AGGRESSIVE, ASSERTIVE AND NON-CONFRONTATIONAL FORMS OF DEFENDING: DIFFERENTIATION OF FORMS AND CONSEQUENCES OF DEFENDING

by

Diana J. Meter

_____

A Dissertation Submitted to the Faculty of

NORTON SCHOOL OF FAMILY AND CONSUMER SCIENCES

In Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

In the Graduate College

THE UNIVERSITY OF ARIZONA

2015

THE UNIVERSITY OF ARIZONA

GRADUATE COLLEGE

As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Diana J. Meter, titled Aggressive, Assertive and Non-confrontational Forms of Defending: Differentiation of Forms and Consequences of Defending and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

_____ Date: (Enter Date)

Noel Card

_____ Date: 10/29/2015

Stephen Russell

_____ Date: 10/29/2015

Sheri Bauman

_____ Date: 10/29/2015

Michael Sulkowski

_____ Date: 10/29/2015

Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

_____ Date: 10/29/2015

Dissertation Director: Noel Card

_____ Date: 10/29/2015

Dissertation Director: Stephen Russell

STATEMENT BY AUTHOR

This dissertation has been submitted in partial fulfillment of the requirements for an advanced degree at the University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Brief quotations from this dissertation are allowable without special permission, provided that an accurate acknowledgement of the source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the head of the major department or the Dean of the Graduate College when in his or her judgment the proposed use of the material is in the interests of scholarship. In all other instances, however, permission must be obtained from the author.

SIGNED: Diana J. Meter

ACKNOWLEDGEMENTS

This dissertation was made possible by the support and guidance of my committee members. I would first like to thank Dr. Noel Card for teaching me the skills necessary to succeed as a researcher, and for always encouraging me to challenge myself. I would like to thank Dr. Stephen Russell for allowing me to join his lab and for providing thoughtful feedback and advice on this project, but also on important career decisions; I value his guidance. I also wish to acknowledge and thank Dr. Sheri Bauman for providing me a new home in the College of Education and for modeling ambition, generosity and kindness in mentorship and collaboration. Thank you also to Dr. Michael Sulkowski for asking tough questions while helping me to feel confident.

I also wish to extend a special thanks to my University of Arizona professors and peers for their enthusiasm, creativity and support. I especially would like to acknowledge Alysha Ramirez and Katie Paschall, who have provided endless love, encouragement, and statistics advice throughout graduate school.

I thank my parents, Mario and Esther Meter, and my brother Jason for believing in me from preschool until now, for giving me the opportunities to learn and grow into the person I am today, and for being proud of me even when I have a bad day.

Last, I thank Rip Nolan for being the most understanding partner. Thank you for understanding when I have to stay late at night at school. Thank you for understanding when I cannot hang out on the weekend. Thank you for understanding when I am too exhausted to help you clean the house. Thank you for understanding how important and difficult, but wonderful being a graduate student has been for me, and for helping me to be my best self through it all.

Table of Contents

LIST OF TABLES

FIGURES

APPENDICES

ABSTRACT

The factor structure of the newly created Enacted Defending Scale (EDS) was investigated to better understand what strategies of defending children and adolescents enact to defend their peers from peer victimization. This investigation resulted in a 5-factor model, representative of assertive, overt aggressive, relationally aggressive, and two non-confrontational strategies of defending, telling an adult and comforting the victim. Aggressive forms of defending could be differentiated; whether the defending strategy was enacted in response to overt or relational victimization could not be differentiated. In general, aggressive strategies were associated with dependent variables indicative of poorer adjustment, while assertive and non-confrontational strategies were either related to positive dependent variables or unrelated to the psychosocial adjustment outcomes. Only one of the associations varied by age. The results suggest, first, that attention must be given to multiple forms of defending and that not all defending of peer victimization may have a prosocial effect, and second, that there is a need to carefully consider the potential consequences of defending for defenders themselves.

INTRODUCTION

Peer victimization is the receipt of aggression from peers, which may take the form of physically violent acts, verbal assaults, and relational aggression, meant to harm peers' reputations or social relationships (Card, Stucky, Sawalani, & Little, 2008; Crick & Grotpeter, 1996). There are clear negative outcomes associated with experiencing peer victimization, which is distressing to victims and witnesses to victimization incidents (Rivers, Poteat, Noret, & Ashurst, 2009; Werth, Nickerson, Aloe, & Swearer, 2015) who are typically present (Craig, Pepler, & Atlas, 2000). Some of these witnesses, referred to as defenders, actively help their victimized peers. It is important to understand the behavior of defenders in child and adolescent peers groups because of their potential to decrease their peers' victimization. Although defenders are beginning to be recognized in research literature, there is a lack of research on what strategies defenders use to help their victimized peers and how enactment of these strategies impacts defenders themselves. Further, the defending literature generally lacks theoretical grounding to frame research hypotheses. In the introduction to this dissertation, first, research on defending among youth is reviewed, followed by a description of scales currently used to measure defending among youth. Next, an introduction to interdependence theory, in which research on defending is embedded, is provided. Last, the forms of defending and developmental changes in victimization and defending are discussed.

LITERATURE REVIEW

Peer Victimization is a Group Problem

Peer victimization occurs when youth are targeted by peers' aggressive acts (Perry, Kusel, & Perry, 1988). It is a problem among children and adolescents that receives worldwide attention due to its impact on children and adolescents' social, psychological, and physical

wellbeing both directly (Austin & Joseph, 1996; Boulton & Underwood, 1992; Card, Isaacs, & Hodges, 2007; Crick & Grotpeter, 1996; Prinstein, Boergers, & Vernberg, 2001) and indirectly (Boivin, Hymel, & Bukowski, 1995). Individuals who experience peer victimization are at risk for developing anxiety, depression, feelings of loneliness, and externalizing problems (Hawker & Boulton, 2000; Hodges & Perry, 1999; Reijntjes, Kamphuis, Prinziea, & Telch, 2010; Schwartz, McFayden-Ketchum, Dodge, Pettit, & Bates, 1998). They may develop somatic symptoms, skip school to avoid victimization, and may struggle academically (Card et al., 2007; Kochenderfer & Ladd, 1996; Nakamoto, & Schwartz, 2010; Schwartz, Gorman, Nakamoto, & Toblin, 2005). Those who are recognized as victims or aggressors have been the subject of a substantial amount of research because of the negative outcomes associated with involvement in peer victimization either as a victim or a perpetrator of aggression toward others. Studies have been conducted to learn more about when, where, in what forms, and for what reasons aggression is perpetrated against peers. One important finding from research on peer victimization is that it rarely occurs when the victim and aggressor are alone. In an observational study, peers were present during over 85% of instances of peer victimization (Craig et al., 2000, O'Connell, Pepler, & Craig, 1999). Because peer victimization does not tend to occur privately between one aggressor and one victim, and instead typically occurs in the presence of peers, it can best be understood as a group phenomenon. Salmivalli (2001) explained that in addition to understanding which characteristics make victims the targets of others' victimization and make others aggressive toward their peers, it is also important to understand, "What is there in this group that contributes to or encourages the victimization of one group member?" (p. 401). During adolescence, expectations to conform to the peer group are strong and individuals may victimize others as a part of peer conformity (Bukowski & Sippola, 2001). Victimization of peers has been defined as

the "result of the potential conflict between particular characteristics of individuals and a group's need to achieve cohesion, homogeneity" (Bukowski & Sippola, 2001, p. 361), but also status and power (Salmivalli, 2010). Aggressors typically do not aggress against the entire peer group. Instead, a small group individuals fill the role of victims in the peer group (Perry, Williard, & Perry, 1990). By only victimizing certain individuals who either lack the social skills or the power to defend themselves, aggressors can demonstrate and maintain their status and power in the peer group and likely will not be challenged (Salmivalli, 2010).

Bystanding peers are aware of the victimization; some support and encourage it, and although some peers feel unfavorably about victimization, they fail to intervene or help victims (Salmivalli, 2001). Even those who do not enforce the rules of tolerated or accepted social behavior in regard to peer victimization promote the norms through their seeming indifference (Juvonen & Galván, 2008). It is important to note that most youth do not individually condone the victimization of their peers. Most youth report being against peer victimization (Boulton, Trueman, & Flemington, 2002; Gini, Albiero, Benelli, & Altoè, 2008; Rigby & Slee, 1991) and have supportive attitudes toward their victimized peers (Boulton et al., 2002; Rigby & Johnson, 2006; Rigby & Slee, 1991). Although the social norms maintained by the aggressor and bystanders may not be associated with the actual beliefs most adolescents hold, they can be perceived by the peer group to be salient beliefs because of the lack of challenge to them and because of the status of the peers maintaining them. Therefore aggression, and lack of challenging the aggressor's victimization of others, results in definitions of socially acceptable and unacceptable behavior that may not actually represent most individuals' beliefs, but nonetheless make up the adolescent peer group's reality (Juvonen & Galván, 2008).

