer Problems	Prosocial
Bully	1.00							
Victim	--	1.00						
Bully-Victim	--	--	1.00					
Emotional Symptoms	.082	.326***	.277	1.00				
Conduct Problems	.410***	.325**	.387***	.230***	1.00			
Hyperactivity	.210***	.253***	.270***	.281***	.446***	1.00		
Peer Problems	.263***	.422***	.410***	.289***	.312***	.202***	1.00	
Prosocial	-.263***	-.057	-.134**	.028	-.370***	-.142**	-.208***	1.00

* $p < .05$, ** $p < .01$, *** $p < .001$

Note: Correlations were not configured on bullies, victims, and bully-victims because the sum of bullies and victims produces the Bully-Victims' scores.

Effect coding was employed for the social status quadrants. The intercept ($B_0 = 10.113$) represents the grand mean for all groups. The regression coefficient related to effect coding₁ ($B_1 = 1.677$) suggested that the mean of Quadrant 3 or the outcast category is 1.677 points greater than the grand mean of all social status groups. This difference was statistically significant, $t(369) = 2.356, p = .019$. Additionally, the regression coefficient associated with effect coding₂ ($B_2 = -.178$), suggested that the mean of Quadrant 2 or adolescents who considered themselves as popular mean was .178 lower than the grand mean of all social status groups. There was no significant difference, $t(369) = -.312, p = .755$. The last regression coefficient associated with effect coding₃ was ($B_3 = -2.019$), which indicated that Quadrant 4 or the class clown category mean was 2.019 lower than the grand mean of all social status groups. Therefore, Quadrant 4 was found to have a significant mean difference, $t(369) = -3.358, p = .001$. Vocabulary

knowledge was statistically related to ROBVQ score, while age and gender were not significantly related (see Table 4.6).

In the second step of the analysis, the R square change indicated a statistically significant relationship between ROBVQ and SDQ scores (i.e., emotional symptoms, conduct problems, hyperactivity, peer problems, prosocial) ($\Delta R^2 = .156$, $F(11, 364) = 9.222, p < .001$). Thus, emotional symptoms, conduct problems, hyperactivity, peer problems, and prosocial accounted for additional 15.6% of the variance in bullying beyond that associated with the variables entered in step 1. Inspection of the beta weights indicated that conduct problems and peer problems accounted for the majority of this effect while prosocial, hyperactivity, and emotional symptoms were not statistically significant. Therefore, and consistent with RQ1, a subset of the social and emotional problems measured by the SDQ were related to ROBVQ beyond the demographic variables. See Table 4.6.

Victim analysis. A similar multiple regression was employed to determine the relationship between social and emotional problems scores on the SDQ and the ROBVQ victims of bullying scale, while controlling for set of demographic variables. In step one, ROBVQ victim scale and the set of demographic variables (i.e., age, gender, social status, and vocabulary knowledge) was statistically related ($R^2 = .087$, $F(6, 369) = 5.832, p < .001$). With effect coding, the intercept ($B_0 = 29.482$) was the grand mean of all groups. The regression coefficient with effect coding₁ ($B_1 = 6.222$), which suggested that the Quadrant 3 or outcast mean is 6.222 higher than the grand mean of all social status groups. Therefore, there was a statistically significant mean difference, $t(369) = 4.331, p < .001$. However, the regression coefficient related to effect coding₂ ($B_2 = -2.224$), suggested that Quadrant 2 or popular adolescents mean was 2.224 lower than the grand mean. Therefore, the mean difference was not significant, $t(369) = -1.926, p = .055$. The regression coefficient with effect coding₃ ($B_3 = -3.307$), indicated that the mean

difference of Quadrant 4 or class clown mean was 3.307 lower than the grand mean of social status groups. Furthermore, the mean difference was not significant, $t(369) = -1.719, p = .086$. Additionally, age and victims were found to be related, while gender and vocabulary were not significant. Results are presented in Table 4.6.

Consistent with the analyses on the ROBVQ bully scale, step two of the analysis on ROBVQ victim scores also found that SDQ scores were related as a set to the victim subscale of the ROBVQ ($\Delta R^2 = .198, (F(11, 364) = 13.136, p < .001)$). Furthermore, social and emotional problems scores accounted for an additional 19.8% of the variance in the victim variable beyond the variables entered in step 1. Consistent with the previous findings, the beta weights associated with emotional symptoms, conduct problems, and peer problems scores were the statistically significant contributors to the effect. Similarly, the beta weights associated with the hyperactivity and prosocial scores were not statistically significant. Therefore, and consistent with RQ1, a subset of the social and emotional problems measured by the SDQ were related to ROBVQ beyond the demographic variables (see Table 4.6).

Bully-victim analysis. The relationship between the ROBVQ bully-victim scale and SDQ social and emotional scales were examined through a multiple regression. Following the previous analysis strategy, demographic variables were placed in step one to determine their relationship to bully-victims scores. There was a statistically significant relationship between ROBVQ bully-victim scores and the set of demographics ($R^2 = .078, (F(6, 369) = 5.185, p < .001)$). The intercept ($B_0 = 38.555$) was the grand mean of all groups. The regression coefficient related to the effect coding₁ ($B_1 = 7.331$), indicated that Quadrant 3 or outcasts mean was 7.331 higher than the grand mean of all social status groups. This mean difference was statistically significant, $t(369) = 3.937, p < .001$. The regression coefficient was associated with effect coding₂ ($B_2 = -2.204$) that suggested Quadrant 2 or popular adolescents mean was 2.204 higher

than the grand mean of social status groups. Effect coding₃ ($B_3 = -5.135$) was associated with the regression coefficient, which indicates that Quadrant 4 or class clown mean was 5.135 lower than the grand mean of social status. This mean difference was significant, $t(369) = -1.990, p = .047$. ROBVQ Total Bully-victim scores were found to be related to vocabulary knowledge. However, ROBVQ bully-victim scores and age or gender were not related (see Table 4.6).

In step two the R square change indicated a significant relationship between ROBVQ bully-victim scores and the set of SDQ social and emotional problems scale scores, ($\Delta R^2 = .202$, $F(11, 364) = 12.880, p < .001$). This relationship accounted for 20.2% of the variance the ROBVQ bully-victim scores. Thus, social and emotional problems scores were related to ROBVQ bully-victim scores beyond demographic variables. Consistent with the previous findings, the beta weights associated with emotional symptoms, conduct problems, and peer problems scores were statistically significant contributors to the effect. Similarly, the beta weights associated with the hyperactivity and prosocial scores were not statistically significant. Therefore, and consistent with RQ1, a subset of the social and emotional problems measured by the SDQ were related to ROBVQ beyond the demographic variables. The results are presented in Table 4.6.

Overall findings. Consistently adolescents who were in Quadrant 3 or outcasts were associated with higher bullies, victims, and bully-victim scores on the ROBVQ. In addition, ROBVQ bully-victim and bully scores were significantly related to Quadrant 4 participants labeled class clowns. Age was found to be a significant correlate for ROBVQ victims of bullying and bully-victims scores, while vocabulary knowledge was related to ROBVQ bully and bully-victim scores. Additionally and consistent with the primary hypothesis of the study, conduct problems and peer problems were found to be related to all three bullying category scores. Emotional symptoms scores were found to be related to ROBVQ bully-victims and

victims scores. Therefore, RQ#1 was answered indicating that social and emotional problems scores and bullying scores are related. See Table 4.6 for specific data results.

Exploratory Research Question 1: Are crimes moderator variables between bully, victim, and bully-victim groups' scores and social and emotional problems scores?

Moderated regression analyses were conducted to examine crimes influence bullying scores and social and emotional problems scores. More specifically, this study assessed whether committing crimes (which was dummy coded to reflect the presence and absence of a crime) moderated the relationship between bullying/victim outcome scores and social and emotional problems scores.

Based on a bivariate analysis, relationships between all of the ROBVQ and SDQ scores and the crime variable were statistically significant. Table 4.7 presents a correlation matrix.

However, due to uncertainty of whether the effect may be secondary to the individual characteristics of the adolescents as well as potentially a measure of their ability and the established and supported relationship between bullying scores and social and emotional problems scores another analysis was employed. Therefore, to test this possibility, a multiple regression was conducted to determine the relationship between social and emotional scores and self-ratings of bully, victim, or bully-victim scores status beyond demographic variables with crime as a moderator variable.

Crimes moderator between ROBVQ bully scores and SDQ social and emotional problems scores. Crimes were examined as a moderator of bully scores and social and emotional problems scores. The first step included demographic variables (social status (effect coded), age, gender, vocabulary knowledge) and being a bully, which concluded that demographics and bully scores were related ($R^2 = .064$, $F(6, 367) = 4.181$, $p < .001$). Based on effect coding, the intercept was ($B_0 = 10.208$) which signified the grand mean of all groups.

Table 4.6

Multiple Regressions: Bully, Victim, and Bully-Victim Scores and Social and Emotional Problems Scores

	Bully	Victim	Bully-Victim
Regression steps			
Step 1	B		
Age	-.091	-.128*	-.130
Gender	.059	-.096	-.049
Social Status			
Quad. 3	.166*	.304***	.276***
Quad. 2	-.022	-.137	-.105
Quad. 4	-.165*	-.134	-.160*
Vocabulary Knowledge	-.174**	-.056	-.103*
R^2	.068***	.074***	.087***
Step 2	B		
Emotional Symptoms	-.029	.159**	.113*
Conduct Problems	.285***	.176**	.226***
Hyperactivity	.054	.057	.071
Peer Problems	.149**	.303***	.283***
Prosocial	-.096	.092	.036
ΔR^2	.155***	.204***	.206***

*p < .05, ** p < .01, p < .001. Note: Quad means Quadrant. Quad. 1 includes nerds, smart, etc., while Quad. 2 includes popular, jocks, etc. Quad. 3 includes outcast, odd, skaters or rock stars, devil or gothic, thug or gangster, etc. Quad. 4 is comprised of cheerleaders or dancers, class clowns, etc. For a complete list of the categories see pages 71 and 77.

The regression coefficient related to effect coding₁ ($B_1 = 1.719$) suggested that Quadrant 3 or outcasts mean was 1.719 higher than the grand mean. Therefore, this mean difference was significant, $t(367) = 2.397, p = .017$. The regression coefficient was associated with effect coding₂ ($B_2 = -.176$), indicating that Quadrant 2 or popular adolescents mean was .176 lower than the grand mean. Thus, the mean difference was not significant, $t(367) = -.307, p = .759$. Effect coding₃ ($B_3 = -2.032$) was associated with the regression coefficient, indicating that Quadrant 4 or class clowns mean was 2.032 lower than the grand mean. The mean difference was significant,

$t(367) = -2.129, p = .034$. Vocabulary knowledge was found to be related to bully scores, but age and gender were not related to bully scores (see Table 4.8).

