

THE ENVIRONMENTAL WEB OF SOCIAL AGGRESSION/VICTIMIZATION  
IN SIXTH GRADE

By

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## DEDICATION

I dedicate this dissertation to Sasha, Christina and Andrei. May all your dreams come true. Remember that one can achieve their goal in life at any age through discipline and perseverance. You can always count on me for support and guidance.

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## **ABSTRACT**

Aggression/victimization in school is a problem that is associated with internalizing and externalizing behaviors which may develop into long term emotional problems for the child. Sixth grade is a transitional period in a child's life, whereby a child experiences hormonal changes, enters a new school and establishes social status. Depending on the child's emotional well-being, these are antecedents that are related to experiencing aggression/victimization. Children develop within a context. Within this context there are parents, adults, siblings, peers and teachers whereby the child learns behaviors through proximal and distal interactions which may impact the child's life either positively or negatively. Within this context the child develops resilience, which is a protective factor that enables the child to "bounce back" from negative situations. The goal of this study is to establish a connection between the environment in which a child develops and the impact emotional well-being, peers and adults have on a child in relation to experiencing aggression and ultimately becoming a victim. The findings indicate that children who suffer from emotional distress are more likely to become victims and children who have supportive adults in their lives are less likely to become victims. Overall, emotional distress plays a negative role and resilience plays a positive and protective role in a child's life. This outcome suggests that prevention/interventions should be created whereby a child has more supportive adults in their lives creating a resilient environment.

## CHAPTER 1: INTRODUCTION

Bullying in school is a problem that may adversely affect a child's psychosocial health and well-being and result in the child becoming a victim. Salmivalli (2010) describes bullying as a subtype of aggressive behavior, whereby an individual or group of individuals repeatedly humiliate, attack or exclude a relatively powerless peer. According to Nansel et al. (2001) peer victimization is a pervasive problem in schools today. Research in this area has often focused on the aggressor and has neglected the victim (Perry, Kusel, & Perry, 1988) however, in recent years with an increase in negative outcomes associated with bullying interest in the victim has increased.

Eccles (1999) suggests that there are several important transitional periods in a child's life where there are hormonal changes, growth in social friendships, and transitioning to new schools. Cairns and Cairns (1986) refer to the transition from 5<sup>th</sup> grade to 6<sup>th</sup> grade as a potentially "brutalizing period" in a child's life, noting an increase in peer aggression as individuals seek to establish social status among peers. In 2007, the National Center for Education Statistics documented that in 6<sup>th</sup> grade 43% of children had experienced aggression and that 14% of the group were physically injured. Statistics suggest that after 6<sup>th</sup> grade reports of peer aggression begins to decline. Interpersonal peer aggression involves two participants, an aggressor and a victim.

Card, Isaacs, and Hodges (2008) define victimization as the result of intentional aggression by a peer or a group of peers. Victimization can continue for long periods of time. As a result, passive peer victims have internalizing behavior problems such as depression, anxiety, loneliness, and being socially withdrawn. Provocative peer victims

have externalizing behavioral problems such as aggression, delinquency, argumentativeness, emotional dysregulation and attention deficit/hyperactivity disorder (ADHD) – type symptoms. There has been an increase in studies on victimization and the results indicate that victimization predicts maladjustment (Card et al., 2008).

The goal of the current study is to focus on the experience of victimization or peer aggression and to better understand how internal resources/resilience, positive peers and emotional distress are predictive of later experience of aggression and whether having positive and supportive adults may contribute to building resilience.

### **Theoretical approach**

This paper utilizes Bronfenbrenner and Morris' (1998) ecological approach to child development as a foundation for exploring the role of social relationships and emotional distress in the experience of aggression by sixth graders

From an ecological perspective, the resiliency of the young person is studied by looking at the “self” from an “I am” and “I can” perspective that reflects the availability of internal resources on which to draw in times of need. Resilience associated with the “I have” aspect refers to supportive persons within the child’s environment. Both the internal resources and external support provides the protective factors available to the child (Grotberg, 1997).

The environment closest to the child is Bronfenbrenner’s microsystem. It includes parents, adults, teachers and peers; all of whom play a critical role in the child’s development.

Within the microsystem and through the proximal processes that occur between the immediate family and the child, the child may learn behaviors that may be exhibited at home, in school or in the neighborhood. The mesosystem integrates the different parts of the microsystem that work for the child, providing a distal connection between the systems. Thus experiences with parents or other adults may influence experiences with teachers and peers. The exosystem encompasses the neighborhood and the school environment which may provide experiences that may be negative or positive for the child. The chronosystem relates to the timing of certain events or occurrences that occur within the child's environment.

From the perspective of this study the environment provides the opportunity to experience peer aggression, positive peer experiences and availability of supportive relationships. Combined with aspects of the self such as resilience and emotional well-being, environmental experiences and resources may play an important impact on whether a child becomes or does not become a victim of aggressive acts.

### **Developing friendships within a peer group during a transitional period**

Several studies have found that transition into middle school affects a child's choice of friendships. Cicchetti's (1984, 1993) developmental framework described attachment as the first stage of child development that occurs from 0-12 months and plays an important role in the establishment of regulation, recognizable states, and communication. During the attachment period the child forms an internal working model that may reflect the child's behavior during their lifetime (Bowlby, 1969). From 12-30 months the child develops autonomy and self development. According to Cicchetti and

Bukowski (1995) from 30 months – 7 years, an individual establishes peer relations whereby they develop empathy, can differentiate between genders, has interest in other children and can identify friendships. Peers play an important role in development as children spend more time away from their parents. They play a protective role if an individual comes from a dysfunctional home life, or a negative role by teaching fellow peers to be aggressive (Rubin, Bukowski, & Parker, 2006).

As children transition away from their parents, they become members of peer groups. Peer culture is the social environment that has its own social norms and values created by children (Corsaro & Eder, 1990). Peers provide an atmosphere where an individual can feel safe to experiment, and learn what strategies work for them. Within peer groups, aggression is a common problem, whereby victims suffer from fear, sadness, humiliation and low self-concept. Conversely, the aggressor experiences happiness and powerfulness through the act of aggression or the reward it carries (Card, Isaacs, & Hodges, 2009). The social context that exists within the peer group influences a child's development. Within peer relationships conflict and harassment exist, but aggression poses a serious threat to healthy youth development (Nansel et al., 2001).

Within the peer group there are different types of aggression that result in an individual becoming a victim. Archer and Coyne (2005) define aggression as physical which is direct or overt and relational as indirect or covert. Direct or overt aggression constitutes hitting or pushing typically performed by boys and indirect or relational aggression constitutes gossiping or spreading rumors typically performed by girls. Instrumental aggression is considered proactive, offensive, or “cold-blooded” and is

enacted with an ultimate goal in mind. Reactive aggression is considered defensive or “hot-blooded” and is an angry, emotionally dysregulated response by an individual who is being aggressed at (Card & Little, 2006). According to Crick and Grotpeter (1996) overt aggression leads to overt victimization and is related to physical or verbal insults experienced more by males. Relational aggression results in relational victimization that is related to spreading rumors and ruining ones reputation leading to exclusion that is experienced more by females.

Even though peer relationships can be both positive and harmful, they play an important role in a 6<sup>th</sup> graders psychological, academic and social development. This study determined the prevalence of aggression among 6<sup>th</sup> graders, resulting in an increase in victimization and the power of resilience as a protective factor against aggression and victimization.

### **Peer groups in relation to victimization during transition into 6<sup>th</sup> grade**

Establishing new friendships and forming peer groups is an important developmental process for children. Within peer groups there are both good and bad relationships. These relationships offer many positive benefits such as friendships and opportunities to receive and reciprocate prosocial behavior, but sometimes they can lead to harmful influences that result in hurt feelings (Card et al., 2009). Friends within a peer group form a protective component against victimization, but the child that is rejected by peers becomes isolated and seeks out peers with similar problems (Coie & Kupersmidt, 1983). Children that experience aggression and become victims also suffer from parental and teacher rejection, and have an increased risk of failing in school (Coie & Kupersmidt,

1983). Pre-adolescents that experience being victimized have negative self-view of themselves. They are lonely, socially anxious, depressed, and suffer from low self-esteem (Graham, Bellmore, & Mize 2006). Among schoolchildren victimization is a common problem that leads to significant maladjustment (Card & Hodges 2008). This study explored 6<sup>th</sup> grade emotional distress mediated by lack of positive peer friendships resulting in an increase in victimization.

### **Building resilience, lowers ones chances of becoming a victim and strengthens development**

When pre-adolescents become victims, there is an increase in depression and a decrease in one's self-esteem by young adulthood especially for adolescents who lack family support (Isaacs, Hodges, & Salmivalli 2008). Family support buffers the impact of victimization.

In studying children who face bullying and victimization, Masten (2001) states that resilience is an important aspect that helps prevent bullying and victimization through protective factors. Resilience does not come from special qualities, but from the everyday magic of ordinary resources within families, relationships with a teacher or a mentor and communities.

“Resilience rests, fundamentally on relationships. The desire to belong is a basic human need, and positive connections with others lie at the very core of psychological development; strong, supportive relationships are critical for achieving and sustaining resilient adaptation” (Luthar, 2006, p. 780). Resilience is an interactive process that is affected by both proximal and distal processes within the context of risk and protective

factors. Resilience is the ability of children to ‘spring back’ in the face adversity (Dyer & McGuinness, 1996). This study explored the victimization of students moderated by emotional distress and peers resulting in increased resilience and positive outcomes and the ability to ‘bounce back’.

**Overall goal of paper**

The purpose of the proposed research is to better understand the experience of aggression within 6<sup>th</sup> grade. The study emphasized the importance of the environment, specifically positive peers and adult relationships for healthy and positive child outcomes.

## CHAPTER 2: LITERATURE REVIEW

This chapter begins with a review of Bronfenbrenner's (1977, 1979) ecological theory in relation to a healthy developmental environment for children, and the affect proximal and distal processes could have on the child in connection with aggression and victimization. In 1980, Bandura's (1973) Social Learning Theory was used to study aggressive behavior. Later, Crick and Dodge (1994) merged social information processing model (SIP) with social learning theory and together these two social-cognitive models are used to explain an individual's tendency to enact aggressive behavior. There will be a discussion of SIP.

Cicchetti's (1984, 1993) developmental framework is used to discuss the specific developmental periods in a child's life. From 0-12 months attachment occurs; 12-30 months the child develops autonomy and self development and from 30 months – 7 years, a child begins to establish peer relationship (Cicchetti & Bukowski, 1995). There will be a brief discussion on attachment in relation to aggression and victimization; and the personality and temperament of a child.

Next, there is a discussion on friendship and the formation of peer groups, followed by the experience of aggression and victimization within these groups. There will be a discussion of gender in relationship to different types of aggression; as well as an in depth discussion of victimization, the result of experiencing aggression, and the impact it has on children creating both internalizing and externalizing problems. Then there is a discussion on the transition into 6<sup>th</sup> grade and the impact victimization has on the developing child. Finally, there is a discussion on resilience in relation to positive

development and the importance of parents/adults/friends in a child's life providing protective factors.

The goal of this study is to establish a connection between the environment in which a child develops and the impact emotional well-being, fellow students, peers and adults have on a child in relationship to experiencing aggression and ultimately becoming a victim. Individuals who are harassed and aggressed at by peers experience being victimized. These victims suffer from internalizing and externalizing behavior problems. Within this atmosphere it is important to provide a positive developmental environment. If families are unable to provide the child with the essentials for healthy development, additional adults and friendships may provide the essentials, helping create a resilient individual that can bounce back from adversities and in turn prevent becoming victim.

### **Developmental systems: Bronfenbrenner's Ecological Theory**

The ecological developmental model conceived by Urie Bronfenbrenner (1977, 1979) takes into account the individual nested within different environments and the interactions that occur. The immediate environment begins with the microsystem that consists of the child and the child's immediate surroundings which include family, school and neighborhood. The child brings to this environment specific temperamental and emotional characteristics which could serve as protective or risk factors. At this level there are interactions and these interactions could be bi-directional, as the child learns mannerisms and behaviorisms at home (proximal processes) and utilizes these skills in the outside world. The child learns additional information outside the home (distal

processes) which the child brings home and could impact the child's parents, and together these proximal and distal interactions could have a major impact on the child's life.

The mesosystem forms a connection between the child's microsystems. This connection consists of different individuals that may influence a child's life. This system plays an important role in the child's life depending on the positive or negative connections that may occur. The exosystem is the larger social system in which the child does not function directly but may be impacted through the parents. The macrosystem consists of culture, customs and values that could affect the parent and in turn impact the child, and the chronosystem relates to the time of certain events in the child's environment that could be external or internal.

The environment is an important aspect in the child's life, but the processes that occur within this environment play an extremely important role. This model is known as the *Process-Person-Context-Time (PPCT)* (Bronfenbrenner & Morris, 1998). According to Bronfenbrenner and Morris (1998) a child's environment is bidirectional whereby the environment has an impact on the child, but the child can directly change the context they are in and seek out contexts with different characteristics.

Within these four interacting dimensions development takes place and proximal and distal processes that are bi-directional play an important role in child development. Proximal processes are the primary engine of development that occurs in a child's life and are more important than the environmental context in which they occur. Proximal processes such as feeding and comforting an infant establishes a mother's responsiveness across time and ensures positive development. Distal processes are what the child

encounters outside their immediate environment and influences home life which could have a negative affect on the child and family such as negative peer involvement.

### **Social Learning Theory and Social Information Processing Model in relation to aggression and victimization**

Bandura's (1973, 1986) *Social-Cognitive Learning Theory* has been used to understand childhood aggression. Within this theory there are three-cognitive components underlying aggressive behavior. 1) Self-efficacy for aggression or the confidence one has to enact aggression. 2) Outcome expectations for aggression or a belief that aggressive behavior may result in a positive outcome, such as obtaining a victim's lunch money. 3) Outcome values for aggression or the high value of outcomes obtained through the use of aggression.

Derived from Social-Cognitive Learning Theory, Crick and Dodge (1994) created Social Information Processing model (SIP) of childhood aggression that is a six step model that accounts for aggressive behavior. The model consists of cues and the individual's interpretation of cues. 1) Encoding of cues, such as heart racing (internal) or external, aggressive children tend to encode fewer social cues. 2) Interpretation of cues or how one looks at the intent and evaluates previous behaviors. For example, aggressive children tend to interpret cues such as a child bumping into them as threatening. 3) Goal selection, in facing a new situation does one want to maintain or change one's goal. For example, aggressive children tend to dominate the situation or seek revenge. 4) Response access or construction, an individual has a goal, or how does one make it happen. For example, aggressive children tend to have fewer responses which are related to

aggression or a negative prosocial response. 5) Response decision, does one complete a project and what will the outcome be (encompasses Bandura's social-cognitive model). 6) Behavioral enactment, after one decides the response, the behavior is enacted. For example, aggressive children usually enact aggressive behaviors.

Two types of aggression emerge from SIP, reactive aggression and proactive aggression, these actions result in an individual being victimized. In reactive aggression the individual has problems encoding and assigning attributes during the first three stages of cue interpretation (Dodge & Coie, 1987). This causes an individual to view any external stimuli, even though benign, as hostile (Crick & Dodge, 1994). According to Dodge and Coie (1987) after the child falsely encodes an external stimulus as hostile, they begin to act aggressively. This forms a cycle of aggressive responses that alienates their peers, leading to rejection and demonstrating that reactive aggression is characteristic of weak, victimized children.

In proactive aggression, the individual has problems encoding the last three steps, response generation, decision and enactment of the behavior (Dodge & Coie, 1987). In proactive aggression the individual is interested in obtaining instrumental goals such as taking someone's lunch money even though it might destroy a relationship. They are interested in achieving their own goals. Proactive aggression is considered instrumental when it is aimed at obtaining an object and aggressive when it is goal directed but aimed at dominating or coercing another person, which in turn causes an individual to suffer victimization.

**Cicchetti's Developmental Framework in relation to the context of development**

Cicchetti (1984, 1993, 1995) developed a framework with three levels, beginning at birth to 7 years. At the proximal level one learns processes that allow the child to function normally. When the child develops normally, they are able to take the processes they have learned and apply it to the outside world with positive results, see (Figure 1).