Participant Roles

There are a variety of roles children and adolescents play in regard to being witness to peer victimization. Some peers reinforce or assist aggressors in their victimization of a peer, but there are additional peers who try to stay out of the situation and those who actively help and stand up for peer victims (Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). There is growing research on the topic of what Salmivalli and colleagues first referred to as participant roles. This research was conducted to better understand what other peer group members do when an aggressor is harassing a victim. Research on participant roles has included different samples across different ages, countries, and forms of aggression. These studies have consistently identified roles that youth tend to fulfill in regard to peer victimization. These roles are defined by the provision of support for aggressors, attempts to stay uninvolved in instances of peer victimization, or demonstration of prosocial, help-giving behavior on behalf of peer victims (Casper, 2013; Fitzpatrick & Bussey, 2011; Goossens, Olthof, & Dekker, 2006; Sandstrom, Makover, & Bartini, 2013; Sutton & Smith, 1999). Aggressors and their supporters, referred to in the participant role literature as bullies, assistants, and reinforcers, engage in peer victimization or show their support for the aggressor in instances of peer victimization. Aggressors are the youth who begin the harassment of a peer, try to get other peers to join in, and may even put down those who refuse to join in the victimization of their peer. Assistants partake in the harassment that an aggressor has started. Reinforcers may not be as actively involved in their peer's victimization, but they reinforce the aggression by watching, laughing, or even verbally showing their support for the aggressor (and assistants). Outsiders tend to either be unaware that peer victimization is occurring, or they attempt to stay uninvolved by pretending not to notice or walking away. They do not take sides with the aggressors *or* victims. The last group is the defenders (Salmivalli et al., 1996). In contrast to the outsiders, the passive bystanders who may

choose to ignore or avoid involvement with peer victimization, defenders take an active role in peer victimization by demonstrating anti-victimization behavior including trying to support victims by taking their sides (Oh & Hazler, 2009). Defending behavior includes comforting the victim, getting the help of an adult or others, assertively standing up to the aggressor, retaliating against the aggressor through aggressive means, being friends with the victim and staying with the victim as a protective measure, and other behavior enacted with the intention of supporting victims (Salmivalli et al., 1996).

Importance of Defenders in the Peer Group

Defenders have an important part in the promotion of the wellbeing of victims and the peer community. Victims alone are often unable to successfully defend themselves. Indeed, the definition of bullying, a subtype of peer victimization, represents a relationship in which the victim is unable to defend herself. This is due to the imbalance of power between the victim and the aggressor (Olweus, 1991).Victimization is associated with lower levels of some of the very characteristics that may be needed to effectively defend oneself: socially skilled behaviors including assertiveness and effective conflict management skills (Card & Hodges, 2008). Aggressors tend to choose easy targets as victims, including those who may be rejected from the peer group (Perry et al., 1988). Aggressors may choose targets who lack friends who could potentially stand up for the victim. Research has shown that having friends who could serve as protectors mitigates the risk of victimization due to internalizing problems, but the risk is exacerbated when the friends are unlikely to be able to provide protection (Hodges, Boivin, Vitaro, & Bukowski, 1999). Smith (2014) described some additional examples that demonstrate differences in power between victims and aggressors including physical weakness, less verbal fluency, less confidence or self-esteem, and being outnumbered.

Despite this common power imbalance between victims and aggressors, many victims do try to improve their situation by reactively fighting back, asserting themselves, or getting help from others. Attention has been paid to the different forms of behavior victims may engage in in response to their victimization. Overall, most victimized youth tend to respond to their victimization in passive ways (Schwartz, Dodge, & Coie, 1993; Waasdorp & Bradshaw, 2011). Younger adolescent participants were more likely to report using non-confrontational and assertive strategies such as seeking support from an adult, walking away, and telling the bully to stop (Waasdorp & Bradshaw, 2011). While some victims try to stop their own peer victimization from continuing, they do not always view their actions as successful. The strategies victims reported that they employed the most included pretending the victimization was not bothering them, telling the aggressor to stop, telling a friend, and walking way. However, students found these same strategies to be least effective, in that they were most related to the perception of having made things worse for the victim (Sulkowski, Bauman, Dinner, Nixon, & Davis, 2014). Students also reported effective prosocial strategies, such as telling an adult at school, and using humor (Sulkowski et al., 2014), although, as discussed previously, young people who are victimized may not be the most socially skilled of the peer group and may not all be able to use humor to combat their victimization. In regard to aggressive responses to one's own peer victimization, among a sample of young elementary school boys, fighting back against aggressors was associated with a continuation of peer victimization (Kochenderfer & Ladd, 1997). Another study found younger children in their sample to be more likely to report fighting back than older children, perhaps in line with developmental trends of younger children enacting more overt aggression (Lindstrom Johnson, Waasdorp, Debnam, & Bradshaw, 2013). Although aggressive responses to peer victimization can lead to a cycle of continued aggression

(Kochenderfer & Ladd, 1997), some youth perceive these approaches to be effective (Sulkowski et al., 2014).

Youth who were most victimized were found to try to help themselves by fighting back as well as telling adults (Lindstrom Johnson et al., 2013). Among middle school students, those who experienced more indirect forms of victimization (i.e. having rumors spread about them, being ignored, being on the receiving end of sexual comments or gestures, having things stolen from them, cyberbullying) were more likely to use multiple strategies to try to stop their victimization, but those in the group who tended to use these multiple strategies also reported more internalizing and externalizing symptoms (Waasdorp & Bradshaw, 2011). The use of passive and assertive strategies by victims themselves may not be a viable way for victims to defend themselves.

In addition to not defending themselves because they are unable to or are unsuccessful when they try, it is also possible that victims do not defend themselves because they blame themselves for their plight. When presented with hypothetical situations in which participants were put in the role of victim, those participants who were recognized as actual victims were more likely to attribute the hypothetical victimization to their own character in comparison to non-victims (Graham & Juvonen, 1998). Although some children believe peer victimization occurs due to factors outside of their character or person, such as jealousy and having mutual antipathies, many attribute victimization to their being different, uncool, or to their own personal behavior (Visconti, Kochenderfer-Ladd, & Clifford, 2013). If victims see themselves as responsible for or deserving of their victimization, they may not defend themselves from the victimization they receive.

For these reasons, peer defenders may have a better chance than victims of effectively stopping peer victimization by intervening or getting help on behalf of victims. Young people tend to believe that victims of peer victimization should seek help in most peer victimization situations (Kanetsuna, Smith, & Morita, 2006). However, defending does not occur because a victim requests help. In fact, victims were observed to request help prior to intervention from a peer only 10% of the time (Hawkins, Pepler, & Craig, 2001). It then seems that although defending positively impacts victims, defenders help their peers in this way of their own accord.

Characteristics of Defenders

Because of their observed success in decreasing peer victimization, a number of factors have been investigated in recent research to assess what characteristics set defenders apart from their peers in other participant roles. While some of these factors cannot be changed, the implication of many of these studies is that it may be possible to promote some of these characteristics to increase defending and decrease peer victimization among peer groups. Defenders tend to be girls more often than boys. Studies using self-reports, teacher reports, observation, descriptions of oneself in a hypothetical peer victimization situation all identify girls as defenders more than boys (Caravita, Gini, & Pozzoli, 2012; Espelage, Green, Polanin, 2011; Evans & Smokowksi, 2015; Gini, 2006; Gini et al., 2008a; Gini, Albiero, Benelli, & Altoè, 2007; Gini, Pozzoli, Borghi, & Franzoni, 2008; Goossens et al., 2006; Menesini, Codecasa, Benelli, & Cowie, 2003; O'Connell et al., 1999; Pöyhönen, Juvonen, & Salmivalli, 2010; Pozzoli & Gini, 2010; Pozzoli, Gini, & Vieno, 2012; Salmivalli et al., 1996; Salmivalli & Voeten, 2004), although there are exceptions (Craig & Pepler, 1998; Menesini, Eslea, Smith, Genta, Giannetti, Fonzi, & Costabile, 1997).

There is also more defending among younger youth (Menesini et al., 1997; Pöyhönen et al., 2010; Pozzoli, Ang, & Gini, 2012; Salmivalli & Voeten, 2004). Among the English youth in their sample, Menesini and colleagues' (1997) found higher mean reporting of other children trying to stop bullying among primary school students than among middle school students. The mean level of reported frequency of other children trying to stop bullying was higher among their Italian primary school sample in comparison to the Italian middle school sample, although this difference was not statistically significant. Mean differences in reported defending have been found when comparing 4th and 8th graders, with the younger youth again reporting more defending than the older youth (Pöyhönen et al., 2010). Pozzoli and colleagues (2012) found a negative association between age and defending among their sample ranging from 4th to 8th graders. Among another adolescent sample, less defending was found among the 5th graders in comparison to 4th graders, and among the 6th graders in comparison to 5th graders (Salimivalli & Voeten, 2004). Evans and Smokowski (2015) compared adolescents and late adolescents in their sample and found 11-year-olds' probability of frequent defending to be over 24%, while this probability was only about 8.5% among 18-year-olds. In all of these studies, prosocial defending was more prevalent among younger youth in the sample in comparison to older youth in the sample.

Defenders tend to have pro-victim attitudes (Salmivalli & Voeten, 2004), be empathic (Barchia & Bussey, 2011; Gini et al., 2007; Nickerson, Mele, & Princiotta, 2008), have positive expectations about the outcomes that will result from defending (Pöyhönen, Juvonen, & Salmivalli, 2012) and have self-efficacy to defend (Pöyhönen, Juvonen, & Salmivalli, 2010). Their empathy for victimized peers and self-efficacy for defending and make change for victims likely motivates youth with these characteristics to defend. Defenders tend to report that they

would feel guilty and ashamed if they were to fail to intervene when a peer is experiencing victimization (Pronk, Olthof, & Goossens, 2014). Defenders perceive helping victimized peers as their personal responsibility. Previous research has shown that children's tendency to defend victimized peers may be dependent on their individual traits, but also on the peer context. Youth who were empathic, prosocial and tended not to have callous-unemotional traits were more likely to intervene; however, a peer context of defending, represented by a higher class mean for defender nominations received among the group, also predicted defending (Barhight, Hubbard, Grassetti, & Morrow, 2015).