Table 4.7
Pearson's Correlation: Bully, Victim, and Bully-Victim Scores, Crimes and Cross Products

	Bully	Victim	Bully-Victim	Crime	Crime* Emotional Symptoms	Crime* Conduct Problems	Crime* Hyperactivity	Crime* Peer Problems	Crime* Pro-social
Bully	1.00								
Victim	--	1.00							
Bully-Victim	--	--	1.00						
Crimes	-.200***	-.055	-.140**	1.00					
Crime* Emotional Symptoms	-.035	.220***	.152**	.372***	1.00				
Crime* Conduct Problems	.188***	.202***	.209***	.398***	.342***	1.00			
Crime* Hyperactivity	.041	.121**	.105*	.552***	.415***	.563***	1.00		
Crime* Peer Problems	.050	.268***	.212***	.474***	.393***	.420***	.389***	1.00	
Crime* Prosocial	-.271***	-.07	-.147**	.798***	.322***	.137**	.371***	.288***	1.00

* $p < .05$, ** $p < .01$, *** $p < .001$

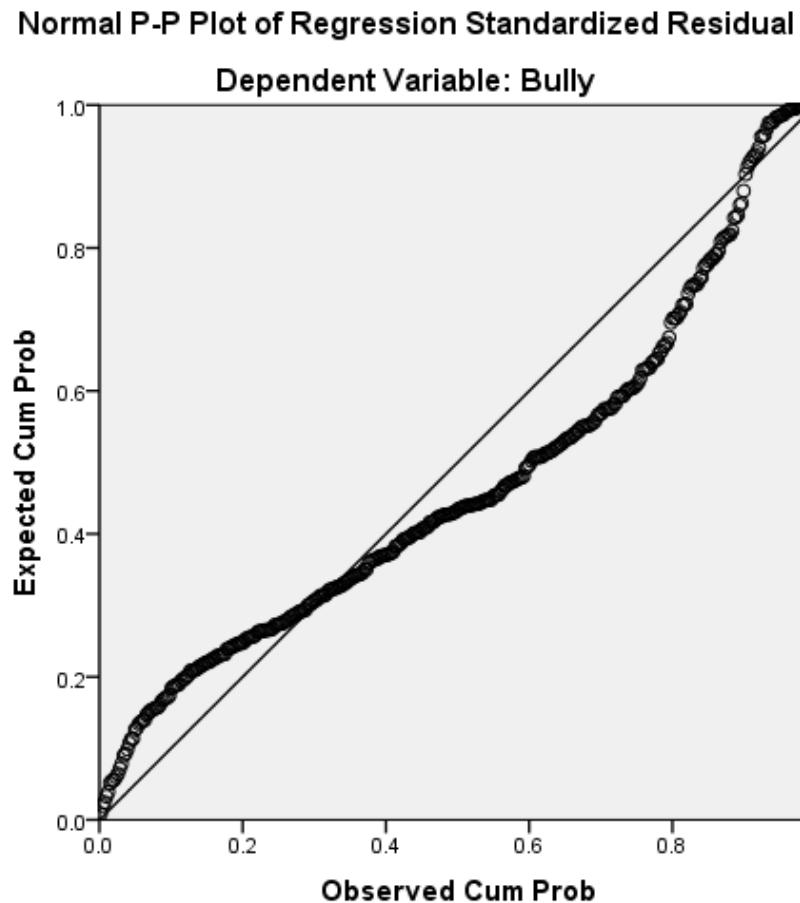
When emotional symptoms, hyperactivity, conduct problems, peer problems, and prosocial scores and crimes were added in step two there was a significant relationship found with ROBVQ bully scores ($\Delta R^2 = .163, F(6, 367) = 8.810, p < .001$). Therefore, social and emotional problems scores and crime accounted for 16.3% more of the variance of being a bully. Inspection of the beta weights indicated that SDQ peer problems and conduct problems scale scores were related to ROBVQ bully scales. However, emotional symptoms, hyperactivity, and prosocial SDQ scores and the crime variable were not statistically significant contributors to the overall effect. In the third step in the hierarchical regression, the set of cross products between the crime variable and the SDQ scales (i.e., Crime*Emotional Symptoms, Crime*Conduct

Problems, Crime*Hyperactivity, Crime*Peer Problems, and Crime*Prosocial) accounted for a statistically significant amount of the ROBVQ bullies scale variance ($\Delta R^2 = .033$, $F(6, 367) = 7.353$, $p < .001$). This finding indicated that the relationship between ROBVQ bully scale and SDQ scores are moderated by the presence or absence of self-reported crime. The beta weights associated with the cross products suggested that the moderator effect was associated with the Crime* Peer Problems and Crime*Hyperactivity variables. The remaining cross products (i.e., Crime*Emotional Symptoms, Crime*Conduct Problems, and Crime*Prosocial) were not statistically significant. Table 4.8 is presents results and Figure 4.1 represents the moderator relationship.

Crimes as a moderator of ROBVQ victim scores and SDQ social and emotional problems scores. A moderated regression was conducted to determine whether crimes influenced the relationship between victims of bullying scores and social and emotional problems scores. The first step, included demographic variables and ROBVQ victim scores, which found a significant relationship ($R^2 = .086$, $F(6, 367) = 5.42$, $p = .008$). Social status quadrants were effect coded, which resulted in an intercept ($B_0 = 29.549$) representing the grand mean. The regression coefficient related to effect coding₁ ($B_1 = 6.220$) that suggested that the mean of Quadrant 3 or outcasts was 6.220 higher than the grand mean. Therefore, the mean difference was significant, $t(367) = 4.292$, $p < .001$. The regression coefficients were related to effect coding₂ ($B_2 = -2.194$) indicating the mean of Quadrant 2 or popular adolescents was 2.194 lower than the grand mean. This mean difference was not significant, $t(367) = -1.891$, $p = .059$. Effect coding₃ ($B_3 = -3.313$) was associated with the regression coefficient, which indicated that the mean of Quadrant 4 or class clown was 3.313 lower than the grand mean. Thus, the mean difference was not significant, $t(367) = -1.083$, $p = .279$. ROBVQ victim scores were

significantly related to age, while gender and vocabulary knowledge were not significantly related. Results are presented in Table 4.8.

Figure 4.1. Normal Plot of Regression demonstrating the moderated relationship between bully scores and all variables.



As in the previous analysis, step 2 indicated a statistically significant increase in ROBVQ victim scores associated with SDQ emotional symptoms, conduct problems, hyperactivity, peer problems, and prosocial scores and the crime variable ($\Delta R^2 = .199, F(6, 367) = 11.976, p < .001$). The beta weights indicated that SDQ emotional symptoms, conduct problems, and peer problems scores were related to ROBVQ victim scores. In step three, there was no significant relationship found between the cross products and ROBVQ victim scores ($\Delta R^2 = .009, F(6, 367) = 8.725, p = .452$). Surprisingly given the effects on ROBVQ bully scores, there were no statistically

significant cross products (i.e., Crime*Emotional Symptoms, Crime*Conduct Problems, Crime*Hyperactivity, Crime*Peer Problems, and Crime*Prosocial) when the analyses were conducted on the ROBVQ victim scores. Thus, the crime variable did not moderate the relationship between ROBVQ victim scores and SDQ social and emotional problems scores (see Table 4.8 and Figure 4.2 of the relationship between variables).

Crimes as a moderator of ROBVQ bully-victim scores and SDQ social and emotional problems scores. Following the strategy developed in the previous analyses, a multiple regression was conducted to determine if the crimes variable moderated the relationship between ROBVQ bully-victim scores and SDQ social and emotional problems scores. As before, the first step in the hierarchy, included demographic variables and vocabulary knowledge. Similar to the preceding analyses, the R square associated with this step was statistically significant ($R^2 = .279$, $F(6, 367) = 5.167$, $p < .001$). Effect coding was conducted on social status quadrants, which indicated an intercept ($B_0 = 38.704$) and signified the grand mean of all groups. Effect coding₁ ($B_1 = 7.360$) was associated with the regression coefficient indicating that the mean of Quadrant 3 or outcast category was 7.360 higher than the grand mean of social status groups. Thus, this mean difference was significant, $t(367) = 3.920$, $p < .001$. The regression coefficient was related to the effect coding₂ ($B_2 = -2.168$) suggesting that Quadrant 2 or popular adolescents mean was 2.168 lower than the grand mean. Therefore, this mean difference was not significant, $t(367) = -1.442$, $p = .150$. The regression coefficient was related effect coding₃ ($B_3 = -5.151$), which indicated the mean of Quadrant 4 or class clowns was 5.151 lower than the grand mean. Thus, the mean difference was significant, $t(367) = -2.061$, $p = .040$. ROBVQ bully-victim scores and age and vocabulary knowledge were significantly related. Gender was not significantly related to ROBVQ bully-victim scores (see Table 4.8).

In step two, SDQ emotional symptoms, conduct problems, hyperactivity, peer problems, and prosocial scores as well as the crime variable was entered into the analysis resulting in a statistically significant increase in variance accounted for ($\Delta R^2 = .206$, $F(12, 361) = 11.933$, $p < .001$). Inspection of the beta weights indicated the overall effect was due to SDQ peer problems, emotional symptoms, and conduct problems scores. By contrast, hyperactivity and prosocial scores and the crime variable were not statistically significant. In step three, the cross product terms (i.e., Crime*Emotional Symptoms, Crime*Conduct Problems, Crime*Hyperactivity, Crime*Peer Problems, and Crime*Prosocial) did not result in a significant increase in variance accounted for ($\Delta R^2 = .019$, $F(6, 367) = 9.087$, $p = .094$). Thus, the crime variable did not moderate the relationship between ROBVQ bully-victim scales and SDQ social and emotional problems scores. Results are presented in Table 4.8 and Figure 4.3 demonstrates the relationship of the moderator.

Overall findings. Focusing on the first step in the analyses across the three ROBVQ scores, a consistent pattern of findings were noted. Specifically, higher ROBVQ scores were associated with the Quadrant 3 (outcasts) participants ROBVQ victims and bully-victims scores were also related to age. ROBVQ bully and bully-victims scores were related to vocabulary knowledge and Quadrant 4 participants (class clown category). None of the ROBVQ bullying scores were related to gender.

In step 2 of the analyses, all of the analyses indicated that SDQ conduct problems and peer problems scores were related to the three ROBVQ variables. Additionally, SDQ emotional symptoms and ROBVQ bully-victim scores and victim scores were associated in the second model.

According to the results in the third step of the hierarchy, the crimes variable was only found to moderate the relationship between ROBVQ bully scale and SDQ social and emotional

problems scores. In this analysis the contributing cross products were Crime*Hyperactivity and Crime*Peer Problems. Therefore according to the exploratory research question 1, crime is a moderator variable between bully scores and social and emotional problem scores, but not a moderator between victim scores, bully-victim scores, and social and emotional problems scores. See Table 4.8 for specific results.

ROBVQ bully scores and SDQ social and emotional problems subscales scores

moderated by crime with only significant variables. Crimes were examined as a moderator of bully scores and social and emotional problems scores. The first step included demographic variables (Quadrant 3, Quadrant 4, vocabulary knowledge) and RQBVQ bully scores, which concluded that demographics and RQBVQ bully scores were related ($R^2 = .059$, $F(3, 370) = 7.333$, $p < .001$). Based on effect coding, the intercept was ($B_0 = 7.733$) which signified the grand mean of all groups.

The regression coefficient related to effect coding₁ ($B_1 = 1.818$) suggests that Quadrant 3 or outcasts mean is 1.818 higher than the grand mean. Therefore, this mean difference was significant, $t(370) = 3.959$, $p = .014$. Effect coding₃ ($B_3 = -3.048$) was associated with the regression coefficient, indicating that Quadrant 4 or class clowns mean was 3.048 lower than the grand mean. The mean difference was significant, $t(370) = -3.489$, $p = .049$. Vocabulary knowledge was found to be related to RQBVQ bully scores, $t(370) = -4.043$, $p < .001$ (see Table 4.9).

When emotional symptoms, hyperactivity, conduct problems, peer problems, and prosocial SDQ scores and crimes (dummy coded) were added in step two there was a significant relationship found with RQBVQ bully scores ($\Delta R^2 = .216$, $F(6, 367) = 16.867$, $p < .001$). Therefore, social and emotional problems and crime accounted for 21.6% more of the variance of bully scores. Inspection of the beta weights indicated that SDQ peer problems and conduct

problems scale scores were related to ROBVQ bully scales as well as crime committed. In the third step in the hierarchical regression, the set of cross products between the crime variable and the SDQ scales (i.e., Crime*Conduct Problems, Crime*Hyperactivity) accounted for a statistically significant amount of the ROBVQ bully scale variance ($\Delta R^2 = .027, F(8, 365) = 14.694, p < .001$). This finding indicated that the relationship between ROBVQ bully scale and SDQ scores were moderated by the presence or absence of self-reported crime. The beta weights associated with the cross products suggested that the moderator effect was associated with the Crime* Peer Problems. Crime*Hyperactivity was not found to be significant in relation to ROBVQ bully scores. Table 4.9 is presents results and Figure 4.4 shows the relationship of the moderator.

Exploratory Research Question 2: What specific types of crimes are most likely committed (i.e., specific misdemeanor crimes, property crimes, violent crimes) by adolescents with traits of social and emotional problems and features of bullying?