Cicchetti (1984, 1993, 1995) identified attachment as the first stage of child development, occurring from 0-12 months which plays an important role in the establishment of regulation, recognizable states, and communication. From 12-30 months, the child develops autonomy and self-development. From 30 months – 7 years, the child establishes peer relations. Here, the child develops empathy, can differentiate between genders, has interest in other children and can identify friendships. When a child successfully completes these levels of development they are able to contribute positively to the outside environment.

**Developmental problems associated with attachment in relation to aggression and victimization.**

As previously discussed, Bronfenbrenner and Morris (1998) point out that the proximal processes that occur in a child's life is extremely important in creating a positive developmental environment from which the child may learn positive attributes, assisting the child in developing healthy relationships and ultimately to lead a productive life. Cicchetti's (1984, 1993) developmental framework indicates 0-12 months as attachment being the first stage in child development that is crucial in helping a child live a normal healthy life and prevent the child from becoming a victim. According to Bowlby (1979) early attachment to a primary caregiver is extremely important. This

attachment helps the child develop an internal working model which is directly related to the child's ability to develop healthy normal relationships, and in turn prevents the child from being aggressed at and becoming a victim.

Researchers have found that the quality of the child's attachment affects their relationships and their emotional, social and cognitive development. A caregiver's mental health could affect their interaction and expression of emotions with the infant which may affect the formation of the infant's attachment status (Bowlby, 1969). A negative attachment during infancy may undermine the development of protective features (Cicchetti & Lynch, 1995). Instead of developing prosocial skills a child may see warmth and intimacy as cold and rejecting (Cicchetti & Lynch, 1995). According to Masten (2001) attachment demonstrates the importance of context for resilience, and that other contextual systems may adversely affect children such as a child's adoptive parent being abusive. From a sample of low income and predominantly single parent households (Renken, Egeland, Marvinney, Mangelsdorf, & Sroufe 1989) found that insecure attachment predicts childhood behavior problems. Shaw et al. (1995) found that insecure attachment, mainly disorganized attachment, predicted aggression.

According to Eliot and Cornell (2009) research has shown that securely attached middle school students are rated higher in peer social status, are less socially anxious and more popular than insecure peers. In contrast, adolescents with an insecure attachment are more aggressive, hostile and antisocial and report higher rates of conflict with peers.

### **A child's personality and temperament.**

During early development through genetics and interaction with a caregiver the child develops a personality and temperament that influences the child throughout life. Personality is strongly related to aggression in childhood (Krueger, Caspi, Moffitt, White, & Stouthamer-Loeber, 1996) and adulthood (Ball, Tennen, Poling, Kranzler, & Rounsaville, 1997). If a child develops within an atmosphere that lacks rules and regulations, environmental change can prove problematic causing them to react to situations intensely, avoid new experiences and have irritable and negative moods. These individuals are said to have difficult temperaments, and research has found that early measured difficult temperaments are predictive of antisocial behavior (Buss & Plomin, 1984). Personality and temperament are factors that can be altered to some extent in the child so as to curb aggression.

### **The role of peers in relation to development**

Children are born into an adult world, and a relationship forms between the adult and child. The adult-child interaction often leaves the child confused, and this leads the child to become a member of a peer group (Corsaro & Eder, 1990). According to Corsaro and Eder (1990) nursery school children develop concepts of friends whereby they build trust. In elementary school, peers play an important role as children gain their own autonomy from adults (Corsaro & Eder, 1990).

Membership within a peer group consists of peers that are similar in age and share the same values. Relationships within this group are more conditional, as friendships can be terminated at any time. If children come from a dysfunctional home life, peers often

play a protective role, but peers may also play a negative role in teaching fellow peers to be aggressive (Rubin et al., 2006).

Peer culture is the social environment children create. Within this culture children bring information from the adult world and reproduce their own unique peer culture. Peer culture has its own social values and norms (Corsaro & Eder, 1990). Peers provide an atmosphere whereby an individual feels safe to experiment and learn what strategies work for them.

Adolescent peer culture becomes an important aspect for creating friends and a sense of belonging. Close friendships provide adolescents with an opportunity to develop greater self-knowledge through a process of mutual reflection. The peer group during adolescence shapes and supports the behavior of its members (Corsaro & Eder, 1990). Membership within the peer group could have either positive or negative benefits.

### **Positive and negative aspects of peer relationships.**

Within each peer group, children hold certain positions and this social standing in turn influences a child's development. According to Card, Isaacs, and Hodges (2009) peer relationships offer many positive benefits such as friendships and opportunities to receive and reciprocate prosocial behavior. Occasionally, it can lead to harmful influences and hurt feelings.

Peer relations play an important role in an individual's psychological, academic, and social development, although it can be both positive and harmful. Within peer relationships, children who are physically weak, exhibit internalizing and externalizing problems, have low social skills, have low self-concept, are rejected by their peers and

have few friends are more likely to become victims (Card, 2003). According to Cairns and Cairns (1986) aggressive children tend to associate and form peer relationships with other aggressive and deviant peers. Peers play a negative role in teaching fellow peers to be aggressive (Rubin et al., 2006). Aggression often occurs in peer relationships which can lead to fear, sadness, humiliation, and low self-concept for the victim whereas the aggressor often experiences happiness, and powerfulness because aggression brings rewards (Card, Isaacs & Hodges, 2009). In early adolescence, negative parenting practices create disengagement between the parent and youth which ultimately results in attraction toward deviant friends and peer groups (Dodge, Coie, & Lynman, 2006). Poor academic skills, peer rejection in middle school, and parents that are not involved result in an increase of association with deviant peers by adolescence (Dishion, Patterson, Stoolmiller, & Skinner, 1991.)

### **Victimization in peer relationships.**

According to (Salmivalli, Lagerspetz, Bjorkqvist, Kaukiainen, & Osterman, 1996) children who are victims of aggression are usually unpopular children in their school class. Since peer groups are formed through similarity, these victims are outside the peer network and thus form networks with each other.

### **How does aggression fit into the peer culture?**

As peer culture developed, researchers noted that power and status were distributed and attained in the peer group. Within this peer culture, aggressors occupied varying levels of status (Xie, Swift, Cairns, & Cairns, 2002; Xie, Cairns, & Cairns, 2002). Aggressors could occupy the highest levels of power and social status (Rodkin &

Hodges, 2003). High status aggressors use prosocial and coercive strategies whereas low status aggressors do not. The group leaders use physical and social aggression (coercive strategies) to achieve their goals. According to Dodge, Coie and Lynman (2006) negative parenting practices in early adolescence can contribute to disengagement between parent and youth. This causes youth to become friends with deviant youth and deviant peer groups. As a result, within positive peer relationships, antisocial behavior deprives children of the positive benefits of peer learning. Peers may act as models and reinforcers for aggressive and antisocial behavior in other peers. Children develop friendships, and within this network there are certain themes. In some networks, support for antisocial behavior is established by providing opportunities and reinforcement for these behaviors (Dishion, French, & Patterson, 1995).

#### **Aggression within peer relationships.**

Aggression is first experienced in the preschool classroom creating social clustering, resulting in an individual being victimized (Rubin et al., 2006). As the form of aggression changes, aggression becomes directed toward specific dyadic relationships (Coie et al., 1999). When aggressive children enter school they are likely to fail academically and socially. These failures interact to accelerate the growth of aggressive behavior. There is evidence that aggressive children are likely to be rejected by their peers (Kupersmidt & Dodge, 2004). Peer rejection contributes to problems of adaptation and increased antisocial behavior (Haselager, Cillessen, Hartup, van Lieshout, & Riksen-Walraven, 2002).

Within the peer culture, during adolescence, delinquent deviance and physical aggression become more socially acceptable (Coie, Terry, Zakriski, & Lochman, 1995). Certain deviant youth begin to hold positive status among peers (Miller-Johnson & Costanzo, 2004). Adolescents form cliques and aggressive behavior is central to a deviant peer clique. According to Kandel, (1978) the culture within antisocial youth promotes deviant behavior because the quality of the relationship is aggressive. Antisocial youth tend to associate with other antisocial youth.

#### **Types of Aggression in relation to gender.**

Aggression is defined as repeated and targeted peer aggression, taking many forms including physical, verbal and indirect aggression (Olweus, 1994). There are two types of aggression. Direct, involves verbal or physical attack and relational which can be indirect, involving damaging an individual's friendship or membership in the peer group (Crick & Grotpeter, 1996). Archer and Coyne (2005) define direct aggression as hitting or pushing usually performed by boys or indirect aggression such as gossiping or spreading rumors typically performed by girls. According to Card, Stucky, Sawalani, and Little (2008) hitting or pushing is considered overt aggression and gossiping or spreading rumors is considered covert aggression.

Within aggression, there is reactive and proactive aggression that results from interpreting SIP processing patterns differently (Dodge & Coie, 1987). Instrumental aggression is considered proactive, offensive or "cold-blooded". It is deliberately enacted with an end result of obtaining a goal. Reactive aggression is considered defensive or

“hot-blooded”. It is an angry, emotionally dysregulated response to being aggressed at (Card & Little, 2006).

### **Aggression in relation to child development.**

Aggressive acts have a negative influence on peers and peer culture. Aggression in children causes parental, peer and teacher rejection, as well as an increased risk of failing in school. Once isolated, the child seeks out peers with similar problems (Coie & Kupersmidt, 1983). According to Card and Little (2006) both proactive and reactive aggression is associated with maladjustment, but internalizing problems are more strongly related to reactive aggression. According to Perry, Kusel, and Perry (1988) aggressive children come from homes where adults and children share the same deficit and biases in SIP that ultimately creates an aggressive response. Aggression results from an imbalance of power with intent to harm an individual and occurs repeatedly, resulting in a serious threat to youth development. Most children experience victimization at some time from their peers (Nansel et al., 2001).

### **Definition of victimization**

Victimization is the continued bullying or harassment of an individual by fellow peers. Olweus (1991, p. 413) defines victimization as repeated exposure “to negative actions on the part of one or more other persons”. It is a dyadic relationship whereby there is an aggressor and a victim. The aggressor attacks the victim repeatedly damaging the victim’s social status and existing relationships. In turn the victim feels demeaned and losses self-esteem and feels rejected.

### **Physical appearance as risk factor for victimization.**

Children who are physically weak are at risk for victimization (Hodges, Malone, & Perry, 1997). These children are viewed as easy targets because they do not retaliate and lack friends that could be a protective factor. Children who are physically weak display certain characteristics that would make them easy targets for aggressors (Ross, 1996). Boys are physically victimized and girls are victimized through relational aggression that includes gossiping that could exclude them from social groups (Crick & Bigbee, 1998; Crick & Grotpeter, 1996; Perry et al., 1988).

#### **Internalizing problems as risk factors for victimization.**

Children bring pre-existing conditions into peer relationships that make them vulnerable and contribute to victimization. Victims that do not defend themselves and those that lack leadership are submissive, and submissiveness is one of the predictors of victimization (Crick & Bigbee, 1998; Schwartz, Dodge, & Coie, 1993). Certain family interactions provide risk factors, whereby children who interact with an inconsistent, insensitive and rejecting caregiver develop insecure attachments and display anxious vulnerability that make them targets for victimization (Troy & Sroufe, 1987). Inconsistent or parental neglect and lack of support (Ladd & Ladd, 1998) create negative outcomes for children. Children that are physical weak exhibit internalizing problems, have low social skills and low self-concept (Card, 2003) causing them to become easy targets for aggression. Over time, this predicts victimization, resulting in increased low self-esteem (Egan & Perry, 1998). Children with the abovementioned characteristics are viewed as weak and are seen as easy targets by aggressors. These children are referred to as “passive” victims as they do not provoke their attackers (Olweus, 1978). Passive

individuals submit to an aggressor's needs without fighting back, increasing victimization over time (Perry, Perry, & Boldizar, 1990). Continued victimization of children with pre-existing internalizing problems causes an increase in internalizing problems and leads to significant maladjustment (Card & Hodges 2008).

#### **Externalizing problems as risk factors for victimization.**

Children learn aggressive behavior from their parents (Patterson & Dishion, 1988). These children exhibit the same deficient SIP cues as their parents (Perry et al., 1990). Their aggression is disorganized and unskilled and is known as "ineffectual aggressors" (Perry, Perry, & Kennedy, 1992). These individuals are known as "provocative" victims. When aggressed at, these victims tend to be angry but don't make attempts to fight back (Perry, Willard, & Perry, 1990). Children that exhibit behaviors such as aggression, delinquency, emotional dysregulation and argumentativeness exhibit externalizing problems which are associated with peer victimization (Card et al., 2008).

According to Card (2003) the risk factors associated with victimization are oftentimes also the consequences of victimization, which create a vicious cycle enmeshing some children in a role of continued victimization.

#### **Social skills as risk or protective factors for victimization.**

Children bring learned social skills to relationships, and those who are victimized lack positive personality attributes and social skills that protect them from victimization (Perry, Hodges, & Egan, 2007). Children who are unfriendly and uncooperative are victimized more over time (Egan & Perry, 1998). Prosocial skills protect a child from victimization (Card, Isaacs, & Hodges, 2007). Children who are disliked by their peer

group are more likely to be victimized by their peers (Card & Hodges, 2007). Children that have low esteem suffer from victimization, and in turn victimization causes a further decrease in self-esteem (Egan & Perry, 1998).

### **Victimization in relation to child development.**

Among schoolchildren, victimization is a common problem that leads to significant maladjustment (Card & Hodges, 2008). Maladjustment affects a child's academic life resulting in school absenteeism, low school achievement and failure and lowers one's self concept and rejection by peers (Card et al., 2007). During adolescence, victimization predicts an increase in depression and decreases one's self-esteem by young adulthood especially for adolescents who lack family support (Isaacs et al., 2008). Victimized adolescents have negative self-views of themselves which in turn causes loneliness, increases levels of anxiety and depression and results in rejection (Ladd & Ladd, 2001).

### **Definition of resilience**

Resilience is a dynamic process that helps a child positively adapt to negative situations. Within the child's environmental context, family (proximal influences) and teachers (proximal and distal influences) are important for normal child development. Resilience is an interactive learned process that protects the child (Luthar, Cicchetti, & Becker, 2000), see (Figure 2).

### **Childhood resilience in relation to stress and protective factors.**

According to Garmezy (1985) children that are stress-resistant have three protective factors. They are: the individual, the family and the community. These

protective factors are found within peers, schools and neighborhoods, with family or caregivers being the most proximal and influential see (Figure 3).

During the developmental process, certain children that face stress and adversity manage to maintain high self-esteem and self-efficacy. These children are protected by certain interactive processes that are important to identify within the developmental and situational mechanisms that protect them while others give up and are led to despair. There are four protective processes that foster resilience (Rutter, 1987) see (Figure 4).

#### **Resilience in relation to aggression and victimization in child development.**

In a child's developmental environment, aggression and victimization result in negative consequences. Within this environment resilience acts as a buffer, reducing the negative effect of aggression and victimization. Resilience is the ability of a child to 'spring back' in the face of adversity (Dyer & McGuinness, 1996). Within the child's developmental environment, resilience is an interactive process that is affected by both proximal and distal processes within the context of risk and protective factors (Luthar, 2006). Resilience does not come from special qualities, but from the everyday magic of ordinary resources within families, relationships and communities (Masten, 2001). In studying children who face aggression and victimization, resilience is an important factor that helps buffer the child against aggression and victimization through protective factors.

Within the context of resilience it is important to identify protective mechanisms and processes during specific developmental periods in a child's life. This assists the child in developing self-esteem, and in the long term, alleviate negative situations and adversities such as being aggressed at and becoming a victim. Building resilience reduces

the impact of aggression and decreases victimization allowing the child to lead a productive life.

### **Transitioning into 6<sup>th</sup> Grade**

Transitioning into 6<sup>th</sup> grade from elementary school is a major event in a child's life. A period of cognitive change that strengthens a child's ability to assess their own successes and failures. It is a time when a child's world broadens to include peers, adults and activities outside the family environment and a time when a child is exposed to social comparisons and competition in school classrooms and within peer groups. It is a time when a child develops their own confidence and control of their worlds, and for certain children these early-adolescent changes could lead to academic failure and school dropout (Eccles, 1999).

In 2005, the National Center for Education Statistics reported that a higher percentage of 6<sup>th</sup> grade students than students in 10<sup>th</sup> grade reported being victims of a violent crime at school.

Early adolescence is viewed as a period when physical aggression increases and has been labeled as a "brutalizing" period (Cairns & Cairns, 1986). Bullying during middle adolescence lowers one's self esteem and increases depressive symptoms of young adults (Olweus, 1993a, 1993b). After the transition to middle school there is a decline in victimization as individuals learn coping skills that allow them to ignore aggressors (Smith, Shu, & Madsen, 2001).