Indeed, other studies have found social factors or contextual factors to be associated with defending as well. Normative pressure to defend is associated with defending (Pozzoli et al., 2012) as is peer status (Caravita, Di Blasio, & Salmivalli, 2010; Pöyhönen et al., 2010; Sainio, Veenstra, Huitsing, & Salmivalli, 2010). Furthermore, defenders' relationship with the victim (Bellmore, Ma, You, & Hughes, 2012; Forsberg, Thornberg, & Samuelsson, 2014; Huitsing, Snijders, Van Duijn, & Veenstra, 2014) has been shown to impact whether youth report that they would defend. Specifically, youth who have a relationship with the victim in hypothetical peer victimization situations reported that they would defend more so than when the victim was an acquaintance (Pronk, Goossens, Olthof, De Mey, & Willemen, 2013, Tisak & Tisak, 1996). Although in general these findings have been fairly consistent across studies, there is some variability between studies. This may be in part due to the differing definitions of defending presented to participants and used across research on this topic.

Scales Used to Measure Defending

Across studies of defending, the behavior of supporting victimized peers has been defined in multiple ways. Different scales to measure defending have included measuring a

variety of behaviors from non-confrontational to assertive actions to aggressive retaliation to understand what differentiates youth who defend from their peers who do not, and under what circumstances they are likely to defend. Salmivalli and colleagues (1996) included multiple positive and arguably antisocial components in their original defender scale such as comforting the victim, getting the help of an adult, acting assertively toward other bystanders, discouraging their support of the aggressor, or retaliating against the aggressor. The Participant Role Questionnaire (PRQ) (Salmivalli et al., 1996) was later revised (Salmivalli, Lappalainen, & Lagerspetz, 1998; Salmivalli & Voeten, 2004) and included only prosocial defending such as comforting the victim, encouraging the victim to tell a teacher, telling others to stop or trying to make others stop bullying. Sutton and Smith's (1999) revised version of the PRQ similarly included positive defending behavior. Goossens and colleagues (2006) describe the participant role scale they used to be similar to these revised scales as well.

In Fitzpatrick and Bussey's (2011) Social Intervening Scale, defending was more vaguely operationalized. Participants were asked to report how often they tried to "help a kid" who experienced a number of specific social victimization situations, such as having gossip or rumors spread about them (Fitzpatrick & Bussey, 2011). Another scale used by Casper (2013) similarly asked participants if they were likely to "try to stop it" if a peer was experiencing specific forms of overt, relational, proactive, and reactive victimization. Crapanzano and colleagues also used the language "try to stop," in reference to bullying more generally (Crapanzano, Frick, Childs, & Terranova, 2011), similar to Denny and colleagues who provided Olweus' definition of bullying and asked participants how often students took action when they knew another student was being bullied (Denny, Peterson, Stuart, Utter, Bullen, Fleming, Ameratunga, et al., 2015). Huitsing and colleagues provided participants with a definition of defending (helping, supporting, or

comforting victimized students) and then asked victims who defends them when they are victimized in order to assess network patterns of defending (Huitsing et al., 2014). Barhight and colleagues similarly shared a definition of bullying with participants and then asked youth to nominate others who tried to stop bullying or who got an adult's help when other kids were bullied (Barhight et al., 2015). Demaray and colleagues included some items that assessed specific forms of defending on their intervening scales ("When I saw someone being physically harmed, I told an adult,") but they also included items that could be interpreted by respondents to include prosocial and aggressive defending ("I defended someone who was being pushed, punched, or slapped") (Demaray, Summers, Jenkins, & Becker, 2014, p. 15). Barchia and Bussey (2011) asked participants specific questions about assertive defending and non-confrontational comforting of victims in response to different forms of victimization. Hawkins et al., (2001) gathered quite detailed information about the target of the defender's behavior (victim, aggressor, or both), and whether verbal, physical, or social assertion and/or aggression were used to abate the victimization episode.

Although many of the scales strictly asked participants to report on prosocial defending, others asked about defending using language that was rather vague and could possibly be interpreted by participants to include aggressive defending behavior such as attacking an aggressor. The original PRQ included retaliatory behavior in its operationalization of defending. Hawkins and colleagues (2001) also coded violent defending in their study, including physical aggression used to quell an attack on a victim. However, studies of defenders and of the consequences of defending share that defending behavior is positive and beneficial to peers and the peer group. Indeed, defended victims have been found to fare better psychosocially than undefended victims and to be less victimized (Sainio et al., 2010). In schools where students

perceived that peers take actions to stop bullying to a higher degree, there were fewer reports of being bullied, and among younger students, fewer reports of students bullying others (Denny et al., 2015). At the classroom level, more defending was associated with less risk of victimization for vulnerable youth (Kärnä, Voeten, Poskiparta, & Salmivalli, 2010). But research that demonstrates a positive (or at least no) impact on defenders themselves is lacking.

Theoretical Framework

According to interdependence theory, individuals in interdependent relationships, such as victim/defender relationships, may act prosocially on behalf of others, but they also seek to maximize their own positive outcomes through their interactions, while striving to minimize negative outcomes or consequences for themselves (Kelley, Holmes, Kerr, Reis, Rusbult, & Van Lange, 2003, as in Meter & Card, In press). There are different factors that contribute to whether youth will enact a particular behavior. First, youth in interpersonal relationships (such as a victim-defender relationships or defender-aggressor relationships) or situations bring their own individual tendencies, attitudes, and values to that interaction, referred to as the person factors (Kelley et al., 2003). Person factors are also what contribute to the satisfaction an individual may associate with defending or not defending. Defenders may feel guilty if they refrain from helping victims (Pronk et al., 2014) because defenders tend to be youth who act prosocially and help peer victims (Meter & Card, in press). Youth may defend to avoid the negative outcome of feeling guilt over *not* defending if this behavior is in line with their predisposition, and they should feel reward if they do act in line with their predisposition.

Second, how much youth know about the situation affects their behavior in the interdependent relationship. This condition in the relationship is referred to as an informational condition; these conditions affect youth’s interpretation of a peer victimization situation

including the outcomes that are possible for the defender and the victim (Meter & Card, in press). Previous research has shown defending to be related to constructs like empathy (Barchia & Bussey, 2011), which affects how youth interpret the victimization of peers because they are aware of the impact on their peers.

The third set of factors that may influence defending are response conditions, the temporal circumstances that allow for opportunities to respond in different ways to different situations (Kelley et al., 2003). Defenders may intervene only when they are able to due to their power among peers, or when they know the act of defending will be favorably evaluated (Rigby & Johnson, 2006, as in Meter & Card, in press). For example, normative pressure to defend is associated with defending (Pozzoli et al., 2012). This perception of the normativity and expectation to defend should precede the action of defending.

Although defenders may engage in behavior that benefits a peer, influenced by person factors, informational conditions, and response conditions, their behavior may not be wholly altruistic. Youth who engage in this sort of prosocial behavior may be seeking to maximize their out positive outcomes and minimize negative outcomes by behaving in ways that will benefit themselves as well. Defenders may put themselves at risk for future victimization (Huitsing et al., 2014) by countering aggressors' goals, but, if they are successful, they may portray themselves as difficult targets who aggressors should avoid victimizing. In fact, enacted defending on behalf of peers has been associated with decreases in own victimization over time (Meter & Card, 2015). It seems possible, then, that defenders may benefit from enacted defending while victims benefit from received defending.

Although the goals may be similar regardless of strategy used to defend victimized peers, potential defenders may use different strategies of defending to do so. Which strategies are most

impactful on victim wellbeing has rarely been explored, and how different forms of defending impact the defenders themselves is currently unknown. It is expected that youth who engage in more typical, developmentally appropriate, or prosocial defending strategies will be more likely to benefit themselves. In addition to youth benefitting from defending by being less victimized over time (Meter & Card, 2015), youth who behave in line with social norms while engaging in prosocial behavior meant to improve peer relations may be viewed favorably and receive positive peer regard. However, the benefits may depend on the strategies used, and whether these specific strategies are counter to behavior deemed socially acceptable during a particular developmental period.

Forms of Defending

From observational research it is known that young people use assertive as well as aggressive strategies to defend victimized peers (Hawkins et al., 2001). Verbal assertion and physical aggression were the two forms of defending most prevalent among a child and early adolescent sample and most defending targeted the aggressor, not the victim. Once observed defending behavior was collapsed into either assertive or aggressive categories, no significant differences were found in the prevalence of strategies used to stop peer victimization, nor were significant differences found in the defender's success in defending if using assertive or aggressive strategies (Hawkins et al., 2001). This suggests not only that youth engage in different types of defending behavior, but that aggressive strategies were no less common than assertive strategies. Additionally, the success of the aggressive strategies shows that aggressive defending is just as viable a way to defend victimized peers as assertive defending. However, whether enactment of different strategies of defending are equally worthwhile ways of maximizing defender outcomes is currently unknown.

Beyond the differentiation of aggressive and assertive defending strategies, research has shown that direct (assertive) and indirect means of defending victimized peers are differentiable behavior, as demonstrated by a CFA with a two-factor structure in an evaluation of intervention preparedness of different forms for hypothetical victims (Pronk et al., 2013). In hypothetical situations, those recognized as defenders reported their preference for assertive defending strategies (confronting a bully alone or with a friend) rather than indirect, or non-confrontational strategies (consoling the victim, warning the teacher). This study showed that youth engage in different defending strategies and may perceive particular strategies to be more related to positive outcomes for themselves, and the victim as well.