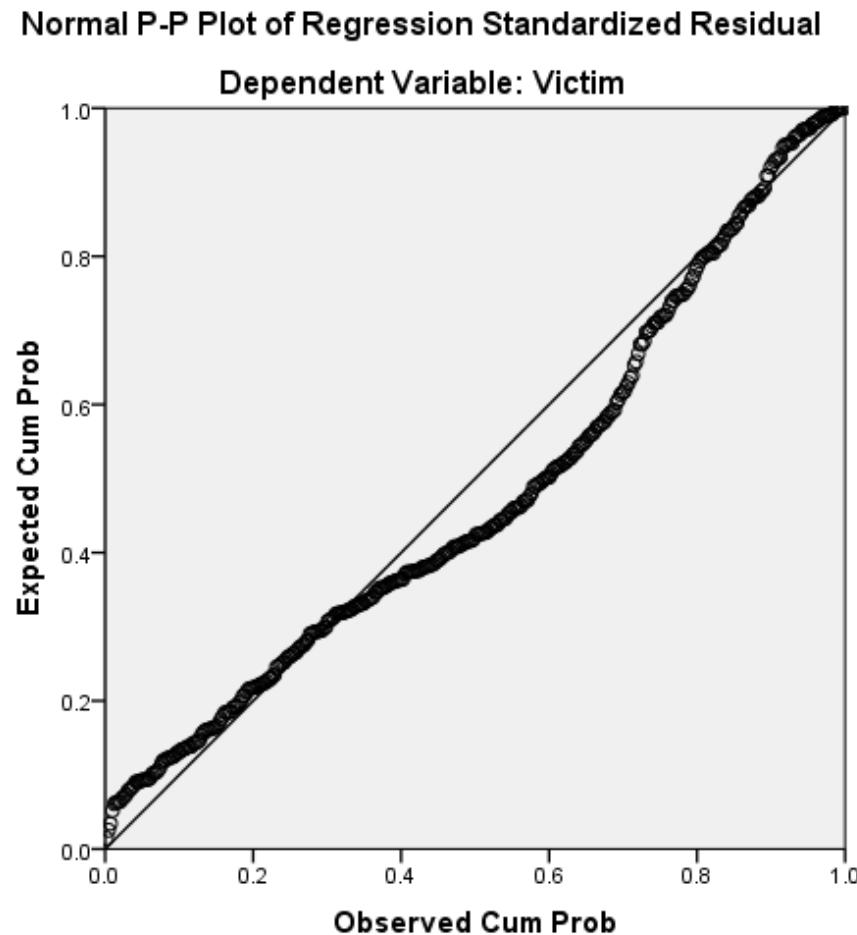
A qualitative analysis was conducted on the types of crimes committed by adolescents with the characteristics of bullies, victims, and bully-victims and social and emotional attributes to determine specific misdemeanor, property, and violent crimes adolescents committed. The crimes reported by adolescents were coded into three categories misdemeanor, felony property, and felony violent crimes. There were 33 misdemeanor crimes committed based on the operational definition of a misdemeanor. Additionally, there were four distinct categories that were noted by the investigator within the misdemeanor category. The categories included drugs, property, stealing, and miscellaneous. In the drug subcategory, adolescents indicated they “smoke marijuana, drink alcohol, use prescription pills,” “possession” of a controlled substance, and “smoke weed.” The property examples of crimes committed included “vandalism,” “breaking someone’s window,” “riding 4-wheelers on someone’s land,” “graffiti,” and

“trespassing.” In the stealing subcategory, there were reports of “stole from CVS (I gave it back and apologized) (I was very sorry),” “I stole from Walmart,” “theft,” “stole a pack of chips,” “stole an earring but gave it back,” “stole from a Dollar store,” “shoplifting,” and “stealing.” The last misdemeanor category, miscellaneous, had reports of “jaywalking,” and “tickets and fights.” As for felony property crimes, there was only one subcategory, “arson,” which 12 adolescents reporting committing. Adolescents reported “set a fire on someone else’s property and almost blew the whole forest up.” There were 12 felony violent crimes committed by borderline and abnormal adolescents had two subcategories, assault and robbery. Adolescents in this category reported “assault and battery 1st degree” and “battery fighting.” An example of the second subcategory under violent felony crimes was “robbery and breaking and entering.”

Summary

Across the analyses a number of patterns in the findings emerged. First, in step one of the regression analysis students who self-described themselves as outcasts were consistently higher on ROBVQ scales. Also, vocabulary knowledge and who self-described themselves as class clowns were related to ROBVQ bully and bully-victim scores. Likewise, ROBVQ victims and bully-victim scores were related to age. In step two, SDQ scores indicated peer and conduct patterns consistently were related to the bullying scale scores. Interestingly, when the focus shifted to the ROBVQ victim and bully-victim scores, the emotional problems scores became a contributing factor. All three ROBVQ groups were related to conduct problems and peer problems scores, while ROBVQ victims and bully-victims scores were related to emotional symptoms scores.

Figure 4.2. Normal Plot of Regression demonstrating moderated relationship between victim scores and social variables.



For the exploratory research question, the findings indicated that participating in crime moderated the relationship between bullying and social emotional problem scores. However, the relationship between ROBVQ victim scores and SDQ subscale scores were not influences by participating in crime.

The last analysis indicated that students who self-reported participating in crime described a wide range of behaviors ranging from relatively mild misdemeanor offenses (e.g., shoplifting) to violent felonies such as assault.

In Chapter 5, there will be discussion about the results of this study in relation to what previous literature found. Additionally, in the next chapter implications and future research needs are addressed.

Figure 4.3. Normal Plot of Regression demonstrating the moderated relationship between bully-victim scores and all variables.

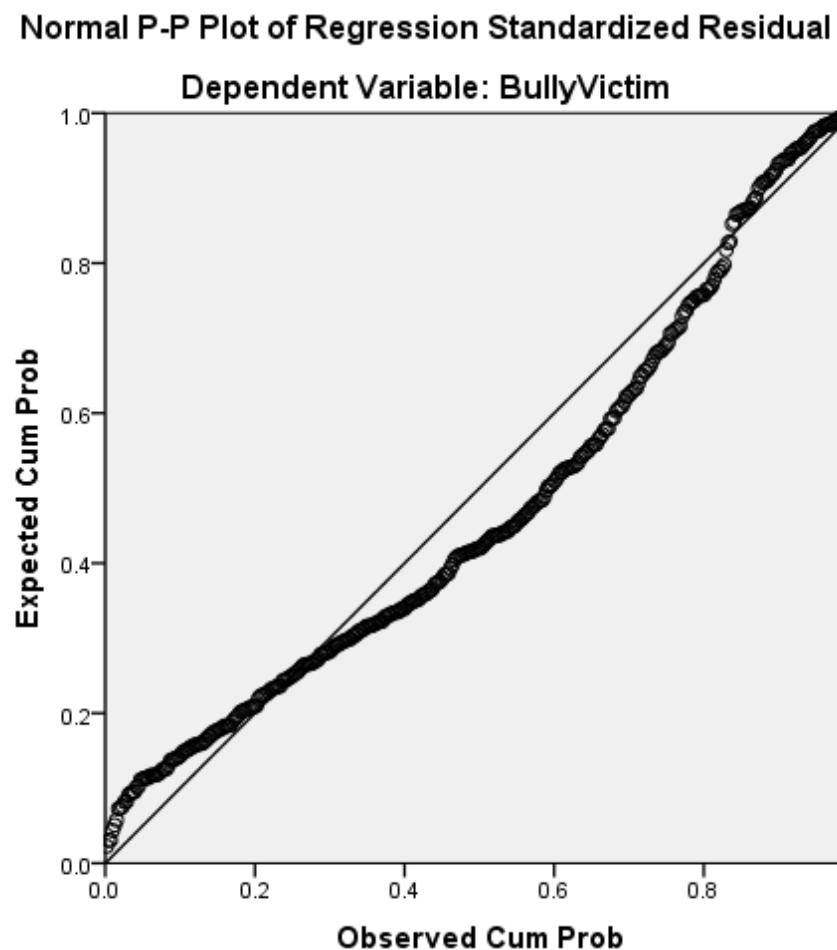


Table 4.8

Moderated Regression of Crime Between Bully, Victim, and Bully-Victim Scores and Social and Emotional Problems Scores

	Bully	Victim	Bully-Victim
Regression steps			
Step 1			
Age	-.092	-.129*	-.132*
Gender	.060	-.094	-.047
Social Status			
Quad. 3	.169*	.069***	.277***
Quad. 2	-.022	-.135	-.103
Quad. 4	-.166*	.134	-.161*
Vocabulary			
Knowledge	-.176**	-.056	-.104*
R^2	.069***	.073***	.071***
Step 2			
Emotional Symptoms	-.026	.159**	.114*
Conduct Problems	.250***	.165**	.202**
Hyperactivity	.055	.058	.073
Peer Problems	.153**	.307***	.288***
Prosocial	-.095	.095	.038
Crime	.103*	.033	.071
ΔR^2	.163***	.206***	.211***
Step 3			
Crime*Emotional Symptoms			
Crime*Conduct Problems	.164	-.005	-.072
Crime*Hyperactivity	.358*	-.034	.110
Crime*Peer Problems	-.384*	-.025	-.176
Crime*Prosocial	.059	.270	.263
ΔR^2	.033*	.010	.019

*p < .05, **p < .01, ***p < .001. Quad. 1 includes nerds, smart, etc., while Quad. 2 includes popular, jocks, etc. Quad. 3 includes outcast, odd, skaters or rock stars, devil or gothic, thug or gangster, etc. Quad. 4 is comprised of cheerleaders or dancers, class clowns, druggies, etc. For a complete list of the categories see page 71 and 77.

Table 4.9

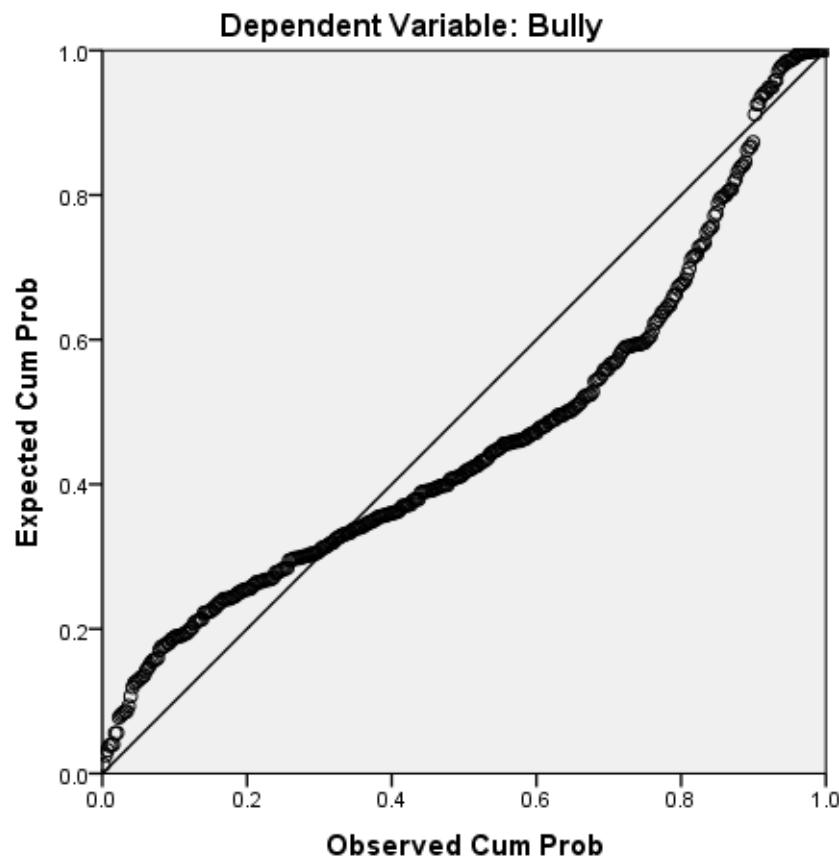
Second Analysis: Crimes Moderate ROBVQ Bully Scores and SDQ Subscale Scores

Bully	
Regression steps	
Step 1	β
Social Status	
Quad.	
3	.162*
Quad.	
4	-.154*
Vocabulary	
Knowledge	-.205**
R^2	.056***
Step 2	
Conduct Problems	.306***
Peer Problems	.158*
Crime	-.101*
ΔR^2	.216***
Step 3	
Crime*Hyperactivity	.098
Crime*Peer Problems	-.442**
R^2	.244**

* $p < .05$, ** $p < .01$, *** $p < .001$. Quad. 1 includes nerds, smart, etc., while Quad. 2 includes popular, jocks, etc. Quad. 3 includes outcast, odd, skaters or rock stars, devil or gothic, thug or gangster, etc. Quad. 4 is comprised of cheerleaders or dancers, class clowns, druggies, etc. For a complete list of the categories see page 71 and 77.

Figure 4.4. Normal Plot of Regression demonstrating the moderated relationship between bully scores and only significant variables.

Normal P-P Plot of Regression Standardized Residual



CHAPTER 5

DISCUSSION

Introduction

This chapter provides a brief overview of the study. This section summarizes and discusses one main research question and two exploratory research questions designed to extrapolate the pertinent results for a multitude of service providers (i.e., educators, school psychologists, researchers, and various mental health professionals) in the area of bullying, social and emotional problems, and criminal activity.

