

The Pennsylvania State University

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**UNDERSTANDING THE MEAN DIFFERENCES IN EMOTIONAL AND
BEHAVIORAL DIFFICULTIES BETWEEN BULLY SITUATION STATUS
(PERPETRATOR, TARGET, AND BYSTANDER)**

A Dissertation in

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ABSTRACT

Bullying is a school and social epidemic. Research in this topic has focused on targets, or victims, of bullying, during middle school years, as this is when behavior often peaks. Little research has focused on bullies, and fewer still have focused on bystanders. This researcher sought to add knowledge to the understanding of the difficulties perpetrators and bystanders have and incorporate data surrounding elementary school-aged children experiences in bullying situations.

Participants in this study were 507 4th-8th grade students at three charter schools in the Mid-Atlantic region of the United States, who completed a modified version of the Me & My School questionnaire, which measures emotional and behavioral difficulties for children 8 years old and older, and a Traditional Bullying Measure, which has an offender (perpetrator) and victimization (target) subscale. This researcher created a Bystander subscale based on the items in the Traditional Bullying Measure subscales. Skip logic was used to separate participants into perpetrators, targets, or bystanders.

The researcher used Multiple Analysis of Variance (MANOVA) to compare the mean differences of emotional and behavioral difficulties (dependent variables) on status in a bullying situation (independent variable), with three categories (perpetrator, target, and bystander). Results indicated that emotional and behavioral difficulties are statistically significant from one another for both bystanders and targets. Emotional and behavioral difficulties were not significantly different from perpetrators.

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CHAPTER I: INTRODUCTION

A review of the literature indicates an ongoing debate about bullying prevalence. Some studies indicate it has stayed the same rate (Brooks, Schiraldi, & Ziedenberg, 2000; Doob & Cesaroni, 2004) while others report an increase (National Center for Education Statistics, 2003, 2005, 2007). Questions about research methodology (Esbenson & Carson, 2009) suggest higher rates of bullying exist that current research efforts are missing. Whether bullying has gone up or stayed the same, reports show almost one third of students report experiencing bullying (U.S. Department of Education, 2013), and bullying presents risks to perpetrators, targets, and bystanders.

Emotional Difficulties

Emotional difficulties are often conceptualized using specific mental health concerns, such as subtypes of anxiety (e.g. social phobia, school phobia) (Gregory & Eley, 2005) and depression, and difficulties with sleeping (Gregory & Sadeh, 2012), and measures often focus on everyday symptoms individuals with anxiety and depression experience, such as worry, fear, and crying (see Deighton, et al., 2013; Goodwin, 1997). Children involved in bullying situations often experience these emotional difficulties; however, research tends to see outward manifestations of these emotional difficulties. Students involved in bullying are at a higher risk for suicidality (Hinduja & Patchin, 2010), substance use (Luk, Wang, & Simons-Morton, 2012), and mental health issues (Haynie, Nansel, Eitel, Crump, Saylor, Yu, & Simons-Morton, 2001). Suicide is the third leading cause of death in adolescents (Center for Disease Control and Prevention, 2014), and suicide rates increased by 28.5% in the 10 to 19 age range (Center for Disease Control and Prevention, 2014). Hinduja and Patchin (2010) found that both perpetrators and victims were more likely to have attempted suicide than those who were not involved in

bullying. Traditional bullying perpetrators were found to be 2.1 times more likely and traditional bullying victims were found to be 1.7 times more likely to have a suicide attempt. Also, cyberbullying perpetrators were 1.5 times more likely and cyberbullying victims were 1.9 times more likely to have a suicide attempt. Victims and perpetrators of both traditional and cyberbullying were found to be two times more likely to have a suicide attempt than youth who were not victimized. Bullying isn't the only variable in suicide ideation and attempts, but it does exacerbate instability adolescents already have (Hinduja & Patchin, 2009)..

Behavioral Difficulties

Links between being the target of bullying and problems with peers, conduct problems, hyperactivity, sleep disturbance, tense feelings, feeling tired, and dizziness have been shown (Gini & Pozzoli, 2009). Male targets have shown to have poor prosocial skills, social difficulties, difficulty expressing emotion, emotional difficulties, and hyperactivity (Johnson, Johnson, Thompson, Wilkinson, Walsh, Balding, & Wright, 2002). Perpetrators of bullying have been found to have a higher risk for hyperactivity, sleep disturbance, and feeling tense (Gini & Pozzoli, 2009). Children with conduct disturbances and hyperactivity are shown to be at higher risk for psychiatric issues in adulthood (Sanders, Henry, Giuliani, & Dimmer, 2013). Wolke, Woods, Bloomfield, and Karstadt (2000) found that children involved in bullying, as either a perpetrator or a target, had more conduct problems, difficulties with peer relationships, and hyperactivity; and perpetrators had fewer prosocial behaviors.

Statement of the Problem and Purpose

According to Robers, Kemp, and Truman (2013), 28% of students between the ages of 12 and 18 reported being bullied at school during the 2011-2012 academic school year, indicating a need for further research and understanding about the bullying phenomenon. Although much

research on bullying has focused on anti-bullying programs (e.g. Edmondson & Hoover, 2008; Ferguson, San Miguel, Kilburn, & Sanchez, 2007; Fox, Farrington, & Ttofi, 2012; Ttofi and Farrington, 2011) and compared characteristics of both victims and perpetrators of bullying (e.g. Camodeca, & Goossens, 2005; Hepburn, AzraStael, Molnar, & Miller, 2012; Meland, Rydning, Lobben, Breidablik, & Ekeland, 2010; Stein, Dukes, & Warren, 2007), little research has explored the emotional and behavioral difficulties experienced by perpetrators, targets, and bystanders of bullying behavior.

Perpetrators, victims, and bystanders of bullying behavior have very different experiences and perceptions of the phenomenon. Victims of bullying “develop adjustment problems, psychosomatic problems, and academic difficulties” (Juvonen & Graham, 2014, p. 165) demonstrating the impact of bullying. Bystanders do not condone bullying behavior, but also tend to not confront perpetrators of bullying while the perpetrator is engaging in that behavior (O’Connell, Pepler, & Craig, 1999). Male perpetrators of bullying engage in physically aggressive behavior but tend to shift to social aggression as they get older (Archer & Coyne, 2005). Bullying behaviors increase in early adolescence (Espelage, Bosworth, & Simon, 2001; Pellegrini & Long, 2002). Nansel, Overpeck, Pilla, Ruan, Simons-Morton, and Scheidt (2001) report “both bullying and being bullied were associated with poorer psychosocial adjustment; however, there were notable differences among those bullied, bullies, and those reporting both behaviors” (p. 2098). Nansel et al. go on to report perpetrators of bullying “were more likely to be involved in other problem behaviors such as drinking alcohol and smoking” and “poorer school adjustment, both in terms of academic achievement and perceived school climate” (p. 2099).

Theoretical Paradigms of Development

Understanding the interactions of the environment upon students involved in bullying situations is important. For this dissertation, I will be using two theories of identity development to explain bullying interactions, specifically, Bronfenbrenner's Ecological Model of Development (1979), and Breakwell's Identity Process Theory (1986). Bronfenbrenner's Model demonstrates the interaction of multiple environments and individuals on an individual. The microsystem, the system with the most direct interaction on a child, contains the domains of school and peers. Breakwell's Identity Process Theory demonstrates the internal processes of an individual's experiences in developing an identity when interacting with the world around him or her (see Chapter 2 p. 14 for the Conceptual Model). For children, interactions with peers within the school context informs identity development. Students who are present for a bullying situation will react to those experiences in unique ways.

The purpose of this study is to examine the mean differences between emotional and behavioral difficulties and status in a bullying situation (perpetrator, target, and bystander). The Traditional Bullying survey (Hinduja & Patchin, 2010) was used to determine experiences of bullying behavior in participants, and the Me and My School (Deighton, Tymms, Vostanis, Belsky, Fonagy, Brown, Martin, Patalay, & Wolpert, 2013) assessment was used to assess emotional and behavioral difficulties in participants.

Research Questions

This researcher had two research questions for this study. The first research question (RQ1) was: what is the relationship between emotional difficulties and behavioral difficulties for perpetrators, for targets, for bystanders? The second research question (RQ2) was: what are the mean differences in emotional and behavioral difficulties between bullying-status groups:

perpetrator, target, and bystander. By understanding emotional and behavioral difficulties experienced by these three distinct groups, researchers can develop interventions geared toward bullying prevention and intervention at not just the behavioral level but also the emotional level for perpetrators, targets, and bystanders, instead of focusing solely on the victim and/or school wide intervention.

Significance of the Study

Many research studies in the area of bullying focus on victimization (e.g., Beebe & Robey, 2011) and effectiveness of anti-bully programs (e.g., Ttofi & Farrington, 2011). Some research studies (see Haynie, Nansel, Eitel, Crump, Saylor, Yu, & Simons-Morton, 2001) focused on the behavior of perpetrators of bullying, but have not considered the emotional difficulties of the perpetrators. In addition, little is known about the emotional impact and resulting behavioral difficulties bystanders experience after witnessing bullying behavior. This study is significant in several ways. First, the results of this study fill in the knowledge gap of what research does not know about the emotional difficulties of perpetrators of bullying. Second, more knowledge is gained in regards to the behaviors and emotions of bystanders. Finally, more information about bullying experiences in late elementary school will be gained. This information informs future anti-bullying programs, provides new insights into why bullying exists, and informs interventions tailored to the needs of these populations.

Limitations

Student identification numbers will be used to track student responses to the survey items. The researcher is concerned that students may fear loss of confidentiality and may not accurately self-report. In addition, students took survey in a computer lab with their peers, further impacting fear of confidentiality.

Survey completion with peers in close proximity might also make students concerned about their peers or teachers seeing their answers so they may respond in a socially desirable way, either by minimizing their feelings and behaviors to please the teachers or inflating their behaviors to please their peers.

The survey items were part of a larger research study being conducted. As such the number of items the students will complete may cause fatigue in participants.

Definitions

Perpetrator refers to anyone who engages in the specified behavior being studied. For this study, bullying behaviors will be the target behaviors.

Bystander refers to anyone who witnesses bullying behavior. *Passive bystander* refers to a witness who observes the bullying and does nothing. *Active bystander* refers to those who behave as *victim defenders*, bystanders who attempt to intervene and stop the bullying.

Target refers to anyone who is the victim or target of bullying behavior.

Bullying behavior is defined as an ongoing pattern of aggressive verbal, physical, and/or relational exclusion with the intent to cause harm by a perpetrator who has more power than the victim. It will also include *harassment* behavior as defined by Bickmore (2011). Harassment, according to Bickmore (2011) is “essentially bullying behavior reinforced by bias and inequity such as racism, sexism, social class discrimination and heterosexism” (p. 650). The study will look at *traditional bullying* as defined in Hinduja and Patchin (2010)—“aggressive behavior or intentional “harm doing” by one person or a group, generally carried out repeatedly and over time, and which involves a power differential” (p. 207). *Traditional bullying* can be direct aggression (physical or verbal violence) or indirect aggression (ostracizing, extorting, and

intimidating), and overt aggression (name calling, pushing, or hitting) or relational aggression (behaviors destructive to personal relationships).

CHAPTER II: PREVALENCE RATES, CONCEPTUAL FRAMEWORK, AND REVIEW OF LITERATURE ON BULLYING

It is important to understand how prevalent bullying is in schools in the United States, and in this chapter, prevalence rates and previous research are discussed. Beyond seeing a glimpse of the frequency of bullying, conceptualizing bullying through lenses of internal development and interactions with other individuals and the environment is necessary. I discuss in this chapter how an ecological model of identity development (Bronfenbrenner, 1978) and an identity process theory (Breakwell, 1986) fit together as a more complete theoretical framework to understand how bullying situations impact bully perpetrators, bully targets, and bystanders of bullying. Definitions and characteristics of bully perpetrators, bully targets, and bystanders of bullying from the literature are reviewed.

Prevalence of Reported Bullying

Latest statistics from the U.S. Department of Education indicate that bullying has decreased to 22% among students age 12-18 (Lessne & Cidade, 2015), after a steady reporting rate of 28% over the last decade (Musu-Gillette, Hansen, Chandler, & Snyder, 2015). Despite the decline, Esbenson and Carson (2009) suggest bullying is more prevalent than what was originally thought due to issues with research methodology and questions asked of the participants, while other researchers suggest the methodology is accurate and bullying rates reported in the literature accurately reflect the prevalence rates (e.g. Brooks, Schiraldi, & Ziedenberg, 2000; Doob & Cesaroni, 2004). According to trends reported by the National Center for Education Statistics (2003, 2005, 2007), reports of bullying have increased by almost 25%. While some data reports that bullying plateaued, others report a steady increase. Regardless of the debate, bullying still is present and perpetrators, targets, and bystanders present

in both similar and unique ways across several domains, including home and family experiences, peer relationships, school connectedness, and emotional and behavioral difficulties. This researcher reviews theoretical frameworks for understanding developmental interactions, reviews the literature on the biopsychosocial of bully perpetrators, targets, and bystanders, including definitions of bullying, identifying research gaps, and discusses treatment needs for these populations.

Theoretical Framework

Bullying occurs during important developmental periods for children and young adolescents. In order to understand the type of impact bullying has on perpetrators, targets, and bystanders, it is important to understand the processes that occur for this age group both internally and externally.

Development occurs on multiple levels across time. Internally, development refers to physiological changes that come from age (e.g., hormone changes and biological growth) and cognitive development (e.g., self-awareness, view of self in connection to the world), temperament, and personality. Development, however, is not just internal biological and cognitive processes that occur in a vacuum. External development occurs through interactions with and observations of family, peers, and the environment. These social interactions convey meanings to the individual who then must decide if and how to accommodate and assimilate the information, and what value to place upon the new integrated information (Breakwell, 2010). This researcher integrates two theories of development into a conceptual framework for this study. Bronfenbrenner's Ecological Model of Development (1979) will be discussed first as this model provides a thorough understanding of how the immediate environments influence development. Breakwell's Identity Process Theory (1986) adds a comprehensive understanding

of how internal processes respond to the interactions of the individual and the environment. Together, these two models provide deeper understanding of the issue of bullying.