### **Creating new peer groups.**

When children graduate from primary schools to larger middle schools they have to establish new social relationships and re-establish status at a time when peer relations are important (Eccles, Wigfield, & Schiefele, 1998). Creating new peer groups is extremely important during this transitional period. Membership within peer groups protects an individual from being aggressed at, as friends form a buffer against victimization (Hodges & Perry, 1999). During this developmental transitional period into 6<sup>th</sup> grade the initial goal within a peer group is to establish dominance. During this period there is an increase in aggression and consequently victimization within the peer group (Hodges & Perry, 1999); after dominance has been established there is a decline in aggression (Pellegrini & Bartini, 2001).

#### **Consequences of victimization in middle school.**

Children that are victims of social/relational aggression lack friends, are rejected by peers and suffer from loneliness and social dissatisfaction (Bukowski & Sippola, 2001; Perry et al., 1988). Childhood victimization creates “scars” that are significantly associated with lower self-esteem and depression in adulthood (Olweus, 1993a, 1993b). Continued peer victimization plays a role in school violence. In middle school, continued victimization results in lower grades and school avoidance which impacts school achievement, low self-concept and self-worth which may result in school violence (Card et al., 2008).

Literature on aggression and victimization suggests that there is a negative impact on normal child development. During the transition into 6<sup>th</sup> grade, children experience the highest level of aggression and victimization in an attempt to establish dominance within

new peer groups. Aggression results in victimization that tends to scar a child for life and is carried over into adulthood.

### **Research Questions**

This study focuses primarily on the environment in which a child develops and the impact fellow students, friends, and adults have on a child in relation to victimization during transition into 6<sup>th</sup> grade. Question one explored the prevalence of experiencing peer aggression/victimization upon entering 6<sup>th</sup> grade and if there was an increase in experience of peer aggression/victimization upon completion of 6<sup>th</sup> grade. Question 2(a) examined if emotional distress and experience of peer aggression/victimization predicted experience of peer aggression/victimization. Question 2(b) determined whether the relation between emotional distress and experience of aggression/victimization is moderated by positive peers. The third question addressed the experience of peer aggression/victimization and if adults entering the picture predicted resilience. The adult/child relationship provides a protective factor for the victimized child that helps a child build resilience and overcome negative issues within their lives.

**Research Question #1:** What is the prevalence of experience of peer aggression/victimization when entering 6<sup>th</sup> grade from Time 1 (fall, 2006) to Time 2 (spring 2007) and is there an increase in experience of peer aggression/victimization?

**Rationale:** With regard to experiencing aggression resulting in victimization in 6<sup>th</sup> grade, Cairns and Cairns (1986) refer to this transitional period as a “brutalizing period” with an increase in aggressive behavior so that individuals can establish social

status and dominance among peers. One of the goals of this study is to determine whether there is an increase in aggression resulting in victimization in 6<sup>th</sup> grade.

**Research Question #2(a):** Does emotional distress Time 1 and experience of peer aggression/victimization Time 1 predict experience of peer aggression/victimization at Time 2?

**Research Question #2(b):** Is the relation between emotional distress Time 1, aggression/victimization Time 1, positive peers Time 1, and aggression/victimization Time 2 moderated by positive peers?

**Rationale:** The literature posits that emotional distress does have an impact on a child's status in a peer group. Children that suffer from internalizing behavior problems such as depression, anxiety and display shy and withdrawn behaviors lack friends, and children exhibiting externalizing behavior problems such as hyperactivity and emotional dysregulation lack friends (Card, 2003). One of the goals of this study is to establish a connection between emotional distress and victimization and the effect lack of positive peers have on victimization.

**Research Question #3:** To what extent does resilience/external support Time 1 predict resilience/internal resources Time 2 in the context of peer aggression/victimization Time 1?

**Rationale:** The literature indicates that the presence and participation of adults in the lives of children have a positive effect. Adults are one of the protective factors that help a child develop resilience and the ability to bounce back from negative experiences. Resilience does not come from special qualities, but from the everyday magic of ordinary

resources within families, relationships and communities (Masten, 2001). One of the goals of this study is to establish that adult participation in the lives of victimized 6<sup>th</sup> graders help builds resilience.

Children develop within a contextual environment that occurs across the five levels of Bronfenbrenner and Morris' (1998) ecological taxonomy. Within this environment there are multiple levels of risk and protective factors and adults provide the proximal interactional processes that are important in child development (Card et al., 2008).

The goals of this study are to demonstrate the prevalence of experiencing peer aggression in 6<sup>th</sup> grade resulting in victimization, the connection between emotional distress predicting victimization and the lack of positive peer friendships that predicts victimization, and the positive presence of adults in a victimized child's life creating resilience, whereby reducing victimization.

## CHAPTER 3: METHOD

### Participants

This study is part of a larger project funded by The Safe Schools/Healthy Children initiative (SAMHSA, 2005). The SS/HC initiative project was conducted to develop a comprehensive, integrated community wide plan to address seven elements. These elements were 1) to provide and maintain a safe school environment; 2) to reduce the incidence of alcohol, tobacco and other drug use; 3) to increase positive relationships in schools and the community; 4) to increase the number and range of services available for the zero to kindergarten population; 5) to increase academic achievement for all students and increase parent involvement in schools and the community; 6) to develop district plans and policies that promote and support a safe, drug-free and disciplined learning environment; and 7) to create a Safe Schools/Healthy Students Community Action Board as a self-sustaining non-profit organization tasked with continuing school and community partnership. This SS/HC Initiative required assessment along specific 'Government Performance and Results Act' (GPRA, 1993) measures, assessment needed by a national evaluation that would allow comparison across projects, and local or project assessment specific to local project goals.

As part of the evaluation of the SS/HC initiative, students were asked to complete surveys that assessed their behaviors, feelings, attitudes, social support and participation in school activities. Students who were present on the day the surveys were administered and had not previously opted out were asked to complete the survey. Survey participation was completely voluntary.

The current study is a secondary data analysis of the data collected as part of a multi-wave study. This study focuses on two waves of data that constitute an academic year, fall 2006 (Time 1) and spring 2007 (Time 2). The main focus of the study is to explore bullying (or peer aggression/victimization) as experienced by 6<sup>th</sup> grade students. Sixth grade has been defined as an important transitional and developmental period in a child's life during which the experience of bullying may have long-term negative impacts (Card & Hodges, 2008).

During fall 2006 and spring 2007, there were a total of 671 6<sup>th</sup> grade students that participated in both waves of the survey of which 341 (51%) were male and 330 (49%) were female. The ethnicity of the 671 6<sup>th</sup> grade participants was primarily White (non-Hispanic) 410 (61%); Black (non-Hispanic) 22 (3%); Hispanic/Latino 104 (16%); Asian or Pacific Islander 23 (3%); Native American 9 or (1%); Multiracial or Multiethnic 69 (10%) and other category 34 (5%); (see Table 1 for gender and ethnicity breakdown).

## **Procedures**

**Data Collection.** The data collection protocol was approved by the University of Arizona Internal Review Board and by the school district in which the data were collected. At each wave of data collection, parents were sent a letter by the school district that explained the study, the questions asked in the survey, and offered the parents an opportunity to exclude their child from survey administration. A survey consisting of 117 questions (Appendix 1) was administered to 6<sup>th</sup> graders during the fall of 2006 and spring of 2007. The survey took approximately 30 minutes to complete. Upon

completion of the surveys, they were returned to the evaluation team that scanned each survey into a database for analysis.

**Factor Analysis.** Principal Axis Factoring extraction method was used (Widaman, 1993; DeVellis, 2003). This is an iterative procedure. It separates common variance from unique/error variance and looks at  $R^2$ . This process yields an accurate number of factors and an unbiased estimate of factor correlations when using oblique rotation and ultimately an unbiased estimate of factor loadings. The number of factors are determined through the eigenvalue  $> 1$  rule. This value denotes that the factor explains as much variability as the average item. A scree plot looks at the number of factors above the “elbow” to determine eigenvalues  $> 1$ . The eigenvalues  $> 1$  and scree plot help determine the number of factors and identify a common theme among the variables.

### **Measures**

The main outcome of the original study was to evaluate the data contained in the completed questionnaires, resulting in only certain questions being pertinent to this study. This study used 32 questions from the initial 117 question survey (see Table 2). The following section describes each of the key variables in the study and why they were chosen.

**Violence and victimization (original evaluation measure).** In the original evaluation, this domain included both the experience of violence or aggressive behavior and the witnessing of violence or aggressive behavior. Example questions included, “During the past 12 months, how often have you been hit, kicked or pushed by a student on school property?” and “During the past 12 months, how often have you seen other

students being hit, kicked, or pushed by a student on school property?” Responses for both questions were based on a five-point Likert-type scale ranging from 1 = not at all to 5 = 5 or more times. The evaluation study was designed for both experiencing bullying and witnessing bullying, there were two questions related to experiencing bullying and two questions related to witnessing bullying. This current study is interested in the individual experiencing bullying and not witnessing bullying.

To confirm that the four questions did in fact discriminate between experiencing and witnessing violence, factor analysis was used to scrutinize the four survey responses related to experiencing bullying and witnessing bullying for underlying patterns. Principal Axis Factoring and oblique factor rotation of 4 Likert scale questions from the safety survey questionnaire was conducted on data gathered from 671 participants to identify the loading of each factor. The scree plot (not shown) indicates that there are two factors with only one factor above the elbow with eigenvalues  $>1$ .

The factor of interest for this study is Factor 2. Two items loaded onto Factor 2. These two items had a factor loading from .35 and .97; (see Table 3). Even though .35 is a low factor loading, the question is appropriate and related to experiencing aggression. It is clear from Table 3 that these two items are directly connected to experience of peer aggression/victimization. Specifically, the students were asked how often in the past 12 months had they been hit, kicked, or pushed by a student on school property; and how often in the past 12 months had they been picked on or bullied by a student on school property. The other two questions related to witnessing aggression and seeing others being picked on loaded onto Factor 1 with loadings of 1.02 and .49. These two items

were dropped from the scale. The two questions on experiencing aggression were retained. Both questions were based on a five-point Likert-type scale ranging from 1 = not being bullied at all to 5= being bullied 5 or more times. This factor was labeled “Experience of peer aggression/victimization”.

**Experience of Peer Aggression/Victimization (current study measure).** This scale was created with the two questions that loaded onto Factor 2 and were related to the experience of bullying. Each item has a scale response set from 1 to 5. The sum of the scores has a range from 2 to 10 representing being bullied both on and off school property with a higher score reflecting a greater frequency of being bullied. After summing the score, a mean score was created to be used in the regression analysis. Two separate scales were created for Time 1 and Time 2. The Cronbach alpha at Time 1 is .62 and Time 2 is .61; (see Table 7). The Time 1 indicator of bullying experience reflects the baseline experience of 6<sup>th</sup> grade students as they enter middle school. The Time 2 indicator of bullying reflects the experience of 6<sup>th</sup> grade students as they finish their 6<sup>th</sup> grade year.

**Positive peers (original evaluation measure).** During the transitional period into 6<sup>th</sup> grade, creating peer friendships play an important role, within these relationships there could be both positive and negative interactions. Sixth grade peer relationships were assessed through a series of ten questions relating to the proportion of their friends that exhibit various positive and negative behaviors. Two items asked 6<sup>th</sup> graders to report how many of their friends exhibit risky behaviors such as “skipping school” and “school misbehavior.” Measures of risky behaviors were adapted from (Barber, Stone, Hunt, &

Eccles, 2005). Sixth graders were asked an additional eight questions that reported on how many of their friends exhibited positive behaviors such as getting along with their parents, attending religious services, planning to attend college, have friends that do well in school, friends that provide encouragement to do well in school, friends that discourage one from making bad decisions, friends that are well behaved in school and friends that think school work is important. The positive behaviors were also adapted from (Barber et al., 2005). The response options ranged from 1, “none” to 5, “all” based on a Likert-type scale.

The ten survey responses related to positive peers were scrutinized for underlying patterns via factor analysis. Principal Axis Factoring and oblique factor rotation of 10 Likert scale questions from the friend’s survey questionnaire was conducted on data gathered from 671 participants to identify the loading of each factor. The scree plot (not shown) indicates that there is only one factor above the elbow with eigenvalues  $>1$ .

Eight items loaded onto Factor 1. These eight items had a factor loading from .79 to .31; (see Table 4). Four questions relating to friends getting along with their parents, friends attending religious services, friends discouraging one from making bad decisions and friends well behaved in school had low factor loadings .32, .32, .31 and .34. These four questions were retained because after running an internal reliability check on the eight questions, the Cronbach alpha was .72. The questions relating to friends skipping class and misbehaving loaded onto factor 2 with a loading of .23 and .80, these two questions were related to negative peer behavior, and since they loaded onto factor 2 were dropped from inclusion in the final scale. It is clear from Table 4 that eight items

relate to positive behaviors such as having friends that get along with their parents, having friends that encourage one to do well in school, having friends that think school work is important, having friends that plan to attend college, having friends that attend religious services regularly, having friends that do well in school, having friends that are well behaved in school and having friends that discourage one from making bad decisions. This factor was labeled “Positive peers”.

**Positive peers (current study measure).** This scale was created with the eight questions that loaded onto Factor 1 that were related to positive behaviors. Each item has a Likert scale response from 1 to 5 with 5 representing the perception of positive peers. The sum of the scores ranged from 6 to 30, with a higher score representing a perception that one’s friend had a positive influence. After summing the score a mean score was created to be used in the regression analysis. Two separate scales were created for Time 1 and Time 2. The Cronbach alpha at Time 1 is .72 and Time 2 is .81; (see Table 7).

**Emotional distress (original evaluation measure).** Eight items were used to measure 6<sup>th</sup> graders emotional well-being. Sixth grade students were asked to think back over the past 30 days and to indicate how often they had experienced each mood indicator. In the last 30 days, how often: were you sad; grouchy or irritable, or in a bad mood, so that even little things would make you mad; feel hopeless about the future; feel like not eating or overeating; sleep a lot more or less than usual, have difficulty concentrating on schoolwork and experiencing loneliness. The response options ranged from 1=never to 5= always, based on a Likert-type scale.

The eight survey responses related to emotional distress were scrutinized for underlying patterns via factor analysis. Principal Axis Factoring and oblique factor rotation of 8 Likert scale questions from the friends' survey questionnaire was conducted on data gathered from 671 participants to identify the loading of each factor. The scree plot (not shown) indicates that there is only one factor above the elbow with eigenvalues  $>1$ .

Seven items loaded onto Factor 1. These seven items had a factor loading from .77 to .61; (see Table 5). The item about happiness loaded onto Factor 2 and had a factor loading of .33. After running an internal reliability check on the remaining seven questions, the Cronbach alpha was .83. A total of seven questions in factor 1 were retained. Six of the questions relating to emotional distress, indicating difficulty in concentrating, increase or decrease in appetite, increase or decrease in sleep, hopeless about the future, and feeling sad and irritable moods were adapted from the Modified Depression Scale (Dahlberg, Toal, Swahn, & Behrens, 2005). An additional factor relating to loneliness was retained. This factor was labeled "Emotional distress".

**Emotional distress (current study measure).** This scale was created with seven items that are related to the emotions one experiences daily. Response options were listed on a five-point Likert-type scale ranging from 1 = never to 5 = always. The sum of the scores range from 7 to 35 with a higher score representing that the individual suffered from emotional distress. After summing the score a mean score was created to be used in the regression analysis. Two separate scales were created for Time 1 and Time 2. The Cronbach alpha at Time 1 is .82 and at Time 2 is .85; (see Table 7).

**Resilience (original evaluation measure).** Resilience was measured using a scale consisting of 15 items in three domains: I AM, I CAN and I HAVE from a scale developed by Grotberg (1995). These items consist of internal and external resources that the child may have developed overtime. Sample items include, “I am willing to be responsible for what I do”, “I can find ways to solve problems that I face,” and “I can control myself when I feel like doing something not right or dangerous.” “I have people around me whom I trust,” and “I have people who show me how to do things right”. The response options ranged from 1=strongly disagree to 4= strongly agree, based on a Likert-type scale.