Over the past decade, there have been vast amounts of bullying-related research published; nonetheless, many unclear findings still remain within the bullying and victim literature (Ball et al., 2008; Cowie et al., 2002; Due et al., 2009; Duke et al., 2010; Farrington et al., 2011; Gil, 2002; Guerra et al., 2011; Holmberg & Hjern, 2008; Laukkanen et al., 2002; Perren & Alasker, 2006; Sourander et al., 2006; Turkel, 2007; Xin, 2002). This study offers insight on several ambiguous results from previous studies. The main purpose of this study was to focus on the relationship of adolescents with social and emotional problems who are bullies, victims, or bully-victims. Because of inconsistent research findings, there were two exploratory purposes of this study. They were: (1) to focus on whether criminal activity was a moderator between adolescents with social and emotional problems scores and ROBVQ bullies, victims, or bully-victims scores, and (2) to focus on the most prevalent types of crimes committed by bullies, victims, or bully-victims scores.

This study was conducted after obtaining school district consent, school-based consent, parent informed consent, as well as written assent from adolescents. The data were gathered in

middle and high schools and school districts, using three instruments previously described (e.g., ROBVQ, SDQ, VFA). Hierarchical regression analyses were used to answer the research question, (1) Is there a relationship between adolescents with social and emotional problems as measured by the SDQ (Goodman, 1997) and adolescents' self-disclosed status as a bully, a victim, or bully-victim as measured by ROBVQ (Olweus, 1996) beyond demographic variables (i.e., age, gender, social status, vocabulary knowledge)? The first exploratory research question, (i.e., "Are crimes a moderator variable between ROBVQ bullying scores and social and emotional problems subscale scores?"), was answered by conducting a moderated regression analysis. Additionally, a qualitative method and one-way between subjects ANOVA were adopted to examine the second exploratory research question, (i.e., "What types of crimes are most likely committed (i.e., misdemeanor, property, violent) by those characterized as a bully, victim, and/or bully-victim with social and emotional problems?"). In the next section, conclusions for the research question and two exploratory questions were assessed, reflected upon, and implications for future research were addressed.

Review and Discussion of the Main Conclusions

One focal research question and two exploratory questions were constructed for this research. For the questions the ROBVQ, SDQ, and VFA, as well as demographic information, were utilized. The ROBVQ scores characterized bullies, victims, or bully-victims. The SDQ assisted in characterizing emotional symptoms, conduct problems, hyperactivity, peer problems, and/or prosocial behavior (i.e., being helpful, kind, caring for others). The VFA assisted in assessing adolescents' vocabulary knowledge or verbal ability. The operationalized definitions of these variables can be found in Chapters 1 and 3. Each research question and its findings are reviewed in relation to previous research, implications, and future research suggestions.

Research Question 1: Social and Emotional Problems and Bullying Involvement Scores:

The first research question was “Does the relationship between adolescents with social and emotional problems as measured by the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) and involvement in bullying as a bully, a victim, or bully-victim as measured by the Revised Olweus Bully/Victim Questionnaire (ROBVQ; Olweus, 1996) remain after controlling for age, gender, social status, and vocabulary knowledge?”

Even with demographics (i.e., age, gender, social status, vocabulary knowledge) having a strong significant relationship with all three bullying category scores, step two of the multiple regression found that social and emotional problems (i.e., emotional problems, conduct problems, hyperactivity, peer problems, prosocial) and involvement in bullying have a statistically significant relationship. Thus, the primary research question was found to be significant in this study.

This significant finding for the primary research question can be interpreted to indicate that social and emotional problems scores were correlated to bully, victim, and bully-victim scores. Data from the study are presented for ROBVQ bully, victim, and bully-victim scales separately.

Higher bully scores were found to be positively related to such descriptions as being “outcasts” or Quadrant 3 or Quadrant 4 or “class clowns.” Vocabulary knowledge was negatively related to bully scores. More specifically in this study, bully scales had overall characteristics of social and emotional problems, which indicated that bully scores and social and emotional problem scores are positively correlated. Additionally, higher bully scores were found to exhibit higher conduct problems and peer problems scores demonstrating a positive relationship between the variables.

Age and social status of being considered as an “outcast” or in Quadrant 3 were positively related to ROBVQ victim scores. The ROBVQ victim scale was also positively related to social and emotional problems scores, but specifically emotional symptoms, conduct problems, and peer problems scores.

Bully-victim scores were positively correlated with age, reporting being “outcasts” or in Quadrant 3, and being considered a “class clown” or in Quadrant 4, while bully-victim scores were negatively associated with vocabulary knowledge. Most importantly, there was a positive relationship found between social and emotional problems scores, specifically emotional symptoms, conduct problems, and peer problems scores, and ROBVQ bully-victim scores.

Past research studies offer comparisons to the current findings for this research question. Gender was not found to be significant in this study, which was inconsistent with previous literature (Nation et al., 2008; Smith et al., 2002; Turkel, 2007). A reason for this contrast was due to the different types of bullying (i.e., relational, physical, verbal) not being explored, which was where the gender differences were found (Carlyle & Steinman, 2007; Hsi-Sheng et al., 2007; Ng & Tsang, 2008). Age was statistically significant for the victim and bully-victim scores in this study. Age was also found to influence bullying characteristics in other studies (Laeheem et al., 2008; Nansel et al., 2001; Pepler et al., 2008). However, unlike other research, this study did not find a significant correlation between bully scores and age (Carlyle & Steinman, 2007; Nation et al., 2008; Smith et al., 2002). In this study, vocabulary was found to be related to bully and bully-victim scores. These results were similar to overall findings when examining academic achievement and bullying (Brown & Taylor, 2007; Conti-Rasden & Botting, 2004; Luciano & Savage, 2007; Woods & Wolke, 2004). For instance, Conti-Rasden and Botting concluded that language difficulties and expressive language increased with involvement in bullying. Additionally, a study conducted by Luciano and Savage (2007) reported that when

vocabulary was controlled, there were no statistical significant findings. Thus, this study had similar findings once vocabulary knowledge was controlled.

The main difference between this current study and previous studies was that prior research found victims of bullying to have the greatest problem with vocabulary. However, in contrast, this study found significance in relation to vocabulary knowledge for higher bully and bully-victim scores. To add, bully and bully-victim scores were found to correlate with vocabulary knowledge, although victim scores did not follow this pattern. This could be interpreted as the more characteristics an adolescent has “as a bully and bully-victim” indicates lower amounts of vocabulary knowledge (i.e., the more an adolescent was involved in bullying the lower his/her score was on the VFA).

Other research indicated that there were no significant relationships between bullying and academic achievement if language was controlled. This study concurs with these findings (Conti-Ramsden & Botting, 2004; Woods & Wolke, 2004) (i.e., language or vocabulary plays an important role in bullying). Not only was vocabulary and bullying scores found to be related, but social and emotional problems scores were also found to be associated. These conclusions are important because youth involved in bullying with social and emotional problems have been found to drop out of school more frequently, have academic problems, have poor attitudes toward school, be treated poorly by teachers and peers, and have adulthood, career, and college education attainment impacted by bullying and social and emotional problems, as well as vocabulary concerns (Brown & Taylor, 2007; Conti-Ramsden & Botting, 2004; Hjern et al., 2008; Luciano & Savage, 2007; Totura et al., 2009; Townsend et al., 2008; Woods & Wolke, 2004).

This study also concluded that higher emotional symptoms scores were attributes of higher victims’ scores. This was consummate with previous research that has found that victims

exhibit more internalizing behaviors such as submissiveness, being withdrawn, anxiety, depression, psychological maladjustment, and so forth (Farrow & Fox, 2011; Fekkes et al., 2006; Hilton et al., 2010; Hsi-Sheng & Williams, 2009; Ivarsson et al., 2005; Perren & Alasker, 2006; Sourander et al., 2006). Bully-victims scores, though, were found to have the characteristic of higher emotional symptoms scores. This differed from some research due to externalized behaviors being associated with bully-victims (Alikasifoglu et al., 2007; Kim et al., 2011; Luukkonen et al., 2011; Topper et al., 2011; van der Wal et al., 2003; Vieno et al., 2011). Even though externalized behaviors were more commonplace for bullies and bully-victims, other research has found that bully-victims at times have exhibited emotional symptoms. For instance, Swearer and colleagues (2007) found a pattern for internalizing psychopathology, including anxiety and depression, for bullies, victims, and bully-victims. Similarly, Turkel (2007) indicated that if one frequently bullies he/she was found to experience envy, revenge, and emotional distress, which was similar to van der Wal (2005). Additionally, Klomek and colleagues (2011) found that depression and suicidal ideation were related to bully-victims. Other studies found that bullies, victims, and bully-victims have been related to emotional and social problems, psychosomatic, and behavioral complaints as well as having a significant amount of health complaints (Gini, 2008; Goodman, 1997; Hjern et al., 2008; Laukkanen et al., 2002).

Literature on psychosocial well-being has suggested that bully-victims scored lower on a psychosocial well-being test, suggesting more external behaviors (Gil, 2002), which concurs with this study. Furthermore, results of studies have concluded that victims of bullying have increased chances of suicide and depression (Gil; Klomek et al., 2011; Ivarrson et al., 2005; van der Wal, 2005). Likewise, results of studies posited that victims have poor emotional adjustment, restrained eating, and body dissatisfaction (Farrow & Fox, 2011). Bullies, bully-

victims, and victims have been found to psychological maladjustment, but victims have been found to have higher levels of low self-esteem, loneliness, anxiety, and depression (Delfabbro et al., 2006; Hsi-Sheng & Williams, 2009; Skapinakis et al., 2011). All of which were consistent with this study.

This study found that higher conduct problems scores were related to higher bully and bully-victim scores. This was similar to previous literature because bullies and bully-victims were found to demonstrate externalized behaviors such as hyperactivity and conduct problems (Holmberg & Hjern, 2008; Gini, 2008; Laukkanen et al., 2002; O'Brien et al., 2011; Renda et al., 2011; Viding et al., 2009). Even with conduct problems being found to be significant, comparable to previous research, peer problems scores were positively related to bully and bully-victim scores. On the other hand, even though higher bully, victim, and bully scores were related to higher peer problems scores, social status only influenced whether or not adolescents had higher bully, victim, or bully-victim scores if they were considered "outcasts" or disliked and rejected (placed in Quadrant 3) and/or if higher bully scores or higher bully-victim scores were considered "class clowns" or categorized in Quadrant 4. This analysis was similar to other studies. For instance, bullies and bully-victims have been found to be more popular or socially preferred, but were rejected by peers (Bruyn et al., 2010; Harel-Fisch et al., 2011; Olthof et al., 2011; Scholte et al., 2011). Other studies, which were aligned with this study, indicated that bullies, bully-victims, and victims were rejected or less accepted and disliked (Dijkstra et al., 2007; Olthof & Goossens, 2008; Rodkin & Berger, 2008; Veenstra et al., 2010). Additionally, some studies have found that even though bullies were at times rejected by peers, they were still preferred over victims of bullying (Dijkstra et al., 2007; Olthof & Goossens, 2008; Scholte et al., 2011). Two particular studies stand out as consistent with this current research study (Perren & Alasker, 2006; Scholte et al., 2010). Furthermore, victims were more submissive, had fewer

leadership skills, were more withdrawn, were more isolated, were less cooperative, were less sociable, and frequently had no playmates (Perren & Alasker). Also, victims have been found to be less preferred (Scholte et al., 2010). The current study's findings were similar to Olthof et al. (2011), which found that both bullies and victims use coercive tactics (i.e., taking toys away from another child, threatening others) when interacting with peers due to victims and bullies having peer problems.

In this study, unique findings also were presented. For example, victim scores were found to be related to conduct problems scores like bully and bully-victim scores. Conduct problems of bullies and bully-victims, as well as victims, were demonstrated in earlier studies, suggesting that all three groups engage in risk-taking behavior, conduct problems, antisocial behavior, and aggressive behaviors (Edmond et al., 2007; Viding et al., 2009). Aggressiveness, hostility, and Machiavellianism were found to be correlated to victims of bullying (Hsi-Sheng & Williams, 2009). Furthermore, poor self-control of aggressiveness and impulsiveness, risk-taking behaviors, and delinquent behaviors have been found to be related to bullies, victims, and bully-victims (Ando et al., 2008; Rusby et al., 2005; van der Wal et al., 2003) in previous work. In the same light as the past, behaviors such as conduct problems, peer problems, and emotional symptoms were found to be significant in this study.

Types of Crimes Moderated Between Bullying Group Scores and Social and Emotional Problems Scores: Exploratory Research Question 1

The first exploratory research question focused on crimes moderating between bully, victim, and bully-victim scores and social and emotional problems scores. There were both significant and not significant findings for this exploratory research question.