Bronfenbrenner's Ecological Model of Identity Development

Bronfenbrenner (1979) posited that systems exist which influence individual development, an ecological model of development. Bronfenbrenner's model is a unique nested system in which multiple entities surround the individual, interact with elements within each system, and impact the individual. These systems (e.g., the microsystem, exosystem, mesosystem, macrosystem, and chronosystem) surround the individual and interact with one another.

The *microsystem* is the first, immediate system and directly interacts with the individual at an early age. This system includes the elements of family, siblings, and peers' social connections such as schools and school systems, neighborhoods, and religious institutions. The next system, the *exosystem*, affects the individual in a slightly less direct, slightly more indirect way, as they interact with entities within the microsystem. The components of the exosystem are neighbors, local economic systems, local resources, and media.

The *mesosystem* is where entities of the exosystem interact with one another and influence entities within the microsystem. Cultural and social influences including laws, history, economic systems, and cultural norms and beliefs are the elements within the *macrosystem*.

Global entities that the individual rarely has direct control over, such as historical events and movements, life course development, and environmental events are part of the *chronosystem*. These systems affect identity development and impact and inform behavior as well. While all the systems in this model are important for this study, the focus of

Bronfenbrenner's model will be on the microsystem, as the microsystem fits best with the variables under exploration.

However, one component of identity unexplained by this ecological model are the ways in which messages from the microsystem affect and influence the individual. I propose that Identity Process Theory (Breakwell, 1986) fills in the gap left by Bronfenbrenner's Ecological Model by clarifying how the microsystem interacts with the individual. Bronfenbrenner's Ecological Model states that entities within the microsystem interact with the individual, but the model does not explain how the interaction affects the individual. For example, a child who may have a learning disability lives with a family that does not understand learning disabilities. The parents and siblings may call the child "dumb", "stupid", or that he may "never amount to anything." Having these types of interactions may lead to the child internalizing and adopting these messages as part of who he is and should not put any effort in learning. He may also go to a school with classmates who also do not understand learning disabilities and ignore or bully the child. The school itself may not have trained teachers, school counselors, or school psychologists who are aware of how to assess for learning disabilities and respond to the child as being "lazy" and a "behavior problem." Family, peers, and school are all entities within the microsystem interacting with the individual, specifically the learning disability characteristic of the individual. These interactions affect how the child sees himself as a person, influencing his self-esteem and self-efficacy with schoolwork. How these interactions with the microsystem affect and influence the individual are explained more clearly in Identity Process Theory.

Breakwell's Identity Process Theory

Identity Process Theory states that self-identity is motivated by *belonging* (closeness to and acceptance by others) and *meaning* (having a sense of purpose and significance) (Vignoles,

Chrysochoou, & Breakwell, 2002), and is constructed by a dimension of *content* and a dimension of *values and emotions* which are regulated by processes of *assimilation-accommodation* and *evaluation* (Breakwell, 1986). Three principles labeled *distinctiveness*, *continuity*, and *self-esteem* guide the regulatory processes (Breakwell, 1986). This researcher will explore these dimensions, processes, and principles more fully using an example to illustrate the theory at work.

Content Dimension

Individuals are born with a set of demographic information, such as race, biological sex, and ability (*Molly, a black female born without any physical or cognitive disabilities*). As an individual grows, more demographic components, such as family constellation, socioeconomic status, sexual orientation, gender identity, spirituality, social environment, etc., become part of the individual (*only child of a working class family who identifies as gay and a tomboy who lives in a predominantly white, conservative, rural area of the United States*). The *content dimension* entails all of the characteristics of the individual, such as social category labels, membership to groups, roles the individual takes on, values, personality and temperament, etc. Demographics of the individual (e.g. race/ethnicity, gender, gender expression, sex, sexual orientation, socioeconomic status, ability/disability, etc.) define the characteristics of the content dimension.

Thus, the content dimension incorporates social identity concepts (e.g., connections made with entities across the various systems outlined by Bronfenbrenner) and personal identity concepts (e.g., how one sees and thinks about the self in relation to the world). *In our example, we now have Molly who is an adolescent black female from a working class family who identifies as gay and a tomboy who lives and attends Middle School in a predominantly white, conservative, rural area of the United States.*

Assimilation-Accommodation and Evaluation

Assimilation-accommodation are two separate processes working in conjunction with one another as regulators between the content dimension and value dimension. In the assimilation process, the individual absorbs “new components into the identity structure” (Breakwell, 1986, p. 23). Messages received from entities in the microsystem convey ideas about the components in the content dimension. An individual takes those messages and assimilates them into his identity structure. In the accommodation process, the individual makes adjustments for the new components to fit into his identity structure. These two process work with each other to regulate the content dimension and the values and emotions dimension.

Evaluation determines what elements of the messages receive attention, assimilation of some components over others, and how the accommodation fits into the individual’s identity. The framing of components by the microsystem entities also influences the evaluation process. Messages indicating value or acceptability of components in the content dimension produces positive evaluations. Whereas messages indicating devalue or unacceptability of components in the content dimension produces negative evaluations.

Assimilation-accommodation and evaluation are separate and work with each other to inform the development of the content dimension for each person. If a person is more similar to the surrounding environment, family, and ideologies communicated by the microsystem, the more positive evaluations occur and the easier time of assimilating and accommodating the information. However, the more dissimilar to the surrounding environment, family, and ideologies communicated by the microsystem, the more negative evaluations occur and more difficult time of assimilating and accommodating the information. These processes do not occur without structure; several principles guide these processes.

Guiding Principles

The processes of assimilation-accommodation and evaluation are separate, interdependent processes, guided by three main principles: distinctiveness, continuity, and self-esteem (Breakwell, 1986). Distinctiveness refers to the idea of uniqueness and distinctiveness from other individuals. Continuity reflects the ongoing development of identity across time and across situations. Self-esteem is the degree to which one has personal value and social worth. The purpose of identity development is to develop into a unique, distinct person, who is consistent across time and situations, and has a sense of personal and social value. The balance of positive and negative evaluations depends on the interactions between the person and the environmental interactions.

Values and Emotions Dimension

The *values and emotions dimension* consists of the positive or negative values of the content dimension, which are regulated through the processes of assimilation-accommodation and evaluation (Breakwell, 1986). Information about one's way of being that has been evaluated, assimilated, and accommodated as positive, will illicit positive emotions about one's identity and thus the person will feel value. Information about one's way of being that has been evaluated, assimilated, and accommodated as negative, will illicit negative emotions about one's identity, and thus the person will feel devalued. Because people are complex, intersectional beings, determining a positive or negative dimension is also complex. Putting together the example developed at the beginning of this section demonstrates the complexity of these processes.

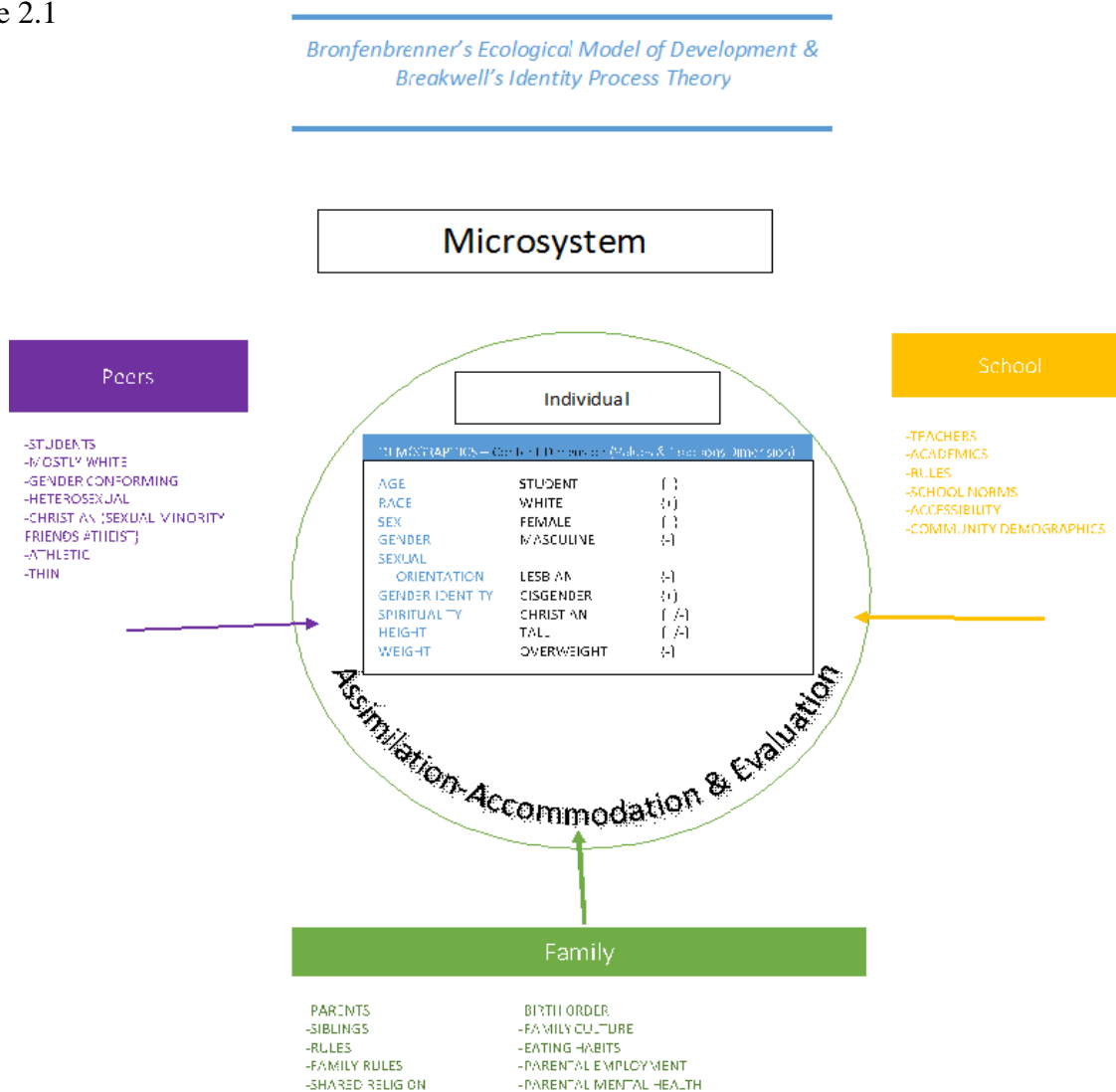
In the example, Molly, the adolescent black gay female who behaves in a tom-boyish way receives messages that being a tom-boy is acceptable, as everyone is encouraged to act in tough,

aggressive ways. However, at the same time, her racial and gay identities may be met with negative messages, as the area is predominantly white and conservative. She will respond in ways that focus on her similarities with her peers while monitoring the perception those around her hold about her sexual orientation, and may keep it hidden from her family and peers in order to keep some semblance of belonging and meaning.

Conceptual Framework

Understanding how these theories guide the current research study is important. Figure 2.1 represents a conceptual model with Bronfenbrenner’s theory integrated into the Individual and Microsystem levels demonstrating how these two theories relate to the variables in the study.

Figure 2.1



Ecological Model of Development and Identity Process Theory in a Bullying Situation

In order to show how the models fit together, the following scenario provides an example to explore the three main roles in a bullying situation: perpetrator, target, and bystander. Wesley, Jesse, and Matthew are 12-year old students who attend a predominantly white rural middle school. Wesley is a white male often shunned by his peers because he presents bigger than his peers (in terms of both weight and height) and has difficulty with his grades. Jesse is a black male who presents shorter and more effeminate than typical boys present, has several female friends, and does well in school. Matthew is a white male who generally gets along with everyone, has several friends, and does reasonably well in school. During a typical day at school, students and school personnel observe Wesley calling Jesse homonegative names, knocking books out of Jesse's hands, and mocking Jesse's mannerisms. On occasion, Wesley's harassing behaviors become more physical, such as tripping Jesse, pushing Jesse into his locker, and putting thumb tacks on Jesse's chair just before Jesse sits down when they have a shared classroom. Teachers frequently redirect Wesley and verbally reprimand him for his actions without any change in Wesley's behavior. Matthew knows Wesley and Jesse and frequently observes the interactions between Wesley and Jesse and the response of teachers and school staff. Using the Ecological Model of Identity Development (Bronfenbrenner, 1978) and Identity Process Theory (Breakwell, 1986), these three individuals are examined.

The Perpetrator (Wesley)

The first thing to note is the *content dimension* of Wesley. He is white, male, presenting as cisgender, is a student, and is taller and weighs more than his peers weigh. While at school and with his peers, he receives messages from these entities of the microsystem in reaction to elements in the content dimension, filtering this information through the *assimilation-*

accommodation and evaluation regulatory system into the *value and emotions dimension*.

Wesley's similarities to his peers (e.g. White, cisgender, and student status) are evaluated as *positive* and provides him a sense of meaning and belonging (*motives for him to assimilate these identity characteristics*), while his height, weight, and poor grades are different from his peers (*negative distinctiveness*), are observed on a daily basis (*continuity*) and are evaluated as *negative*. His struggle with grades, inability to change his height, and difficulty making changes to weight reduce his sense of *self-esteem*. He believes his only option, therefore, is to take elements that are valued as negative and respond in a way that may make him feel a sense of control and positive, such as engaging in bullying behavior toward a student who embodies characteristics that are distinctly different from him, in the example that would be Jesse. The limited corrective responses from teachers allows him to believe that what he is doing is not that bad, and can be seen as reinforcement because no stronger reactions are occurring.

The Target (Jesse)

The *content dimensions* to note in Jesse's case are his race, stature, gender expression, role as a student, and primary peer group. While at school and with his peers, Jesse is observant of the messages he receives from the microsystem entities in regards to the content dimension elements. The messages are *assimilated-accommodated and evaluated* as well. Many of the elements in his content dimension are *distinct* from his peers: race, height, and gender expression, and the messages he receives regarding these elements are continuously negative, especially when targeted by Wesley for these differences. He seeks out female peers because he feels a sense of *belonging* and *meaning* around them. Having a group of supportive friends provides positive *self-esteem*, which translates to his strong academics and continues to empower his self-esteem. However, the continuous harassment and bullying by Wesley highlights his

differences and affects the positive values and emotions he has regarding these elements. While teachers occasionally intervene, the fact Wesley continuously engages in these bullying behaviors with low-impact consequences impacts Jesse's grades and makes Jesse feel unsafe at school.