Another study investigated predictors of different forms of defending in response to a hypothetical scenario among adolescents. Only those participants who reported they would help the victim were asked follow-up questions about their likelihood to engage in certain non-confrontational and assertive defending strategies. Participants who were more empathic were found to be more likely to report that they would enact the non-confrontational strategy of telling a teacher about the victimization (Bellmore et al., 2012). The informational condition of being aware of a peer's suffering seems to lead to this non-confrontational strategy of helping a victimized peer without putting oneself in opposition to an aggressor. However, while empathy was also positively related to confronting the bully and telling the bully to stop, defenders' victimization was negatively associated with this assertive strategy (Bellmore et al., 2012). Although empathic youth may have the awareness of another's suffering, those who have been victimized themselves may refrain from directly confronting aggressors for fear of retaliation and their own victimization. They may rely on other, less visible strategies. Youth with a communal goal orientation and high empathy were more likely to enact the non-confrontational strategy of

comforting the victim (Bellmore et al., 2012). Along with the informational condition, empathy, the person factor of having communal goals was associated with comforting, perhaps as a way not only to help the victim, but to gain personally from the value and satisfaction associated with this kind and caring response to a peer's victimization.

Other researchers have differentiated between aggressive and nonaggressive bystander behavior in regard to witnessing hypothetical verbal and physical race-based victimization. Participants who had experienced racism themselves were more likely to report they would respond aggressively to a peer victimization incident in contrast to those who had not experienced racism themselves, although even among those who experienced racism themselves, most were likely to report nonaggressive or assertive strategies of defending to the same degree as those who has not experienced racism (Palmer & Cameron, 2010). Perhaps this type of discriminatory, blatantly unjust victimization insights a different reaction from some youth who have been victimized through discriminatory means as well, in contrast to general victimization experiences, which have been shown to dissuade youth from assertive, direct confrontation of an aggressor (Bellmore et al., 2012) likely out of fear of retaliation. It is important to note that Bellmore and colleagues (2012) did not measure aggressive defending in their sample.

When 10 to 18-year-old youth in one study were asked about how bystanders responded when they were present during the participants' remembered traditional and/or cyber peer victimization situation, they named a number of defending strategies used by defenders including those that were prosocial and aimed at the victim and ones that were aggressive and aimed at the aggressor (Jones, Mitchell, & Turner, 2015). Forty-three percent of the victimized participants reported that their helpful bystander told an adult (non-confrontational defending). A little over half of the interviewed victims reported that a helpful bystander told them they were sorry it

happened (non-confrontational comforting defending) and slightly over half said the bystander told the aggressor to stop (assertive defending). Fifty-eight percent of victimized participants reported that bystanders avoided the aggressor, and 26% threatened the aggressor (aggressive defending). About one quarter of youth reported that the bystander tried to get peers to help. These results show that bystanders use different strategies (non-confrontational, assertive, aggressive) to defend victimized peers. They also found that more specific characteristics of the peer victimization incident contributed to the likelihood of different bystander responses (Jones et al., 2015).

Trach and colleagues investigated age and gender differences in strategies used by bystanders who witnessed peer victimization situations. The strategies included talking to an adult, helping the victim get away/talking to victim after, telling the bully to stop, talking to the bully's friends, walking away, ignoring bullies, distracting bullies, getting friends to help, getting friends to get back at bullies, staying home from school, talking to a peer about it, and doing nothing. They found younger adolescents and girls in comparison to older adolescents and boys to be more likely to defend in positive ways (assertive defending, telling an adult, comforting the victim). Older adolescents in comparison to younger adolescents in this sample were found to be more likely to report that they responded by *not* defending, (walking away, doing nothing) or by defending in an aggressive way (getting friends to retaliate against the bully) (Trach, Hymel, Waterhouse, & Neale, 2010).

Beyond this, little is known about the differentiation of forms of defending and what the effects of enacting different strategies of defending on defenders' own victimization and adjustment are concurrently or over time. Participants have reported a preference for different strategies (Pronk et al., 2013), but there is no knowledge of the reason for *why* particular

strategies are preferred. According to interdependence theory, individuals behave in ways that maximize their own positive outcomes while minimizing negative outcomes. Defenders who enact defending behavior that is socially accepted and prosocial may put themselves in an advantageous position because they are helping a victimized peer, which shows they are capable of standing up to aggressors, but they also are behaving in ways that might be appreciated by others in the peer group. These youth also have the ability to defend in ways that do not introduce more aggression into the situation. Furthermore, research has not been conducted to investigate the effects of enacting non-confrontational strategies such as comforting the victim or getting help from an adult in comparison to aggressive or assertive strategies. These strategies do not necessarily show a defender's power or ability to stand up to an aggressor, but they do demonstrate concern for others, a characteristic that is likely associated with positive peer regard and not associated with aggression.

Before youth are encouraged to intervene during episodes of peer victimization and defend their victimized peers, it is important to know what strategies defenders use, the strategies' impact on victimization, and how enacting different strategies affects defenders themselves. Furthermore, although aggressive strategies used by defenders to combat peer victimization have been found to be successful (Hawkins et al., 2001), it is important that researchers, interventionists, and those working with young people understand when and under what circumstances aggressive strategies are successful and rewarded to indicate when these behaviors could be replaced with prosocial ones. For example, in the *Steps to Respect* bullying intervention program, students are encouraged specifically to defend in non-confrontational ways including befriending victims or in assertive ways, such as by discouraging friends from bullying (Low, Frey, & Brockman, 2010).

Although youth may, while helping a victimized peer, consider what is in their own best interests, there may be situations in which defending results in negative outcomes. It is important to explain that young people may fulfill different participant roles at different times. Enacted defending has been related to victimization both concurrently and longitudinally (Barchia & Bussey, 2011; Caravita et al., 2010; Pozzoli et al., 2012). Investigations of correlations between participant roles and secondary roles in addition to primary participant role designation show evidence that defenders may also be recognized as victims, and victims as defenders (Fitzpatrick & Bussey, 2011; Salmivalli et al., 1996; Sutton & Smith, 1999). Victims have been found to nominate each other mutually as defenders more often than would be expected by chance (Sainio et al., 2010). Huitsing and colleagues (2014) investigated defending relationships within the peer network. They found that defenders were at risk of becoming victims themselves of the same aggressors that torment those they defended over time. Victims and defenders are not mutually exclusive roles among young people in regard to peer victimization. Victims can potentially serve as defenders of each other, and defenders may formerly be, currently be, or become victimized. They likely defend when the behavior seems advantageous in their relationship either with an aggressor, in that they are showing their ability to stand up to powerful peers, or with the victim, in that they are engaging in behavior that might be reciprocated next time they are personally being victimized (Meter & Card, in press). It seems then, that although defending is considered to be a positive and prosocial behavior among the peer group, enactment of defending, particularly if unsuccessful or using socially unacceptable or developmentally atypical strategies, may have negative consequences as well.

Developmental Changes in Victimization and Defending

Peer victimization takes different forms that tend to increase in prevalence at different developmental periods. Overt victimization includes the receipt of direct, easily observable aggressive behavior such as hitting and kicking, pushing, or verbally abusing others (Card et al., 2008; Crick & Grotpeter, 1996). Relational victimization is characterized by the receipt of more covert aggressive behavior aimed at harming social reputations or relationships including rumor-spreading, ignoring or excluding peers (Card et al., 2008; Crick & Grotpeter, 1995; Crick & Grotpeter, 1996). Although these different forms of victimization have been observed across child and adolescent development, they become more prevalent during different developmental periods. Additionally, there are norms against reporting incidents of peer victimization that may preclude peer bystanders from acting as defenders and reporting peer victimization at different developmental periods. Since youth weigh the consequences of defending by considering their victimized peer's potential outcome, but also how the defending will affect the defender himself, the norms regarding defending may impact whether youth engage in defending, and the developmental appropriateness of different forms of defending may affect defenders' own outcomes.

During childhood, physical aggression is prevalent, but tends to decline by the end of late childhood (Côté, Vaillancourt, Barker, Nagin, & Tremblay, 2007). As children develop into early adolescents, relational aggression appears more frequently (Cairns, Cairns, Neckerman, Ferguson, & Gariépy, 1989). Children generally exhibit decreasing levels of physical aggression and some youth, by early adolescence, begin to increase in indirect or relational aggression (Côté et al., 2007). It is assumed that in order to successfully enact these forms of aggression, advanced social, cognitive, and verbal intelligence is required, which may not develop until closer to adolescence (Björkqvist, 1994; Vaillancourt, Miller, Fagbemi, Côté, & Tremblay, 2007). While

harmful to both aggressors and victims, due to previous research showing developmental changes in typical forms of victimization, we suspect that overt victimization may be perceived as more typical among younger children, while relational victimization may be perceived as more typical among older children and adolescents.

Further, older youth, in comparison to younger youth, tend to have less positive attitudes toward peer victims (Rigby & Slee, 1991). There is more defending among younger participants (Menesini et al., 1997; Pöyhönen et al., 2010; Pozzoli et al., 2012; Salmivalli & Voeten, 2004), and younger individuals perceive their peers as providing help in peer victimization situations at a higher frequency than older children (Menesini et al., 1997). One study found that when differentiated by defending strategies used by victims to defend themselves, there was a group in the middle school sample that tended to endorse behaviors such as seeking support from an adult, telling the aggressor to stop, or walking away (Waasdorp & Bradshaw, 2011). This group was not found to be a separate group among the high school sample. This example provides additional evidence that the norms regarding reactions to peer victimization may vary depending on developmental stage. Adolescents who perceive that bullying is pervasive and generally accepted in their schools have been found to be less likely to report bullying (Unnever & Cornell, 2004), suggesting that the norms around bullying in an adolescent's specific context affects the frequency of this defending strategy.

It is possible, due to changes in norms regarding defending and different forms of peer victimization, that the potential consequences of defending peer victims for defenders are different depending on developmental stage and social norms at these developmental stages. For example, overt aggressive defending may be perceived positively at younger ages when this behavior is more typical and age-appropriate. Contrarily, defending using relationally aggressive

strategies in adolescence may not be associated with negative consequences due to its prevalence during this time. These hypotheses have not previously been tested.