The fifteen survey responses related to being responsible, being able to control oneself, having people around me and positive attitudes were scrutinized for underlying patterns via factor analysis. Principal Axis Factoring and oblique factor rotation of 15 Likert scale questions from the resilience survey questionnaire was conducted on data gathered from 671 participants to identify the loading of each factor. The scree plot (not shown) indicates that there are two factor above the elbow with eigenvalues  $>1$ .

Ten items loaded onto Factor 1. These ten items had a factor loading from .76 to .50; (see Table 6). Even though the question “I can talk to others about the things that frighten me or bother me” has a higher factor loading in external support .50 and .59, this item involves a person’s internal capability. The Cronbach alpha is .89 with the inclusion of this item. It is clear from Table 6 that these ten items all relate to being responsible and being able to control oneself and having a positive attitude. This factor was labeled “Resilience/internal resources”. The other 5 “I have” questions were related to external

resources and loaded onto Factor 2. These items were labeled Resilience/external support.

**Resilience/internal resources (current study measure).** This scale was created with ten questions “I AM and I CAN” that loaded onto Factor 1. These questions were related to having a positive attitude and being liked by people. The scale was measured by using a 10-item Likert type questions with a 4-point response set that ranged from “strongly agree” to “strongly disagree”. The sum of the scores range from 10 to 40 with a higher score representing that the individual did have a positive attitude and that people liked them and had individuals they could approach if in a difficult situation. After summing the score, a mean score was created to be used in the regression analysis. Two separate scales were created. The Cronbach alpha at Time 1 was .89 and at Time 2 was .93; (see Table 7).

**Resilience/I Have (original evaluation measure).** Resilience was measured using a scale consisting of 5 items in the “I have” domain from a scale developed by developed by Grotberg (1995). These items consist of external resources that the child has developed overtime that act as buffers. The scale was measured using a 5-item Likert type questions with a 4-point response set that ranged from “strongly agree” to “strongly disagree”. The sum of the scores range from 5 to 20 with a higher score representing that the individual did have people around them when needed. Sample items include “I have” questions relating to having people around whom I trust and I know love me no matter what; people who set limits to prevent danger or trouble from occurring; people who

show me how to do things right; people who want me to learn to do things on my own and people who help me when I am sick, in danger, or need to learn.

Five items relating to having someone around them loaded on factor 2. These five items had a factor loading from .64 to .34; (see Table 6). The item relating to having people who want them to do things on their own had a low factor loading of .34. This factor was retained because it is directly related to external support. It is clear from Table 6 that these five items all relate to having people around who one can trust and who love them no matter what and having people who help them when sick and in danger. These 5 items related to having external support. This factor was labeled “Resilience/external support”.

**Resilience/external support (current study measure).** This scale was created with the five items that loaded onto factor 1. The scale was measured by using a 4-item Likert type questions with a 4-point response set that ranged from “strongly agree” to “strongly disagree”. The sum of the scores range from 5 to 20 with a higher score representing that the individual had someone to help and protect them. After summing the score a mean score was created to be used in the regression analysis. At Time 1 the Cronbach alpha was .73 and at Time 2 the Cronbach alpha was .84; (see Table 7).

### **Analyses**

The goal of this study is to examine the prevalence of bullying resulting in victimization during the transitional period into sixth grade, and the impact the environment has on a developing child’s life through an individual’s emotional well-being, peer friendships, and the presence of internal resources and external support.

Six variables were created for measurement at two different data points. The scales created include: Experience of peer aggression/victimization Time 1; Experience of peer aggression/victimization Time 2; Positive peers Time 1; Emotional distress Time 1; Resilience/internal support Time 2; and Resilience/external support Time 1, (see Table 8).

Before addressing the research questions descriptives were provided on the six scales: Experience of peer aggression/victimization Time 1; Experience of peer aggression/victimization Time 2; Emotional distress Time 1; Positive peers Time 1; Resilience/internal support Time 2; Resilience/external support Time 1; to look at the distribution, mean differences and standard deviation.

**Research question 1.** In order to determine if there is an increase in experiencing peer aggression/victimization between Time 1 and Time 2, a Wilcoxon signed rank test and a *t* test were conducted to look at change across time.

**Research question 2(a).** In order to address if emotional distress Time 1 and experience of peer aggression/victimization Time 1 predicts experience of peer aggression/victimization Time 2 regression analysis were performed. First the predictor variables, emotional distress Time 1 and control variable experience of peer aggression/victimization Time 1 were centered. In the regression analysis the dependent variable, experience of peer aggression/victimization Time 2, were regressed on the control variable experience of peer aggression/victimization Time 1 and on the predictor variable, emotional distress at Time 1.

**Research question 2(b).** To address question 2(b) to determine whether the relationship between emotional distress Time 1 and positive peers Time 1 while controlling for experience of peer aggression/victimization Time 1 is moderated by positive peers predicting experience of peer aggression/victimization Time 2, a moderator/interaction regression analysis was performed. First, the predictor variables, emotional distress Time 1, positive peers Time 1, experience of peer aggression/victimization Time 1 were centered. Next, the interaction term was created by combining positive peers Time 1 x emotional distress Time 1. To perform the regression first the control variable experience of peer aggression/victimization was entered. Next, the predictor variables emotional distress Time 1 and positive peers Time 1 were entered to obtain the main effect. Next, the two predictor variables emotional distress Time 1, positive peers Time 1 and the interaction term positive peers Time 1 x emotional distress Time 1 were entered simultaneously. In the regression analysis, the outcome variable, experience of aggression/victimization Time 2, was regressed on the control variable experience of peer aggression/victimization Time 1, and the predictor variables emotional distress Time 1 and positive peers Time 1, and the moderator positive peers Time 1 x emotional distress Time 1.

Then we examined R-square for the percentage of variance explained in the experience of peer aggression/victimization. R-square change is the increase in R-square that results from the inclusion of one or more variables into a regression model. ANOVA for R-square and R-square change have associated *F*-values which test whether they are statistically significant.

**Research question 3.** In order to address as to what extent resilience/external support Time 1 predicts resilience/internal resources Time 2 in the context of peer aggression/victimization Time 1 creating a resilient environment, regression analysis is conducted. First the predictor variables, resilience/external support Time 1 and experience of peer aggression/victimization Time 1 were centered. Next, the outcome variable, resilience/internal resources Time 2 was regressed on resilience/external support Time 1 and experience of peer aggression/victimization Time1.

## CHAPTER 4: RESULTS

The goal of this study was to examine the prevalence of bullying resulting in victimization during the transitional period into sixth grade. The focus was on the child's emotional well-being that is impacted by the environment through peer friendships and the positive influence adults have in a child's life.

Before addressing the research questions descriptives on the five scales used in the current study were provided. To research the first question, paired sample t-test were performed to see if there is an increase of experience of peer aggression/victimization from Time 1 to Time 2. Next, multiple regression were used to determine if emotional distress and lack of positive peers predicts experience of peer aggression/victimization. Next, moderation analysis in regression were conducted to test if emotional distress at Time 1 may be more strongly associated with an increase in experience of peer aggression/victimization at Time 2 under conditions of lack of positive peer support. Finally, stepwise multiple regression was used to examine if a child experiencing peer aggression/victimization becomes resilient if external support is offered.

### Preliminary Analyses

#### Descriptive Statistics- Predictor variables

*Experience of peer aggression/victimization Time 1.* Baseline descriptive analyses revealed that the majority of 6<sup>th</sup> graders in the current study did not experience being bullied during 6<sup>th</sup> grade. Of the 565 6<sup>th</sup> graders that answered the question relating to being hit, kicked or pushed by a student on school property, the majority reported ( $n=341$ , 60.4%) that they had never been hit, kicked or pushed. Forty percent of students did

report some form of peer aggression. Students reported being hit, kicked or pushed at least once ( $n=88$ , 15.6%); at least twice ( $n=41$ , 7.3%); at least three or four times ( $n=40$ , 7.1%); and five or more times ( $n=55$ , 9.7%) (see Table 9).

At the beginning of the school year, 571 students answered the question how often they have been picked on or bullied by a student on school property. The majority reported ( $n=375$ , 65.7%) that they had never been picked on or bullied. Thirty five per cent of students had experienced some form of aggression. Students that had been picked on or bullied reported frequency as at least once ( $n=87$ , 15.2%); at least twice ( $n= 36$ , 6.3%); at least three or four times ( $n= 33$ , 5.8%); and more than five times ( $n= 40$ , 7.0%); (see Table 9).

As shown in Table 9, 60% of the students had not been hit, pushed, picked or bullied, whereas 40% experienced some form of aggression. The means (with standard deviation in parentheses) was 1.82 (1.10). Even though the majority of students have not been hit, pushed, picked on or bullied, a number of students experienced aggression greater than five times. A meaningful percentage of students reported that they had been hit, kicked or pushed ( $n=55$ , 9.7%), or picked on and bullied more than five times ( $n=40$ , 7%) was found.

*Emotional Distress Time 1.* As shown in Table 9, baseline analyses revealed that the majority of 6<sup>th</sup> graders did not suffer from emotional distress. Of the 521 6<sup>th</sup> graders that answered the question how often they suffered from sadness in the last 30 days, students reported that they never felt sad ( $n=128$ , 24.6%); seldom suffered from sadness

( $n= 155, 29.8\%$ ); sometimes felt sad ( $n= 145, 27.8\%$ ); often felt sad ( $n= 73, 14\%$ ), and always felt sad ( $n= 20, 3.8\%$ ).

When the 6<sup>th</sup> graders were asked how often they were grouchy, irritable or in a bad mood, so that even little things would make them mad in the last 30 days, 517 students answered the question. Students reported that they were never grouchy, irritable or in a bad mood ( $n=144, 27.9\%$ ); seldom felt grouchy, irritable or in a bad mood ( $n= 164, 31.7\%$ ); sometimes felt grouchy, irritable or in a bad mood ( $n= 121, 23.4\%$ ); often experienced grouchiness, irritability and bad moods ( $n= 39, 13.3\%$ ); or were always grouchy, irritable or in a bad mood ( $n= 19, 3.7\%$ ); (see Table 10).

When the 6<sup>th</sup> graders were asked how often they felt hopeless about the future in the last 30 days, 517 students answered the question. Of that number, students answered that they did not have feelings of hopelessness ( $n=299, 57.8\%$ ); seldom had thoughts of hopelessness ( $n= 87, 16.8\%$ ); sometimes experienced hopelessness ( $n= 68, 13.2\%$ ); often had thoughts of hopelessness ( $n=41, 7.9\%$ ); and that always had thoughts of hopelessness ( $n= 22, 4.3\%$ ); (see Table 10).

When the 6<sup>th</sup> graders were asked how often they felt like not eating or eating too much in the last 30 days, 521 students answered the question. Students answered that they did not have eating problems ( $n= 260, 49.9\%$ ); seldom had eating problems ( $n= 80, 15.4\%$ ); sometimes had eating problems ( $n= 88, 16.9\%$ ); often had eating problems ( $n= 60, 11.5\%$ ); and always had eating problems ( $n=33, 6.3\%$ ); (see Table 10).

When the 6<sup>th</sup> graders were asked how often they slept a lot more or a less than usual in the last 30 days, 516 students answered the question. Students reported not

having any sleeping problems ( $n=179$ , 34.7%); seldom had sleeping problems ( $n= 98$ , 19%); sometimes had sleeping problems ( $n= 112$ , 21.7%); often had sleeping problems ( $n= 80$ , 15.5%); and always had sleeping problems ( $n=47$ , 9.1%); (see Table 10).

When the 6<sup>th</sup> graders were asked how often they had difficulty concentrating on school work in the last 30 days, 520 students answered the question. The students reported never having difficulty concentrating in school ( $n=195$ , 37.5%); seldom had difficulty concentrating in school ( $n= 154$ , 29.6%); sometimes had difficulties concentrating in school ( $n= 89$ , 17.1%); often had difficulty concentrating in school ( $n= 47$ , 9.0%); and always had difficulties concentrating in school ( $n= 35$ , 6.7%); (see Table 10).

When the 6<sup>th</sup> graders were asked how often they felt lonely in the last 30 days, 517 students answered the question. The students reported never being lonely ( $n=231$ , 44.7%); seldom were lonely ( $n= 122$ , 23.6%); sometimes felt lonely ( $n= 91$ , 17.6%); often felt lonely ( $n= 46$ , 8.9%); and always felt lonely ( $n= 27$ , 5.2%); (see Table 10).

As shown in Table 10, the majority of 6<sup>th</sup> graders did not suffer from emotional distress. Those that have never experienced sadness were at 24.6% or 128 students, 27.9% or 144 students were never irritable, 57.8% or 299 students never felt hopelessness, 49.9% or 260 students did not have eating problems, 34.7% or 179 students did not have sleeping problems, 37.5% or 195 students did not have difficulty concentrating at school and 44.7% or 231 students never felt lonely. The means (with standard deviation in parentheses) for the scale was 2.20 (.89). The majority of students

did not suffer from emotional distress, but those that did suffer from emotional distress ranged from 3.7% to 9.1% or between 19 to 47 students.

*Resilience/external support Time 1.* As shown in Table 11, baseline analyses revealed that the majority of 6<sup>th</sup> graders had external support that would assist them and show them the correct way to do things (by example). In the current study, 516 students answered the question if they had people around them whom they trust and love them. Students reporting that they did not have anyone ( $n= 22, 4.3\%$ ); somewhat disagreed about having people around ( $n= 41, 7.9\%$ ); somewhat agreed they had someone around ( $n= 198, 38.4\%$ ); strongly agreed they had someone around ( $n=255, 49.4\%$ ).

When 6<sup>th</sup> graders were asked if they had people who would set limits for them so they knew when to stop before there is danger or trouble, 510 students answered the question. Students that strongly disagreed that they had no one ( $n= 21, 4.1\%$ ); somewhat disagreed ( $n= 46, 9.0\%$ ); somewhat agreed ( $n= 175, 34.3\%$ ); strongly agreed ( $n=268, 52.5\%$ ); (see Table 11).

When the 6<sup>th</sup> graders were asked if they had people who showed them how to do things right by the way they do things (by example), 503 students answered the question. Students that strongly disagreed that they had no one to show them how to do things by example ( $n=10, 2.0\%$ ); somewhat disagreed ( $n= 43, 8.5\%$ ) somewhat agreed ( $n= 224, 44.5\%$ ); and strongly agreed they had someone ( $n=226, 44.9\%$ ); (see Table 11).

When the 6<sup>th</sup> graders were asked if they had people who want them to learn to do things on their own, 508 students answered the question. Students that strongly disagreed

( $n=16$ , 3.1%); somewhat disagreed ( $n= 44$ , 8.7%); somewhat agreed ( $n=197$ , 38.8%); strongly agreed ( $n=251$ , 49.4%); (see Table 11).

When the 6<sup>th</sup> graders were asked if they had people who would help them when sick, or in danger, 520 students answered the question. Students that strongly disagreed ( $n= 12$ , 2.3%); somewhat disagreed ( $n= 23$ , 4.4%); somewhat agreed ( $n= 135$ , 26.0); strongly agreed ( $n= 350$ , 67.3%); (see Table 11).

As shown in Table 11, baseline analyses revealed that 49.4% of students have people they could trust, 52.5% have people around who set limits, 44.9% have people who set positive examples, 49.4% have people who want them to learn things on their own and 67.3% had people who help them when they are sick or in danger. The means (with standard deviation in parentheses) for the scale is at 3.37 (.54). The majority of students did have someone available to help them and build resilience, but those that did not have someone ranged from 2% to 9%.

### **Descriptives – Predictor, Moderator Variable**

*Positive Peers Time 1.* As shown in Table 12, baseline analyses revealed that the majority of 6<sup>th</sup> graders in the current study have friends that get along with their parents, attend religious services, plan to attend college, have friends that do well in school, and encourage them to do well, have friends that discourage them from making bad decisions, are well behaved in school and think school work is important. In the current study, 550 students answered the question as to how many of their friends get along with their parents. Students that did not get along with their parents ( $n=14$ , 2.5%); had some friends that got along with their parents ( $n= 40$ , 7.3%); half their friends get along with their

parents ( $n= 29$ , 5.3%); most of their friends got along with their parents ( $n= 201$ , 36.5%); and all of their friends got along with their parents ( $n= 266$ , 48.4%); (see Table 12).

When 6<sup>th</sup> grade students were asked how many of their friends attended religious services, 521 students answered the question. Students said none of their friends attended religious services ( $n= 63$ , 12.1%); some of their friends attend religious services ( $n= 226$ , 43.4%); half of their friends attended religious services ( $n= 82$ , 15.7%); most of their friends attended religious services ( $n= 108$ , 20.7%); all of their friends attended religious services ( $n= 42$ , 8.1%); (see Table 12).