There were significant findings for higher bully scores and social and emotional problems scores moderated by committing crimes. This means that adolescents with bullying

characteristics and higher social and emotional problems scores were moderated by committing crimes.

Victim scores and social and emotional problems scales were not found to be moderated by crimes. Lastly, crimes were not found to be moderators for the ROBVQ bully-victim scale and social and emotional problem scores.

These results were concurrent with previous findings (Farrington et al., 2011; Killias & Rabas, 1997; Luukkonen et al., 2011). Kinlock et al. (2004) indicated that severity of crimes increased with involvement in bullying, while Jiang and colleagues (2011) and Sourander et al. (2006) concluded that youth involved in committing crimes at a young age were more likely to commit crimes when they get older. Like these studies, the current study found that committing crimes was a moderator for higher bully and social and emotional scores. Furthermore, antisocial development has been related to bullying and committing crimes (Bender & Losel, 2011). These findings were also supported by this current study's results for bully scores.

While bully-victims and victims both have been found to commit crimes, victim and bully-victim scores were not found to be associated with crime in this study. For instance, victims began their criminal careers later than bullies and bully-victims, which could account for why this population's results were not significant as a moderator or main effect in this study (Luukkonen et al., 2011). Bully-victims have been reported to have more criminal thinking, reactive aggression, and secondary psychopathy attributes when compared to bullies (Jiang et al., 2011). The current results were in contrast to Jiang et al. because bully-victim scores did not have a relationship with crimes nor did crimes influence bully-victim scores with social and emotional problem characteristics.

Bullies, bully-victims, and victims have been incarcerated and have social and emotional problems (Grennan & Woodhamss, 2007; Ireland, 2002; Kinlock et al., 2004; Viljoen et al.,

2005). These results were similar to the current work because some adolescents were incarcerated for crimes they committed as well as characterized as having higher bully, victim, or bully-victim scores and higher social and emotional problem scores. Crimes were found to have a moderated relationship between bully scores and social and emotional problems scales, which was supported by previous research. For example, Grennan and Woodhams (2007) and Viljeon and colleagues (2005) results suggested that bullying involvement was related to psychological distress, specifically depression and anxiety. Archer et al. (2007) and Ireland and Archer (2004) indicated that bullies were more likely to be aggressive and impulsive in prisons; consistent with the results of this study (higher bully scores were correlated to higher conduct problem scores as well as committing crimes). Risk-taking and aggressive behaviors bullies engaged in were related to being incarcerated (Archer et al., 2007; Ireland et al., 2009; Jiang et al., 2011; Sourander et al., 2011; Viljeon et al., 2005), which was commensurate with bully scores having increased conduct problems scores, peer problems scores, and criminal activity, in this study.

Specific Crimes Committed by Adolescents with Traits of Bullying Involvement and Social and Emotional Characteristics: Exploratory Research Question 2

This exploratory question focused on the specific descriptions of crimes committed by bullies, victims, and bully-victims identified by higher ROBVQ scores and increases SDQ subscale scores. The question was, “Which types of crimes are most likely committed (i.e., misdemeanor, property, violent crimes) by adolescents involved in bullying as measured by the ROBVQ with social and emotional problem characteristics?”

In the qualitative analysis, more misdemeanor crimes were committed and put into four categories, including drugs, stealing, property, and miscellaneous. Adolescents were less likely to commit felony violent crimes, but more adolescents committed more violent crimes and were

willing to divulge the description of their violent crimes than property crimes. They were also more likely to describe the misdemeanor crimes in comparison to felony type crimes.

This study's qualitative method for this specific question differed because the previous literature used quantitative analyses. Therefore, this current study expanded the scope of being able to identify specific crimes in the three main categories that adolescents with higher bully and social and emotional problems scores have committed. Alikasifoglu et al. (2007), Craig and Pepler (2003), Holmberg and Hjern (2008), and Liang et al. (2007) conducted studies that concentrated on risk behaviors, criminal behaviors and activity, and different types of crimes in relation to bullying. Likewise, involvement in bullying suggested more delinquent behaviors (Edmondson et al., 2007; Ivarsson et al., 2005; Perren & Alasker, 2006; O'Brien et al., 2011). Kim and colleagues (2011), Rusby et al. (2005), Topper and colleagues (2011), and Vieno et al. (2011) indicated heavy drinking, marijuana use, and violence were correlated with bullying. This was similar to this current study because adolescents indicated that they used marijuana, alcohol, and engaged in violent behaviors such as "fighting," "battery," and "assault."

Within the cited research on committing crimes (Edmondson et al., 2007; Ivarsson et al., 2005; Perren & Alasker, 2006; Rusby et al., 2005), there was limited discussion on such crimes as stealing, trespassing, vandalism, prescription pills, cocaine, tickets, and arson. In comparison, this current study identified specific subcategories within misdemeanor, felony violent, and felony property crimes that were more likely committed by higher bully scores. Some studies have shed light on how bullies, victims, and bully-victims have committed violent and property crimes (Farrington et al., 2011; Ragatz et al., 2011; Sourander et al., 2006), albeit; in longitudinal studies and not done qualitatively. Thus, this current study expanded on previous research by identifying specific crimes.

Limitations of the Study

There were implications for educators, parents, adolescents, helping professionals, and researchers, nonetheless, there were five limitations in this study that should be discussed. First, the sample size was convenient because the sample was derived from a group of adolescents willing to participate from middle and high schools in the southeast. Adolescents who were characterized with social and emotional problems, bullies, victims, and bully-victims were participants as well as those not involved in bullying and those without social and emotional problems. This may have limited the sample size since bullying scores and adolescents with social and emotional problems scores population were smaller in number than adolescents characterized without social and emotional problems or bullying attributes. Second, adolescents who have committed crimes (also part of the sample size) were fewer in number than those who have not committed crimes. Thus, generalizability to middle and high adolescents (who were not identified with social and emotional problems or who do not have criminal records) was unknown. Third, the varieties of social and emotional problems could not be controlled. Social and emotional problems of adolescents develop based on varying circumstances and/or experiences. Because adolescents cope with situations differently, some adolescents may have developed social and emotional problems, while other adolescents, with similar experiences and situations, may not have exhibited social and emotional problems. The fourth limitation was related to criminal offenses and subsequent court charges. Some adolescents, who committed criminal offenses, received plea bargains and lesser charges (i.e., misdemeanor instead of a felony), while others received charges that were not reduced was a limitation to the accuracy of the types of crimes committed. Additionally, some adolescents have committed crimes but were not caught or charged with criminal behavior. This limitation cannot be controlled. Fifth, while bullying involvement scores were low, prevalence rates of bullies,

victims, and bully-victims was similar to previous literature ranges (Ball et al., 2008; Kepenecki & Cinkir, 2005; Laehheem et al., 2009; Nansel et al., 2001; Pepler et al., 2008), future researchers should be cautious in making generalizations about this research. These low scores could be accounted for due to minimal return rates as well as specific adolescents and/or parents choosing not to have their adolescent participate (i.e., the surveys related personal and vulnerable information such as characteristics of bullying behaviors and possible criminal behaviors). The low scores could also be related to the recruiting of adolescents for this study, which had specific tactics that were and were not beneficial. To illustrate, principals and teachers who endorsed the study and encouraged their students to participate, elicited higher return rates of signed informed consent forms than principals and teachers who did not. Additionally, when relationships were established by the researcher and the principals and/or teachers, return rates of informed consent forms were higher than schools with no rapport. Communicating about the study with principals beforehand, as well as being willing to share conclusions with the school systems and specific schools increased participation from students. Not having a plan between the researcher and principal for distributing the informed consents to students, proved to be problematic. A clear plan on how to carry this critical task out is vital for getting signed consent forms returned for student participation.

Implications and Future Research

Even though the following demographics (e.g., age, gender, social status, vocabulary knowledge) were significant contributors to higher bullying scores, age was only related to victim scores and bully-victim scores. Previous literature has indicated age is related to all groups involved in bullying (Pepler et al., 2008; Smith et al., 2002). Additionally, vocabulary knowledge was noted to be related to bully and bully-victim scores in this study as well as in

other research studies (Conti-Ramsden & Botting, 2004). However, language was not found to impact victims of bullying in this study, contrasting earlier studies (Luciano & Savage, 2007; Woods & Wolke, 2004). Gender, unlike other literature (Shute et al., 2008; Turkel, 2007), was not found to be significant in this study. Social status, particularly being an “outcast,” was found to be significant across higher bully, victim, and bully-victim scores, similar to previous work (Guerra et al., 2011; Thornberg & Knutsen, 2011).

The demographic findings have implications for professionals, parents, and adolescents. More specifically, this study revealed that bully, victim, and bully-victim scores differ across demographic variables. This is significant because age could be used to characterize victims of bullying and bully-victims, while vocabulary knowledge can be employed in differentiating bullies’ and bully-victims’ traits. Because vocabulary was negatively related to bully and bully-victim scores, interventions could take place to increase vocabulary knowledge, which has not been discussed in previous literature. This focus could assist in decreasing bully and bully-victim scores because adolescents with bullying characteristics could be better equipped with communication skills and using social language appropriately (i.e., with appropriate communication skills and positive coping mechanisms in place, the adolescent would not need to rely on bullying or antisocial behaviors in their interactions with peers).

Most importantly, determining adolescents’ social status, specifically as “outcasts,” could assist in identifying adolescents with more bullying involvement behaviors. This has specific implications for the role “outcast” adolescents and young adults have. For example, several ostensibly labeled “outcasts” have been involved with school and university-related shootings (e.g., Dylan Klebold and Eric Harris at Columbine High School in 1999 in Littleton, Colorado, Seung-Hui Cho at Virginia Polytechnic Institute and State University in 2007 in Blacksburg, Virginia, Adam Lanza at Sandy Hook Elementary in 2012 in Newtown, Connecticut; Pearson

Education, Inc., 2012). Media reports indicated that these perpetrators had “outcast” characteristics. Thus, school districts, teachers, administrators, parents, and peers of “outcast” students should examine how outcasts are treated at school. This study noted that adolescents in Quadrant 3 (i.e., outcasts) were seen as low in peer admiration and low in adult competency; thus, they were rejected and disliked by not only peers but by adults (i.e., teachers, administrators, parents). The relationship between the “outcast” and their peers and the “outcast” and their teachers could be considered therefore be seen as hostile and negative. The relationships between the outcasts and their peers and the outcasts and educators need to be considered since “outcast” adolescents often feel isolated, rejected, and disliked.

The outcast relationships could possibly be enhanced by interventions that assist students in learning positive coping mechanisms and appropriate social skills. For example, educators could: (1) incorporate students who are identified in Quadrant 3 in positive social interactions as soon as they notice a student is being isolated, left out, and/or withdrawn, (2) acknowledge the feelings and treatment of “outcast” students, and (3) emphasize positive peer collaboration and interactions. While previous research has indicated the importance of social support (Cowie, 2000; Hampel et al., 2009; Hunter & Borg, 2006; Tenebaum et al., 2011), this focus on outcasts goes more in depth with interventions and differs from previous research.

Overall, the demographic variables in this study accounted for variance in bullying scores and indicated specific characteristics of bullies, victims, and bully-victims. Overtime, there have been inconsistencies with demographic variables and bullying. Gender, in particular, needs further examination to explain why it was not significant in this study, in contrast to previous work (Athanasiaides & Deliyanni-Kouimtzis, 2010; Dijkstra et al., 2007). Further investigation of the age variable will be beneficial. In this study, victim and bully-victim scores correlated with age, deviating from other research which found age associated with all three bullying groups

(Carlyle & Steinman, 2007; Laeheem et al., 2008; Nation et al., 2001). Vocabulary knowledge was another variable that needs further exploration. Other studies have indicated that victims were impacted by language deficits (Conti-Ramsden & Botting, 2004; Woods & Wolke, 2004). This study noted some different conclusions (bully and bully-victim scores and vocabulary knowledge were negatively related). New research should also explore when vocabulary knowledge begins to influence bullying behaviors as well as if there is a difference between social language and academic language in relationship to bullying scores. Specifically, having interventions that could increase vocabulary knowledge, while decreasing bullying attributes, is important.

Additionally, reexamining why being “outcasts” or in Quadrant 3 led to increased bully, victim, and bully-victim scores would give insight on bullying characteristics and involvement. Furthermore, the role that “outcasts” play in bullying warrants additional exploration, with several questions to consider. More specifically, “What characteristics do ‘outcasts’ have that increase their involvement in bullying?”, “Are ‘outcast’ adolescents who are involved in bullying more likely to engage in school shootings?”, and “Are there different categories of ‘outcasts’ (i.e., quiet and isolated outcasts, obnoxious and loud outcasts) that determine whether or not an adolescent will become a bully, victim, or bully-victim?”