Defending peer victims through assertive or non-confrontational means, may be related to rewards for younger youth, but not adolescents, who have less positive attitudes toward victims. For instance, perceived popularity has previously been related to defending; however, in one study, the investigators found this among their middle childhood sample, but not their adolescent sample (Caravita, Di Blasio, & Salmivalli, 2009). Different strategies of defending may be more or less socially rewarded by the peer group across development.

In regard to assertive defending strategies, although it has been suggested that younger children are unable to defend themselves in ways that require social skills (Waasdorp & Bradshaw, 2011), defenders tend to be socially skilled among the peer group, evidenced by their theory of mind skills (Caravita et al., 2010; Gini, 2006) and empathy of different forms (Barchia & Bussey, 2011; Caravita et al., 2009; Caravita et al., 2010; Gini et al., 2007; Pöyhönen et al., 2010) including empathy in relation to bullying/victimization (Nickerson et al., 2008). As youth gain the advanced social skills that might be necessary to defend in assertive ways, assertive types of defending may be considered more socially acceptable than strategies that may be used by less socially skilled individuals, including aggressive and non-confrontational strategies. This question is open to exploration.

Little research has investigated defending of different forms of aggression, and no research has investigated whether defending of different forms is differentially related to different outcomes across development. Correia and colleagues (2010) investigated secondary victimization, or negative reactions to victims *after* victimization by another has already occurred. These behaviors included meeting the victim to make the victim feel better (reverse-

coded), laughing at the victim, saying nothing to the victim, telling the victim it was his fault, telling the victim he is worthless, or that it was nothing and could be worse. This secondary victimization is like the inverse of the non-confrontational defending behavior of comforting the victim included in some scales of defending. The authors found that when trying to appear in a positive light in front of peers rather than a negative one, participants reported that they would engage in less secondary victimization. However, in relation to hypothetical relational and verbal victimization situations, participants did not differ in their reports of secondary victimization depending on whether they wanted to appear "good" or "bad" in front of their peers (Correia, Alves, Almeida, & Garcia, 2010). It seems then that even non-confrontational responses to others' victimization may differ by form of victimization. It is plausible that the appropriateness of comforting strategies could also vary in line with developmental norms. Because other studies of forms of defending have not separated defending strategies into defending of overt and relational victimization, there is currently no evidence of whether these strategies should be differentiated based form of victimization they are enacted in response to.

Dissertation Purpose and Goals

This dissertation includes analyses to investigate the following topics:

Part 1: The factor structure of the enacted defending scale (EDS). The Enacted Defending Scale (EDS) was created after careful study of other surveys used to garner information about overt and relational victimization and defending. Specifically, the language used in Hawkins and colleagues' (2001) coding scheme used to code behavior of children observed in natural settings was used to help develop items which distinguished between aggressive and assertive defending. For example, their verbal assertion code was used when a peer intervened by verbally requesting that the peer victimization cease (e.g. "stop it", "break it

up"). Their verbal aggression code referred to name-calling, yelling. Aggressive and assertive physical and social aggression were also distinguished (Hawkins et al., 2001). The original participant roles scale developed by Salmivalli and colleagues also inspired the EDS. Their original 20-item scale included antisocial and prosocial aggressive, assertive and non-confrontational strategies of defending including attacking the bully in order to defend the victim, trying to arbitrate the differences by talking, and telling an adult about the bullying (Salmivalli et al., 1996).

The factor structure of the EDS)was investigated first. The EDS included questions that asked participants about their responses to various overt and relational peer victimization situations. Defending responses included 1) aggressive, 2) assertive, and 3) non-confrontational defending. A 3-factor structure was expected, representative of these three forms of defending. It was also possible that there would be differences between specific non-confrontational strategies as well, in that getting help from an adult was a distinct construct from the more direct, but non-confrontational approach of comforting a peer victim. This would be represented by a 4 factor structure in which non-confrontational strategies (telling an adult and comforting the victim) were differentiated.

Part 2: Differentiation of EDS by form of victimization. A second component of the investigation of the factor structure was whether the defending scale could be differentiated between defending of overt and relational victimization. Furthermore, use of either overt or relational aggression could be used to defend overt or relational victimization situations. Additional analyses were used to investigate these more detailed differentiations among constructs of defending (possible models listed in Table 1 and depicted visually in Figure 1).

Part 3: Dependent variables associated with enactment of different strategies. The effects of aggressive, assertive, or non-confrontational strategies used to decrease peer victimization by defenders on defenders themselves has not previously been assessed. Based on the final, best-fitting model found in the previous analyses, how agreement with statements about enactment of aggressive, assertive, and non-confrontational strategies was differentially related to aggression toward others, acceptance, rejection, popularity, unpopularity, depression and victimization for defenders was explored. It was suspected that those who use aggressive defending strategies to defend others would be more likely to be aggressive more generally. Overt aggressive strategies of defending in particular were expected to be associated with negative outcomes due to the non-normativity of defending using overt aggression among this mostly middle adolescent sample. Assertive and non-confrontational strategies of defending were expected to be related to positive outcomes

Part 4: Effect of age on endorsement of different defending strategies. First, the effect of age on endorsement of different defending strategies was assessed. It was expected that certain defending strategies would be endorsed more by younger youth than older youth. Specifically, the more direct strategy of assertion was expected to be positively related to age. Non-confrontational forms of defending were expected to be negatively associated with age, in line with changing norms about support for peer victims, and stigma that might be associated with "tattling" (e.g. telling an adult). Due to the decreasing prevalence of overt aggression in middle adolescence, we expected there might be a negative association between age and overt aggressive defending, in that this strategy may not be as developmentally normative. We expected to find no association between age and relationally aggressive defending, since this form of aggressive behavior is most prevalent in adolescence.

Part 5: Age moderation of the investigated effects. Last, age moderation of the effects investigated in Part 3 was explored. Defending with different strategies may be more or less rewarded by the peer group in terms of social status, and may be differentially related to a perception of wellbeing at different times in development. For example, while non-confrontational strategies such as telling an adult about peer victimization may be acceptable among younger youth, this reliance on adults to solve peer problems may be undesirable among older adolescents and lead to less peer-perceiving acceptance among older youth than younger youth. Since research on consequences of different forms of defending in general is lacking, these moderation analyses of how these relations vary for youth at different ages were exploratory.

METHODS

Participants

Data were collected from 370 5th-12th graders at 3 parochial schools in the Southwestern United States. The two 5th-12th grade schools were independent parochial schools within the same community, and the high school was from a different community; the kindergarten to 8th grade schools were not feeder schools to the high school. Fifty-one percent of the sample were boys, 48% girls, and less than 1% indicated other or preferred not to answer. Participants were approximately 53% Caucasian, 26% Hispanic, 14% biracial or indicated "other", 2% African American, 3% Asian, and 1% Native American. Two of the schools contained children in kindergarten to 8th grade (N = 48, N = 75), and the 3rd school was a high school with 9-12th grade students (N = 248). The research team made the decision to include 5th graders and those in older grades after consulting with the schools' administration about whether the students would be

able to understand and complete the online questionnaires. The participants' mean age was 14.88 years (SD = 1.95), representative of the mostly high school-aged sample.

Procedure

After obtaining approval from the university IRB, permission was granted by the principals of three schools for their students to participate in the study. All 5th-8th graders at the two schools of younger students were invited to participate by their school administration. The school with the smaller N had about a 35% participation rate. About 39% of the other school containing 5-12th graders participated. A random sample of half of the high school students was selected by the Assistant Principal of the high school to provide a representative sample while decreasing the time burden for the school to participate. The participation rate of this sample was about 67%. Parents were informed of the study via a letter from their child's school and University IRB consent document provided by the school administration and asked to provide their informed consent for their children to participate. Students signed assent forms on the day surveys were administered after being advised of their rights to decline to participate without penalty. Students who did not have permission to participate were provided with an alternate task by a teacher assisting with data collection. Of the 705 youth from the three schools who were invited to participate, 53% did participate. One participant began the survey but did not provide any data. Two percent of youth who received parental permission to participate did not due to absence or lack of assent. While we cannot know why participation rates were particularly low at the schools of students in younger grades, this could have plausibly been due to lack of school or student incentives and lack of teacher support for the project, since teachers were asked to collect their students' permission forms. The administrator and teachers at the high school were enthusiastic about participation in the project.

Surveys were administered by two trained graduate assistants. Surveys were confidential; a code number was assigned to each participant based on a roster provided by the school. The list of names and code numbers were kept separately from the completed surveys. Participants completed the self-report surveys on computers. It took about 45 minutes for the youngest participants to complete the questionnaires, and about 30 minutes for the high school students to complete them. The survey items used in this dissertation were part of a larger survey.

Measures

Demographics. Participants' gender, age, and race/ethnicity were reported by participants themselves via the online surveys. Gender was used as a covariate in the Part 3 analysis. Gender remained a covariate in the Part 4 and 5 analyses and age was used as a predictor (Part 4) and an interaction term (Part 5).

Enacted Defending Scale. The EDS presented 4 hypothetical scenarios to participants (see Table 2). Two were scenarios of overt victimization (someone being hit or kicked, someone being called names or having mean things said to them), and two of relational victimization (a rumor being spread, someone being kept out of an activity or group on purpose). The participants were asked to indicate on a scale of 1-5 representing strongly disagree to strongly agree, their typical actions in response to the situation. The actions they responded to included 4 aggressive strategies of defending (2 overt and 2 relational), 3 assertive strategies, and 2 non-confrontational strategies.

Aggression. Both overt and relational forms of aggression were measured by asking participants to respond to how often they engaged in certain behaviors (Casper, 2013). Overt aggression items included "I push others around," "I hit or kick others," and "I say mean things to others or call them names." Relational aggression items were, "I try to make my friends ignore

or stop talking to others," "I try to keep others from being part of activities or groups," and "I start rumors about others." Participants were asked to indicate whether they engaged in this behavior 1) Never, 2) Once or Twice in a School Year, 3) A couple times a month, 4) More than once a week, or 5) Almost every day.