When 6<sup>th</sup> grade student were asked how many of their friends plan to attend college, 531 students answered the question. Students said none of their friends planned to attend college ( $n= 9$ , 1.7%); some of their friends planned to attend college ( $n=25$ , 4.7%); half of their friends plan to attend college ( $n= 29$ , 5.5%); most of their friends plan to attend college ( $n=142$ , 26.7%); and all their friends plan to attend college ( $n= 326$ , 61.4%); (see Table 12).

When 6<sup>th</sup> grade student were asked how many of their friends do very well in school, 551 students answered the question. Students said none of their friends do well in school ( $n=11$ , 2%); some of their friends do well in school ( $n=57$ , 10.3%); half of their friends do well in school ( $n=74$ , 13.4%); most of their friends do well in school ( $n= 247$ , 44.8%); all their friends do well in school ( $n= 162$ , 29.4%); (see Table 12).

When 6<sup>th</sup> grade students were asked how many of their friends encourage them to do their best in school, 548 students answered the question. Students said none of their friends encourage them to do their best ( $n= 82$ , 15%); some of their friends encourage

them to do their best in school ( $n= 76$ , 13.9%); half their friends encourage them to do their best ( $n= 34$ , 6.2%); most of their friends encourage them to do their best ( $n= 110$ , 20.1%); and all their friends encouraged them to do their best in school ( $n= 246$ , 44.9%); (see Table 12).

When 6<sup>th</sup> grade students were asked how many of their friends discourage them from making bad decisions, 532 students answered the question. Students said none of their friends discouraged them from making bad decisions ( $n= 103$ , 19.4%); some of their friends discouraged them ( $n= 47$ , 8.8%); half of their friends discouraged them ( $n= 33$ , 6.2%); most of their friends discouraged them ( $n= 96$ , 18%); or all their friends discouraged them from making bad decisions ( $n= 253$ , 47.6%); (see Table 12).

When students were asked how many of their friends are well behaved in school, 552 students answered the question. Students said none of their friends are well behaved ( $n= 22$ , 4%); some of their friends are well behaved ( $n =61$ , 11.1%); half their friends are well behaved ( $n =59$ , 10.7%); most of their friends are well behaved ( $n= 187$ , 33.9%); and all their friends were well behaved ( $n= 223$ , 40.4%); (see Table 12).

When students were asked how many of their friends think school work is important, 546 students answered the question. Students said none of their friends think school work is important ( $n= 23$ , 4.2%); some of their friends think school work is important ( $n=60$ , 11%); half their friends think school work is important ( $n= 58$ , 10.6%); most of their friends think school work is important ( $n=171$ , 31.3%); and all their friends think school work is important ( $n= 234$ , 42.9%); (see Table 12).

As shown in Table 12, the majority of 6<sup>th</sup> grade students got along with their parents and had positive peer friendships which ranged from 61.4% - 36.5%. The means (with standard deviations in parentheses) for the scale is 3.80 (.72). The students that did not get along with their parents and did not have positive peer friendships ranged from 1.7% to 7.3%.

### **Descriptives- Outcome variables**

*Experience of peer aggression/victimization Time 2.* As shown in Table 13, the majority of 6<sup>th</sup> graders in the current study did not experience being bullied during 6<sup>th</sup> grade. During Time 2, data shows that a greater number of students reported being hit, kicked, pushed, picked on or bullied. In the present study of 562 respondents, students at Time 2, answered the question relating to being hit, kicked or pushed by a student on school property, the majority of students had never been hit, kicked or pushed ( $n=279$ , 49.6%); at least once ( $n=87$ , 15.5%); at least twice ( $n=57$ , 10.1%); at least three or four times ( $n=64$ , 11.4%); and five or more times ( $n=75$ , 13.3%).

When the 6<sup>th</sup> graders were asked at Time 2, how often they have picked on or bullied by a student on school property 563 students answered the question. The majority of students had never been picked on or bullied ( $n=317$ , 56.3%); at least once ( $n=105$ , 18.7%); at least twice ( $n= 46$ , 8.2%); at least three or four times ( $n= 36$ , 6.4%); and more than five times ( $n= 59$ , 10.5%); (see Table 13).

As shown in Table 13, descriptive analyses revealed that the majority of students between 49.6% - 56.3% had not been hit, pushed, picked on or bullied. The means (with standard deviations in parentheses) for the scale was 2.09 (1.20). Even though the

majority of students have not been hit, pushed, picked on or bullied, a meaningful number of students had been hit, kicked or pushed more than five times ( $n=75$ , 13.3%) and picked on or bullied more than five times ( $n=59$ , 10.5%).

*Resilience/internal resources Time 2.* As shown in Table 14, descriptive analyses revealed that the majority of 6<sup>th</sup> grade students were likeable, loveable, did nice things for others and showed concern, respect of others and themselves, were responsible for their actions and optimistic. In the current study, 580 students answered the question “I am a person people can like and love.” Students strongly disagreed that they were not likeable and loveable ( $n= 22$ , 4.6 %); somewhat disagreed about being likable and loveable ( $n= 19$ , 4%), somewhat agreed they were likeable and loveable ( $n= 186$ , 38.8%); strongly agreed that they were likeable and loveable ( $n=253$ , 52.7%).

When 6<sup>th</sup> grade students were asked if they were glad to do nice things for others and show their concern, 480 students answered the question. Students strongly disagreed that they weren’t glad to do nice things for others ( $n= 14$ , 2.9%); somewhat disagreed ( $n= 22$ , 4.6%); somewhat agreed ( $n= 192$ , 40%); and strongly agreed ( $n=252$ , 52.5%); (see Table 14).

When the 6<sup>th</sup> graders were asked if they were respectful of others and themselves, 482 students answered the question. Students strongly disagreed ( $n=10$ , 2.1%); somewhat disagreed ( $n= 23$ , 4.8%); somewhat agreed ( $n= 209$ , 43.4%); strongly agreed ( $n=240$ , 49.8%); (see Table 14).

When the 6<sup>th</sup> graders were asked if they were willing to be responsible for what they do, 475 students answered the question. Students strongly disagreed ( $n=14$ , 2.9%);

somewhat disagreed ( $n= 17, 3.6\%$ ); somewhat agreed ( $n=182, 38.3\%$ ); and strongly agreed ( $n=262, 55.2\%$ ); (see Table 14).

When the 6<sup>th</sup> graders were asked “I am sure things will be alright”, 463 students answered the question. Students strongly disagreed ( $n= 21, 4.5\%$ ); somewhat disagreed ( $n= 35, 7.6\%$ ); somewhat agreed ( $n= 226, 48.8\%$ ); and strongly agreed ( $n= 181, 39.1\%$ ); (see Table 14).

When the 6<sup>th</sup> graders were asked if they could talk to others about the things that frighten or bother them, 473 students answered the question. Students strongly disagreed were ( $n= 29, 6.1\%$ ); somewhat disagreed ( $n= 51, 10.8\%$ ); somewhat agreed ( $n= 207, 43.8\%$ ); strongly agreed ( $n=186, 39.3\%$ ); (see Table 14).

When students were asked if they could find ways to solve problems that they face, 470 students answered the question. Students strongly disagreed ( $n= 18, 3.8\%$ ); somewhat disagreed ( $n= 27, 5.7\%$ ); somewhat agreed ( $n= 211, 44.2\%$ ); and strongly agreed ( $n=221, 46.3\%$ ); (see Table 14).

When the 6<sup>th</sup> graders were asked if they can control themselves when they feel like doing something not right or dangerous, 471 students answered the question. Students strongly disagreed ( $n=16, 3.4\%$ ); somewhat disagreed ( $n= 31, 6.6\%$ ); somewhat agreed ( $n= 190, 40.3\%$ ); and strongly agreed ( $n=234, 49.7\%$ ); (see Table 14).

When the 6<sup>th</sup> graders were asked if they could figure out when it is a good time to talk to someone or take action, 473 students answered the question. Students strongly disagreed ( $n=12, 2.5\%$ ); somewhat disagreed ( $n= 29, 6.1\%$ ); somewhat agreed ( $n=220, 46.5\%$ ); and strongly agreed ( $n=212, 44.8\%$ ); (see Table 14).

When the 6<sup>th</sup> graders were asked if they could find someone to help them when they needed it, 479 students answered the question. Students strongly disagreed ( $n= 17$ , 3.5%); somewhat disagreed ( $n= 27$ , 5.6%); somewhat agreed ( $n= 197$ , 41.1%); and strongly agreed ( $n= 238$ , 49.7%); (see Table 14).

As shown in Table 14, descriptive analyses revealed the majority of students between 38.3% - 55.2% felt that they are individuals who could be liked, loved, respectful of others, responsible and the ability to think positively, solve problems and control themselves. The mean (with standard deviation in parentheses) for the scale is 3.33 (.57). The majority of students had positive images of themselves and felt that they could solve problems and were in control, but those that did not have positive images and the ability to solve problems and were not in control ranged from 2.1% to 10.8%.

### **Research Question 1: Peer aggression/victimization over time.**

To address research question 1, to determine if there is an increase in experiencing peer aggression/victimization between Time 1 and Time 2, a Wilcoxon signed rank test and a  $t$ -test were performed to assess change across time.

Results of the Wilcoxon matched pairs, signed rank test showed that the difference between the median response for being hit, kicked or pushed by a student on school property at Time 1 ( $M=1.90$ ,  $SD=1.35$ ) and at Time 2 ( $M=2.23$ ,  $SD=1.48$ ) was significant beyond the .001 level: ( $Z=4.162$ ,  $p<.001$ ); (see Table 14). These results indicate that there is an increase of being hit, kicked or pushed by a student on school property from Time 1 to Time 2.

A Wilcoxon matched pairs, signed rank test showed that the difference between the median response for being picked on or bullied by a student on school property at Time 1 ( $M=1.73$ ,  $SD=1.23$ ) and at Time 2 ( $M=1.96$ ,  $SD=1.35$ ) was significant beyond the .01 level: ( $Z=3.079$ ,  $p<.001$ ); (see Table 14). These results indicate that there is an increase of being hit, kicked, pushed, picked on and bullied on school property from Time 1 to Time 2.

The results further indicate that the majority of 6<sup>th</sup> graders had not been hit, kicked, or pushed by a student on school property. From Time 1 to Time 2 of the school year the total number of 6<sup>th</sup> graders that answered the survey were ( $n=490$ ). Almost half the 6<sup>th</sup> graders or 223 did not report having experienced peer aggression/victimization; 168 6<sup>th</sup> graders reported an increase in aggression, and 99 6<sup>th</sup> graders reported a decrease in experience of peer aggression/victimization, (see Table 15).

The results indicate that the majority of 6<sup>th</sup> graders had not been picked on or bullied by a student on school property. From Time 1 to Time 2 of the school year the total number of 6<sup>th</sup> graders that answered the survey were ( $n=497$ ). Half of the 6<sup>th</sup> graders or 254 did not report having being picked on or bullied, 146 6<sup>th</sup> graders reported an increase in aggression, and 97 6<sup>th</sup> graders reported a decrease in experience of peer aggression/victimization, (see Table 15).

Based upon paired sample *t*-test performed on experience of peer aggression/victimization at Time 1 and Time 2, the mean response for experience of aggression/bullying at Time 1 ( $M=1.80$ ,  $SD=1.08$ ) was less than the mean response for experience of aggression/victimization at Time 2 ( $M=2.08$ ,  $SD=1.19$ ). A related-samples

*t* test showed significance beyond the .001 level:  $t(498) = -5.08$ ;  $p < .001$ , 95% CI [-.39, -.17]. Cohen's  $d = .22$ . Even though the effect size is small, there is an increase of experience of aggression/victimization from Time 1 to Time 2 (see Table 16).

**Research Question 2(a): Emotional distress predicting aggression/victimization.**

To address research question 2(a), emotional distress and experience of peer aggression/victimization Time 1 predicting experience of peer aggression/victimization at Time 2 a regression analysis was conducted. This analysis predicts if emotional distress at Time 1 and controlling for experience of peer aggression/victimization Time 1 increases experience of peer aggression/victimization at Time 2.

Prior to conducting regression analysis, the independent variables, emotional distress at Time 1 and experience of peer aggression/victimization Time 1 were centered by subtracting the mean from each score to eliminate multicollinearity and to help interpret the regression coefficients and betas. In the regression analysis, the dependent variable, experience of peer aggression/victimization Time 2 was regressed on the predictor variables of experience of peer aggression/victimization Time 1 and emotional distress Time 1.

As illustrated in Table 17, for every one unit increase in experience of peer aggression/victimization Time 1 there is a .438 increase of experiencing peer aggression/victimization at Time 2 which is significant ( $b=.438$ ,  $SE_b=.047$ ,  $\beta=.393$ ,  $p<.001$ ) and ( $r=.39$ ,  $R^2=.153$ ). There was 15.3% variance accounted for which was statistically significant  $F(1,469) = 85.89$ ,  $p < .001$ ). The results suggest a stable relation

between experiencing peer aggression/victimization at the beginning of the year and experiencing peer aggression at the end of the year.

Upon entering emotional distress at Time 1, for every one unit increase in emotional distress Time 1, there is a .263 corresponding increase in experience of peer aggression/victimization at Time 2. Emotional distress Time 1 significantly predicts experience of peer aggression/victimization Time 2 ( $r = .43$ ;  $R^2 = .185$ ). The results indicate that the overall model was statistically significant  $F(2,468) = 54.29$ ,  $p < .001$ ). There was 18.5% variance in emotional distress accounted for by experience of peer aggression/victimization which is significant. There is a significant association between emotional distress and experience of peer aggression/victimization Time 2, suggesting that 6<sup>th</sup> graders who experienced emotional distress were more likely to experience peer aggression/victimization.

**Research Question 2(b): Moderation/positive peers.**

To address research question 2(b), to determine whether the relation between emotional distress and the experience of peer aggression/victimization is moderated by positive peers, a regression analysis was performed.

First, the control variable experience of peer aggression/victimization Time 1 was centered. Next, the predictor variables were centered, emotional distress Time 1 and positive peers Time 1. The variables are centered to eliminate multicollinearity effects between the predictors and the interaction term (Aiken & West, 1991). Then the moderator/interaction term was created by combining positive peers Time 1 x emotional distress Time 1. In the moderation regression analysis the outcome variable, experience

of peer aggression/victimization Time 2 was regressed on the predictor variables experience of peer aggression Time 1, emotional distress Time 1, positive peers Time 1, and the moderator positive peers Time 1 x emotional distress Time 1.

As shown in Table 18, first the control variable experience of peer aggression/victimization Time 1 was entered. Then the predictor variables emotional distress Time 1 and positive peers Time 1 was entered to obtain the main effect. Next the two predictor variables emotional distress Time 1, positive peers Time 1 and the interaction term positive peers Time 1 x emotional distress Time 1 was entered simultaneously.

Upon entering the control variable experience of peer aggression/victimization Time 1, for every one unit increase in experience of aggression/victimization there is a .437 increase in chances of being bullied which is significant, ( $B=.437$ ,  $SE_b=.047$ ,  $\beta=.393$ ,  $p<.001$ ) and ( $r=.39$ ;  $R^2=.152$ ). There was 15.2% variance, which was statistically significant  $F(1,468) = 85.258$ ,  $p<.001$ ). Sixth graders who have previously experienced peer aggression/victimization have a greater chance of experiencing peer aggression/victimization.

Results for the main effect, indicate that for every one unit increase in emotional distress there was a one unit increase of emotional distress there was a .266 increase in being bullied which was significant, ( $B=.266$   $SE_b =.062$ ,  $\beta= .199$ ,  $p<.001$ ) and ( $r=.43$ ,  $R^2=.182$ ). There is 18.2% variance, which is statistically significant  $F(3,466) =35.83$ ,  $p<.001$ ). Sixth graders that suffer from emotional distress have an increased chance of being bullied and becoming victims. Positive peers were not significant. Upon adding the

moderator, the results were not significant. These results indicate that the overall model was statistically significant ( $F=27.63$ ,  $p<.001$ ). The predictor variables, experience of aggression/victimization and emotional distress are statistically significant but positive peers and the moderator are not significant.