Furthermore, not only are the “outcast” traits important to examine, but how the “outcast” adolescents perceive peers and teacher interactions would also be vital in future research. Likewise, examining teacher and peer perceptions of “outcast” adolescents would be beneficial to research in exploring how to intervene. Having positive experiences instead of negative would be notable. Lastly, it is important to see how early trends develop and are maintained over a lifetime. For example, a focus on how children become “outcast” students and how these

characteristics transcend later in life into social status, criminal behavior, and bullying, could be examined through a longitudinal study.

Previous literature indicated that bullying involvement was related to social and emotional problems and certain demographic variables (Cowie, 2000; Jablonska & Linderberg, 2007; Nation et al., 2008; Laeheem et al., 2008; Perren & Alasker, 2006; Smith et al., 2002; Turkel, 2007). Thus, the finding in this study that social and emotional problems scales and bully, victim, and bully-victim scores were related beyond demographic variables was notable for several reasons. First, it demonstrated that social and emotional problems characteristics can account for and influence bullying involvement. While parents, educators, leaders in the community, researchers, school psychologists, administrative staff, counselors, and other helping professionals are integral entities in assisting adolescents with bullying attributes, they need to better understand the relationship between social and emotional problems traits and victims, bullies, and bully-victims qualities in order to intervene now and help prevent bullying in the future.

Secondly, this study had implications for adolescents because adolescents with higher bully, victim, and bully-victim scores were found to have more negative behaviors (i.e., higher peer problems, conduct problems, emotional symptoms scores) that they engage in, which impact their emotional well-being, social relationships, and behaviors, consistent with previous research (Edmond et al., 2007; Gil, 2002; Hjern et al., 2008; O'Brien et al., 2011; van der Wal, 2005). Most importantly, peer problems, conduct problems, and emotional symptoms are traits that can aid in identifying adolescents with bully, victim, and bully-victim features, which will abet adolescents in learning proper coping mechanisms as well as receiving the necessary assistance that they need. Identifying these attributes was meaningful because research has demonstrated that adolescents employ maladjustment coping methods when bullying is involved, nonetheless,

adding social support alleviated and/or improved their coping skills (Cowie et al., 2008; Hampel et al., 2009; Hunter & Borg, 2006; Tenebaum et al., 2011).

This study has implications for future research that need to explore prosocial behaviors and characteristics of bullies, victims, and bully-victims because there were differing results between this study and previous literature. More specifically, research should further examine the specific behaviors bullies, victims, and bully-victims engage in that are considered prosocial. Additionally, information is needed in regard to why victims have been found to be more prosocial than their counterparts (bullies, bully-victims) in past research, but were not in this study. Furthermore, studies should focus on the extent of the emotional symptoms traits bully-victims experience and when/if these symptoms are transferred or transformed into externalized behaviors. Likewise, new studies are needed to explore externalized behaviors in victims, especially conduct problems. Research still needs to examine bully-victims and their characteristics in comparison to bullies and victims because bully-victims exhibit a mixture of behaviors that victims and bullies have been noted to demonstrate. Lastly, new studies need to expand on bullies', victims', and bully-victims' relationships with their peers. More specifically, questions such as "Why adolescents involved in bullying are disliked and rejected, perceive themselves as 'outcasts', or in Quadrant 3 and 'class clowns' or in Quadrant 4," "How the three groups interact with peers," and "What makes these relationships positive and/or negative," need to be answered.

The finding from this study that bully scores and social and emotional problems scores were moderated by crimes has vital importance to the bullying literature. Earlier studies have found that bullies were more likely to engage in criminal activity (Farrington et al., 2011; Jiang et al., 2011; Ragatz et al., 2011). However, this study expanded on prior research by linking higher bully scores, crimes, and higher social and emotional problems scores together, which

suggested that adolescents with bullying attributes and social and emotional problems traits were influenced and impacted by crime.

The information from this study on crimes committed has implications for helping professionals, parents, the juvenile justice system, and adolescents. Even though, adolescents with high bully scores were associated with crimes and crimes could be used to moderate bully scores and social and emotional problems scales, these findings could be employed in identifying characteristics of bullies. This could assist with interventions and prevention models in the future. These findings could be targeted to help decrease criminal activity and increase adjustment and social and emotional coping skills for adolescents with bully traits. Specifically, interventions should begin early, meaning that children who have been identified as having bullying characteristics should receive intervention and prevention techniques to decrease the likelihood of committing criminal offenses. Once an adolescent has been found to engage in criminal activity or risk-taking behavior, parents and educators need to intervene to hopefully decrease the likelihood that more crimes will follow.

This study found that Quadrant 3 and bullying scores were related. Additionally, social and emotional problems scales and bullying scores were moderated by crimes. Thus, there are specific implications for this group. Educators and parents need to identify “outcast” adolescents to intervene in decreasing social isolation and social alienation from teachers and peers to decrease bullying and social and emotional characteristics as well as decrease criminal activities.

Future research should examine if being associated with the “outcast” group isolates adolescents to engage in more bullying, which lead to criminal behavior(s). Further research is indicated, and should explore the differences among the three bullying groups and types of crimes committed to discern correct misdemeanor, felony property, and felony violent crime moderators for adolescents with characteristics of bullies, victims, and bully-victims with social

and emotional problems. Additional clarification is needed for the discrepancy between higher victim and bully-victim scores not having significant results for committing crimes in this study (previous studies found that all three types of bullying groups commit criminal acts; Bender & Losel, 2011; Renda et al., 2011; Sourander et al., 2006). This study supported literature about adolescents with features of bullying committing crimes as well as adolescents with bullying attributes were found to commit different types of crimes (i.e., misdemeanor, property, violent).

The specific types of crimes committed by adolescents, offered in this study, was essential knowledge for juvenile detention centers, counselors, parents, educators, school psychologists, researchers, and any other professionals who work with adolescents likely to commit crimes. This could be used as a cautionary tool to intervene before more severe criminal activity takes place, specifically with adolescents who have bully attributes.

Another implication for this study was that adolescents can become aware of the impact that criminal behaviors have on their futures and current lives. Thus in turn, adolescents can learn effective methods for coping with bullying, conduct problems, emotional symptoms, peer problems, and/or any other negative effects in their lives such as criminal behavior. Not only could adolescents become consciously aware of the impact of criminal behavior, but bullying could be seen as a gateway to crime. For instance, it has been noted in literature that preschoolers who have engaged in bullying behavior were more likely to engage in aggressive behaviors (Edmond et al., 2007). Additionally, juvenile offenders were likely to report that they were involved in bullying. Bullies were more likely to have been previously incarcerated and affiliated with gangs, while bully-victims experienced abuse, drug use, and suicide attempts (Ireland, 2002; Viljeon et al., 2005). These studies as well as this current study's findings that bully scores and social and emotional problems scales are moderated by crime suggest that characteristics of bullies and involvement in bullying increases the likelihood of adolescents

committing crime. Similarly, bullying has been found to increase antisocial behaviors, which has also been found to be associated with criminal behaviors (Farrington et al., 2011; Jiang et al., 2011; Ragatz et al., 2011; Renda et al., 2011; Sourander et al., 2011). This augments to the argument that not only are crime and bullying related, but potentially bullying engagement increases the likelihood of criminal behavior due to engaging in negative or antisocial behaviors (i.e., conduct problems, peer problems). Therefore, bullying could be a gateway for criminal activity. This could then lead to interventions for deterring adolescents and younger children from engaging in antisocial behaviors and bullying which would decrease the negative outcome of committing crimes.

Future research needs to be conducted on the specific types of crimes adolescents have committed if they have traits of being bullies, victims, and/or bully-victims with social and emotional problems. More specifically, qualitative analyses are necessary to enhance and increase the understanding of subcategories that fit within misdemeanor, violent, and property crimes as well as being able to identifying specific examples in each subcategory. Other quantitative analyses are necessary to examine types of crimes and bullying qualities. Additionally, more qualitative analyses are warranted to interview adolescents about why they committed crimes, if bullying is a gateway to criminal behavior, if being an “outcast” increases isolation then increases bullying which then opens the door to criminal behavior, and the reason why they committed that specific crime. Thus, due to the differences in types of crimes among adolescents with features of bullies, victims, and bully-victims clarification and additional work are warranted.

Summary

This chapter revisited the problem and purpose of this study, as well as a brief description of the methodology. This study examined one main research question and two exploratory

research questions. The first question focused on social and emotional problems (hyperactivity, emotional symptoms, peer problems, prosocial, conduct problems) scores and bully, victims, and bully-victim scores being related beyond the demographic variables. Age and victims of bullying scores were related, while bully and bully-victim scores were correlated with vocabulary knowledge. All three bullying groups' scores were associated with social status, specifically "outcasts" by peers.

Victim scores were related to emotional symptoms, conduct problems, and peer problems scores, while bully and bully-victim scores were correlated to conduct problems and peer problems scores. Bully-victim scores were also found to be associated with emotional symptoms scores. The two exploratory questions had significant findings. Crimes committed were a moderator between bully, victim, and bully-victim scores and social and emotional problems scales were explored. Bully scores and social and emotional problems scores were moderated by crimes, while victim and bully-victim scores and social and emotional problems scores did not have any relationship with crimes. The last question focused on the types of crimes (i.e., misdemeanor, violent, and property crimes) committed by higher scores on bullying involvement. Lastly, there were four subcategories for misdemeanors (i.e., stealing, property, drugs, miscellaneous), while felony property crime had arson and felony violent crimes had assault and robbery. There are several implications for professionals, parents, and adolescents that need to be acknowledged to decrease bullying characteristics, increase positive behaviors, and decrease criminal behaviors. Future studies are warranted for various reasons to clarify variations in the results of demographic variables, social and emotional problems scores, crimes, and types of crime committed found in this study when compared to earlier research.

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Appendices

Appendix A

ROBVQ Approval Letter

PSYKOLOGKONSULT DAN OLWEUS

Vognstølbakken 16, N-5096 Bergen, NORWAY.

Tlf. (+47) 55 58 23 27; (+47) 55 29 36 12; email: Olweus@psyhp.uib.no

Organization NO 967791822

Dear mail-sender-

The following information is primarily intended for persons who are interested in possibly using the Revised Olweus Bully/Victim Questionnaire in a **research project**. If you want to use the Questionnaire for practical registration and/or intervention purposes (usually in the context of implementing the Olweus Bullying Prevention Program), you may consult the website www.hazelden.org/olweus for more information and/or send a mail to rschladweiler@hazelden.org.

In ordering the Questionnaire **for research purposes**, you should fill out the attached Order Form, send it by mail (not registered mail) to BVP - Dan Olweus, Vognstolbakken 16, N-5096 Bergen, Norway, and add a check in the amount of US \$140 or £90 (see Order Form at the end for more details). Unfortunately, **only prepaid orders can be handled or considered**, and this is the only way the Questionnaire can be ordered (not by fax or email).

If you are interested in translating and using the Questionnaire in a non-English or non-Spanish language in a research or intervention project (not just a student project), you should send a mail with your inquiries to me at olweus@psyhp.uib.no.

Special information for more or less advanced students: We get a good deal of requests asking for permission to use the Questionnaire for free in connection with a term paper or to add the Questionnaire as an appendix to a report and the like. Although we certainly appreciate your interest in the Questionnaire, we cannot usually approve of such requests, unfortunately. There is, however, a good deal of information about the Questionnaire in the paper by Solberg & Olweus (2003), Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. Aggressive Behavior, 29, 239-268. This paper is also available electronically online. Also see the Olweus, D. (1993). Bullying at school: What we know and what we can do (more information about the book below).

For your information, there is also available a scannable version and an online version of the Questionnaire. Please look at www.hazelden.org/olweus for more information.

Dan Olweus

GENERAL INFORMATION ABOUT THE REVISED OLWEUS BULLY/VICTIM QUESTIONNAIRE

THE QUESTIONNAIRE

The Revised Olweus Bully/Victim Questionnaire (for the present available in English, Norwegian, Swedish, Icelandic, and Spanish) which is filled out anonymously by the students, consists of some 40 questions for the measurement of a number of aspects of bully/victim problems: to be exposed to various (physical, verbal, indirect, racial, sexual etc.) forms of bullying/harassment, various forms of bullying other students, where the bullying occurs, pro-bully and pro-victim attitudes, and the extent to which the social environment (teachers, peers, parents) are informed about and react to the bullying etc. The psychometric properties of the Questionnaire are generally quite good. The “definition” of the word bullying as presented to the students in the Questionnaire is included here as an Appendix.