Victimization. The victimization items (Casper, 2013) aligned with the aggression items in that they asked about the same behaviors as described in the overt and relational aggression items. For example, the overt victimization items were "kids push me around," "kids hit or kick me," and "kids say mean things to me or call me names." Three items that assessed relational victimization were phrased similarly to those assessing relational aggression. For these items, participants were again asked to indicate whether they engaged in this behavior 1) Never, 2) Once or Twice in a School Year, 3) A couple times a month, 4) More than once a week, or 5) Almost every day. ($\Omega = .64$ for overt victimization and $\Omega = .84$ for relational victimization (McDonald, 1999).

Acceptance. Perception of peer acceptance was assessed with one item which asked participants to report on a scale from 1-5 from strongly disagree to strongly agree whether they are liked by others. The specific wording of the item was "others like me."

Rejection. Rejection was similarly assessed by asking participants how much the agreed with the statement "others dislike me."

Popularity. Participants were asked to report on a scale from 1-5 from strongly disagree to strongly agree whether they are popular.

Unpopularity. A single item also assessed on a scale from 1-5 whether participants agreed with the statement "I am not popular."

Depressive Symptoms. Participants' self-reported depressive symptoms were measured via the 10-item Center for Epidemiologic Studies Depression Scale, a shorter version of the CESD (CESD-10; Radloff, 1977), rated on a 4-point scale (range = 1 to 4). After reverse-coding the positive items, responses were averaged so that higher scores indicated more depressive symptoms. The scale's reliability, content, concurrent, and discriminant validity have been supported (Radloff, 1991; Radloff, 1977; Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977).

Analyses

Planned Missingness Design

Participant burden can arise when completing lengthy surveys (Enders, 2010). The inclusion of items to assess defending of different forms in response to situations that included different forms of victimization (overt and relational) in addition to other items included in the questionnaire, resulted in a lengthy survey for the young participants to complete. In order to decrease the amount of time it would take to complete the survey, and the number of questions that would need to be answered by each participant, a multiform planned missingness design was utilized (Little & Rhemtulla, 2013). In this data collection design, different versions of the survey are created. All surveys contain a group of core items, and a percentage of the additional items are included on each form, but which items these are varies by form. The data to be utilized in the analysis were collected with a 10-form survey. Because the defending items were of importance to the analyses, these items were included in the core group of items, which all participants received. Overall, the multiple forms included more core items than specified as necessary for the multiform planned missingness design. Table 3 depicts which variables included in the analyses were on each form of the 10-form planned missingness survey.

The resulting data were incomplete, but importantly the majority of the missing data were missing completely at random (MCAR). This is because the missing responses were planned and therefore the missing data were missing randomly, not due to participant behavior. Analyses were performed in R version 3.2.0 using Lavaan (Rosseel, 2012), which has the capability to handle missing data using Full Information Maximum Likelihood (FIML) while fitting confirmatory factor analyses and structural equation models. FIML supplements the information missing from the model using the observed responses that are available (Little, Jorgensen, Lang, & Moore, 2013). FIML has been shown to perform comparably to multiple imputation (MI) techniques (Little et al., 2013) and to perform better at smaller sample sizes than MI (Jia, Moore, Kinai, Crowe, & Schoemann, et al., 2014). FIML is also recommended for data with more than 10% missing values. The FIML approach computes a casewise likelihood function with observed variables for each case. Due to sample size retention, accurate standard errors are produced (Schlomer, Bauman, & Card, 2010). A simulation study found that when there was a large enough sample size for the model estimated with FIML to converge, the parameter estimates were accurate (Jia et al., 2014).

Parts 1 and 2: Investigation of Factor Structure of the EDS and Differentiation of Forms of Aggression

The first goal of this study was to investigate the factor structure of the EDS. In order to assess the properties of the scale designed to assess different forms of defending behavior, a series of Confirmatory Factor Analyses (CFAs) were run. First, aggressive, assertive, and non-confrontational defending of overt *and* relational victimization were included in the model as three separate constructs. Another model which included assertive, aggressive, and the two different non-confrontational strategies (getting help from an adult, comforting the victim) was

evaluated, with the non-confrontational strategies considered as separate constructs. Overall model fit of each model, variances and covariances between constructs, as well factor loadings of indicators of each construct were assessed.

A second goal was to further refine the EDS to investigate whether it could be used to assess more differentiated forms of defending. For example, overt or relational aggression may be used to defend overt or relational victimization situations. Additional analyses to investigate these more detailed differentiations among constructs of defending were based on the factor structure found in the previously described analysis.

A sample size of 370 provided sufficient power to attain the covariance structure using RMSEA of even the most complex anticipated model ($p = 1$) (Preacher & Coffman, 2006). Nested model comparisons between nested models were used to evaluate whether more restrictive models fit the data more poorly than less restrictive models that allowed for more constructs. A significant change in chi square, which signifies a significantly better fitting model, was used as the criteria to suggest that one model better fit the data than another. Comparisons between non-nested models were made by comparing the AIC and BIC (lower values denote better fitting models) (Kline, 2011). Other model fit indices including RMSEA, CFI, and NNFI were used to evaluate the model fit of the best fitting model (Kline, 2011). An acceptable fit is indicated by an RMSEA of approximately .08 - .05 (lower values denote better fit), and CFI and NNFI of about .90 - .95 (higher values represent a better fit) (Little, 2013). The eight models tested are listed in Table 1. Figure 1 is a depiction of the possible constructs the EDS could be used to evaluate.

Once the best model of the different forms of defending form the EDS was found, the McDonald's omega (McDonald, 1999) of each individual construct was calculated, which is

interpreted like Cronbach's alpha, but allows for the multiple indicators of constructs to have different loadings.

Overall, evaluation of the EDS established whether defender behavior can 1) be distinguished into different forms of defending, 2) whether different types of non-confrontational strategies should also be considered separately, 3) whether aggressive defending could be differentiated into overt and relational defending, and 4) whether different forms of defending could be further distinguished by the form of victimization to which the defending is enacted. With that information, the scale could be used to investigate whether or not defending of different forms is more or less beneficial to the defenders themselves in regard psychological and social adjustment among the peer group.

Part 3. Effects of Different Forms of Defending on Defenders

As previously described, the effects aggressive, assertive, or non-confrontational strategies have on defenders has not previously been assessed. How agreement with enactment of aggressive, assertive, and non-confrontational strategies was differentially related to aggression, peer acceptance, rejection, popularity, unpopularity, depressive symptoms and victimization, controlling for gender, for defenders was investigated. Model fit was first established using a CFA. Covariances between constructs were then converted to regressive paths to predict the association of the different forms of defending on the outcomes.

Parts 4 and 5. Effect of Age on Strategies of Defending and Age Moderation Analysis

As a first step in investigating age effects on the endorsement of different defending strategies, age was investigated as a predictor of each of the strategies of defending found in the evaluation of the EDS, controlling for gender. Second, whether age moderated the relations between different strategies and outcomes while controlling for gender was assessed. The

continuous variable of age in years was used to create a product term with each of the indicators of the constructs of different forms of defending. Double mean centering was used to decrease collinearity between the main effect indicators and the interaction indicators. Double mean centering was completed by first centering the product term indicators as well as the outcome indicators. After the interaction indicators were created, these were again mean-centered (Lin, Wen, Marsh, & Lin, 2010). The outcomes variables were regressed onto each of the interaction constructs in addition to the main effect constructs.

It was expected that non-confrontational strategies would result in more positive and less negative outcomes among younger youth, while assertive and aggressive strategies would be more rewarded among older youth.

RESULTS

Parts 1 and 2: EDS Model Fitting

First, the test statistic of the baseline model (where all observed variables are assumed to be uncorrelated) was calculated, χ^2 (630) = 6167.79, $p < .01$. Then, a series of models were tested. Model fit of each possible, hypothesized model was compared, and models that would not converge or were not positive definite were considered inadequate. Model fit was evaluated using three practical fit indexes including the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the non-normed fit index (NNFI). Model comparisons between nested models were evaluated using a change in chi square test, and comparisons between non-nested models were made by comparing the AIC and BIC (lower values denote better fitting models) (Kline, 2011). When a best-fitting model was found within each series, subsequent models were compared to the best-fitting previous model in the series. Details of different models tested prior to arriving at the final model are available in Appendix B.

The first series of models included all indicators from the EDS. Due to inadequate fit in all of the first models tested, new models were considered after removing certain indicators. It is possible that the removed specific defending strategies were not salient to the participants, or that they were not be appropriate responses to all peer victimization situations presented to the participants. Problems in model fit can be due to dual loadings, correlated residuals, or large error terms. Moving from series 1 to series 2, two poor-loading indicators, the "trying to separate the people" indicators, were removed from all analyses and the 8 models were all run without the inclusion of these indicators.

Series 2: Model 6 (a five factor model including assertive defending, overt aggressive defending, relational aggressive defending, non-confrontational telling an adult and non-confrontational comforting the victim) was the best-fitting model in series 2, and although this analysis resulted in a model with the best model fit seen so far, it was still inadequate. Further, there were some indicators that were loading poorly on the constructs. Therefore, these indicators were removed from the models and the 8 models were tested again.

Series 3: In addition to the removal of the "trying to separate the people" indicators, 2 additional sets of indicators were removed; specifically, items assessing whether youth would try to keep aggressors out of activities or groups in response to either overt or relational victimization. Again, this type of defending may not be a strategy youth widely use to defend victimized peers. Although model fit, particularly for Model 6, was better than in previous series, model fit was still poor.