The Bystander - Matthew

The *content dimensions* of Matthew include being White, presenting as cisgender, doing moderately well in school, and getting along with everyone. He *evaluates* his interactions as positive, *assimilates* them into his identity, and *accommodates* these positive messages into his identity, thus providing positive *value and emotions*. Matthew's ongoing observation of Wesley's bullying behavior toward Jesse are experienced as traumatic, especially considering the adults in the school who are responsible for student safety are not responding in a way that prevents the behavior. Matthew *assimilates* this information, *evaluating* that the school environment is not safe, and *accommodates* this information into his identity as a student who may not be safe or protected. His identity as a safe student falters and the *values and emotions dimension* contains an element of being unsafe.

Putting it Together

Identity development consists of both internal and external processes, occurring as the individual grows and develops physically, and as the individual interacts with family, peers, and society. These internal processes interact with the messages received by the external world through observations and behaviors around the individual. Many of these messages convey what is acceptable and unacceptable, and appropriate and inappropriate. Cognitive growth of self-awareness, informed by social norms and mores, processes what these messages mean to the individual, and assists in developing an ideological view of self and informing how individuals

process and behave in the world around them. Cognitive growth, self-awareness, and messages from the environment promote either behavioral and emotional health or behavioral and emotional difficulties. Having a conceptual framework of identity development informs how children and adolescents who engage in bullying behavior (bullying perpetrators), are targets of bullying behavior (targets), or witness bullying behavior (bystanders), internalize messages from the multiple environments they live and how these messages and social interactions affect emotions and behaviors in unique and profound ways.

Bullying

Types of Bullying

Bullying consists of four general domains of behavior: physical, verbal, relational, and cyber (Brank, Hoetger, & Hazen, 2012). Physical bullying includes pushing, hitting, kicking, and any physical acts of aggression. Verbal bullying is characterized by name-calling and teasing. Relational bully relates to social areas including spreading rumors and purposely excluding others from a group, activities, or friendships. Cyber-bullying involves the use of technology to aggress against others, such as texting and emailing, and using different forms of social networking. In some cases, individuals who engage in bullying may engage in one form of bullying while others engage in multiple forms of bullying. Wang, Iannotti, and Luk (2012) conducted a latent class analysis on the 2005-2006 Health Behavior in School-aged Survey, separating relational bullying into two distinctive categories of spreading rumors and social exclusion. A small percentage of individuals (10.5% boys, 4% girls) engaged in all types of bullying, a moderate percentage of individuals (29.3% boys, 29.4% girls) engaged in verbal-social bullying, and a moderate-to-high percentage of individuals (60.2% boys, 66.6% girls) had a low probability of engaging in any type of bullying. Students engaging in all types of bullying

were 6th-8th graders, reinforcing the trend that bullying behaviors increase in middle school and then taper off. This highlights the importance of focused intervention during middle school, and prevention in earlier grade levels.

Definition

Bullying has been defined similarly throughout the literature, “described as peer-related aggression, involving an imbalance of power, repeated over time, which can be subcategorised according to whether the aggression is physical, verbal (i.e., insulting, offensive remarks), or psychological (i.e., spreading nasty rumours, social exclusion, malicious text messages)” (Herba, Ferdinand, Stijnen, Veenstra, Oldehinkel, Ormel, & Verhulst, 2008, p. 687). The Center for Disease Control generated a uniform definition for researchers to use, and is as follows:

Bullying is any unwanted aggressive behavior(s) by another youth or group of youths who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated.

Bullying may inflict harm or distress on the targeted youth including physical, psychological, social, or educational harm. (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014, p. 7)

In some cases, bullying is considered a form of harassment that occurs (Bickmore, 2011). Carney (2008) simplified the definition into three main components to use when determining or defining bullying: *harm* has been done, there is an *unfair match* between parties, and the harmful behavior is *repeated* over time. This study will look at traditional bullying as defined in Hinduja and Patchin (2010)—“aggressive behavior or intentional “harm doing” by one person or a group, generally carried out repeatedly and over time, and which involves a power differential” (p. 207). This definition falls in line with the definition put forth by the Center for Disease Control.

Perpetrating, being the target of, and observation of bullying behaviors impacts identity development and has an added influence on the bio-psycho-social experiences individuals already bring into a bullying situation.

Messages from the Microsystem

As children transition into adolescents, primary socialization transitions from parents, siblings, and the family environment to peers, teachers, and the school environment (Bronfenbrenner, 1979). With this transition comes the ingrained messages that adolescents have received from the family environment which inform behavior and how adolescents interact with their peers. Adolescents who engage in bullying behavior bring with them a unique set of bio-psycho-social experiences correlated with the bullying behavior. This next section will review these correlates of bully perpetrators, bully targets, and bully bystanders through the lenses of Bronfenbrenner's Ecological Model of Development and Breakwell's Identity Process Theory.

Perpetrators of Bullying Behavior

Bronfenbrenner (1979) maintains that microsystems are entities that directly interact with the adolescent on a frequent basis. Microsystem entities are parents and siblings (family), peers (friends and school environment), belief systems (cultural and spiritual), and the immediate neighborhood where the individual lives. Children and adolescents who engage in bully perpetrating behavior experience difficulties interacting with these entities and bring these difficulties into their school environment.

Parent-child relationship. Parental involvement positively or negatively affects bullying behavior. Lack of parental involvement increases the likelihood of children engaging in bullying behavior (Georgiou, & Fanti, 2010; Patton, Hong, Williams, & Allen-Meares, 2013).

Bully perpetrators report difficulty communicating with parents (Spriggs, Iannotti, Nansel, & Haynie, 2007), low levels of trust in their parents, high conflict with parents, and low parental monitoring of their day-to-day lives (Pepler, Craig, Jiang, & Connolly, 2013). In addition to conflict, lack of parental involvement, and poor communication, bully perpetrators also perceive high levels of rejection from parents and low emotional warmth from parents (Veenstra, Lindenberg, Oldehinkel, Winter, Verhulst, & Ormel, 2005). Children learn social skills through parental interaction. Poor communication, lack of involvement creates social skill deficits, which influence how students interact with their peers. Thus, the poor communication, lack of trust, low parental monitoring, and low warmth, along with high conflict and feelings of rejection children receive from parents will influence how children and adolescents view themselves and how they view and interact with peers and the school environment.

Parents who have children who engage in bullying behavior have unique characteristics and report numerous feelings about the parent-child relationship as well (Shetgiri, Lin, Avila, & Flores, 2012). Specifically, parents disclosed feeling as if their bully-perpetrating child bothered them a great deal, reported their children were more difficult to care for, and reported a higher frequency of being angry with their child. Parents also engaged in harsher discipline (Espelage, Bosworth, & Simon, 2000; Spriggs, Iannotti, Nansel, & Haynie, 2007). Ncube (2013), in a study of African adolescents, found that parent-child relationship risk factors for bullying included poor access to parents to discuss problems, lack of quality time with parents, poor parental involvement in school, and severe physical discipline.

Family and neighborhood characteristics. Family constellation and dynamics correlate with bully perpetrating behavior. Parental characteristics, such as being a single parent, becoming a parent at a young age, low educational level or not completing high school (Shetgiri,

Lin, Avila, & Flores, 2012), parental unemployment (Jansen, Verlinden, Dommissie-van Berkel, Mieloo, van der Ende, Veenstra, Tiemeier, 2012; Shetgiri, Lin, Avila, & Flores, 2012) and low socioeconomic status (Herba, Ferdinand, Stijnen, Veenstra, Oldehinkel, Ormel, & Verhulst, 2008; Jansen, Verlinden, Dommissie-van Berkel, Mieloo, van der Ende, Veenstra, Tiemeier, 2012, Veenstra, Lindenberg, Oldehinkel, Winter, Verhulst, & Ormel, 2005) have all been found to be risk factors for bully perpetrators. Mothers of perpetrators also have been identified as having poorer mental health (Shetgiri, Lin, Avila, & Flores, 2012). Many bully perpetrators live in unsafe neighborhoods in low-income housing (Shetgiri, Lin, Avila, & Flores, 2012). Overall, bully perpetrators often come from a disadvantaged background (Veenstra, Lindenberg, Oldehinkel, Winter, Verhulst, & Ormel, 2005). Unmitigated stress stemming from mesosystemic interactions between family environment and economic environment impact parental capabilities and stress and safety levels of children and adolescents who engage in bullying behavior.

Peers and Schools. Bullying behaviors often occur in school (Wright, 2014) as it becomes the primary source of social engagement for children and adolescents. In regards to peers, bully perpetrators tend to have poor relationships with classmates, low levels of social well-being (Herba, Ferdinand, Stijnen, Veenstra, Oldehinkel, Ormel, & Verhulst, 2008), and high levels of peer conflict (Pepler, Craig, Jiang, & Connolly, 2013). Given that perpetrators bring to the school environment social skills deficits and engage in bullying behavior, they are unable to interact in a healthy manner. Poor relationships with peers, high conflict, and low levels of social well-being lead to bully perpetrators experiencing isolation and marginalization (Vanderbilt & Augustyn, 2010), in some cases being highly disliked (Veenstra, Lindenberg, Oldehinkel, Winter, Verhulst, & Ormel, 2005). Friends of perpetrators tend to engage in

antisocial delinquent behavior themselves (Beebe & Robey, 2011; Keelan, Schenk, McNally, & Fremouw, 2014). These negative peer relationships increase bullying (Georgiou, & Fanti, 2010; Patton, Hong, Williams, and Allen-Meares, 2013) creating a reciprocal environmental effect of bullying behavior and reinforcement for bullying behavior.

Negative social interactions are not the only consequence of bullying behavior on perpetrators. These individuals also negatively experience academics and school climate. Perpetrators tend to have below average academic performance and dissatisfaction with their schools (Spriggs, Iannotti, Nansel, & Haynie, 2007). Their sense of belonging to the school community decreases, and they report teacher dissatisfaction (Espelage, Hong, Rao, & Thornberg, 2015), mirroring the dissatisfaction and lack of connectedness with parents (Pepler, Craig, Jiang, & Connolly, 2013; Veenstra, Lindenberg, Oldehinkel, Winter, Verhulst, & Ormel, 2005). Overall perpetrators report negative school climate (Nansel, Haynie, & Simons-Morton, 2003), which continues the thread of disconnectedness to family and home.

Emotional and behavioral difficulties. Twenty-five percent of identified bully perpetrators have indicated emotional, developmental, or behavior problems (Shetgiri, Lin, Avila, & Flores, 2012), depression being a common emotional difficulty (Wang, Nansel, & Iannotti, 2011) as well as low empathy (Farrington & Baldry, 2010). In addition to identifying depression, perpetrators also report having negative attitudes about self and negative self-cognitions (Espelage & De La Rue, 2013), and are 2.1 times more likely to have a suicide attempt than peers not involved in bullying (Hinduja & Patchin, 2010). Behavioral characteristics that have been associated with bully perpetration include impulsivity and high levels of hyperactivity (Farrington & Baldry, 2010). Developmentally, perpetrators have been found to have lower IQ (Farrington & Baldry, 2010), poor social problem-solving skills, which

challenges social competence, and leads to challenges in academic competence (Cook, Williams, Guerra, Kim, & Sadek, 2010). Brank, Hoetger, and Hazen (2012) surmise that these developmental factors prevent the perpetrator from understanding his behavior is hurting others. Salmivalli, Kaukiainen, Kaistaniemi, and Lagerspetz, (1999) found high levels of defensive egotism in bully perpetrators, which they define as “grandiose, self-enhancing attitudes” along with “defensiveness to criticism” (p. 1271). Little research has examined the need for self-enhancing attitudes and the origins of defensive responses to criticism. In a meta-analytic study by Cook, Williams, Guerra, Kim, and Sadek (2010), characteristics of bully perpetrators include behavioral difficulties, emotional difficulties, have negative attitudes and beliefs about others, negative self-cognitions, conflict in the home environment, poor parental engagement, negative perceptions of the school environment, and are impacted by a negative community and from negative peers. This frequent exposure to unsafe, neglectful, and aggressive environments send messages to the individual about the individual, who then place value on those messages and the self (Breakwell, 1986).

Hymel, Schonert-Reichl, Bonanno, Vaillancourt, and Henderson (2010) point out that direct day-to-day stressful elements can restructure cognitions regarding bullying as being acceptable. Such restructuring includes minimizing the bullying with something more severe (e.g. “I only just...”), justifying the behavior and making it acceptable, in some cases blaming the victim for the act based on their perceived inferiority (Millington & Wilson, 2010), and framing the behavior as normal (e.g. “boys will be boys” or “I’m just teasing”). Observing aggressive behavior in the home can translate to engaging in aggressive behavior toward peers. Peers that encourage bullying behavior diffuse the responsibility of the actual perpetrator of bullying by making it more acceptable and share in the responsibility. Perhaps messages

received over time from these entities within the microsystem have led to the development of defensive egotism as a coping mechanism to counter negative values of assimilated information from the environment, as well as informed bully-perpetrating behavior.

Targets of Bullying Behavior

Not only do negative interactions and relationships with entities within the microsystem affect adolescents who engage in bully perpetrating behavior, these interactions also influence adolescents targeted in bullying situations. Unique relationships with parents, such as controlling (Rigby, 2002) or neglectful parents (Fosse & Holen, 2002), isolation from peers (Vanderbilt & Augustyn, 2010), and poor social skills (Cook, Williams, Guerra, Kim, & Sadek, 2010), can affect emotional difficulties (Cook, Williams, Guerra, Kim, & Sadek, 2010) and behavioral difficulties (Gini & Pozzoli, 2009).

Parent-child relationship. Duncan (2011) cites several articles listing unique family characteristics of targets of bullying. Several articles identified mothers as being overprotective, highly responsive (Georgiu, 2008), and overly controlling of their sons (Rigby, 2002). Fathers of bully targets, on the other hand, have been found to be critical and distant (Olweus, 1993), uninvolved (Flouri & Buchanan, 2002), or absent (Fosse & Holen, 2002). However, father involvement has moderated the mother-child relationship when mother involvement was low (Flouri & Buchanan, 2003).