### **Research Question 3: External support predicting resilient environment.**

To address research question 3, to what extent does resilience/external support Time 1 predict resilience/internal resources Time 2 in the context of peer aggression/victimization Time 1 creating a resilient environment, regression analysis was conducted. This analysis predicts if resilience/external support Time 1 and experience of peer aggression/victimization Time 1 increases internal resources Time 2.

In the regression analysis, the outcome variable, resilience/internal resources Time 2 was regressed on resilience/external support Time 1 and experience of peer aggression/victimization Time 1.

As illustrated in Table 19, for every one unit increase in experience of resilience/external support Time 1 there is a .312 increase in resilience/internal resources Time 2 which is significant ( $b=.312$ ,  $SE_b=.051$ ,  $\beta=.286$ ,  $p<.001$ ) and ( $r=.28$ ,  $R^2=.08$ ). There was 8% variance accounted for which was statistically significant  $F(1,413)=36.77$ ,  $p<.001$ ). Upon entering experience of aggression/victimization Time 1, the result was not significant.

The results indicate that sixth graders who have external support in their lives are more capable of making positive internal decisions and less likely to experience peer aggression/victimization. Further indicating that external support is predictive of having

internal resources, whereas experience of aggression/victimization is not predictive of having internal resources.

## CHAPTER 5: DISCUSSION

The current study assessed the experience of peer aggression in 6<sup>th</sup> grade with an emphasis on emotional health and the environment in which a child develops, and the impact peers and adults have on a child's development in relationship to victimization. Previous studies have shown that the child's emotional health and lack of positive peers contributed to a child being aggressed at and ultimately becoming victimized. Studies have shown that the presence of adults in a child's life whether it is the mother/primary caregiver or an adult provided the nourishment, support and resilience required for the child to develop normally, and if the child experiences negative incidents, the ability to "bounce" back. This study examined the prevalence of experiencing aggression in 6<sup>th</sup> grade, exploring whether emotional distress and lack of peers contributed to being aggressed at, ultimately becoming a victim. For a child who has experienced aggression, does the presence of adults in the child's life provide resilience for the child to "bounce" back?

First, the prevalence of experiencing peer aggression/victimization upon entering 6<sup>th</sup> grade and completing 6<sup>th</sup> grade was explored. Emotional distress and lack of positive peers was tested to see if they were predictive of experiencing peer aggression. Next, positive peers were explored as a moderator predicting experience of peer aggression/victimization. Finally, this study examined the experience of peer aggression/victimization and the presence of adults in a child's life creating a resilient environment.

## **Findings**

### **Prevalence of Aggression/Victimization in Sixth Grade across Time**

At the beginning of the school year almost half or 50% of the 6<sup>th</sup> graders did not report experiencing peer aggression; however, 4.9% of the 6<sup>th</sup> graders reported peer aggression. At the end of the school year almost half or 50% of the students did not report experiencing peer aggression; whereas, 5.12% of students did report experiencing peer aggression. This suggests a 22% increase of experiencing aggression overtime. Support was found for the hypothesis that there is an increase of aggression/victimization overtime in 6<sup>th</sup> grade.

The implications of this finding suggest that during 6<sup>th</sup> grade there is an increase in peer aggression which could have long term negative effects on children's development. According to Cairns and Cairns (1986) 6<sup>th</sup> grade is the most "brutalizing period" in a child's life with an increase in peer aggression/victimization as children establish social status among peers.

Previous studies have shown that children who experience peer aggression, resulting in victimization, suffer from fear, sadness, humiliation, and low self-concept (Card et al., 2009). According to (Graham et al., 2006) pre-adolescents that experience victimization have negative self-views. They are lonely, socially anxious, depressed, and suffer from low self-esteem. Victimization among schoolchildren is a common problem that leads to significant maladjustment (Card & Hodges, 2008).

### **Emotional Distress Predicting Experience of Peer Aggression/Victimization**

The results from research question 2(a), indicated that 6<sup>th</sup> graders who suffer from emotional distress had an 18.6% increase in chances of experiencing aggression than those students who did not suffer from emotional distress. The implication of this finding suggests that children who suffer from emotional distress could also have an increased chance of developing further emotional problems.

Previous studies found that children who suffer from emotional distress are more likely to be aggressed at and become victims. Children who are physically weak exhibit internalizing problems, have low social skills, and low self-concept that increases a child's chance of experiencing aggression (Card, 2003). Children that interact with an inconsistent, insensitive, and rejecting caregiver develop insecure attachments and display anxious vulnerability that make them targets for victimization (Troy & Sroufe, 1987). According to Card and Hodges (2008) continued victimization of children with pre-existing internalizing problems causes an increase in internalizing problems that leads to significant maladjustment.

### **Positive Peers as Moderator Predicting Experience of Peer Aggression/Victimization**

The results from research question 2(b) with positive peers as the moderator, again suggest that children who suffer from emotional distress have an 18.3% higher chance of experiencing aggression than those children who do not suffer from emotional distress. Also, 6<sup>th</sup> graders that had previously experienced aggression had a 15.2% chance of experiencing aggression again. Positive peers did not have a significant effect on aggression. This is contrary to current research that implies that peers do have an effect

on aggression. According to Corsaro and Eder (1990) peer culture is the social environment created by children, and membership within a peer group consists of peers that are similar in age and share the same values. Peers play a protective role, but peers also play a negative role in teaching fellow peers to be aggressive (Rubin et al., 2006).

According to (Dishion et al., 1995) children develop friendships, and within this network there are certain themes. Often these networks support antisocial behavior by providing opportunities and reinforcement for these behaviors. According to Card, Isaacs and Hodges (2009) peer relationships offer many positive benefits such as friends and opportunities to receive and reciprocate prosocial behavior. It can also lead to harmful influences and hurt feelings. As mentioned previously, children who are physically weak exhibit internalizing problems that make them easy targets for aggression (Card, 2003). Children who are passive submit to an aggressor's needs without retaliation, increasing their chances of becoming victims over time (Perry et al., 1990).

### **External Support Predicting Resilient Environment**

The results from the study indicate that children who have external support in their lives are more capable of making positive internal decisions, whereas children who experience aggression/victimization are less likely to have internal resources. The results further suggest that children who have supportive adults in their lives are 8% less likely to experience peer aggression. Having supportive adults in a child's life creates a resilient internal resource for the child resulting in less peer aggression. The implications for these results indicate that children who experience aggression should have more adults and mentors in their lives.

Previous studies have shown that resilience is a dynamic process that helps a child positively adapt to negative situations. Within the child's environment, families and adults are important for normal child development as they provide an interactive process that protects the child (Luthar et al., 2000).

Literature posits that resilience does not come from special qualities, but from the everyday magic of ordinary resources within families, relationships, and communities (Masten, 2001). When children face aggression and victimization, resilience is an important factor that helps buffer the child by creating protective factors.

## **Conclusions**

### **Limitations of the Present Study**

The present study was a secondary data analysis that had several limitations concerning the data, the methodology and measures. Following is a discussion of how these limitations impacted the study.

The data used in this study was part of a larger project funded by The Safe Schools/Healthy Children Initiative. The goal of the project was to evaluate the school environment and to address gaps or problems. Pointed questions were not asked regarding aggression/victimization, peers, resilience and the child's overall environment which had a direct impact on the study, limiting the conclusions that could be reached which may be important for future intervention/prevention programs.

The methodology used in this study had limitations. Measures of aggression/victimization, emotional distress, peers and resilience were based on self-reports which could result in shared method variance problems. Self-reports offer the

child's opinion and views which may be inaccurately reported, and may not be relevant thereby biasing the results of this study.

This study was aimed at experience of aggression/victimization in 6<sup>th</sup> grade. Only two questions targeted aggression/victimization. These questions did not assess frequency and the different types of aggression/victimization that occurs in relation to gender. This study was limited to reporting only aggression/victimization and not about the frequency, and was unable to relate aggression/victimization directly to gender.

Current literature posits that there is a relationship between peers and aggression. Though this study failed to show an association between peers and aggression, improved questions may establish the relationship between peers and aggression.

The results from this study indicate that emotional distress predicted aggression/victimization, but failed to show if the individual suffered from internalizing or externalizing behaviors and low self-esteem. This study failed to show a link between internalizing problems and externalizing problems as risk factors for aggression/victimization.

Another limitation is the lack of questions addressing the child's immediate environment. Family/adults play a critical role in creating resilience, and lack of family/adult support could pose a developmental problem resulting in emotional distress that may lead to aggression/victimization if additional adults are unavailable. This study failed to show a connection between aggression/victimization and internal resources.

A major limitation in this study is the self-report method that is used to study complex behaviors such as aggression/victimization. Additional reports obtained from

peers and teachers and independent observational data could provide additional and perhaps more pertinent information about aggression/victimization. According to Card, Isaacs and Hodges (2009) new measures should be developed to assess aggressor/victim relationships.

### **Recommendations for Future Research**

Despite these limitations, the present finding adds to the literature by showing a connection between emotional distress and aggression/victimization, and the role adults play in creating a resilient environment.

From this study we can conclude that the child's environment whether it is on school grounds or the home, plays an important role in normal, healthy child development.

Future studies need to focus on the connection between emotional distress and aggression/victimization. Identifying specific emotional problems may enable providers to teach the child new coping strategies and conflict resolution skills to avoid further aggression/victimization.

Additional studies should focus on the school environment to identify why certain environments are more caustic than others. In identifying problematic areas such as the playground or the bathrooms, one can create a safe-haven through additional monitors or installing cameras in pertinent areas to avoid altercations.

Research has shown that adults in a child's life create a protective and safe environment. Early attachment plays an important role in developing an internal working model. Creating a secure attachment may benefit the child in helping them make good

decisions and avoiding bad ones. New interventions should be created based on early attachment, whereby a mother learns to love and protect her child, teaching the child appropriate behaviors and helping build positive attitudes.

Future research needs to identify antecedents that cause aggression and victimization. After antecedents have been established one can create prevention/intervention programs that include family, adults, teachers, clergy and peers that may help alleviate problems and create a positive and healthy developmental environment whereby children can flourish, mentally, physically and academically instead of being distressed.

## APPENDIX A: TABLES

Table 1

*Sample Characteristics: Gender and ethnicity, sixth grade*

	Number	Percent
Gender		
Male	341	51%
Female	330	49%
Ethnicity		
White (non-Hispanic)	410	61%
Black (non-Hispanic)	22	3%
Hispanic/Latino	104	16%
Asian or Pacific Islander	23	4%
Native American	9	1%
Multiracial or Multiethnic	69	10%
Other	34	5%

Table 2

*Self Report Questionnaire for Data Collection Sixth Grade, School Academic Year*

## Breakdown of 32 questions used in survey

## EXPERIENCE OF PEER AGGRESSION/VICTIMIZATION

1. During the PAST 12 MONTHS, how often have YOU been hit, kicked, or pushed by a student on school property?
2. During the PAST 12 MONTHS, how often have YOU been picked on or bullied by a student on school property?

## POSITIVE PEERS

3. How many of your friends get along with their parents?
4. How many of your friends attend religious services regularly?
5. How many of your friends plan to go to college?
6. How many of your friends do very well in school?
7. How many of your friends encourage you to do your best in school?
8. How many of your friends discourage you from making bad decisions?
9. How many of your friends are well behaved in school?
10. How many of your friends think school work is important?

## EMOTIONAL DISTRESS

11. In the last 30 days, how often were you sad?
12. In the last 30 days, how often were you grouchy or irritable, or in a bad mood, so that even little things would make you mad?
13. In the last 30 days, how often did you feel hopeless about the future?
14. In the last 30 days, how often did you feel like not eating or eating more than usual?
15. In the last 30 days, how often did you sleep a lot more or a lot less than usual?
16. In the last 30 days, how often did you have difficulty concentrating on your school work?
17. In the last 30 days, how often did you feel lonely?

(continued)

Table 2

*Self Report Questionnaire for Data Collection Sixth Grade, School Academic Year  
(continued)*

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Breakdown of 32 questions used in survey

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RESILIENCE/INTERNAL SUPPORT

“I AM”, “I CAN”

18. I am a person people can like and love.
19. I am glad to do nice things for others and show my concern.
20. I am respectful of others and myself.
21. I am willing to be responsible for what I do.
22. I am sure things will be alright.
23. I can talk to others about the things that frighten or bother me.
24. I can find ways to solve problems that I face.
25. I can control myself when I feel like doing something not right or dangerous.
26. I can figure out when it is a good time to talk to someone or take action.
27. I can find someone to help me when I need it.

RESILIENCE/EXTERNAL SUPPORT

“I HAVE”

28. I have people around me whom I trust and who I know love me, no matter what.
29. I have people who set limits for me so I know when to stop before there is danger or trouble.
30. I have people who show me how to do things right by the way they do things (e.g., by example).
31. I have people who want me to learn to do things on my own.
32. I have people who help me when I am sick, in danger, or need to learn.

Table 3

*Factor Loadings for Exploratory Factor Analysis with Principal Axis Factoring with Oblique Rotation on Aggression/Victimization Measure*

Measure bullying	Witnessing bullying	Experiencing
During the past 12 months, how often have you been hit, kicked, or pushed?	.26	<b>.35</b>
During the past 12 months, how often have you been picked on or bullied?	-.06	<b>.97</b>
During the past 12 months, how often have you seen other students hit or kicked?	1.02	-.117
During the past 12 months, how often have you seen other students being bullied?	.49	.27

Note. Factor loadings used are in boldface. Factor 1 accounted for 56.57% of the variance, and Factor 2 accounted for 19.53% of the variance.

Table 4

*Factor Loadings for Exploratory Factor Analysis with Principal Axis Factoring with Oblique Rotation on Positive Peers Measure*

Measure	Positive peers	Negative peers
How many of your friends get along with parents?	<b>.32</b>	-.11
How many of your friends attend religious services?	<b>.32</b>	.01
How many of your friends plan to attend college?	<b>.42</b>	-.04
How many of your friends do well in school?	<b>.48</b>	-.19
How many of your friends encourage you to do well?	<b>.79</b>	.17
How many of your friends discourage you from making bad decisions?	<b>.31</b>	.01
How many of your friends are well behaved in school?	<b>.34</b>	-.46
How many of your friends think school work is important?	<b>.56</b>	-.19
How many of your friends skip classes?	-.02	.23
How many of your friends misbehave in school?	.04	.81

Note: Factor loadings used in boldface. Factor 1 accounted for 32.02% of the variance, and Factor 2 accounted for 10.78% of the variance.

Table 5

*Factor Loadings for Exploratory Factor Analysis with Principal Axis Factoring with Oblique Rotation on Emotional Distress Measure*

Measure	Emotional Distress	Emotional Distress
In the last 30 days, how often were you sad?	<b>.69</b>	-.21
In the last 30 days, how often were you grouchy, irritable, or in a bad mood, so that even little things would make you mad?	<b>.62</b>	-.05
In the last 30 days, how often did you feel hopeless about the future?	<b>.74</b>	-.06
In the last 30 days, how often did you feel like not eating or eating more than usual?	<b>.66</b>	.25
In the last 30 days, how often did you sleep a lot more or a lot less than usual?	<b>.61</b>	.21
In the last 30 days, how often did you have difficulty concentrating on your school work?	<b>.68</b>	.13
In the last 30 days, how often did you feel lonely?	<b>.77</b>	-.30
In the last 30 days, how often did you feel very happy?	-.40	-.33

Note: Factor loadings used in boldface. Factor 1 accounted for 54.04% of the variance, and Factor 2 accounted for 10.70% of the variance.

Table 6

*Factor Loadings for Exploratory Factor Analysis with Principal Axis Factoring and Oblique Rotation for Resilience/External Support Measure and Resilience/Internal Resources Measure*

Scale	Resilience Internal Resources	Resilience External Support
I have people around me whom I trust, and love me.	.46	<b>.60</b>
I have people who set limits for me to prevent danger.	.44	<b>.64</b>
I have people who show me how to do things right.	.42	<b>.62</b>
I have people who want me to learn to do things on my own.	.24	<b>.34</b>
I have people who help me when I am sick, or in danger.	.42	<b>.57</b>
I am a person people can like and love.	<b>.69</b>	.51
I'm glad to do nice things for others and show concern.	<b>.76</b>	.57
I am respectful of others and myself.	<b>.77</b>	.47
I am willing to be responsible for what I do.	<b>.72</b>	.50
I am sure things will be alright.	<b>.66</b>	.58
I can talk to others about things that frighten or bother me.	<b>.50</b>	.59
I can find ways to solve problems that I face.	<b>.61</b>	.52
I can control myself when I feel like doing something not right or dangerous.	<b>.65</b>	.47
I can figure out when it is a good time to talk to someone or take action.	<b>.62</b>	.60
I can find someone to help me when I need it.	<b>.62</b>	.59

Note: Factor loadings used are in boldface. Factor 1 accounted for 31.8% of the variance, and Factor 2 accounted for 17.9% of the variance.