There is now only **one version of the Questionnaire for use in grades 3 through 12** (typically for students with 2 years, possibly one year, of reading instruction and above). However, the way of administering the Questionnaire is slightly different for students in lower grades (3 through 5) and higher grades (6+), as explained in the instructions for administration. In the higher grades, administration of the survey can usually be completed without problems within less than a school hour. Students in the lower grades and/or students with reading difficulties may need somewhat longer time.

We generally recommend that the Questionnaire be administered to the students no earlier than 6-8 weeks after the Summer holidays or 4 weeks after the Winter and Spring holidays. The Questionnaire 'package' also contains an **Instruction part**, one copy of the Questionnaire with recommended code numbers .

SOME GENERAL INFORMATION ABOUT THE QUESTIONNAIRE AND THE OLWEUS BULLYING PREVENTION PROGRAM

Many of the questions in the Questionnaire have been used in my own large-scale surveys of Norwegian and Swedish students, and accordingly, there is a good deal of data with which survey results from one's own school(s) can be compared. Additional data from student populations in other countries will gradually become available. Generally, I refer to my book Bullying at School: What We Know and What We Can Do. (Oxford: Blackwell Publishers, 1993; the book can be ordered directly from: Marketing Department, Blackwells, 108 Cowley Road, Oxford, OX4 1JF, United Kingdom, or from Blackwells, c/o AIDC, P.O.Box 20, Williston, VT 05495, USA, phone: 1-800-216-2522) which contains a good deal of information of relevance. The book also gives a relatively detailed description of the school based anti-bullying intervention program (Olweus Bullying Prevention Program) that I developed and scientifically evaluated in 42 schools in Bergen, Norway (2500 students followed over 2,5 years). Some of the main results were as follows:

- * There were marked reductions - by 50% or more - in bully/victim problems in the 42 schools during the two years following introduction of the intervention

program. The results generally applied to both boys and girls and to students from all grades studied (from grade 4 through 9).

- * There were also clear reductions in general antisocial behavior such as vandalism, fighting, pilfering, drunkenness, and truancy.
- * In addition, we could register marked improvement as regards various aspects of the "social climate" of the class: improved order and discipline, more positive social relationships, and a more positive attitude to schoolwork and the school.
- * At the same time, there was an increase in student satisfaction with school life.

We have now **six large-scale evaluation projects of the Olweus Bullying Prevention Program in Norway, all with generally positive results**. See for example Olweus, D. (2005), A useful evaluation design, and effects of the Olweus Bullying Prevention Program. *Psychology, Crime & Law*, 11, 389-402

The program has also been used with positive results in several other countries including the US, see Olweus, D. & Limber, S.(1999) Blueprint: (Olweus) Bullying Prevention Program. The program has recently been selected by a US expert committee as a "model program" to be used in a nationwide violence prevention initiative, supported by the US Ministry of Justice (OJJDP). A detailed description of the program, information about how it can be used, and a short description of the other nine "model programs" (called Blueprint Programs) are to be found in the Blueprint publication referred to in this paragraph. An overview of the core components of the Olweus Bullying Prevention Program is presented in an Appendix to these information sheets. (The Blueprint publication can be ordered for a small cost from the Center for the Study and Prevention of Violence, University of Colorado at Boulder, fax: 1-303-443-3297; see also www.colorado.edu/cspv/blueprints).

For more information about the Olweus Bullying Prevention Program, see the website www.hazelden.org/olweus or send a mail to rschladweiler@hazelden.org.

PRICE FOR USE OF THE QUESTIONNAIRE FOR RESEARCH PURPOSES

The cost for using the Questionnaire for research purposes is **US \$ 140 (or £90)**. This price comprises p&p including shipping (if sent by mail).

If you plan to use the Questionnaire in a research project, I would very much appreciate receiving a brief description of the project (including approximate number and age range of subjects etc.) The description can be made on the back of the enclosed Order Form or in a separate letter. When the project has been completed , a copy of the report(s) or article would be appreciated.

More information about the conditions for ordering the Questionnaire is provided on the Order Form.

With best wishes. Sincerely,

Dan Olweus
Research Professor of Psychology

Address: Vognstolbakken 16, N-5096 Bergen, NORWAY
Tel: (+47) 55 58 23 27; (+47) 55 29 36 12 ; email: Olweus@psyhp.uib.no

"DEFINITION" OF BULLYING AS PRESENTED TO THE STUDENTS IN THE OLWEUS BULLY/VICTIM QUESTIONNAIRE

ABOUT BEING BULLIED BY OTHER STUDENTS

Here are some questions about being bullied by other students. First we define or explain the word bullying. We say a student is being bullied when another student, or several other students

- say mean and hurtful things or make fun of him or her or call him or her mean and hurtful names
- completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose
- hit, kick, push, shove around, or lock him or her inside a room
- tell lies or spread false rumours about him or her or send mean notes and try to make other students dislike him or her
- and other hurtful things like that.

When we talk about bullying, these things happen repeatedly, and it is difficult for the student being bullied to defend himself or herself. We also call it bullying, when a student is teased repeatedly in a mean and hurtful way.

But we don't call it bullying when the teasing is done in a friendly and playful way. Also, it is not bullying when two students of about equal strength or power argue or fight.

(Copyright: Dan Olweus, 1996)

(OLWEUS)

OVERVIEW OF THE OLWEUS BULLYING PREVENTION PROGRAM

GENERAL PREREQUISITES

- * **AWARENESS AND INVOLVEMENT ON THE PART OF ADULTS**

MEASURES AT THE SCHOOL LEVEL

- * **QUESTIONNAIRE SURVEY**
- * **SCHOOL CONFERENCE DAY**
- * **EFFECTIVE SUPERVISION DURING RECESS AND LUNCH TIMES**
- * **REGULAR STAFF DISCUSSION GROUPS**
- * **FORMATION OF COORDINATING GROUP**

MEASURES AT THE CLASS LEVEL

- * **CLASSROOM RULES AGAINST BULLYING**
- * **CLASSROOM MEETINGS WITH STUDENTS**
- * **MEETINGS WITH PARENTS OF THE CLASSROOM**

MEASURES AT THE INDIVIDUAL LEVEL

- * **SERIOUS TALKS WITH BULLIES AND VICTIMS**
- * **SERIOUS TALKS WITH PARENTS OF INVOLVED STUDENTS**
- * **DEVELOPMENT OF INDIVIDUAL INTERVENTION PLANS**

October 2006

BRIEF PSYCHOMETRIC INFORMATION ABOUT THE REVISED OLWEUS BULLY/VICTIM QUESTIONNAIRE

Here is some brief psychometric information about the Questionnaire. We have made lots of analyses on the internal consistency (reliability), the test-retest reliability and the validity of the Revised Olweus Bully/Victim Questionnaire on large representative samples (more than 5000 students). The results are generally quite good: At the individual level (with individual subjects as the unit of analysis), combinations of items for being victimized or bullying others, respectively, have typically yielded internal consistency reliabilities (Cronbach's alpha) in the .80's

or higher, depending on the number of items included in the scales. Often, however, the school is the natural unit of analysis, and then, of course, the reliabilities are even higher, typically in the .90's. Both individuals and schools can thus be very well differentiated with the Questionnaire..

With regard to the validity of Questionnaire, I have written a little bit about it in a footnote to an article published in 1994. I quote it here for your information:

"With regard to the validity of self-reports on variables related to bully/victim problems, it may be mentioned that in the early Swedish studies (Olweus, 1978) composites of 3-5 self-report items on being bullied or bullying and attacking others, respectively, correlated in the .40-.60 range (Pearson correlations) with reliable peer ratings on related dimensions (Olweus, 1977). Similarly, Perry, Kusel, and Perry (1988) reported a correlation of .42 between a self-report scale of three victimization items and a reliable measure of peer nominations of victimization in elementary schoolchildren. In the intervention study (below), we also found class-aggregated student rating estimates of the number of students in the class who were bullied or bullied others during the reference period, to be highly correlated with class-aggregated estimates derived from the students' own reports of being bullied or bullying others: Correlations were in the .60-.70 range (see Olweus, 1991, for details)." [Olweus, D. (1994). Annotation: Bullying at school: Basic facts and effects of a school based intervention program. Journal of Child Psychology and Psychiatry, 35, 1171-1190.]

In addition, in our recent studies we have found strong evidence for the **construct validity** of the Questionnaire dimensions of "being victimized" and "bullying others" in looking at the relations between degree of victimization and degree of bullying others, respectively, and relevant other variables: We typically find fairly strong linear relations between degree of victimization (being bullied) and variables such as (self-reports of) depression, poor self-esteem and peer rejection (peer group disintegration), on one hand, and even stronger linear relations between degree of bullying others and various dimensions of antisocial behavior (and several aspects of aggressive behavior, on the other(see in particular 2003 article by Solberg and Olweus mentioned below, and Bendixen & Olweus (1999), Measuring antisocial behavior in early adolescence and adolescence: Psychometric properties and substantive findings. Criminal Behaviour and Mental Health, 9, 323-354).

An article about some of the psychometric properties of the Questionnaire is now available upon request: Solberg, M. & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. Aggressive Behavior, 29, 239-268. It is also available electronically online.

A description of the design (named age-cohort design or cohort-sequential design) used in several of our large-scale studies on the effects of the Olweus Bullying Prevention Program and of results from such evaluations is given in Olweus, D. (2005). A useful evaluation design, and effects of the Olweus Bullying Prevention Program. Psychology, Crime, and Law, 11, 389-402.

Order Form May 2006

ORDER FORM FOR BULLY/VICTIM QUESTIONNAIRE (Unfortunately, orders can not be made by fax or email.)

Listed price comprises costs for p&p (including shipping). The purchaser can normally **expect to receive the ordered materials within 2-3 weeks after our receipt of the Order Form** if the materials are sent by (air) mail. If they are sent electronically, they will of course arrive much more quickly.

Hereby I order (please circle and fill out, where appropriate):

+ one set of the Olweus Bully/Victim Questionnaire, to be used for research purposes only.

Price: \$140 or £90

The order must be **accompanied by a check** for the relevant amount (a bank check or remittance; private checks can also be accepted but unfortunately only from the US) The check should be made **payable to BVP - Dan Olweus, and sent (together with the Order Form) to BVP - Dan Olweus, Vognstolbakken 16, N-5096 Bergen, Norway**. Please don't send the order form/check as registered mail - it will only delay the process.

On reception of Order Form and check, **one set of the Questionnaire materials will be sent to the purchaser** (usually by email) who can then make the necessary number of copies

Permission/license to use the Questionnaire is granted for use in research conducted by the person making the order (or persons within the same research group) for a period of **three years** from receipt of ordered materials. Use of the Questionnaire after that period requires a new license.

I enclose a check for US \$/ £

It would be appreciated if you could also write (overleaf or in a separate letter) a few words about the project/context in which the materials are to be used (including your own role in the project).

CONFIRMATION

In signing this Order Form, **I confirm that** that Questionnaire materials received will not be delivered to others for use in other research projects than that/those referred to/specifyed on this Order Form.

Place/date.....

Signature.....

Name (in capitals).....

Address (Please use **school or office address**, if available; **never use P.O.Box address**):

.....

.....
Phone: Fax:

Possible email-address:

[This Order Form together with check for the relevant amount should be sent by mail to **BVP - Dan Olweus, Vognstolbakken 16, N-5096 Bergen, Norway**. Tel: +47 55 58 23 27 or +47 55 29 36 12 or email: Olweus@psyhp.uib.no (for information but not for ordering)].



REQUEST FOR PERMISSION

Applicant, please complete this request and send to **Hazelden Publishing, P.O. Box 176, Center City, MN 55012-0176** or **fax 651-213-4720**. If you're filling out this form electronically, please type in the information and e-mail back to: **lstroshane@hazelden.org**
Permission will not be effective until a copy of this request is signed by Hazelden and returned to the applicant.