Female targets of bullying have very different experiences with their mothers, as some daughters have more negative attitudes toward their mothers (Rigby, 1993). Some mothers withdraw love, are more hostile and abusive, and reject their daughters as a form of punishment for misbehavior (Fosse & Holen, 2002). Parental involvement positively or negatively influences development of bully targets similarly to bully perpetrators.

Family characteristics. Some studies of female targets involved in outpatient care reported abuse and neglect by their parents (Fosse & Holen, 2002). Ikemoto (as cited in Duncan, 2011) found that parents also have less than optimal parenting skills and lacked affection. Families of bully targets display poor communication (Spriggs, Iannotti, Nansel, & Haynie, 2007), lower levels of affection, and higher dysfunction than non-targets in bullying situations (Rigby, 1994). They also come from disadvantaged backgrounds and have a higher vulnerability to familial internalizing disorders (Veenstra, Lindenberg, Oldehinkel, Winter, Verhulst, & Ormel, 2005).

Peers and schools. Being the target of bullying influences peer relationships and target interactions with school culture. Socially, targets experience marginalization and isolation from their peers (Vanderbilt & Augustyn, 2010). Some speculate this is due to poor social skills exhibited by targets (Cook, Williams, Guerra, Kim, & Sadek, 2010). Experiencing bullying in an environment (school) where one is supposed to feel safe sends the message that school is not safe. As such, targets disengage from school (Glew, Fan, Katon, & Rivara, 2008) and have poor school adjustment (Nansel, Haynie, & Simons-Morton, 2003). Feeling unsafe and disengaging from the school environment affects student performance (Beebe & Robey, 2011; Nakamoto & Schwartz, 2010). Targets have lower achievement (Glew, Fan, Katon, Rivara, & Kernic, 2005) and lower grade point averages (Glew, Fan, Katon, & Rivara, 2008). Feeling unsafe, isolation from peers, and disengaging from the academic environment are symptoms of the negative messages targets internalize. This internalization leads to development of emotional and behavioral difficulties.

Emotional and behavioral difficulties. Children who are targets in bullying situations have exhibited behavioral difficulties and related symptoms, such as headaches, backaches,

stomachaches, sleeping problems, poor appetite, and bed-wetting (Gini & Pozzoli, 2009). They also have negative self-cognitions (e.g. thoughts, feelings, and beliefs about one's self) (Cook, Williams, Guerra, Kim, & Sadek, 2010). Targets who reported high levels of rejection at home also reported high levels of suicidal ideation, and high levels of depression and anxiety (emotional difficulties) (Cook, Williams, Guerra, Kim, & Sadek, 2010; Herba, Ferdinand, Stijnen, Veenstra, Oldehinkel, Ormel, et al., 2008). Long-term risks for targets of bullying include long-term depression (Janson & Hazler, 2004), loneliness and low self-esteem (Hawker & Boulton, 2000), and suicide (Hinduja & Patchin, 2010; Vanderbilt & Augustyn, 2010). Targets of bullying often exhibit an increase in arousal symptoms (e.g. heart rate and skin conductance) and high emotional difficulties similar to individuals who have been diagnosed with PTSD and victims of other traumatic events (e.g. armed robbery, rape victims, victims of crimes, and victims of racism) (Janson & Hazler, 2004). In addition to these physiological and social reactions, targets also exhibit reactive aggression, defined as "a defensive response provocation or trouble, a way to defend oneself and to retaliate against abuse, and is accompanied by anger (Camodeca & Goossens, 2005, p. 187).

Bystanders of Bullying Behavior

Bystanders recently have been the focus of bullying research, as researchers and practitioners shift from dyadic interactions (e.g. bully and target) to more social and group processes (Polanin, Espelage, & Pigott, 2012; Salmivalli, 2010). Most research has surrounded the role bystanders play in bullying situations (Twemlow, Fonagy, & Sacco, 2004) and strategies they can employ (Rock & Baird, 2012). However, no studies extensively examine family life and experiences that might inform or moderate experiences in bullying situations. Bystanders are typical, average students who happen to witness bullying behavior (Glew, Fan, Katon,

Rivara, & Kernic, 2005; Twemlow, Fonagy, & Sacco, 2004), and respond to the situation in one of four roles: reinforcer, assistant, defender, or outsider (Polanin, Espelage, & Pigott, 2012). Their reactions to bullying strategies, suggest that there are nuances among bystanders, informing the type of bystander role taken. One study (Pozzoli & Gini, 2013) indicated the need for understanding personal characteristics of bully bystanders and decision-making processes for intervening in bully situations. This translates more knowledge needed in regards to entities within the microsystem that inform how bystanders behave. A few studies have considered the impact of bullying situations on bystanders in regards to schools and peers, and even fewer have looked at internal processes of bystanders.

Peers and schools. The impact of witnessing bullying behavior, or being a bystander, has been studied limitedly. What has been shown from these studies are that bystanders often have difficulty concentrating in school and difficulty maintaining friendships (Carney, Hazler, Oh, Hibel, & Granger, 2010; Vanderbilt & Augustyn, 2010). Some have also indicated feeling emotionally isolated from their peers (Hutchinson, 2012) identifying the experience as stirring a great deal of cognitions and affect.

Emotional and behavioral difficulties. Research has shown the importance of coping ability of bystanders in bully situations (Pozzoli & Gini, 2013). Internal processes can either prompt one to act or enforce inaction. Bystanders often exhibit an increase in arousal symptoms (e.g. heart rate and skin conductance) and high emotional disturbance similar to individuals who have witnessed traumatic events (e.g. witnesses to mass shootings and other terrorist activities, rape victims, and survivors of natural disasters) (Janson & Hazler, 2004). A number of themes emerged from talking with bystanders (Hutchinson, 2012), including reasons for keeping silent during a situation (fear of becoming victims and anxiety of personal views being used against

them at a later date); emotional isolation from peers and disconnection during the bullying event, and uncertainty about what to do during the bullying event; and reasons for not talking about or reporting the bullying event after the fact (guilt and embarrassment for not intervening). Many experience a combination of feeling upset, imagining what the target is going through, evaluating perpetrators' and targets' actions and emotions, and coming to value decisions about their experience. Some individuals did report a level of resilience and ability to intervene based on previous successes with intervening in bullying situations. These studies provide a glimpse into what bystanders experience, and also indicate the need to understand internal processes during and after witnessing bullying.

In Summary

Individuals who experience traumatic events, grow up in insecure environments, and receive negative messages from the environment and important individuals in their environment tend to respond to those experiences inwardly through emotional difficulties (e.g., sadness, loneliness, sleep disturbances), and outwardly through behavioral difficulties (e.g., anger, losing temper, being destructive). Bullying behavior is an outward manifestation of these difficulties. Therefore, individuals who exhibit bullying behaviors are at higher risk to have both emotional and behavioral difficulties. Targets of bullying behavior develop more emotional difficulties. This study seeks to understand the emotional and behavioral difficulties of individuals who engage in bullying behavior, experience being the target of bullying behavior, and witness bullying behavior.

Several gaps exist in the literature. Most research has looked at middle school students when bullying behavior is at its peak. Few studies have examined elementary school students in regards to experiencing bullying, whether as a perpetrator, target, or bystander. This researcher

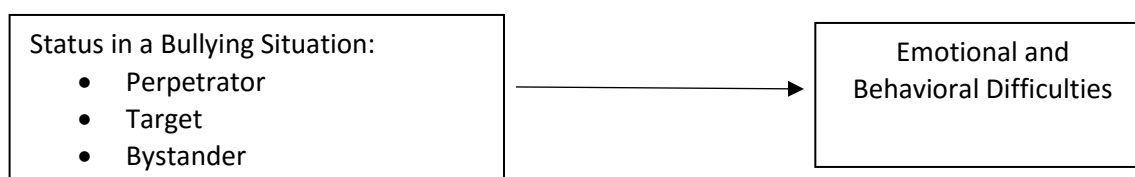
seeks to provide data on these experiences through this study. In addition, little research has looked extensively at emotional and behavioral difficulties of individuals involved in bullying experiences. Emotional and behavioral difficulties will be examined for individuals who engage in bullying behavior, experience bullying behavior as a target, and witness bullying behavior as a bystander.

Most bully prevention programs focus on social learning theory, reinforcement for prosocial behaviors, and punishment for antisocial behaviors (Ferguson, San Miguel, Kilburn, Jr., & Sanchez, 2007; Ttofi & Farrington, 2011). By understanding emotional and behavioral difficulties children and adolescents experience in bullying situations, intervention and prevention can be more targeted leading to higher success rates and reducing the likelihood the of ongoing bullying behavior.

Chapter III: METHODOLOGY

This study had IRB approval. This researcher assessed emotional difficulties and behavioral difficulties and three statuses in a bullying situation. The three statuses in bullying experiences, being a bully perpetrator, being a bully target, and being a bystander of bullying behavior were treated as three categories of one independent variable. Emotional difficulties and behavioral difficulties were dependent variables. This researcher hoped to answer the following research questions: (RQ1) what is the relationship between emotional difficulties and behavioral difficulties for perpetrators, for targets, for bystanders? (RQ2) What are the mean differences in emotional difficulties and behavioral difficulties on bullying status (perpetrator, target, and bystander)?

Model



Participants

Participants (N = 507) were gathered from a convenience sample of 4th- 8th grade students involved in a larger bully prevention program analysis study taking place in three inner-city charter schools in the Mid-Atlantic region. There were more girls (N=282) than boys (N=253) in the study, and there was a range of race-ethnicity representation in the participants (Black = 333, White = 67, Hispanic/Latino = 7, Asian = 7, Native American = 24, Hawaiian/Pacific Islander = 2, Multiracial = 48, Other = 43, Not indicated = 4). Representatives of the school approached the creator and director of the bully prevention program to assess frequency of bullying behaviors

occurring in their schools. All students participated in the bully prevention program analysis.

The schools are relatively similar in demographic background. (See Table 3.1 below).

Table 3.1

Sample Population Descriptives

	School 1	School 2	School 3
Total School Enrollment/	295/	397/	606/
Larger Study Participated/	153/	231/	229/
Recruited into Dissertation	129	208	205
Low income Enrollment (%)	247 (83.7%)	330 (83.1%)	522 (86.1%)
Median Income	\$35,732	\$26,009	\$32,593
Free Lunch	65.1%	75.5%	80.4%
Reduced Lunch	2.1%	9.5%	8.6%
Ineligible for Free/Reduced Lunch	32.8%	14.9%	11%
White	22.4%	23.5%	5.2%
Hispanic	1.0%	1.3%	0.7%
Asian	1.6%	0.0%	0.0%
Black	63.0%	71.6%	84.7%
Biracial	12.0%	3.1%	9.4%
American Indian	0.0%	0.5%	0.0%
Pacific Islander	0.0%	0.0%	0.0%

The number of participants placing into the categories of Bully Perpetrator, Bully Target, or Bully Bystander varied across sex, race, grade, and school. Below is a table (Table 3.2) of these descriptors.

Table 3.2

Sample Population Frequencies

		Perpetrator	Target	Bystander	Total
Sex	Male				
	Female				
Missing = 7					
Race	Black	21	84	210	315
	White	0	27	34	61
	Hispanic/Latino	1	2	4	7
	Asian	1	1	2	4
	Native American	2	9	13	24
	Hawaiian/Pacific Islander	0	1	1	2
	Multiracial	4	12	27	43
	Others	2	12	26	40
Missing = 11	Totals	31	148	317	496
Grade	4 th Grade	6	35	58	99
	5 th Grade	1	39	71	111
	6 th Grade	6	16	62	84
	7 th Grade	11	33	66	110
	8 th Grade	8	25	61	94
Missing = 9	Total	32	148	318	498
School	School 1	6	41	71	118
	School 2	16	53	125	194
	School 3	12	56	123	191
Missing = 4	Total	34	150	319	503

The sample of students for this study were students who self-identify status in a bullying situation (perpetrator, target, and bystander). *Perpetrators* were defined as individuals indicating engaging in bullying behavior by endorsing “A few times”, “Many times” or “Every day” on a minimum of three statements on the Traditional Bullying Offending Scale. *Targets* were defined as individuals indicating being the victim/target of bullying behavior by endorsing “A few times”, “Many times” or “Every day” on a minimum of two statements on the Traditional Bullying Victimization Scale. *Bystanders* were defined as individuals indicating witnessing bullying behavior by endorsing “A few times”, “Many times” or “Every day” on a minimum of three statements on the Traditional Bullying Bystander Scale.

The researcher examined the differences between three categories (status in a bullying situation) on two response variables (emotional difficulties and behavioral difficulties) based on bullying status within the participant population. G*Power analysis (Faul, Erdfelder, Buchner, & Lang, 2009) with an alpha of .05 determined a sample size of 153 was needed for three groups and two response variables in a MANOVA. Number of participants recruited into the study were greater ($N = 507$) than G*Power analysis calculated as necessary.

Instruments

Bullying Measures. Hinduja and Patchin (2010) developed a Bullying Scale reflecting three domains of bullying behaviors (verbal, relational, and physical) for offending and victimization of traditional bullying and offending and victimization of cyber-bullying. Three items on the Bullying Scale use the word *bullied* (“I *bullied* another student with mean names or comments about his or her race or color”; “I *bullied* another student with mean names, comments, or gestures with a sexual meaning”; and “I *bullied* another student I another way”). In order to address social desirability, conservative reporting, and to be more inclusive of behaviors (Huang & Cornell, 2015; Kert, Coddington, Tryon, & Shiyko, 2010), researchers altered one item and removed one item from the study. The item “I *bullied* another student with mean names or comments about his or her race” was changed to “I *picked on* another student mean names or made comments about his or her race or color”. The item “I *bullied* another student with mean names, comments, or gestures with a sexual meaning” was removed due to the age of the population (elementary-aged students) being studied. The last item “I *bullied* another student I another way” was removed altogether as it does not capture specific bullying behaviors. Cronbach’s α was assessed for the altered subscales. For the purposes of this study, only the Traditional Bullying subscales for victimization and offending were used (see Appendix A & B).