Table 7

*Breakdown of Five Measures and Cronbach's Alpha*

Measures	Cronbach's alpha	Cronbach's alpha
	Time 1	Time 2
<b>EXPERIENCE OF PEER AGGRESSION/VICTIMIZATION</b>	<b>.62</b>	<b>.61</b>
Kicked, pushed		
Picked on or bullied		
<b>POSITIVE PEERS</b>	<b>.72</b>	<b>.81</b>
Friends getting along with their parents		
Friends attending religious services		
Friends planning to attend college		
Friends doing well in school		
Friends encouraging one to do well		
Friends discouraging one from bad decisions		
Friends well behaved in school		
Friends think school work is important		
<b>EMOTIONAL DISTRESS</b>	<b>.82</b>	<b>.85</b>
Feeling sad		
Irritable and grouchy		
Hopeless about the future		
Not eating or eating too much		
Sleeping less or too much		
Difficulty concentrating on schoolwork		
Do you feel lonely		

(continued)

Table 7

*Breakdown of Five Measures and Cronbach's Alpha (continued)*

Measures	Cronbach's alpha	Cronbach's alpha
	Time 1	Time 2
<b>RESILIENCE/INTERNAL</b>	<b>.90</b>	<b>.91</b>
I am a person people like and love		
I do nice things for others and show concern		
I am respectful of others and myself		
I am willing to be responsible for what I do		
I am sure things will be alright		
I can talk to others about things that frighten and bother me		
I can find ways to solve problems		
I can control myself when I feel like doing something dangerous		
I can figure out when it is a good time to talk to someone or take action		
I can find some to help me when I need it		
<b>RESILIENCE/EXTERNAL</b>	<b>.73</b>	<b>.84</b>
I have people around whom I trust		
I have who set limits		
I have people who show me how to do things right		
I have people who want me learn to do things on my own		
I have people who help me when I'm sick or in danger, or need to learn		

Table 8

*Six Measures used in Survey*

## Measure

**EXPERIENCE OF PEER AGGRESSION/VICTIMIZATION TIME 1**

During the past 12 months, how often have you been hit, kicked, or pushed by a student on school property?

During the past 12 months, how often have you been picked on or bullied by a student on school property?

**EXPERIENCE OF PEER AGGRESSION/VICTIMIZATION TIME 2**

During the past 12 months, how often have you been hit, kicked, or pushed by a student on school property?

During the past 12 months, how often have you been picked on or bullied by a Student on school property?

**POSITIVE PEERS TIME 1**

How many of your friends get along with their parents?

How many of your friends attend religious services?

How many of your friends plan to go to college?

How many of your friends do very well in school?

How many of your friends encourage you to do your best in school?

How many of your friends discourage you from making bad decisions?

How many of your friends are well behaved in school?

How many of your friends think school work is important?

**EMOTIONAL DISTRESS TIME 1**

In the last 30 days, how often were you sad?

In the last 30 days, how often were you grouchy or irritable, or in a bad mood, so That even little things would make you mad?

In the last 30 days, how often did you feel hopeless about the future?

In the last 30 days, how often did you feel like not eating or eating more than usual?

In the last 30 days, how often did you sleep a lot more or a lot less than usual?

In the last 30 days, how often did you have difficulty concentrating on your school work?

In the last 30 days, have you felt lonely?

(continued)

Table 8

*Six Measures used in Survey (continued)*


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Measure

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## RESILIENCE/INTERNAL RESOURCES TIME 2

- I am a person people like and love
- I am glad to do nice things for others and show my concern
- I am respectful of others and myself
- I am willing to be responsible for what I do
- I am sure things will be alright
- I can talk to others about things that frighten or bother me
- I can find ways to solve problems that I face
- I can control myself when I feel like doing something not right or dangerous
- I can figure out when it is a good time to talk to someone or take action
- I can find some to help me when I need it

## RESILIENCE/EXTERNAL SUPPORT TIME 1

- I have people around whom I trust and who I know love me, no matter what
  - I have people who set limits for me so I know when to stop before there is danger or trouble
  - I have people who show me how to do things right by the way they do things (e.g., by example).
  - I have people who want me learn to do things on my own
  - I have people who help me when I'm sick, in danger, or need to learn
-

Table 9

*Means and Standard Deviation of the Control variable, Experience of peer aggression/victimization at Time 1*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
Experience of peer aggression/victimization Time 1			1.82	1.10
Hit, kicked or pushed				
Not at all	341	60.4		
Once	88	15.6		
Twice	41	7.3		
3 or 4 times	40	7.1		
5 or more times	55	9.7		
Picked on or bullied				
Not at all	375	65.7		
Once	87	15.2		
Twice	36	6.3		
3 or 4 times	33	5.8		
5 or more times	40	7.0		

Table 10

*Means and Standard Deviation of the Predictor variable, Emotional Distress at Time 1*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
Experience of Emotional Distress Time 1			2.20	.89
Last 30 days, suffer from sadness				
Never	128	24.6		
Seldom	155	29.8		
Sometimes	145	27.8		
Often	73	14.0		
Always	20	3.8		
Last 30 days, irritable, bad mood, grouchy				
Never	144	27.9		
Seldom	164	31.7		
Sometimes	121	23.4		
Often	69	13.3		
Always	19	3.7		
Last 30 days, feel hopeless about the future				
Never	299	57.8		
Seldom	87	16.8		
Sometimes	68	13.2		
Often	41	7.9		
Always	22	4.3		

(continued)

Table 10

*Means and Standard Deviation of the Predictor variable, Emotional Distress at Time 1 (continued)*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
Last 30 days, feel like not eating				
Never	260	49.9		
Seldom	80	15.4		
Sometimes	88	16.9		
Often	60	11.5		
Always	33	6.3		
Last 30 days, did you sleep a lot more or less				
Never	179	34.7		
Seldom	98	19.0		
Sometimes	112	21.7		
Often	80	15.5		
Always	47	9.1		
Last 30 days, did you have difficulty concentrating				
Never	195	37.5		
Seldom	154	29.6		
Sometimes	89	17.1		
Often	47	9.0		
Always	35	6.7		

(continued)

Table 10

*Means and Standard Deviation of the Predictor variable, Emotional Distress at Time 1 (continued)*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
Last 30 days, how often did you feel lonely				
Never	231	44.7		
Seldom	122	23.6		
Sometimes	91	17.6		
Often	46	8.9		
Always	27	5.2		

Table 11

*Means and Standard Deviation of the Predictor variable, Resilience/external support at Time 1*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
Resilience/external Time 1			3.37	.54
Have people around whom I trust				
Strongly disagree	22	4.3		
Somewhat disagree	41	7.9		
Somewhat agree	198	38.4		
Strongly agree	255	49.4		
Have people around who set limits				
Strongly disagree	21	4.1		
Somewhat disagree	46	9.0		
Somewhat agree	175	34.3		
Strongly agree	268	52.5		
Have people around who set positive examples				
Strongly disagree	10	2.0		
Somewhat disagree	43	8.5		
Somewhat agree	224	44.5		
Strongly agree	226	44.9		

(continued)

Table 11

*Means and Standard Deviation of the Predictor variable, Resilience/external support at Time 1 (continued)*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
Have people around who want me to learn to do things on my own				
Strongly disagree	16	3.1		
Somewhat disagree	44	8.7		
Somewhat agree	197	38.8		
Strongly agree	251	49.4		
Have people who help me when I am sick, in danger, or need to learn				
Strongly disagree	12	2.3		
Somewhat disagree	23	4.4		
Somewhat agree	135	26.0		
Strongly agree	350	67.3		

Table 12

*Means and Standard Deviation of the Predictor, Moderator variable, Positive Peers at Time 1*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
Positive Peers Time 1			3.80	.72
How many of your friends get along with parents?				
None	14	2.5		
Some	40	7.3		
Half	29	5.3		
Most	201	36.5		
All	266	39.6		
How many of your friends attend religious services?				
None	63	12.1		
Some	226	43.4		
Half	82	15.7		
Most	108	20.7		
All	42	8.1		
How many of your friends plan to go to college?				
None	9	1.7		
Some	25	4.7		
Half	29	5.5		
Most	142	26.7		
All	326	61.4		

(continued)

Table 12

*Means and Standard Deviation of the Predictor, Moderator variable, Positive Peers at Time 1 (continued)*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
How many of your friends do very well in school?				
None	11	2.0		
Some	57	10.3		
Half	74	13.4		
Most	247	44.8		
All	162	29.4		
How many of your friends encourage you to do your best in school?				
None	82	15.0		
Some	76	13.9		
Half	34	6.2		
Most	110	20.1		
All	246	44.9		
How many of your friends discourage you from making bad decisions?				
None	103	19.4		
Some	47	8.8		
Half	33	6.2		
Most	96	18.0		
All	253	47.6		

(continued)

Table 12

*Means and Standard Deviation of the Predictor, Moderator variable, Positive Peers at Time 1 (continued)*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
How many of your friends are well behaved in school?				
None	22	4.0		
Some	61	11.1		
Half	59	10.7		
Most	187	33.9		
All	223	40.4		
How many of your friends think school work is important?				
None	23	4.2		
Some	60	11.0		
Half	58	10.6		
Most	171	31.3		
All	234	42.9		

Table 13

*Means and Standard Deviation of the Outcome variable, Experience of peer aggression/victimization at Time 2*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
Experience of peer aggression/victimization Time 2			2.09	1.20
Hit, kicked or pushed				
Not at all	279	49.6		
Once	87	15.5		
Twice	57	10.1		
3 or 4 times	64	11.4		
5 or more times	75	13.3		
Picked on or bullied				
Not at all	317	56.3		
Once	105	18.7		
Twice	46	8.2		
3 or 4 times	36	6.4		
5 or more times	59	10.5		

Table 14

*Means and Standard Deviation of the Outcome variable, Resilience/internal at Time 2*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
Resilience/internal Time 2			3.33	.57
I am a person people can like and love				
Strongly disagree	22	4.6		
Somewhat disagree	19	4.0		
Somewhat agree	186	38.8		
Strongly agree	253	52.7		
I am glad to do nice things for others and show my concern				
Strongly disagree	14	2.9		
Somewhat disagree	22	4.6		
Somewhat agree	192	40.0		
Strongly agree	252	52.5		
I am respectful of others and myself				
Strongly disagree	10	2.1		
Somewhat disagree	23	4.8		
Somewhat agree	209	43.4		
Strongly agree	240	49.8		

(continued)

Table 14

*Means and Standard Deviation of the Outcome variable, Resilience/internal at Time 2  
(continued)*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
I am willing to be responsible for what I do				
Strongly disagree	14	2.9		
Somewhat disagree	17	3.6		
Somewhat agree	182	38.3		
Strongly agree	262	55.2		
I am sure things will be alright				
Strongly disagree	21	4.5		
Somewhat disagree	35	7.6		
Somewhat agree	226	48.8		
Strongly agree	181	39.1		
I can talk to others about the things that frighten or bother me				
Strongly disagree	29	6.1		
Somewhat disagree	51	10.8		
Somewhat agree	207	43.8		
Strongly agree	186	39.3		

(continued)

Table 14

*Means and Standard Deviation of the Outcome variable, Resilience/internal at Time 2 (continued)*

Variable	<i>N</i>	Percent	<i>M</i>	<i>SD</i>
I can find ways to solve problems that I face				
Strongly disagree	18	3.8		
Somewhat disagree	27	5.7		
Somewhat agree	211	44.2		
Strongly agree	221	46.3		
I can control myself when I feel like doing something not right or dangerous				
Strongly disagree	16	3.4		
Somewhat disagree	31	6.6		
Somewhat agree	190	40.3		
Strongly agree	234	49.7		
I can figure out when it is a good time to talk to someone or take action				
Strongly disagree	12	2.5		
Somewhat disagree	29	6.1		
Somewhat agree	220	46.5		
Strongly agree	212	44.8		
I can find someone to help me when I need it				
Strongly disagree	17	3.5		
Somewhat disagree	27	5.6		
Somewhat agree	197	41.1		
Strongly agree	238	49.7		

Table 15

*Wilcoxon Matched Pairs, Signed Rank Test*

Variable	<i>N</i>	Time 1		Time 2		<i>Z</i>	<i>p</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Being hit, kicked or pushed		1.90	1.35	2.23	1.48	4.791	.000*
Decrease	99						
Increase	168						
Ties	223						
Total	490						
Being picked on or bullied		1.73	1.23	1.96	1.35	3.216	.001**
Decrease	97						
Increase	146						
Ties	254						
Total	497						

\*Significant at the .001 level (2-tailed).

\*\*Significant at the .01 level (2-tailed)

Table 16

*Correlation, paired sample t-test, experience of peer aggression/victimization*

Variable	Time 1		Time 2		<i>t</i>	<i>df</i>	95% CI		Sig	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>		
Experience peer aggression/Victimization	1.80	1.08	2.08	1.19	-5.08	498	-.39	-.17	.000*	.22

\*Correlation significant at the 0 .01 level (2-tailed)

Table 17

*Regression analysis: the dependent variable, experience of peer aggression/victimization Time 2 was regressed on the control variable experience of peer aggression/victimization Time 1 and predictor variable emotional distress Time 1*

Variable	<i>B</i>	<i>SE<sub>b</sub></i>	$\beta$	<i>R</i> <sup>2</sup>
Step 1				.153*
Experience of peer aggression/ Victimization Time 1	.438	.047	.393**	
Step 2				.185*
Experience of peer aggression/ Victimization Time 1	.357	.050	.321**	
Emotional Distress Time 1	.263	.060	.197**	

\*  $p < .001$

\*\*  $p < .001$

Table 18

*Moderation regression analysis: The outcome variable, experience of peer aggression/victimization Time 2 was regressed on the control variable experience of peer aggression Time 1, and predictor variables emotional distress Time 1, positive peers Time 1, and the moderator positive peers Time 1 x emotional distress Time 1*

Variable	<i>B</i>	<i>SE<sub>b</sub></i>	$\beta$	<i>R</i> <sup>2</sup>
Step 1				.152*
Experience peer aggression/ Victimization Time 1	.437	.047	.393**	
Step 2				.182*
Experience peer aggression/ Victimization Time 1	.357	.050	.321**	
Emotional distress Time 1	.266	.062	.199**	
Positive Peers Time 1	.019	.073	.011 n.s.	
Step 3				.185*
Experience peer aggression/ Victimization Time 1	.360	.050	.323**	
Emotional Distress Time 1	.254	.063	.190**	
Positive Peers Time 1	.034	.074	.020 n.s.	
Positive peers x emotional distress	-.118	.072	-.069 n.s.	

\* $p < .001$

\*\*  $p < .001$

Table 19

*Regression analysis: The outcome variable, resilience/internal resources Time 2 was regressed on resilience/external support Time 1 and experience of peer aggression/victimization Time 1*

Variable	<i>B</i>	<i>SE<sub>b</sub></i>	$\beta$	<i>R</i> <sup>2</sup>
Step 1				.08*
Resilience/external Time 1	.312	.051	.286	
Step 2				.078 n.s.
Resilience/external Time 1	.310	.052	.284*	
Experience peer aggression/ victimization Time 1	-.010	.026	-.018 n.s.	

\* $p < .001$

## APPENDIX B: FIGURES

Figure 1

*Cicchetti's Developmental Framework*

0-12 months	Attachment
12-30 months	Autonomy and self development
30 months – 7 years	Peer relations, empathy

Figure 2

*Resilience Framework, Luthar 2006*

Resilience as a personal trait	This approach identifies personality traits that enhance the ability of an individual to overcome adversity (Block & Block, 1980).
Resilience as positive outcomes	This approach focuses on positive developmental outcomes among individuals at high risk, even during continued exposure to threat and/or trauma (Masten, Best, & Garmezy, 1990; Rutter, 1987, 1990).
Resilience as an adaptive process	This approach describes a dynamic process of positive adaptation despite experience of adversity or trauma (Masten, 1994; Luthar and Cicchetti, 2000; Luthar et al. 2000).