Series 4: The fourth series of models removed two additional indicators: "If someone is saying mean things to someone or calling them names, I try to stop it by hitting or kicking the person saying mean things to get them to stop." "If someone is spreading rumors about someone

else, I try to stop it by hitting or kicking the person spreading rumors about others to get them to stop." These indicators represent overtly aggressive (physical) defending of verbal and relational victimization situations, which were not endorsed to a high degree (see Appendix A).

Model 6 fit best of all the models in each series, and Model 6 from model Series 4 was the best fitting model overall so far. However, the model fit was still not good. Two additional indicators were removed that occurred at low frequency (see Table 4). Specifically, two indicators of overtly aggressive defending strategies were removed: hitting or kicking in response to another being hit or kicked, and hitting or kicking in response to someone keeping a peer out of activities or groups.

This resulted in the final model of the EDS which had satisfactory model fit: χ^2 (242) = 495.45 ($p < .01$); RMSEA = .05 (90% CI: .05 - .06); NNFI=.93; CFI=.93; AIC = 19750.54; BIC = 20071.44. The model-implied unstandardized intercepts, standard errors, and standardized factor loadings are available in Appendix C. The best structure of the EDS was a 5-factor model, the factors being assertive defending, aggressive defending using overtly aggressive strategies, aggressive defending using relationally aggressive strategies, and two non-confrontational defending factors, telling an adult, and comforting the victim. The final model suggests that different forms of defending are differentiable constructs, and that while assertive defending was one general construct, aggressive defending should be separated into overt and relational forms and non-confrontational defending should be separated into getting help from some adult and comforting the victim after. Figure 3 depicts the covariances between constructs of the final form of the EDS.

The reliability of the each of the latent constructs was satisfactory. The McDonald's Omega (McDonald, 1999) for assertive defending was .84, for overt aggressive defending, .83,

for relationally aggressive defending, .85, for non-confrontational telling some adult, .91, and for non-confrontational comforting the victim .80.

Assertive defending was negatively associated with overt aggressive defending (*ns*), and negatively associated with relationally aggressive defending ($p < .01$). Prosocial assertive defending was positively associated with the two prosocial, non-confrontational strategies, telling some adult and comforting the victim ($ps < .01$). Overt and relationally aggressive defending strategies were associated with each other ($ps < .01$). Overt aggressive defending was negatively associated with telling some adult ($p < .01$), but was not associated with comforting the victim (*ns*). Relationally aggressive defending was negatively associated with the two prosocial non-confrontational strategies, telling some adult and comforting the victim ($ps < .01$). The two non-confrontational strategies of defending were positively associated ($p < .01$).

The items that were not ultimately included in the final model of the EDS showed a different pattern than the other items in their category. In Appendix A, the frequency with which students responded to questions from strongly disagree to strongly agree, and additionally percent data missing for each item, is displayed. For the items that did not load well, the tendency was for participants to not agree with their enactment of certain assertive behaviors represented by the removed indicators as much as the others in the construct, suggesting that this is not a popular response for the participants and they neither agree nor disagree about whether they enact this defending strategy. In regard to items that represented enactment of antisocial behaviors that were removed, participants disagreed about their enactment of these behaviors more than other behavior, again suggesting that these behaviors may not often be enacted by the peer group and that this is not a typical response to the hypothetical victimization situations presented.

Part 3. Effects of Different Forms of Defending on Defenders

After five distinguishable strategies of defending were identified, the next step was to investigate which outcome constructs were predicted by endorsement of different strategies. Those outcome constructs were overt aggression, relational aggression, overt victimization, relational victimization, acceptance, rejection, popularity, unpopularity, and depression. The different forms of aggression and victimization were expected to be positively related. Victimization of both forms was expected to be positively associated with rejection, unpopularity, and depression, and negatively associated with acceptance and popularity. The variables that were positively and negatively associated with victimization were expected to be associated with each other in the same directions (e.g. acceptance and rejection negatively associated).

Table 4 includes the descriptive statistics of the outcome variables in addition to the percent missing on each variable. The percentage of missing data in the outcome variables ranged from 59% to 63% due to the planned missingness design. The measurement model included the five strategies of defending identified in Part I of the dissertation, the covariate, gender, and nine outcome variables: overt aggression, relational aggression, overt victimization, relational victimization, acceptance, rejection, popularity, unpopularity, and depressive symptoms. The originally specified model included ten indicators of depressive symptoms and three indicators each of overt aggression and relational aggression. The model did not converge when multiple indicators of the aggression constructs were specified, even after the number of iterations specified was extreme. When the ten CESD indicators were included in a model, the model was not positive definite, likely due to an estimated variance greater than one. In order to provide more information in the model, the three overt aggression indicators were averaged, the

three relational aggression indicators were averaged, and the 10 depressive symptoms indicators were averaged. The percentage missing for each manifest variable was significantly less once these indicators were averaged (2% for the CESD, 11% for overt aggression, 13% for relational aggression). The CESD's reliability, content, concurrent, and discriminant validity have been supported (Radloff, 1991; Radloff, 1977; Weissman et al., 1977), as previously mentioned, which suggests averaging this scale is an acceptable choice. When these variables were included as manifest variables rather than latent variables, the CFA and SEM successfully converged.

Due to non-normality of the outcome variables, robust standard errors were requested by using the MLR (maximum likelihood robust) estimator for the CFA, SEM predicting the adjustment outcomes, and the interaction models (all models including the adjustment outcome variables). In the CFA, all factor loadings were significant at the $p < .01$ level (see Appendix D). The model fit of the measurement model was adequate, $\chi^2 (545) = 841.99$ ($p < .01$); RMSEA = .04 (90% CI: .03-.04); NNFI=.90; CFI=.92. Covariances between constructs from the CFA are available in Table 5. Covariances between outcome variables in the measurement model suggest convergent and discriminant validity. Both forms of aggression and both forms of victimization were significantly, positively associated with each other. Peer victimization of either form was associated with less acceptance, more rejection, less popularity, more unpopularity, and more depression, although the association between relational victimization and popularity was only marginally significant for relational victimization. Acceptance and popularity were positively associated with each other, and negatively associated with rejection and unpopularity; rejection and unpopularity were positively associated with each other; although not all of these effects were statistically significant, the effects were medium in size. Depression was positively associated with both forms of victimization, but neither form of aggression. Depressive

symptoms were negatively associated with acceptance. Depressive symptoms and unpopularity were positively associated.

Next, all paths between strategies of defending and outcomes were converted to regression paths. Each of the outcome variables was also regressed on the covariate, gender. Model fit of this first model was χ^2 (573) = 826.46 ($p < .01$); RMSEA = .04 (90% CI: .03-.04); CFI = .93 NNFI = .91. Figure 3 depicts the significant paths in this model. After controlling for gender, assertive defending was positively associated with one outcome, popularity, but this association was only marginally significant at the standard $p < .05$ level ($\beta = .28$, $p = .07$). Marginally significant findings are shared when the standardized effect is substantial in magnitude. Overt aggressive defending was related positively to overt victimization, rejection, and depression. Relationally aggressive defending was positively, significantly associated with relational aggression, and marginally, negatively associated with unpopularity ($\beta = -.20$, $p = .06$). The non-confrontational defending strategy of telling an adult was negatively associated with both overt and relational aggression, and the non-confrontational strategy of comforting the victim was positively associated with acceptance. Overall, the aggressive strategies were associated with negative outcomes, while the prosocial strategies (assertive, non-confrontational) were associated either with positive outcomes, or no negative outcomes. Full regression results are available in Tables 6 and 7. Appendix E presents the observed means, standard deviations, and correlations between model indicators.

Parts 4: Age Effects on Strategies of Defending

As a first step in investigating age effects on the endorsement of different defending strategies, age was entered as a predictor of each of the defending strategies, controlling for gender. The model fit was as follows: χ^2 (281) = 560.78 ($p < .01$); RMSEA = .05 (90% CI: .05-

.06); NNFI=.92; CFI=.93. The significant associations are depicted in Figure 4. The older youth were, the less they endorsed the strategies of assertion, non-confrontational defending of telling and adult, and the non-confrontational strategy of comforting the victim, evidenced by the negative association between age and these strategies. Age was positively associated with overt aggressive defending. Full results from the regression model are available in Table 8. Appendix E presents the observed means, standard deviations, and correlations between model indicators.

The positive association between age and overt aggressive defending was counter to the expectation that youth would less strongly agree with overt aggressive defending, in this case verbal aggression, as they grew older. A quadratic effect was added to the model to test the post hoc hypothesis that the relation between age and overt aggressive defending was curvilinear, all other effects held constant. Age was centered at 14.88 years old, the mean age in the sample, and then squared to create the quadratic term. The model fit was as follows: χ^2 (305) = 585.94 ($p <$ .01); RMSEA = .05 (90% CI: .04-.06); NNFI=.92; CFI=.93; AIC = 23625; BIC = 24008. In this model, the effects of gender and age stayed similar in regard to effect size and statistical significance. A concave quadratic effect was observed. The effect of age on overt aggressive defending was β = .17, $p <$ .01 and the effect of age squared on overt aggressive defending was β = -.16, $p <$ .01. This suggests that although youth in this sample increased their reporting of their use of overt aggressive defending from the earliest age included in the sample, this positive association waned among the older youth. However, the model fit of the model with the quadratic effect fit less well than the original model (AIC = 21648; BIC = 22016). Therefore the original model will be discussed in our discussion section.