The Traditional Bullying Offending scale consists of 10 statements of typical bullying behaviors for perpetrators. After removing two items discussed previously, the final scale consisted of 8 items. Responses are on a 5-point Likert scale labeled “Never” = 1, “Once or twice” = 2, “A few times” = 3, “Many times” = 4, and “Every day” = 5. Eight items were generated using the same items in the offending and victimization subscales to assess bystander experiences (Appendix C). Both the offending and target/victimization scales have shown good reliability ($\alpha = .88$) (Hiinduja & Patchin, 2010). The bystander measure developed from the two established scales was assessed for reliability.

Skip Logic. Skip logic, also referred to as *conditional logic* and *skip branching*, refers to the concept that how a respondent answers a current question determines the next question or set of questions (Nadkarni, 2011). Item response theory posits that individuals must indicate high levels in a specific construct in order to receive items that are more difficult within the same construct (Reise, Ainsworth, & Haviland, 2005). If a person has a high level of a specific trait, he or she is more likely to endorse more components of that trait. For example, if an individual has high levels of depression, this individual is more likely to endorse more severe symptoms of depression. This holds true for individuals who are involved in bullying situations. Individuals who presented with specific bullying and victimization questions tend to report more bullying and victimization, possibly due to increased ability to recall specific experiences of bullying (Huang & Cornell, 2015). Thus, utilizing skip logic in this study is appropriate.

The use of skip logic in this study is as follows. If participants endorse a particular item or items on the Bullying Measure, another part of the Bullying Measure will open up to them. If participants do not endorse a particular item or items, remaining questions within the construct

are no longer available. In this study, participants were presented with the four most frequently indicated items on the Bullying Offending Scale.

1. I called another student mean names, made fun of or teased him or her in a hurtful way.
2. I picked on another student or students at school.
3. I kept another student out of things on purpose, excluded him/her from my group of friends or completely ignored him/her.
4. I hit, kicked, pushed, or shoved another student around or locked another student indoors

Participants responding with *Never* or *Once or twice* do not fit into bully perpetrator status per the accepted definition of bullying occurring repeatedly. These participants' bully perpetrating scores were not calculated and they were not included in the status of bully perpetrator. In order to be classified as bully perpetrator status, participants must respond with a 3 (*A few times*) or higher on three of the four items to receive the remaining bully perpetrator items. Scores on these items, combined with scores on the remaining bully perpetrator items, were summed to create an overall Bullying Offending Score.

For example, Student 1 responds to the four questions as follows:

I called another student mean names, made fun of or teased him or her in a hurtful way.	3
I picked on another student or students at school.	3
I kept another student out of things on purpose, excluded him/her from my group of friends or completely ignored him/her.	3
I hit, kicked, pushed, or shoved another student around or locked another student indoors.	1
Total	10

Because Student 1 endorsed three of the experiences with *A few times*, the remaining four items on the Bullying Offending Subscale are presented.

Participants who respond with a *Once or twice (2)* or *Never (1)* on at least two of the four items will not receive the remaining items on the Bullying Offending Subscale, and will then be presented with the three most frequently indicated items on the Bullying Target Subscale. A participant must respond to two of the three questions with *A few times (3)* or higher to be presented with the remaining Bullying Target Subscale. Participants who responded on two of the three items with *A few times* were considered a target in a bullying situation and received the remaining items on the Bullying Target Subscale.

For example, Student 2 responds as follows:

I was called mean names, was made fun of, or teased in a hurtful way.	3
Other students left me out of things on purpose, excluding me from their group of friends, or completely ignored me.	3
I was picked on at school. (Original item: I was bullied at school).	1
Total	7

Because Student 2 endorsed two of the experiences with *A few times*, the remaining five items on the Bullying Target Subscale are presented to the student. Participants who responded with a *Once or twice (2)* or *Never (1)* on at least two of the three items did not receive the remaining items on the Bullying Target Subscale. These individuals were not considered as having a bully target status and their scores for this subscale were not be calculated. Instead, they were presented with the Bullying Bystander Subscale that was generated using the Bullying Offending and Bullying Target Subscales. Participants who endorsed at least one of the eight items with *Once or twice* were considered to have observed at least one instance of bullying and were counted as a bully bystander.

Behavioral and Emotional Difficulties Measure. The Me & My School (M&MS), developed by Deighton, Tymms, Vostanis, Belsky, Fonagy, Brown, Martin, Patalay, and Wolpert (2013), is a 16-item measure of emotional difficulties (10 items) and behavioral difficulties (6 items) in elementary school age children. The Emotional Difficulties subscale also has items that assess social relationships (e.g. I have lots of friends. Other children tease me.). It was developed due to lack of valid mental health self-report measures for children under 11 years of age.

Development. Developers of the Me & My School (M&MS) measure looked at a review of outcome measures, analyzed concepts of emotional and behavioral measures of others scales, and developed a large pool of items with lower reading ranges typically found in younger age groups. Developers then used focus groups of young children to determine what words and concepts younger children understood and used, generating 24 items. These items were converted to an online survey to be easily read by children.

Factor Analyses. Developers collected responses to the M&MS and conducted an exploratory factor analysis on a randomized half of the total sample of 9,881 students aged 11-12 years in their study to identify clear subscales of behavioral and emotional difficulties. The items that had significant factor loadings and minimum cross-loadings were selected for confirmatory factor analysis on the remaining half of participants' responses. Developers used oblique rotation due to correlation of concepts and traits, and three factors (eigenvalues were 6.87, 2.86, 1.81, and 1.02) were generated: behavioral difficulties, emotional difficulties, and a few items relating to social aspects. Confirmatory factor analysis was conducted on the second half of the sample using a two-factor model, which demonstrated goodness of fit (CFI = 0.934; TLI = 0.924; RMSEA = 0.060) and had a moderate correlation of 0.42 ($p < .001$).

Differential Item Functioning. Differential Item Functioning (DIF), also referred to as measurement bias, assesses if different categories of groups or subgroups with the same trait or ability, are likely to answer differently on a questionnaire (Osterlind & Everson, 2009).

Developers of the M&MS conducted DIF analysis across five grouping criteria: gender, Special Education needs (SEN), if English was the second language for participants (EAL), whether participants receive a free lunch in school (FSM), and whether the participants were in care. Deighton, et. al (2012) saw insignificant differences between genders on some items on the emotional difficulties subscale. Boys, those with SEN, and those in care were more likely to endorse being teased than others at the same level of emotional difficulties. Those with SEN, EAL, and in care were more likely to report they bullied others than others endorsing bullying others. As such, the developers removed those two items to create the final emotional difficulties subscale with 10 items, and final behavioral difficulties subscale with 6 items.

Validity. Developers of the M&MS assessed correlations of the subscales (emotional difficulties and behavioral difficulties) with similar subscales on the the Strengths and Difficulties Questionnaire (SDQ) for participants 11 and older, as the SDQ is developmentally appropriate for children 11+ years of age. Correlations were high between the emotional subscales of the M&MS and emotional problems subscale of the SDQ ($r = .67, p < .001$) and behavioral subscales of the M&MS and conduct problems of the SDQ ($r = .70, p < .001$). Discriminant validity was assessed using the M&MS subscales and the unrelated subscales on the SDQ (hyperactivity/inattention and peer relationship problems). Correlations were low ($r = .22, p < .001$; $r = .24, p < .001$). The M&MS has discriminant capabilities between high-risk and low-risk clients and the subscales have shown good internal reliability (emotional difficulties $\alpha = .84$; behavioral difficulties $\alpha = .82$) (Patalay, Deighton, Fonagy, Vostanis, & Wolpert, 2014).

The purpose of using the M&MS in the study is to measure emotional and behavioral difficulties in students with the status of bully perpetrator, bully target, or bully bystander as identified from responses on the Bullying Scale in 4th-8th grade. Due to the extensive questionnaires already in place as part of the larger study and reduce participant fatigue in the students, the research team decided to reduce the number of items used to 10, selecting items with the highest factor loadings in the factor analyses and removing items that are asked in other measures implemented (see Appendix D). This researcher assessed the reliability of the modified M&MS.

Procedures

Administration of these measures were part of a larger study. Parents who did not want their child participating in the study signed an opt-out form and the student's identification number was noted. Data was collected electronically for 4th-8th grade students via Qualtrics. Students entered their identification number, used as participant numbers, and the school they attended at the onset of the survey. At the conclusion of the surveys, students completed several demographic questions such as gender (boy or girl), race/ethnicity (Black, White, Hispanic/Latino, Asian, Native American, Hawaiian/Pacific Islander, or Multiracial [parents of different races]), grade, and their teacher's name.

In order to reduce participant fatigue, the research team decided to use Skip Logic in the administration of the Bullying Scale for participants. Participants will initially receive four of the perpetrator statements most commonly identified as bullying behavior. If participants respond in the 3-5 range on three of the four items, the remaining bully perpetrator questions will be administered to them. If responses are in the 1-2 range, four of the target statements most commonly identified will be administered. If participants respond in the 3-5 range on 3 of the 4

items, the remaining target items will be administered. If responses are in the 1-2 range, the bystander items will be presented to the participants. This will reduce the number of questions participants will have overall and provide a sense of the most common behaviors occurring in the schools (see Skip Logic section on page 4 for further details).

Research Design

The design of this study is causal-comparative in nature. In a causal-comparative design, researchers examine the relationship between or the effect of an independent variable and one or more dependent variables, by comparing groups of individuals after an event or action (Brewer & Kubn , 2010). Similar to an experimental design, causal-comparative research seeks to compare groups of individuals based on the focus of independent variable, and the impact the independent variables or variables have on the dependent variable or variables. Unlike an experimental design, causal-comparative research does not manipulate the independent variable. In the case of this study, it would be unethical to manipulate the independent variable (e.g. cause a bullying incident to occur).

The design of this study is to assess the mean differences between emotional and behavioral difficulties and status in a bullying situation. First, little research has been done on elementary students' experiences of emotional and behavioral difficulties and bullying. I will assess the relationship of urban elementary students' experiences of bullying perpetration behaviors, experiencing bullying as a target, and witnessing bullying behavior, and use a relatively new measure of emotional and behavioral difficulties designed for elementary school-aged students. Second, recommendations have been put forth to assess bullying based on behavior, refraining from using the words *bully* and *bullying* (Huang & Cornell, 2015; Kert,

Codding, Tryon, & Shiyko, 2010), and the measures used to assess bully perpetration and being a target were developed with language that focuses on behavior.

In addition to gathering information from elementary school students, this researcher examined emotional and behavioral difficulties in both bully perpetrators and offenders. Most research focuses on adolescents and middle school students, as this time period is typically when bullying behavior is most prominent. This study will determine the extent of bullying behavior that occurs in elementary school-aged students and the extent of emotional and behavioral difficulties symptoms exhibited by these individuals.

There has been little research conducted on the emotional and behavioral difficulties experienced by children and adolescents who observe bullying behavior. The goal was to understand the emotional and behavioral difficulties experienced by these individuals and add to the body of work already done. Results from this study provided more information and a trajectory for future research.

Advantages and disadvantages. The advantage of conducting a MANOVA is that it allows for the testing of the two dependent variables of emotional difficulties and behavioral difficulties at the same time. Utilizing a MANOVA provides the opportunity to observe the effect of bullying status on each dependent variable.

Validity threat. Internal validity may be threatened by fatigue of participants as they take the survey. In addition, some participants may answer in response to social desirability, which is participants may want to please the researcher or may want to please adults with what may be defined as appropriate social behavior. Independent and dependent variables are self-reported, which may lead to spuriously strong prediction. External validity may be threatened by lack of

diversity of participants, in effect making the data less generalizable than if the sample is representative of the larger population.

Validity strength. Internal validity strengths include the validity of the measures and what they measure, their appropriateness for participants in the study. Data collection occurred in an urban setting, which provided some level of generalizability due to the diversity of the student population.

Data Analysis

This researcher used a Multivariate Analysis of Variance (MANOVA) to assess the relationship between one independent variable with three categories (perpetrator/offender, target, and bystander) and two dependent variables (emotional difficulties and behavioral difficulties). Standard scores (z scores) were calculated for each item prior to subscale mean calculation and analyses due to measures and subscales having different numbers of items. For example, the emotional difficulties subscale has 10 items and the behavioral difficulties subscale has 6 items.

Missing data. Some participants had missing data across subscales. Analysis to determine if missing data was random. Participants with large amounts of missing data were deleted from the sample. A Missing Values Analysis from SPSS was conducted to determine the randomness of missing data. Median scores were imputed for missing values for individual items in subscales if participants completed a minimum of 66% of the items for the subscale as the percentage of missing data was very small.

Assumptions. There are nine assumptions for conducting a Multivariate Analysis of Variance (Tabachnik & Fidell, 2013). Several statistical tests are available for assessing each of the assumptions, as well as different options of cleaning, transforming, or deleting to address items that do not meet assumptions. This researcher tested each assumption prior to analysis.

Assumption 1: Dependent variables must be continuous. The dependent variables of Emotional Difficulties and Behavioral Difficulties were measured as continuous variables. Participants respond to items in the scale from a *Strongly Agree* to *Strongly Disagree*. While these measures do not necessarily identify responses as being equally distant, some researchers (see Glass, Peckham, & Sanders, 1972; Lubke & Muthen, 2004) have found using Likert-scale responses to be accurate in the data reporting, providing the other assumptions are met.

Assumption 2: Independent variable should consist of two or more categories. Participants in this study self-identified as perpetrators, targets, or bystanders in bullying situations based on responses to the Traditional Bullying Offender Scale, Traditional Bullying Victimization Scale, and Traditional Bullying Bystander Scale.

Assumption 3: Independence of Observation. Participants must not be in two or more groups. Skip logic was utilized to identify participants based on their responses to the three scales. If a participant endorsed bullying behaviors initially, they were not presented with the victimization/target or bystander questions. If participants endorsed the victimization/target questions, they were not presented with the bystander questions.

Assumption 4: Adequate sample size. For analyses of variance, there must be more participants in each group than the amount of dependent variables measured. There were two dependent variables measured, and the number of participants in each category were greater than two.

Assumption 5: Outliers. For MANOVA results, it is assumed there are no outliers within the data as MANOVA is sensitive to outliers (Tabachnik & Fidell, 2013). This researcher used Mahalanobis test to determine if there are any outliers. Any existing outliers were deleted.