Figure 3

*Protective Factors, Garmezy, 1985*

Dispositional attributes of the child	A child's temperament offers protection and vulnerability; an irritable child could stress a parent whereas a child with an easy temperament will not.
Family cohesion and warmth	Ego-resilient children have parents who are competent, integrated, loving, patient, and have shared values. A positive relationship with one's parent is protective
Availability and use of external support systems by parents and children	External support systems act as protective factors for the developing child. The relationship between life stressors and illness is moderated by social support from intra-familial and extra-familial sources

Figure 4

*Protective processes that foster resilience in children Rutter, 1987*

Reducing negative outcomes by altering the risk or child's exposure to the risk.	If a child is affected by a violent family member, leaving the environment is not an option but an additional resource such as a mentor can offer support to the child and lower his/her exposure to risk
Reducing a negative chain reaction following risk exposure	If a child drops out of school, without an intervention the child will find it difficult to recover from the negative event. Working with dropouts by offering a flexible schedule and counseling will prevent the child from further going into a downward spiral
Establishing and maintaining self-esteem and self-efficacy	These developmental processes are learned through positive interactions with peers and adults, and in successful accomplishment of a task in any field. Self-esteem is learned through every day positive interactions. Self-efficacy is learned when a student feels they have some control over certain things in their life and are not helpless
Opening up opportunities	Persistence is fostered when a child is offered opportunities to acquire new skills and invest in prosocial activities. Persistence opens up new opportunities permitting the child to grow and flourish.

## APPENDIX C: ORIGINAL SURVEY

## ORIGINAL SURVEY

## Activities/ Grades

1. What kind of grades do you get?
  - a. Mostly A's
  - b. Mostly B's
  - c. Mostly C's
  - d. Mostly D's
  - e. Mostly F's
  - f. Does not apply
2. What activities are you involved in? (Mark all that apply)
  - a. I'm not involved in activities
  - b. Sports
  - c. Religious group
  - d. Music/Dance
  - e. Scouts, Campfire, etc.
  - f. 4-H or Junior Achievement
  - g. Other club or group (Please list on your answer sheet)
  - h. Other activity(ies) (Please list on your answer sheet)

## Safety

3. How often do you feel unsafe when you are at school?
  - a. Never
  - b. Rarely
  - c. Some days
  - d. Most days
  - e. Every day
4. How often do you feel unsafe going to or from school?
  - a. Never
  - b. Rarely
  - c. Some days
  - d. Most days
  - e. Every day
5. How often do you feel unsafe when you are NOT at school?
  - a. Never
  - b. Rarely
  - c. Some days
  - d. Most days
  - e. Every day
6. How often do you feel unsafe when you are out in your community?
  - a. Never
  - b. Rarely
  - c. Some days
  - d. Most days

e. Every day

7. During the PAST 12 MONTHS, how often have YOU been hit, kicked, or pushed by a student on school property?

a. Not at all

b. Once

c. Twice

d. 3 or 4 times

e. 5 or more times

8. During the PAST 12 MONTHS, how often have YOU been picked on or bullied by a student on school property?

a. Not at all

b. Once

c. Twice

d. 3 or 4 times

e. 5 or more times

9. During the PAST 12 MONTHS, how often have you seen other students being hit, kicked, or pushed by a student on school property?

a. Not at all

b. Once

c. Twice

d. 3 or 4 times

e. 5 or more times

10. During the PAST 12 MONTHS, how often have you seen other students being picked on or bullied by a student on school property?

a. Not at all

b. Once

c. Twice

d. 3 or 4 times

e. 5 or more times

11. During the PAST 12 MONTHS, did your boyfriend or girlfriend ever hit, slap or physically hurt you on purpose?

a. Not at all

b. Once

c. Twice

d. 3 or 4 times

e. 5 or more times

f. Does not apply

School Attendance

12. During the past 30 days, on how many days did you NOT go to school because you felt you would be unsafe at school or on your way to or from school?

a. 0 days

b. 1 day

c. 2 or 3 days

- d. 4 or 5 days
- e. 6 or more days

*Statements 13 -22 are reasons some students have for missing classes other than illness. Please indicate if these reasons apply to you.*

13. I miss classes because I think classes are boring, irrelevant, and a waste of time.

- a. Yes, this is a reason
- b. No, this is not a reason

14. I miss classes because I can't keep up with schoolwork or I'm failing.

- a. Yes, this is a reason
- b. No, this is not a reason

15. I miss classes because I don't have positive relationships with teachers.

- a. Yes, this is a reason
- b. No, this is not a reason

16. I miss classes because I don't have positive relationships with other students.

- a. Yes, this is a reason
- b. No, this is not a reason

17. I miss classes because I am suspended too often.

- a. Yes, this is a reason
- b. No, this is not a reason

18. I miss classes because I don't feel safe at school.

- a. Yes, this is a reason
- b. No, this is not a reason

19. I miss classes because I have family obligations.

- a. Yes, this is a reason
- b. No, this is not a reason

20. I miss classes because I have to take care of family members.

- a. Yes, this is a reason
- b. No, this is not a reason

21. I miss classes because I have to work during school hours.

- a. Yes, this is a reason
- b. No, this is not a reason

22. I miss classes because I don't have transportation.

- a. Yes, this is a reason
- b. No, this is not a reason

23. I only miss classes when I have an approved reason.

- a. Yes (Please list your approved reason(s) on your answer sheet)
- b. No

Perceived Risk

24. How much do you think people risk harming themselves (physically or in other ways) if they smoke cigarettes occasionally?

- a. No risk
- b. Slight risk

c. Moderate risk

d. Great risk

25. How much do you think people risk harming themselves (physically or in other ways) if they smoke one or more packs of cigarettes per day?

a. No risk

b. Slight risk

c. Moderate risk

d. Great risk

26. How much do you think people risk harming themselves (physically or in other ways) if they try marijuana once or twice?

a. No risk

b. Slight risk

c. Moderate risk

d. Great risk

27. How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana regularly?

a. No risk

b. Slight risk

c. Moderate risk

d. Great risk

28. How much do you think people risk harming themselves (physically or in other ways) if they take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day?

a. No risk

b. Slight risk

c. Moderate risk

d. Great risk

29. If your friends were doing something that would get them in trouble, would you try to stop them?

a. Yes

b. No

30. If one of your friends was smoking some marijuana and offered you some, would you smoke it?

a. Yes

b. No

How many of your friends...

31. How many of your friends get along with their parents?

a. None

b. Some

c. Half

d. Most

e. All

32. How many of your friends attend religious services regularly?

- a. None
- b. Some
- c. Half
- d. Most
- e. All

33. How many of your friends plan to go to college?

- a. None
- b. Some
- c. Half
- d. Most
- e. All

34. How many of your friends do very well in school?

- a. None
- b. Some
- c. Half
- d. Most
- e. All

35. How many of your friends skip classes?

- a. None
- b. Some
- c. Half
- d. Most
- e. All

36. How many of your friends encourage you to do your best in school?

- a. None
- b. Some
- c. Half
- d. Most
- e. All

37. How many of your friends discourage you from making bad decisions?

- a. None
- b. Some
- c. Half
- d. Most
- e. All

38. How many of your friends misbehave in school?

- a. None
- b. Some
- c. Half
- d. Most
- e. All

39. How many of your friends are well behaved in school?

- a. None

b. Some

c. Half

d. Most

c. All

40. How many of your friends think school work is important?

a. None

b. Some

c. Half

d. Most

e. All

Commitment to not use drugs

*Please indicate how true statements 41-49 are for you.*

41. I will never smoke cigarettes.

a. False

b. Somewhat false

c. Somewhat true

d. True

42. Smokers look stupid.

a. False

b. Somewhat false

c. Somewhat true

d. True

43. People my age who smoke are show-offs.

a. False

b. Somewhat false

c. Somewhat true

d. True

44. People my age who smoke cigarettes have more friends than people who don't.

a. False

b. Somewhat false

c. Somewhat true

d. True

45. Smoking makes a person look grown up.

a. False

b. Somewhat false

c. Somewhat true

d. True

46. Girls like boys who smoke.

a. False

b. Somewhat false

c. Somewhat true

d. True

47. I will never drink beer, wine, or hard liquor.

- a. False
  - b. Somewhat false
  - c. Somewhat true
  - d. True
48. People who smoke marijuana have more fun than people who don't.
- a. False
  - b. Somewhat false
  - c. Somewhat true
  - d. True

49. If a young person smokes marijuana, he or she will be popular.
- a. False
  - b. Somewhat false
  - c. Somewhat true
  - d. True

#### School Climate

50. If some students are acting up in class, the teacher will do something about it.
- a. Never
  - b. Hardly ever
  - c. Sometimes
  - d. Most of the time
  - e. Always
51. When teachers make a rule, they mean it.
- a. Never
  - b. Hardly ever
  - c. Sometimes
  - d. Most of the time
  - e. Always
52. Students are given clear instructions about how to do their work in classes.
- a. Never
  - b. Hardly ever
  - c. Sometimes
  - d. Most of the time
  - e. Always
53. Students understand what will happen to them if they break a rule.
- a. Never
  - b. Hardly ever
  - c. Sometimes
  - d. Most of the time
  - e. Always
54. Teachers make a point of sticking to the rules in classes.
- a. Never
  - b. Hardly ever
  - c. Sometimes

- d. Most of the time
  - e. Always
55. In our school, students are given the chance to help make decisions.
- a. Never
  - b. Hardly ever
  - c. Sometimes
  - d. Most of the time
  - e. Always
56. Students in this school have a say in how things work.
- a. Never
  - b. Hardly ever
  - c. Sometimes
  - d. Most of the time
  - e. Always
57. Students get to help decide some of the rules in this school.
- a. Never
  - b. Hardly ever
  - c. Sometimes
  - d. Most of the time
  - e. Always
58. Teachers ask students what they want to learn about.
- a. Never
  - b. Hardly ever
  - c. Sometimes
  - d. Most of the time
  - e. Always
59. Students help decide how class time is spent.
- a. Never
  - b. Hardly ever
  - c. Sometimes
  - d. Most of the time
  - e. Always
60. I feel safe in my school.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
61. The students at my school respect each other.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
62. The students at my school obey the rules.

- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
63. The students at school help each other.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
64. Bullying is a problem at my school.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
65. Adults at school care about the students.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
66. Students at my school do things to help the school be a better place.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
67. Fighting is a problem at the school.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
68. I feel close to people at my school.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
69. I feel like I am part of my school.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree
  - d. Strongly Agree
70. I am happy to be at my school.
- a. Strongly Disagree
  - b. Somewhat Disagree
  - c. Somewhat Agree

d. Strongly Agree

71. Teachers at my school treat students fairly.

a. Strongly Disagree

b. Somewhat Disagree

c. Somewhat Agree

d. Strongly Agree

Perceived Problems

72. How much of a problem is student tobacco use in your school?

a. Not a problem

b. Mild problem

c. Moderate problem

d. Severe problem

73. How much of a problem is student alcohol use in your school?

a. Not a problem

b. Mild problem

c. Moderate problem

d. Severe problem

74. How much of a problem is student drug use in your school?

a. Not a problem

b. Mild problem

c. Moderate problem

d. Severe problem

75. How much of a problem is harassment or bullying among students in your school?

a. Not a problem

b. Mild problem

c. Moderate problem

d. Severe problem

76. How much of a problem is physical fighting between students in your school?

a. Not a problem

b. Mild problem

c. Moderate problem

d. Severe problem

77. How much of a problem is disruptive student behavior in your school?

a. Not a problem

b. Mild problem

c. Moderate problem

d. Severe problem

78. How much of a problem is racial/ethnic conflict among students in your school?

a. Not a problem

b. Mild problem

c. Moderate problem

d. Severe problem

79. How much of a problem is student depression or other mental health problems in your school?

- a. Not a problem
- b. Mild problem
- c. Moderate problem
- d. Severe problem

80. How much of a problem is verbal or physical abuse of school staff by students in your school?

- a. Not a problem
- b. Mild problem
- c. Moderate problem
- d. Severe problem

81. How much of a problem is cutting classes or being truant in your school?

- a. Not a problem
- b. Mild problem
- c. Moderate problem
- d. Severe problem

82. How much of a problem is gang-related activity in your school?

- a. Not a problem
- b. Mild problem
- c. Moderate problem
- d. Severe problem

83. How much of a problem is weapons possession in your school?

- a. Not a problem
- b. Mild problem
- c. Moderate problem
- d. Severe problem

84. How much of a problem is vandalism (including graffiti) in your school?

- a. Not a problem
- b. Mild problem
- c. Moderate problem
- d. Severe problem

85. How much of a problem is theft in your school?

- a. Not a problem
- b. Mild problem
- c. Moderate problem
- d. Severe problem

Resiliency

86. I have people around me whom I trust and who I know love me, no matter what.

- a. Strongly Disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

87. I have people who set limits for me so I know when to stop before there is danger or trouble.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
88. I have people who show me how to do things right by the way they do things (e.g., by example).
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
89. I have people who want me to learn to do things on my own.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
90. I have people who help me when I am sick, in danger, or need to learn.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
  - Always
91. I am a person people can like and love.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
92. I am glad to do nice things for others and show my concern .
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
93. I am respectful of others and myself.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
94. I am willing to be responsible for what I do.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree

95. I am sure things will be alright.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
96. I can talk to others about the things that frighten or bother me.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
97. I can find ways to solve problems that I face.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
98. I can control myself when I feel like doing something not right or dangerous.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
99. I can figure out when it is a good time to talk to someone or take action.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
100. I can find someone to help me when I need it.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
- Mental Health
101. In the last 30 days, how often were you sad?
- Never
  - Seldom
  - Sometimes
  - Often
  - Always
102. In the last 30 days, how often were you grouchy or irritable, or in a bad mood, so that even little things would make you mad?
- Never
  - Seldom
  - Sometimes
  - Often

e. Always

103. In the last 30 days, how often did you feel hopeless about the future?

a. Never

b. Seldom

c. Sometimes

d. Often

e. Always

104. In the last 30 days, how often did you feel like not eating or eating more than usual?

a. Never

b. Seldom

c. Sometimes

d. Often

e. Always

105. In the last 30 days, how often did you sleep a lot more or a lot less than usual?

a. Never

b. Seldom

c. Sometimes

d. Often

e. Always

106. In the last 30 days, how often did you have difficulty concentrating on your school work?

a. Never

b. Seldom

c. Sometimes

d. Often

e. Always

107. In the last 30 days, how often did you feel very happy?

a. Never

b. Seldom

c. Sometimes

d. Often

e. Always

108. In the last 30 days, how often did you feel lonely?

a. Never

b. Seldom

c. Sometimes

d. Often

e. Always

How often has your family...

109. How often has your family discussed with you the effects of smoking cigarettes?

a. Never

b. Seldom

c. Sometimes

- d. Often
- e. Always

110. How often has your family discussed with you the effects of getting drunk?

- a. Never
- b. Seldom
- c. Sometimes
- d. Often
- e. Always

111. How often has your family discussed with you the effects of using inhalants like glue or gas?

- a. Never
- b. Seldom
- c. Sometimes
- d. Often
- e. Always

112. How often has your family discussed with you the effects of using marijuana?

- a. Never
- b. Seldom
- c. Sometimes
- d. Often
- e. Always

113. How often has your family discussed with you the effects of using other drugs?

- a. Never
- b. Seldom
- c. Sometimes
- d. Often
- e. Always

114. During a typical week, how many times do any or most of your family members living in your home eat dinner together?

- a. None
- b. Once or twice per week
- c. Three or four times per week
- d. Five or more times per week

115. How far do you plan to go in school?

- a. I do not plan to finish high school
- b. High School diploma
- c. Training program (like beauty school or electrician certificate)
- d. AA or Associate Degree (2-year degree like Pima Community College)
- e. BA or Bachelor's Degree (4-year degree like the University of Arizona)
- f. Graduate or Professional Degree (MA, Ph.D., JD, MD to become a doctor, lawyer, or scientist)

116. Have you ever participated in any of the following drug prevention programs?  
(Mark all that apply)

- a. DARE
- b. Red Ribbon Campaign Activities
- c. High School Wellness Class
- d. Other school education program
- e. Other drug/alcohol prevention program or activity
- f. None of the above

117. Please write any comments about the survey or the Safe Schools/Healthy Students Vail Cares Project in the space provided on your answer sheet.

This is the end of the survey!

The Safe Schools/Healthy Students Vail Cares Project

Thanks you

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