1. Date: 3/18/2013

2. The undersigned applicant requests permission to use an excerpt from the Hazelden work entitled:

Revised Olweus Bully/Victim Questionnaire

3. Order # (on back of the cover): CD of Questionnaire

4. Author(s) Name: Olweus

5. Format of Hazelden work (book, DVD or other): CD but using only few items from
Questionnaire as examples

6. Excerpt: (Set forth page or frame numbers and the opening and closing lines of the material for which permission is requested. Use reverse side or additional sheets if necessary) Questionnaire items: #4, 5, 6, 24, 27,
28, 1, 3, 39

Requested Use of Excerpt

1. The Excerpt will be used in applicant's Work entitled: Bullying and Adolescents with Social and
Emotional Problems (title may change)
2. Written by: Sara Ziech (main author) Jay Burnham, Stephen Thomas, Ansley Gilpin-Tulloch,
Patti Harrison, Rael House
3. Format(s) for applicant's Work:

Book/Journal/Other Publication

Print Number of Copies: UNKNOWN

Electronic Number of Copies: UNKNOWN

Course Pack

Print Number of Copies: _____ and Term: _____

Electronic Number of Copies: _____ and Term: _____

Audio-Visual Work

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 Print Number of Copies: UNKNOWN
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4. Language(s) for applicant's Work: English

5. Territory for Distribution: United States, but if electronic worldwide due to Internet access

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7. Distribution of Work will begin by: 3/18/2013

8. The Excerpt will be used for the following purpose in the applicant's Work: Research, dissertation, publication of bullying involvement influenced by social and emotional problems scores as well as crime, moderating bullying, social and emotional problems.

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Signature of Applicant:

Print Applicant's Name:

Sara Zach

Print Applicant's Organization: (if applicable)

Print Applicant's Address: 10110 Lenox Cir Tuscaloosa, AL 35405

Print Applicant's Phone Number: 205-344-3452

Fax Number:

Email: zachy001@crimson.ua.edu

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PLEASE ALLOW 1-3 WEEKS FOR A RESPONSE.
Thank you, Hazelden Publishing

Appendix B

SDQ Approval Letter

Goodman, Robert [robert.goodman@kcl.ac.uk]

Actions

To:

Zach, Sara

Friday, March 15, 2013 3:04 AM

Retention Policy: 1 year - Delete (1 Year) Expires: 3/15/2014

You forwarded this message on 3/15/2013 8:03 AM.

Hi Sara

Thank you for checking so carefully. You have my permission to bind a copy of the SDQ exactly as downloaded from the www.sdqinfo.org website into any paper copy of your thesis, but you cannot include electronic versions of the SDQ in any electronic version of your thesis.

Best wishes

Robert

Appendix C

VFA Approval Letter

Dear Ms. Zach:

As discussed, I'm forwarding the permissions grant sent to you yesterday that was returned to sender.

Please let me know if I can be of further assistance.

Sincerely,

Regina R. Green

Senior Contracts Administrator/Contracts & Licensing
Contracts, Copyrights, & Licensing

Houghton Mifflin Harcourt

222 Berkeley Street
Boston, MA 02116
Office: 617.351.5389
Fax: 617.351.3546
hmhco.com

From: Permissions, School

Sent: Thursday, March 21, 2013 5:56 PM

To: ['zach001@crimson.ua.edu'](mailto:zach001@crimson.ua.edu)

Subject: FW: Permission request - 3824 - University of Alabama

Dear Ms. Zach:

Thank you for your attached request dated March 15, seeking permission to include copies of *VOCABULARY FOR ACHIEVEMENT*, Placement Evaluation Answer Key in the appendix of your dissertation entitled "Bullying and Adolescents with Social and Emotional Problems: Predicting Criminal Offenses" as well as for submission to University of Alabama.

We are pleased to grant your request on a one-time, nonexclusive, and nontransferable basis as stated, provided that you agree not to portray our copyrighted material in a negative manner, and that no deletions from, additions to, or changes in the material will be made without prior written approval of Houghton Mifflin Harcourt Publishing Company. This license only applies to use of our copyrighted material specified above as examples in your dissertation, and does not authorize mechanical or electronic reproduction in any form. Permission granted herein is limited to material owned by Houghton Mifflin Harcourt Publishing Company.

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Sincerely,

Regina R. Green

Senior Contracts Administrator/Contracts & Licensing
Contracts, Copyrights, & Licensing

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222 Berkeley Street
Boston, MA 02116
Office: 617.351.5389
Fax: 617.351.3546
hmhco.com

From: school.permissions@hmhpub.com [mailto:school.permissions@hmhpub.com]
Sent: Friday, March 15, 2013 11:07 AM
To: zach001@crimson.ua.edu
Subject: Permission request - 3824 - University of Alabama

Thank you for your inquiry. Your request has been forwarded to our School Permissions inbox for processing. Please note: This email was sent from a notification-only address that cannot accept incoming email. Please do not reply to this message.

Appendix D

IRB Information

August 13, 2012

Sara Zach
Department of ESPRMC College of Education
Box 870231

Re: IRB Application# 12-013 "Bullying and Adolescents with Social and Emotional Problems: Predicting Criminal Offenses" Dear Ms. Zach:

The University of Alabama IRB has received the revisions requested by the full board on 7/20112. The board has reviewed the revisions and your protocol is now approved for a one-year period. Please be advised that your protocol will expire one year from the date of approval, 7/20/12.

If your research will continue beyond this date, complete the IRB Renewal Application by the 15th of the month prior to project expiration. If you need to modify the study, please submit the Modification of An Approved Protocol Form. Changes in this st4Qy cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Request for Study Closure Form.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number. Please use reproductions of the IRB approved stamped consent/assent forms to obtain consent from your participants.

Good luck with your research. Sincerely,

Stuart Usdan, PhD.

Chair, Non- Medical Institutional Review Board
The University of Alabama

UNIVERSITY OF ALABAMA INSTITUTIONAL REVIEW BOARD

Title of Research: Bullying and Adolescents with Social and Emotional Problems: Predicting Criminal Offenses

Investigator(s): Sara Zach, Ed.S., Joy Burnham, Ph.D., Steven Thoma, Ph.D., Patti Harrison, Ph.D., Ansley Gilpin, Ph.D., and Judy Giesen, Ph.D.

IRB Approval #

OSP#: Sponsor:--

Your child(_____), is being asked to be in a research study.

The name of this study is: Bullying and Adolescents with Social and Emotional Problems: Predicting Criminal Offenses

This study is being done by: Sara Zach, Ed.S. Educational Psychology Doctoral Candidate, lead researcher, Dr. Joy Burnham, Dissertation Chair, Dr. Steven Thoma, Committee Member, Dr. Patti Harrison, Committee Member, Dr. Ansley Gilpin, Committee Member, and Dr. Judy Giesen, Committee Member

What is the purpose of this study-what is it trying to learn?

This study examines vocabulary and bullying and if bullying involvement predicts teenagers with social and emotional problems. It explores if the types of crimes committed by teenagers is influenced by bullying and social and emotional problems. This study will examine the types of crimes committed by teenagers with social and emotional problems who are involved in bullying. This study will help us learn more about teenagers and the effects of bullying. The surveys will be given in small groups in an empty classroom during an elective or P.E. class. Your child will be asked to rate items on a survey as "not true", "somewhat true", and "certainly true" about the way they act. They will also complete a survey about being involved in bullying that looks at the number of times it has occurred, behaviors, place where it occurs, feelings toward bullying, and things that have been done to stop bullying. The last survey asks your child to identify a similar word for a word that is given based on four choices.

Why this is study important-what good will the results do?

The results may show schools how bullying influences vocabulary, behavior, and social and emotional problems.

Why has my child been asked be in this study?

Your child has been asked to be in this study because he/she is attending a school that has been selected to take part in this study.

How many other people will be in this study?

We expect 1200 children in this study.

Page 1 of 3

Prospect Initials_____

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED: 8/10/12
EXPIRATION DATE: 7/19/2013

What will my child are asked to do in this study?

If you agree for your child to be in this study, the surveys will be handed to your child during an elective or P.E. class. Your child will be asked to agree to join in the study by signing a form.

The survey is confidential-your child's name remains anonymous and the information is not shared with other students or educators.

How much time will my child spend in this study?

Your child will sit with other peers from his/her school and grade for 75 minutes to complete the surveys in an empty classroom.

Will my child's being in this study cost us anything?

There is no cost for your child to be involved in this study.

What are the benefits of my child being in this study?

There are no direct benefits to this study. It is possible that your child may learn more about bullying, his/her actions, feelings on bullying, and vocabulary.

What are the risks (dangers or harms) to my child if he/she is in this study? There are minor harms to your child if he/she is in this study. A minor risk is that your child may be reminded of a hard time he/she had with peers. Your child could feel sad, angry, or embarrassed about those times. Due to this study taking about 75 minutes to complete your child may experience fatigue.

How will my child's privacy be protected?

All names and data are private, meaning any response your child gives will not be linked with his/her name. We will not tell anyone that your child is in this study. Your child does not have to answer any questions or give us any information that he/she does not want to. Your child will be in an empty classroom completing the surveys, so other peers will not know or see that your child is partaking in this study.

How will my child's confidentiality be protected?

We will protect your child's information by giving his/her surveys a number. Names are never taken, so the surveys do not have identifying names. Your child's name will not be on any study document, except for this form. There is no way to link this form and names with data. The data from the study will be kept in locked file cabinet in a locked office. No one will have access to the data except the investigators.

Data will be used in a dissertation as well as published in scientific articles but no families, towns, or counties will be identified.

Does your child have to be in this study?

No. If you decide to refuse this, that is fine. You can reject for your child to be in the study. If your child starts the study and decides to stop at any time, that is fine. If you refuse or if your child starts the study then stops it, your child will not lose any benefits or rights he/she would normally have at his/her school or The University of Alabama.

If you don't want your child to be in the study, are there other choices?

If you do not want your child to be in this study, the other choice is to decline. Your child will stay in his/her usual class, while other students will sign the assent form and complete surveys in an empty classroom. This means that your child will participate in class like any other day. We will thank your son/daughter for his/her time.

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Prospect Initials _____

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED: 8/10/12
EXPIRATION DATE: 7/19/2013

What if you have questions, suggestions, concerns, or complaints?

If you have questions about the study, please ask them. If you have questions or concerns, you can reach

Sara Zach at 205-344-3452, Dr. Burnham at 205-348-2302, Dr. Thoma at 205-348-7575, Dr. Harrison at 205-348-7575, Dr. Gilpin at 205-348-9903, and Dr. Geisen at 205-348-7575. If you have questions about your rights as a person taking part in a research study, or if you would like to make suggestions or file complaints and concerns, you may call Ms. Tanta Myles, The Research Compliance Officer of the University of Alabama at 205-348-8461 or toll free at 1-877-820-3066. You may also ask questions, suggestions, or file complaints and concerns through the IRB Outreach website at http://osp.ua.edu/site/PRCO_Welcome.html. You may email us at participantoutreach@bama.ua.edu.

What else do we need to know?

You do not give up any of your legal rights by signing this consent form.

You will be given a copy of this form to keep. Save it in case you want to review it later or you decide to contact the investigators or the university about the study. The University of Alabama Institutional Review Board (IRB) is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and the study is being carried out as planned.

I have read this consent form. I have had a chance to ask questions. My questions have been answered. I understand what my child will be asked to do. I freely agree that my child will take part in it.

Date _____

Name of Child Participating

Date _____

Signature of Parent or Guardian

Date _____

Signature of Parent or Guardian

Date _____

Signature of Investigator

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED: 8/10/12
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ASSENT FORM (For Students)

I am about to do a study on bullying of boys and girls your age. I hope to find out some facts about bullying and your actions. If you choose to be in this study, I will give you surveys that take about 75 minutes to finish with boys and girls your age. There is no right or wrong answers on the bullying and behavior surveys. There is right or wrong answers on the vocabulary survey. Your name will not be put on the surveys. Your name will only be on this paper. Do not write your name on any of the surveys. No one will see your papers but me. You should not worry about your answer on the surveys because no one but me will see your answers. Some of the items may remind you of hard times that you had with your peers. You may feel sad, angry, or embarrassed about those times. If you feel this way at any time you can choose to stop at any time. If you choose not to be in this study, you will be asked to read a book, draw, or write quietly. You could return to class. If you get upset during the surveys or at a later time, please see your teacher or school counselor or let me know.

You will choose if you want to be in this study by signing this paper in a few minutes .

If you have questions, call Sara Zach at 205-344-3452. Ask me any questions. I will be happy to help.

If you have questions about your rights as a person taking part in a research study, or if you would like to make suggestions or file complaints and concerns, you may call Ms. Tanta Myles, The Research Compliance Officer of the University of Alabama at 205-348-8461 or toll free at

1-877-820-3066. You may also ask questions, suggestions, or file complaints and concerns through the IRB Outreach website at <http://osp.ua.edu/site/PRCO>Welcome.html>. You may email us at participantoutreach@bama.ua.edu.

If you will be a part of this study, please sign this page and date it. Thank you.

Name of Participant

Signature of Participant

Signature of Investigator

Date _____

Date _____

UA IRB Approved Document
Approval date: - 11/12
Expiration date: ___-4J.....,_.