Assumption 6: Normal distribution. Significance in MANOVA assumes that dependent variables follow a normal distribution. Sample size or group size as low as 20 should be a significant number to ensure a normal distribution (Mardia, 1971, as cited by Tabachnik & Fidell, 2013). Skewness of data were assessed and all scores were converted to z-scores, as z-scores normalize the data.

Assumption 7: Linearity. The seventh assumption to meet for MANOVA is that dependent variables are linear. When dependent variables deviate from linearity, reduction in statistical test power occurs. Scatterplots provide observation for linearity or curvilinearity, and when curvilinearity occurs, converting dependent variables into high vs. low dummy variables is an option. Scatterplots for each dependent variable (emotional difficulties and behavioral difficulties) were generated to observe linearity or curvilinearity.

Assumption 8: Homogeneity of variance-covariance. Homogeneity of variance-covariance is assumed unless the sample sizes are unequal. In this study, each category of the independent variable (perpetrator, target, and bystander) are unequal, requiring an evaluation of homogeneity of variance-covariance. Box's M was utilized to test homogeneity of the variance-covariance matrices that are generated.

Assumption 9: Multicollinearity and singularity. Dependent variables should not be highly correlated as this will create multicollinearity issues and appear redundant in the assessment process (Tabachnik & Fidell, 2013). Theoretically, emotional difficulties and behavioral difficulties should be moderately correlated but not highly correlated. Correlations were assessed to determine level of correlation the two dependent variables were.

Univariate Analysis. Univariate analysis is any analysis with one dependent variable with one or more independent variables (Tabachnick & Fidell, 2013). In this study, the mean

differences of each dependent variable (emotional difficulties and behavioral difficulties) were compared within each category of the independent variable. This researcher assessed the skewness of each dependent variable. After dividing skewness by the standard error of the skewness, the dependent variables were positively skewed and the resulting numbers were greater than 2. A root square transformation resulted in a positive skew for Emotional Difficulties. This researcher conducted a Log10 transformation and the resulting skewness demonstrated normality for both variables.

Bivariate Analysis. Bivariate analysis is any analysis of two, non-experimental independent variables with the purposes of studying the relationship (Tabachnick & Fidell, 2013). This study is non-experimental in design, and has the purpose of understanding the relationship between status in a bullying situation and mean differences between emotional and behavioral difficulties.

Multivariate Analysis. Multivariate analysis means analyzing multiple dependent and multiple independent variables (Tabachnick & Fidell, 2013). Analyses were conducted on the mean differences between the two dependent variables (emotional difficulties and behavioral difficulties) and category of bullying status within the independent variable (perpetrator, target, and bystander), and a correlation matrix (Table 3.3) was generated.

Table 3.3

Correlation Matrix

	Bully Perpetrator Status	Bully Target Status	Bully Bystander Status	Emotional Difficulties	Behavioral Difficulties
Bully Perpetrator Status Significance					
Bully Target Status Significance					
Bully Bystander Status					
Emotional Difficulties Significance					
Behavioral Difficulties Significance	.			.	

CHAPTER IV: RESULTS

This chapter reports the results of the Multiple Analysis of Variance (MANOVA) for the purpose of this study, which is to understand the mean differences in emotional difficulties (ED) and behavioral difficulties (BD) on categories in a bullying situation: bully perpetrator, bully target, and bully bystander. In addition to reporting the results of the analysis, this section reports the process and results of addressing missing data and the assumptions for MANOVA.

Missing Data

This researcher used a subsample from a larger data set for this study. Therefore, each subscale and item were assessed for missing data. Participants with 34% of missing data were excluded from analysis, and subscales with a minimum of 66% completion of subscale items had median scores imputed. After removing participants with 34% of data missing, there were three individual items missing and a median score of three (3) was imputed.

Assumptions

In order to conduct a Multiple Analysis of Variance (MANOVA), nine assumptions must be met, whether through data collection, transformation, or deletion. Each of the nine assumptions for MANOVA were met in this study. Below, this researcher has outlined how each assumption was tested for, results of the tests, and any transformations or deletions that occurred.

Assumption 1: Continuous dependent variables. Dependent variables must be measured with an equal distance from each response option. The dependent variables of Emotional Difficulties and Behavioral Difficulties were measured on a Likert scale using *Strongly Agree* to *Strongly Disagree*. Likert scales do not typically provide a true equal distance from each response, as Likert scales are often used to measure attitudes and beliefs. However

some researchers (Glass, Peckham, & Sanders, 1972; Lubke & Muthen, 2004) argue that Likert scales provide a true measure if the other assumptions are met. If the other assumptions necessary for MANOVA are met, F test accuracy is increased with appropriate p values. This assumption was shown to be true for the data.

Assumption 2 & 3: Independent variables of two or more categories & Independent observation. The second and third assumptions to be met for MANOVA are that the independent variable consists of a minimum of two categories, and these categories must be independently observed, meaning no participant can be accounted for in more than one category. For this study, the independent variable of status in a bullying situation consisted of three categories: perpetrator, target, and bystander. This researcher utilized Skip Logic to separate participants based on their responses to the bullying situation questions, which made it impossible for participant classification into more than one category of status in a bullying situation. These assumptions were shown to be true in the data.

Assumption 4: Adequate sample size. For this assumption, there must be more participants in each group than the number of observed or measured dependent variables. This researcher measured two dependent variables (Emotional Difficulties and Behavioral Difficulties) within status in a bullying situation (perpetrator, target, and bystander). The number of participants in each category of perpetrator ($N = 34$), target ($N = 151$), and bystander ($N = 322$) were higher than the number of dependent variables. This assumption was shown to be true for the data.

Assumption 5: Outliers. Outliers often exist in data collection and data sets. The presence of outliers in a dataset can skew analysis and provide inaccurate results (Tabachnik & Fidell, 2013). In order to conduct a MANOVA, there must not be any outliers present. One way

to test for outliers is to use Mahalanobis test through the Regression → General Linear Model functions in SPSS. After calculating Mahalanobis and computing a probability variable, the items within the independent variable did not achieve significance, indicating there were no outliers in the data set. This assumption was shown to be true for the data.

Assumption 6: Normal distribution. Dependent variables must follow a normal distribution in order for MANOVA to show significance. After assessing skewness (see *Univariate analysis* section below for details), totals for each dependent variable was z-scored and then converted to t-scores for analysis. All items fell within normal distribution post transformations. This assumption was shown to be true for the data.

Assumption 7: Linearity. As stated in the previous chapter, dependent variables must have a linear relationship in order to use MANOVA. Scatterplots allow observation of linear relationships. Scatterplots were generated for each dependent variable and category in the independent variable and all showed linearity. For perpetrator status, as bullying experiences increased, behavioral difficulties increased and emotional difficulties decreased. For target status, as bullying experiences increased, both behavioral and emotional difficulties increased. For bystander status, scatterplots did not easily show a linear relationship. Linearity tests were conducted and results indicate that behavioral difficulties do not significantly deviate from linearity ($p = 0.112$); whereas emotional difficulties were significant in deviation from linearity ($p = 0.042$). This assumption was shown to be true for the data.

Assumption 8: Homogeneity of variance-covariance. Homogeneity of covariance across dependent variables is assumed when conducting a MANOVA. Box's M tests this assumption by examining significance of covariance between the dependent variables and the categories of the independent variable. After computing Box M, non-significance was shown (p .

= .210) demonstrating this assumption has been met. This assumption was shown to be true for the data.

Assumption 9: Multicollinearity and singularity. Moderate correlation between independent variables is ideal for a MANOVA. In order to assess multicollinearity, correlations for each dependent variable (Emotional Difficulties and Behavioral Difficulties) in each category of independent variable (perpetrator, target, and bystander). This assumption was shown to be true for the data.

Univariate Analysis

Univariate analyses conducted in the study addressed issues of skewness, and homogeneity, as well as determined reliability of the created Traditional Bully Bystander Scale and the modified subscales on the Me & My School Scale. Results of these analyses are below.

Traditional Bully Bystander Scale

This researcher utilized the Traditional Bully Offending Scale and the Traditional Bully Victimization Scale items to generate a Traditional Bully Bystander Scale to determine the number of students who witness bullying as a bystander and the types of behaviors frequently seen. The 8-measure returned a high reliability ($\alpha = 0.879$) with moderate inter-item correlations. The correlation matrix below demonstrates the inter-item correlation for the Traditional Bully Bystander Scale.

Table 4.1

Traditional Bully Bystander Scale (BBS) Correlation Matrix

	BBS1	BBS2	BBS3	BBS4	BBS5	BBS6	BBS7	BBS8
(BBS1) I saw other students get called mean names, get made fun of, or teased in a hurtful way.	1.000	.785	.606	.471	.509	.443	.260	.344
(BBS2) I saw other students get picked on at school.	-	1.000	.651	.521	.502	.506	.385	.399
(BBS3) I watched other students get left out of things on purpose, be excluded from groups of friends, or completely ignored.	-	-	1.000	.498	.521	.519	.430	.406
(BBS4) I've seen students get hit, kicked, pushed, or shoved around or get locked indoors.	-	-	-	1.000	.529	.449	.420	.499
(BBS5) I've heard lies or false rumors spread about another student to make other students dislike him or her.	-	-	-	-	1.000	.505	.274	.389
(BBS6) I heard students get picked on with mean names or comments about his or her race or skin color.	-	-	-	-	-	1.000	.455	.513
(BBS7) I've seen students get money or other things taken away from them or damaged.	-	-	-	-	-	-	1.000	.548
(BBS8) I saw students get threatened or forced to do things they did not want to do.	-	-	-	-	-	-	-	1.000

Modified Emotional and Behavioral Difficulties Measure

The Me & My School measure is a 16-item measure developed to assess behavioral and emotional difficulties in Elementary School-aged children. The original emotional difficulties subscale in the Me & My School Measure contained 10 items, with strong good ($\alpha = 0.84$). Due to number of questionnaires incorporated into the larger study, four items with the lowest factor loadings were removed, causing a reduction in reliability but still remained acceptable ($\alpha = 0.789$). The original behavioral difficulties subscale in the Me & My School measure contained 6 items, with good reliability ($\alpha = .82$). Two items were removed for this study due to the number of questionnaires incorporated into the larger study. Reliability was reduced but acceptable ($\alpha = .770$).

Both scales had positive skewness (Emotional Difficulties Skewness Statistic = .725, and Behavioral Difficulties Skewness Statistic = .447, Skewness Standard Error = .105) and the distribution needed to be normalized. This researcher used square-root transformation, which normalized the distribution of Behavioral Difficulties (Skewness = .114), but did not normalize the Emotional Difficulties (Skewness = .345). Log 10 transformation was then used on the dependent variables, which resulted in a normalized distribution (Emotional Difficulties = -.002, Behavioral Difficulties = -.182). Scores were converted to z-scores then into t-scores using the formula ($\text{New_Var} = (\text{var001} * 10) + 50$) allowing the data to meet the assumptions of normal distribution and linearity for MANOVA.

The number of participants in each category in a bullying situation status were unequal. Box M test on homogeneity results were non-significant ($\alpha = .134$) indicating the categories did not co-vary and MANOVA could be conducted.

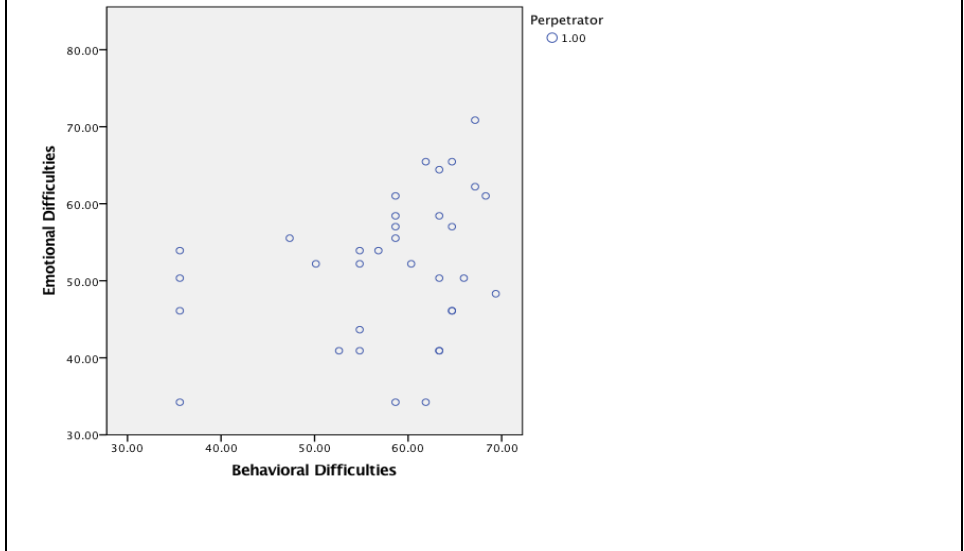
Bivariate Analysis

Bivariate analysis answered the first research question: what is the relationship between emotional difficulties and behavioral difficulties for perpetrators? for targets? for bystanders?

This researcher used SPSS and computed Pearson's r to assess the relationship between emotional difficulties and behavioral difficulties for bully perpetrators (labeled Status 1). There was a non-significant correlation between the two variables, $r = .301$, $n = 34$, $p = .084$. A scatterplot summarizes the results (Figure 4.1). For perpetrators of bullying behavior, emotional difficulties and behavioral difficulties do not have a strong relationship with one another. Overall, student who engage in bully perpetrating behavior manifest behavioral difficulties or emotional difficulties.

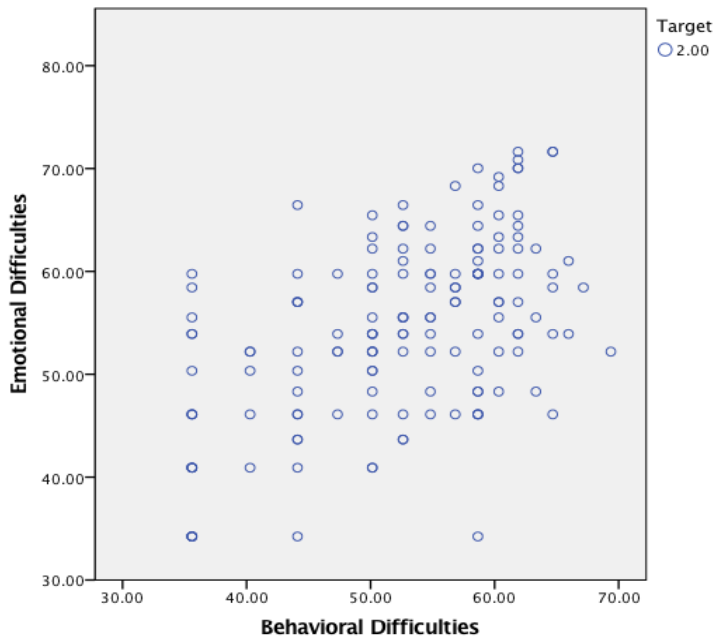
Figure 4.1

Correlation of Emotional and Behavioral Difficulties for Perpetrators



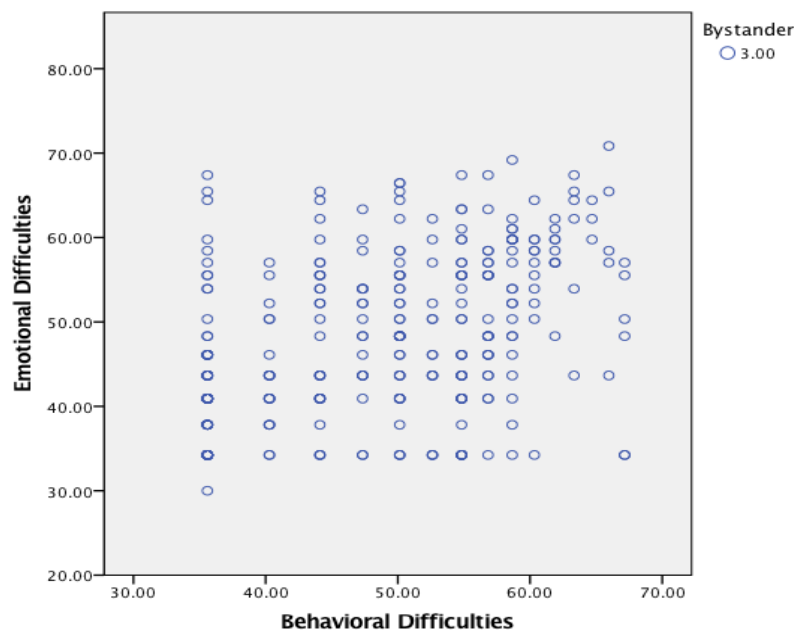
Using SPSS, this researcher computed Pearson’s r to assess the relationship between emotional difficulties and behavioral difficulties for bully targets (Status 2). There was a significant correlation between the two variables, $r = .516$, $n = 151$, $p < .005$. A scatterplot summarizes the results (Figure 4.2). For targets of bullying behavior, emotional difficulties and behavioral difficulties have a significant relationship with one another. Overall, increases in behavioral difficulties correlate with an increase in emotional difficulties in students targeted for bullying behavior.

Figure 4.2.

Correlation of Emotional and Behavioral Difficulties for Targets

A Pearson's r was computed to assess the relationship between emotional difficulties and behavioral difficulties for bully bystanders (Status 3). There was a significant correlation between the two variables, $r = .459$, $n = 322$, $p < .005$. A scatterplot summarizes the results (Figure 4.3). For students who observe bullying behavior, emotional difficulties and behavioral difficulties have a significant relationship with one another. Overall, increases in behavioral difficulties correlates to increases in emotional difficulties as students witness bullying behavior.

Figure 4.3

Correlation of Emotional and Behavioral Difficulties for Bystanders

The purpose of this study was to examine the mean differences in emotional difficulties and behavioral difficulties based on status in a bullying situation: perpetrator, target, and bystander. Scores for the dependent variables were z-scored for normalization, and then converted to T-scores to create a mean of 50 and standard deviation of 10.

Emotional difficulties. Participants responding to the emotional difficulties subscale in the Me & My School measure differed based on their status in a bullying situation. The participants who were in the category of perpetrator were slightly above the mean for emotional difficulties (N = 34, M = 51.72, SD = 9.43). Perpetrator categorization was negatively non-significantly correlated with emotional difficulties ($r = -0.305$, $p = 0.089$). Participants who were categorized as targets were above the mean for emotional difficulties (N=151, M = 54.66, SD = 8.62). Target categorization and emotional difficulties were significant ($r = 0.383$, $p <$

0.01). Participants categorized as bystanders were slightly below the mean for emotional difficulties ($N=322$, $M = 47.93$, $SD=9.69$), and were not significantly correlated ($r = 0.125$, $p = 0.25$).

Behavioral difficulties. Participant responding to the behavioral difficulties subscale in the Me & My School measure differed based on their status in a bullying situation. Participants identified as perpetrators were above the mean for behavioral difficulties ($M=57.62$, $SD = 9.65$), and were not correlated. Participants identified as targets were above the mean for behavioral difficulties ($M = 52.63$, $SD=8.83$). Target categorization and behavioral difficulties were significantly correlated with one another ($r = 0.292$, $p < 0.01$). Participants categorized as bystander were slightly below the mean for behavioral difficulties ($M=48.37$, $SD=9.71$), and the category of bystander was significantly correlated with behavioral difficulties ($r = 0.172$, $p > 0.01$)

Multivariate analysis

Multivariate analysis addressed the second research question. What are the mean differences in emotional difficulties and behavioral difficulties on bullying status (perpetrator, target, and bystander)? A one-way MANOVA was conducted to determine the mean differences among status groups on emotional and behavioral difficulties. There was a statistically significant difference in emotional and behavioral difficulties based on status in a bullying situation, $F(4, 1006) = 19.45$, $p < .0005$; Wilk's $\lambda = .862$, partial $\eta^2 = .07$. Bullying status explained approximately 7% of variability in emotional difficulties and behavioral difficulties. Additionally, involvement in a bullying situation had a statistically significant effect on both Emotional Difficulties ($F(2, 504) = 27.03$, $p < .0005$; partial $\eta^2 = .097$) and Behavioral

Difficulties ($F(2, 504) = 21.44, p < 0.0005$; partial $\eta^2 = .078$). Bullying status explained 10% of the variance in emotional difficulties and 7.8% of the variance in behavioral difficulties.

Table 4.2 Mean Differences in Emotional and Behavioral Difficulties on Bullying Status

	Perpetrator	Target	Bystander
Emotional Difficulties	M = 51.72 (N = 34, SD = 9.43)	M = 54.66 (N = 151, SD = 8.62)	M = 47.93 (N = 322, SD=9.69)
Behavioral Difficulties	M = 57.62 (N = 34, SD =9.65)	M = 52.63 (N = 151, SD = 8.83)	M = 48.37 (N = 322, SD=9.71)

A Tukey's HSD post-hoc test examined the relationships between bullying situation statuses and emotional and behavioral difficulties. The scores for Emotional Difficulties were statistically significant between target and bystander ($p < 0.01$) but not between perpetrator and target ($p = 0.223$), and perpetrator and bystander ($p = .065$). Scores for Behavioral Difficulties were almost statistically significantly different between perpetrator and target ($p = 0.016$), and

Table 4.2

Correlation Matrix

		Perpetrator	Target	Bystander	Emotional Difficulties	Behavioral Difficulties
Perpetrator		1	--	--	--	--
Target		--	1	--	--	--
Bystander		--	--	1	--	--
Emotional Difficulties	Pearson's <i>r</i>	-.305	.343**	.125*	1	--
	Sig. (2-tailed)	.089	.000	.025		
Behavioral Difficulties	Pearson's <i>r</i>	.097	.292**	.172**	.491**	1
	Sig. (2-tailed)	.586	.000	.002	.000	

(* - Correlation is significant at the 0.05 level. ** - Correlation is significant at the 0.01 level)

were significant between perpetrator and bystander ($p < 0.01$), and between target and bystander ($p < 0.01$).

CHAPTER V: DISCUSSION

The purpose of this study was to answer two research questions. The first research question asked, what is the relationship between emotional and behavioral difficulties for perpetrators, for targets, for bystanders? The second research question asked, what are the mean differences in emotional and behavioral difficulties between bullying-status groups: perpetrator, target, and bystander? Results of the Multiple Analysis of Variance (MANOVA) indicated several points of significance. Overall, involvement in a bullying situation influences emotional and behavioral difficulties, particularly for targets and bystanders. This researcher discusses the findings in detail below, implications of the findings for schools, considers limitations and strengths of the study, and offers ideas for future research.

Specific Findings for Research Question 1

The first research question asked what is the relationship between emotional and behavioral difficulties for perpetrators, for targets, for bystanders? The following sections discuss the findings.

Emotional Difficulties

Perpetrator status has a negative correlation with emotional difficulties. This was to be expected as previous studies have shown perpetrators have difficulty with empathy (Farrington & Baldry, 2010), lack social skills (Brank, Hoetger, & Hazen, 2012; Cook, Williams, Guerra, Kim, & Sadek, 2010), and often justify these behaviors and qualify them as less significant than they are (Millington & Wilson, 2010). The more a student engaged in bullying behavior, the less likely they were to endorse emotional difficulties. Individuals who engage in perpetrating behavior often show signs of being tough as a way to be resilient to negative experiences and emotional expression is difficult for them. Students who engage in perpetrating behavior may be

concerned about expressing emotional difficulties and will not indicate they experience these types of behaviors. Research has shown that perpetrators lack empathy and associate with peers who also engage in bullying behavior. Together, these could indicate a numbing of empathy and difficulty accessing emotions that suppressed over time.

Target status indicated a positive, significant correlation with emotional difficulties. As a student experienced bullying increased, so did their level of emotional difficulties. The ongoing nature of being the target of bullying behavior and feeling powerless in a bullying situation leads to increase in emotional difficulties (Hawker & Boulton, 2000; Janson & Hazler, 2004).

Previous studies indicated some students targeted in bullying situations lack parental warmth and involvement at home (Duncan, 2011; Fosse & Holen, 2002). Combined difficulties at home and at school could increase the emotional difficulties experienced by targets in bullying situations.

Bystander status positively correlates with emotional difficulties, indicating increase in emotional difficulty as students witness bullying occurrences. This reflects previous research that bystanders manifest similar symptoms to those who have experienced some trauma (Janson & Hazler, 2004). This study included both elementary and middle school students, and accounts for seeing at least three types of bullying a minimum of a *few times*. The type of bullying behavior witnessed may provide further insight into the type of reaction that bystanders have and the level of emotional difficulties post-exposure generated.

Behavioral Difficulties

Perpetrator status does not significantly correlate with behavioral difficulties. Two of the items on the behavioral difficulties scale reflect behaviors found in bullying situations (*I break things on purpose* and *I do things to hurt people*). Other items in the Bullying Offending Scale do not reflect these specific pieces indicating that some students engage in bullying

behavior that may not necessarily reflect physical aggression, such as social exclusion. Past research indicates perpetrators lack empathy and social skills, so individuals may not be able to interpret that their behaviors are hurtful toward others.

Target status positively, significantly correlates with behavioral difficulties.

Experiencing ongoing harassment makes one feel inferior and powerless. Lashing out, breaking things, losing one's temper, and becoming easily angered are all forms of reactive aggression to feeling powerless, and indicate ways for a targeted student to feel some sense of power in an environment that frequently makes them feel powerless (Camodeca & Goossens, 2005).

Bystander status positively, significantly correlates with behavioral difficulties as well. Previous research has indicated bystander of bullying behavior exhibit symptoms of individuals who experience trauma (Janson & Hazler, 2004). Witnessing a situation where one feels powerless to intervene often manifests later in behavioral outbursts, expressing anger, and losing one's temper.

Specific Findings for Research Question 2

The second research question asked, what are the mean differences in emotional and behavioral difficulties between bullying-status groups: perpetrator, target, and bystander? The following sections discuss the specific findings.

Emotional Difficulties

Participants identified as experiencing bullying had the highest mean in emotional difficulties, followed by participants identified as perpetrators, and bystanders with the lowest mean score. These results were expected as victimization is associated with feelings of depression and anxiety (Cook, Williams, Guerra, Kim, & Sadek, 2010; Herba, Ferdinand, Stijnen, Veenstra, Oldehinkel, Ormel, et al., 2008), and somatic symptoms such as poor sleep

and sleep disturbance (Gini & Pozzoli, 2009). Past studies on cortisol and anxiety response system show a clear impact on targets (Carney, Hazler, Oh, Hibel, & Granger, 2010; Ouellet-Morin, Odgers, Danese, Bowes, Shakoor, Papadopoulos, et al, 2011). As an individual nears a place and time where a bullying situation is repeatedly experienced, cortisol increases, preparing the individual for the event.

Participants identified as perpetrators experience emotional difficulties to a lesser degree than participants identified as targets, even though previous research has indicated similar emotional difficulties (Shetgiri, Lin, Avila, & Flores, 2012; Wang, Nansel, & Iannotti, 2011). Interestingly, the direction of the relationship between bully perpetrating behavior and emotional difficulties was negative. This could be due to the unique experiences of perpetrators. As stated in Chapter 2, past studies indicate some unique differences between perpetrators and targets, specifically, perpetrators experience harsher discipline (Espelage, Bosworth, & Simon, 2000; Ncube, 2013; Spriggs, Iannotti, Nansel, & Haynie, 2007). This could create high levels of anxiety and result in a numbing of the response system, reducing the ability to experience and identify emotional difficulties.

Bystanders who reported the least amount of emotional difficulties among the three groups were below the mean. Bystanders exhibit low levels of a trauma reaction, as indicated in Chapter 2 (Janson & Hazler, 2004). Individuals witnessing repeated bullying events develop an increase in cortisol (Carney, Hazler, Oh, Hibel, & Granger, 2010), which heightens anxiety. While results indicate less emotional difficulties than perpetrators and targets, these difficulties were still significant, indicating a need for intervention to focus on this group of individuals as well.

Behavioral Difficulties

Participants in the study identified as perpetrators had the highest mean in behavioral difficulties, followed by targets. Participants identified as bystanders were lowest among the three groups. These results were expected as behavioral difficulties assess acting out behaviors similar to bully perpetrating behaviors.

Targets engaging in acting out behavior was expected as well. Previous studies have discussed a fourth category of bully status: bully-victim. These individuals have been both targeted and perpetrated bullying behavior (Haynie, Nansel, Eitel, Crump, Saylor, Yu, et al., 2001). Participants in this study were clearly identified as either perpetrator or target; however, some individuals may cross over into both if skip logic had not been conducted. Students who were identified as targets and have behavioral difficulties might be at the precipice of turning into a bully-victim.

Bystander were below the mean in behavioral difficulties as well. Witnessing repeated traumatic behaviors increases cortisol for bystanders (Carney, Hazler, Oh, Hibel, & Granger, 2010). If exposure to traumatic events goes unaddressed, behavioral difficulties occur, which may be a coping mechanism for students who witness bullying behavior (Hutchinson, 2012; Rivers, Poteat, Noret, & Ashurst, 2009). As stated in Chapter 2, students who have witnessed bullying have identified a myriad of cognitive processes and concerns during and after the experience, such as fear of retaliation and isolation from peers (Hutchinson, 2012). Difficulty coping with a bullying experience might be leading to behavioral difficulties.

Strengths & Limitations

As with all research studies, strengths and limitations exist due to the confines of operating in the real world. The following section reviews strengths and limitations of this study.

Strengths

Several strengths are present within this study. First, the sample in this study is rather unique in that students of color make up most of the sample size. Previous studies have a majority of Caucasian students (see Carney, 2008; Donoghue, Rosen, Almeida, & Brandwein, 2015; Espelage, Bosworth, & Simon, 2000; Wang, Iannotti, & Luk, 2012). The sample for this study provides new insights into experiences of predominantly students of color.

Second, utilization of a measure that does not use the word *bully* in the items and addresses behaviors reduces the likelihood of socially desirable responses and increase the validity of self-report. As indicated in the first chapter, methodology of collecting data reflecting bullying experiences has been called into question of not reflecting actual experiences. Utilization of a measure that asks about behaviors without the label of bully reduces the likelihood a participant will not answer a question accurately because they would not consider themselves a bully.

Third, elementary-aged students participated in this study, filling in some of the gap of knowledge in regards to bullying experiences in elementary school. Behaviors considered to be bullying typically occur during Middle School; however, some behaviors begin earlier. Understanding bullying behavior as it manifests in Elementary School provides earlier points of intervention and prevention of future behavior.

Finally, knowledge gaps of bystander experiences has been filled in. Previous studies have limited information on what bystanders experience in bullying situations. Results from this study indicate witnessing bullying behavior has a significant correlation with emotional and behavioral difficulties, indicating a need for school counselors to assess students who have witnessed bullying situations for these types of difficulties, and for mental health providers to be aware that presenting issues of children and adolescents may be due to witnessing bullying in school.

Limitations

There were several limitations to this study. First, all measures were self-report, which also can bias the sample through social desirability. Participants categorized with perpetrator indicated a negative relationship with higher levels of emotional difficulties. This could be a clear reflection of social desirability, meaning students who engage in aggressive behaviors may deem expression of emotion as a weakness, and therefore refrain from sharing such difficulties. Future research would incorporate other avenues of data collection regarding emotional expression

Second, the use of MANOVA necessitated the classification of participants into distinct categories of perpetrator, target, and bystander. While this is a strength of the study to separate individuals into these distinct categories to understand of their emotional and behavioral difficulties, research has indicated some individuals fall into the category of bully-victim (Sharkey, Ruderman, Mayworm, Green, Furlong, Rivera, & Purisch, 2015). Future research should consider the unique characteristics of bully-victims and how their characteristics compare and contrast with those of both targets and perpetrators.

Third, this researcher made the decision to exclude cyberbullying from this study. The larger study did not make it feasible to incorporate cyberbullying questions. Approximately 10-40% of children and adolescents report being cyberbullied, due to accessibility from social media (Kowalski, Agatston, & Limber, 2012). Future research would incorporate or look exclusively at cyberbullying in regards to emotional and behavioral difficulties experienced by the perpetrators, bystanders, and targets.

Implications

Having gained further insight into bullying as experienced by perpetrators, targets, and bystanders, and emotional and behavioral difficulties, transferring this information into real-world application is a necessity, especially on several fronts, that of school policy, school professionals, school counselors, and counselor educators.

Policy & practice

Policy makers are in a position to influence the direction of prevention and intervention of bullying. With approximately 10% of emotional and behavioral difficulties explained by bullying, policy and practice can incorporate this knowledge and make policy that addresses bullying for all students, and support school professionals and school counselors in addressing the emotional and behavioral difficulties stemming from experiencing bullying. These adjustments will improve school climate and promote learning for all students.

School Professionals

A majority of bullying occurs in schools. As such, school personnel are in the prime spotlight to tackle bullying in new ways given the results of this study. First, school personnel can be more vigilant and responsive to all individuals involved in a bullying experience, not just the target and perpetrator. Being mindful that bystanders also experience emotional and

behavioral difficulties puts them in a vulnerable position, one that school personnel can address. In addition to direction intervention, school personnel can look for and implement bully prevention and intervention programs that address bystanders and perpetrators experiences in ways that are more meaningful. Instead of focusing only on disciplinary action for perpetrators, addressing skill deficits will provide tools for them to express themselves in new, safer, and more socially appropriate ways.

School Counselors

School counselors can provide more availability for all students identified in a bullying experience. School counselors can provide the skills and support needed to address the emerging behavioral and emotional difficulties experienced by targets, perpetrators, and bystanders, whether through individual counseling sessions or addressing the situation in groups.

Counselor Educators

Individuals who are in the position to train school counselors and research bullying are at an advantage. Counselor educators can assess curriculum and program content within the graduate training and incorporate training Master's level counselors-in-training to view perpetrators and bystanders with the lens of potential emotional and behavioral difficulties being present.

Future Research

Results from this study opens several paths for ongoing research. First, results of this study are confined to charter schools with a primary population of students of color. Future studies must further focus on students of color in different types of schools, such as faith-based schools, public schools, and online schools, as well as culturally diverse locations across the

country. This will provide further insight into bullying experiences of students of color in a variety of settings.

Second, future studies can incorporate further avenues of data collection, such as school data, parent report, and observational data. These types of data provide how well students are performing, how much time is spent out of class, actions schools take, behaviors exhibited at home, and what behaviors may be going on that teachers and school personnel do not always observe, as teachers are in charge of all the students in the classroom.

Replication of the study in other parts of the country will provide further information in regards to emotional and behavioral difficulties. Participants in this study were primarily students of color. Assessing schools that have a predominantly white population will provide further insight into how privileged identities are at work, and the extent to which racist undertones may exist within the student structure.

Researchers left out cyber-bullying due to the extent of the larger study. Future research will incorporate cyber-bullying to get an understanding of how emotional and behavioral difficulties manifest based on status in a bullying situation. In addition to cyber-bullying, assessing individuals who may have a bully-victim status will be helpful to understand the nuances between perpetrators, targets, and perpetrator-targets. Some of the participants identified as perpetrators may have been or are also currently victims, and the skip logic designed did not capture this phenomenon. In addition to expanding to these different populations, focusing the research on one or two of the statuses and focusing further on emotional and behavioral difficulties will provide further insight into the experiences of individuals in these categories.

Expanding data collection to be more in-depth will also be helpful in understanding these populations. Utilizing more detailed measures on mental health, measures about family, and incorporating qualitative research will provide further data on emotional and behavioral difficulties, influences from the students' home life, and providing space for students to speak about what is most salient to them.

With the mass shooting in Orlando that occurred on June 12th, 2016 assessing more specific domains in the microsystem, such as family, faith tradition, and the impact these entities have on demographics and the content dimension (e.g. sexual orientation, gender identity, gender expression, race/ethnicity, etc.). Understanding how these specific domains interact with one another will provide further insight and nature of the specific relationships between the microsystem and the individual and about experiences of students identified as perpetrators, targets, or bystanders.

Finally, to further test and understand the conceptual framework for this study, utilize structure equation modeling and expand to other systems outlined in the ecological model. SEM can show how each component positively or negatively relates to one another.

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Appendix A

Descriptive Statistics—Traditional Bullying (Previous 30 Days)

	Mean	Std. dev	Range/ percent
<u>Traditional Bullying Offending (a=.88)</u>	2.27	4.38	0-40
**I called another student mean names, made fun of or teased him or her in a hurtful way			27.70%
**I picked on another student or students at school. (Original item: I have taken part in bullying another student or students at school)			20.50%
**I kept another student out of things on purpose, excluded him/her from my group of friends or completely ignored him/her			19.90%
**I hit, kicked, pushed, or shoved another student around or locked another student indoors			15.30%
I spread false rumors about another student and tried to make others dislike him or her			10.80%
<i>*I bullied another student with mean names, comments, or gestures with a sexual meaning</i>			9.90%
I picked on (original wording: bullied) another student with mean names or comments about his or her race or color			8.60%
I took money or other things from another student or damaged another students belongings			7.90%
I threatened or forced another student to do things he or she didn't want to do			6.50%
<i>*I bullied another student in another way</i>			11.70%
<i>*denotes item that was removed for this study</i>			
**denotes items used in Skip Logic			

Appendix B

Descriptive Statistics—Traditional Bullying (Previous 30 Days)

	Mean	Std. dev	Range/ percent
<u>Traditional Bullying Victimization (a=.88)</u>	3.2	5.24	0-40
Other students told lies or spread false rumors about me and tried to make others dislike me			29.30%
<i>**I was called mean names, was made fun of, or teased in a hurtful way</i>			28.70%
<i>**Other students left me out of things on purpose, excluding me from their group of friends, or completely ignored me</i>			25.50%
<i>**I was picked on at school. (Original item: I was bullied at school)</i>			19.20%
<i>*I was called bullied with mean names, comments, or gestures with a sexual meaning</i>			19.20%
I was picked on (original wording: <i>bullied with</i>) mean names or comments about my race or color.			18.80%
I was hit, kicked, pushed, shoved around, or locked indoors			16.30%
I had money or other things taken away from me or damaged			15.10%
<i>*I was bullied in other ways at school</i>			12.20%
I was threatened or forced to do things I didn't want to do			10.90%
<i>*denotes item that was removed for this study</i>			
<i>**denotes items used in Skip Logic</i>			

Appendix C

Modified Bully Bystander Subscale

I saw other students get called mean names, get made fun of, or teased in a hurtful way.

I saw other students get picked on at school.

I watched other students get left out of things on purpose, be excluded from groups of friends, or completely ignored.

I've seen students get hit, kicked, pushed, or shoved around or get locked indoors.

I've heard lies or false rumors spread about another student to make other students dislike him or her.

I heard students get picked on with mean names or comments about his or her race or skin color.

I've seen students get money or other things taken away from them or damaged.

I saw students get threatened or forced to do things they did not want to do.

Appendix D

Me & My School (M&MS)

Emotional Difficulties subscale (Eigenvalues)

1. I feel lonely. (0.62)
2. I cry a lot. (0.55)
3. I worry a lot. (0.58)
4. I have problems sleeping. (0.56)
5. I wake up in the night. (0.51)
6. I feel scared. (0.63)

Behavioral Difficulties subscale

1. I get very angry. (0.82)
2. I lose my temper. (0.85)
3. I do things to hurt people. (0.75)
4. I break things on purpose. (0.82)

Appendix E




Vice President for Research
Office for Research Protections

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EXEMPTION DETERMINATION

Date: August 5, 2014
From: Courtney Whetzel, IRB Analyst
To: JoLynn Carney

Type of Submission:	Initial Study
Title of Study:	Changing school climate by increasing school connectedness: Assessing Project TEAM from the students' perspective
Principal Investigator:	JoLynn Carney
Study ID:	STUDY00000778
Submission ID:	STUDY00000778
Funding:	Not Applicable
Documents Reviewed:	<ul style="list-style-type: none"> • 2nd-6th pretest/posttest school climate survey (0.01), Category: Data Collection Instrument • K-1st grade Survey One (0.01), Category: Data Collection Instrument • Grades 2-3 Survey One (0.01), Category: Data Collection Instrument • K-1 Pretest/Posttest school climate survey (0.01), Category: Data Collection Instrument • Grades 4-6 Survey One (0.01), Category: Data Collection Instrument • Carney, Project TEAM.pdf (0.03), Category: IRB Protocol

The Office for Research Protections determined that the proposed activity, as described in the above-referenced submission, does not require formal IRB review because the research met the criteria for exempt research according to the policies of this institution and the provisions of applicable federal regulations.

Continuing Progress Reports are **not** required for exempt research. Record of this research determined to be exempt will be maintained for five years from the date of this notification. If your research will continue beyond five years, please contact the Office for Research Protections closer to the determination end date.

Changes to exempt research only need to be submitted to the Office for Research Protections in limited circumstances described in the below-referenced Investigator Manual. If changes are being considered and there are questions about whether IRB review is needed, please contact the Office for Research Protections.

This correspondence should be maintained with your records.

Appendix F

Parent Consent Form

The Pennsylvania State University

Please note this is a different type of a permission slip. Only sign & return if you DO NOT want your child to participate. You have until "Specific DATE" to return this form.

The purpose of this research study is to assess students' perspective on the school's climate and their sense of being connected to the school. The Penn State Office for Research Protections has approved this study.

Your child will be asked to complete a brief survey twice during the school year. Sample items include:

- 'I enjoy coming to school.
- I am proud of my school.
- I have good relationships with teachers and others at school.
- I cooperate with others.'

Your child's participation is completely voluntary and permission to participate or not will in no way impacts your child's grade or school standing. Students are free to stop participating at any time and to decline to answer any specific questions. Your child's teacher or another school staff person who is appropriate will oversee the surveys. Your child's responses to the survey items will not have his/her name or any other information that the researchers can identify. In the event of publication of this research, only group data will be used and no one will be able to identify your child or their school. This study involves minimal risk. If your child expresses any reactions of concern to any of the benign survey items, the school counselor will notify you.

Please contact Dr. JoLynn Carney (814) 863-2404 or jcarney@psu.edu with any questions you may have.

If you **DO NOT GIVE PERMISSION** for your child, _____, to participate in the research, **please sign and date this sheet below. Have your child return the form to the classroom teacher by "Specific Date."**

 PARENT SIGNATURE

 DATE