Part 5: Age Moderation

In addition to understanding how age might impact endorsement of the different defending strategies, it was also of interest to investigate whether the consequences of using these different strategies depended on age. In order to do this, the Part 3 model was modified, with age included as a main effect predictor of all outcomes, in addition to the interaction of each defending strategy and age predicting each outcome. Standardized covariances from this model are available in Table 9. Model predictive paths are available in Table 10. A log-likelihood test was used to compare the moderation model to a similar model that did not include the moderation effects (Maslowski, Jager, & Hemken, 2014). First, the model fit statistics were calculated in a model in which the interaction effects on the outcomes were not included (set to zero). This resulted in poor model fit according the CFI and NNFI, but satisfactory model fit according to the RMSEA: χ^2 (1745) = 3599.89 (p < .01); RMSEA = .05 (90% CI: .05-.06); NNFI=.74; CFI=.76. Ideally, the model fit would be satisfactory, and then this model could be compared to the model that includes the interaction effects (Little, 2013). The test statistic for a log-likelihood ratio test, often denoted as D, is calculated using the following equation:

D = - 2[(log-likelihood for Model 0) – (log-likelihood for Model 1)].

Log-likelihood comparison based on the chi square distribution was used to test the difference between a model that included the interaction effects set to zero (-29555.79) and the interaction model (-29521.96) (Klein & Moosbrugger, 2000). There was a significant difference in model fit (χ^2 (45) = 66.31, p < .05). The significance of this test suggests a significant loss in model fit between Model 1, the interaction model, and Model 0 (Maslowski et al., 2014). The model fit of the interaction model was as follows: χ^2 (1700) = 3532.81 (p < .01); RMSEA = .05 (90% CI: .05-.06); NNFI=.73; CFI=.77.

Few of the interaction effects were significant. Findings with *p*-vales < .08 were investigated further. The interaction of relationally aggressive defending and age marginally predicted rejection (β = .25, p < .07). The interaction of overt aggressive defending and age predicted unpopularity (β = -.19, p < .05). The interaction of assertive defending and age marginally predicted depression (β = -.21, p = .07).

Simple slopes were used to interpret the significant interactions. Within the model, age was standardized with a mean of zero and a variance of one and the outcomes were mean-centered as part of the double mean-centering procedure. Simple slopes were tested at standardized ages of -1, 0, and 1, representative of low, average and high age among the sample. First, the positive association between relationally aggressive defending and rejection was not found at the tested ages, ages +/- 1 *SD* of the mean. There tended to be a positive association for older youth and a negative association for younger youth, but these simple slopes were not statistically significant. Second, the association between overt aggressive defending and unpopularity was found to be negative among older youth and positive among younger youth; however, no significant relation was found at ages +/- 1 *SD* of the mean or at the sample mean. The negative association between assertive defending strategies and depression was only significant among older youth (*simple slope* = -.33, p < .05). A visual depiction of this interaction effect is presented in Figure 5. Whereas assertive defending was not found to be associated with depression among youth in the previous analysis (Part 3), here the positive outcome of less depressive symptoms in association with using assertive defending strategies was observed among older youth.

Most associations between enacted defending strategies and age did not depend on age. Due to inferior model fit and very few significant results, it is possible that these effects were observed due to Type 1 error.

DISCUSSION

Parts 1 and 2: Factor Structure of the EDS

One of this dissertation project's strengths was its attention to the many ways in which youth may stand up for their victimized peers. This study attended to different assertive, non-confrontational, and aggressive strategies of defending, but also to the different forms of aggression that may be used in order to defend a peer, and the different forms of victimization to which youth may respond when defending others from peer victimization. The investigation of the factor structure of the EDS led to the conclusion that the EDS can best be represented by a 5-factor model. The five factors were assertive defending, overt aggressive defending, relationally aggressive defending, non-confrontational defending of telling some adult, and non-confrontational defending of comforting the victim. The possibility that the strategies of defending could be distinguished by the form of victimization to which the defending was in response was tested. The data did not support this possibility, as indicated by both model non-convergence and inadequate model fit. This suggested that the defending strategies should not be distinguished by the form of victimization to which the defending was in response.

The five factor model showed that there are distinguishable forms of defending that in most previous research have been considered to be a single factor or construct. Some general defending measures may have captured the multiple strategies of defending, since they ask youth how they "try to stop it" or help a victimized peer, which allows the participants to interpret the

question to include any behavior they engage in, prosocial or aggressive, that was enacted in order to stop peer victimization or help a victimized peer. However, more specific items that ask only about one or two assertive or non-confrontational strategies of defending of peer victimization likely do not include participant reports of aggressive defending. If researchers are only interested in prosocial defending, then this is not problematic; however, youth have shown that they do engage in aggressive defending of their victimized peers (Hawkins et al., 2002). This dissertation provides further evidence that some youth do engage in aggressive defending strategies in order to defend their victimized peers. Without attention to these forms of defending, albeit problematic due to their introduction of continuing aggression into the peer group, the full picture of defending behavior, its impact on the continuation of victimization, and the impact of engaging in aggressive defending is ignored. Despite the important consideration of these multiple strategies of defending in this dissertation, the results cannot speak to the effectiveness of these different strategies in stopping or thwarting the victimization of their peers; they can speak to the effect of engaging in these different strategies of defending behavior on the defenders themselves.

In general, the prosocial strategies of defending, assertive defending and the two non-confrontational strategies of defending, telling some adult and comforting the victim, tended to be positively associated with each other. The two aggressive defending strategies were positively associated with each other and tended to be negatively associated with the prosocial strategies. Although there were two associations between constructs in the model that were not significant and had insubstantial effect sizes, all significant effects were in the expected directions. There were distinguishable defending behaviors reported by participants, but there was overlap among youth who engaged in the different defending strategies, evidenced by the positive associations

within prosocial types of strategies and positive associations between aggressive types of strategies. Those who defended in one prosocial way may also defend in other prosocial ways, but are less likely to defend in aggressive ways. The positive correlations between positive defending roles suggests that perhaps positive defending of different forms could be encouraged, particularly among youth who are already engaging in one specific type of prosocial defending. For example, youth who comfort their friends might be encouraged to tell a teacher or other adult about their peers' victimization.

There were some specific strategies of defending included in the originally specified models that were eventually removed completely from the models. These strategies were a) the assertive defending strategy of trying to separate the people, b) the relationally aggressive strategy of trying to keep aggressors out of activities or groups, and c) the overt aggressive strategy of hitting or kicking. There are a few possibilities of why these strategies needed to be removed. First, it is possible that these strategies were not appropriate for the sample. For example, hitting or kicking in response to a peer being victimized may not be developmentally appropriate ways of standing up for a victimized peer. Physical aggression in general tends to decrease during the developmental time frame captured in the sample, and this physical strategy used in response to victimization may not be deemed an appropriate strategy. This was reflected in the low frequency of these behaviors. Without responses from younger children, it cannot be known whether these strategies would be endorsed to a higher degree among this population. It is also possible that it was not the participants' developmental age that predicted their responses, but rather that these are not typical responses across development. If and when this scale is used with other samples to assess different forms of defending, it would be important to investigate whether these strategies tended not to be endorsed among other samples, including younger

samples. Third, this research was conducted using a sample of youth in parochial schools which were smaller relative to most public school. These students overall reported low levels of aggression and victimization (see Table 4). It would be interest to see if these results replicate in schools with higher levels of aggression and victimization, or in larger and smaller schools. Although we do not have specific hypotheses about how these contextual differences might affect the results, we do suspect that in schools where aggression and victimization is more common, the effects might be magnified due to more opportunities to defend victimized peers, making this behavior more visible in the peer group. In regard to school size, we believe that in larger schools, there may be less awareness of others' victimization. Last, some of these strategies might cross-load onto different constructs, which could have caused decreased model fit. The items that were retained resulted in differentiable constructs that could be used to predict study outcomes. They also still retained multiple indicators that allowed for the inclusion of multiple specific strategies of specific forms of defending behavior in each latent construct.

Part 3: Associations between Enacted Defending Strategies and Outcomes

Previous research has shown assertive strategies of defending to be just as successful as aggressive strategies of defending (Hawkins et al., 2011). Although there were no significant associations between using assertive defending strategies and any of the hypothesized outcomes, no change in status such as popularity or acceptance, aggression or victimization involvement, and depressive symptoms is not a bad outcome; the results showed that use of assertive defending was not negatively associated with participants' adjustment. Those who use assertive defending strategies, found in previous research to be successful, are not putting themselves at risk, and, although the association was marginally significant, these youth may even become more popular from defending through this means. Longitudinal studies are needed to understand

whether popularity might lead to the ability to use assertive strategies to stop powerful aggressors, or whether the ability to assertively defend leads to popularity among peers, or both.

Interestingly, in this study, we did not find an association between popularity and any of the defending strategies except for the marginally significant association between assertive strategies and popularity. The association between defending and popularity found in previous research has been mixed. Previous research has found this association only among a younger sample in comparison to an older sample (Caravita et al., 2009). Defending and popularity were not associated to the degree that has been observed among younger samples in a sample of only high schoolers (Pouwels, Lansu, & Cillessen, 2015). Other research has found popularity to be associated with defending only in classrooms where status is less associated with bullying (Peets, Pöyhönen, Juvonen, & Salmivalli, 2015). Socially savvy defenders in this instance seemed to be aware of the potential risks of defending, and abstained from standing up for victimized peers when defending could damage their standing among peers. Previous research on the association between popularity and defending has not separated forms of defending, which could account for some differences across studies. A larger sample from multiple classrooms and schools would allow for the investigation of the effect of the social norms around defending on popularity and other interpersonal adjustment indicators. It would also be of interest to investigate the association between use of different strategies of defending and popularity across development to see if the social norms and youth's engagement in defending in relation to social norms around peer victimization differs across development.

Importantly, the results suggest that there are youth who report using aggressive defending strategies of both overt and relational forms. These retaliatory responses of overt and relationally aggressive defending predicted adjustment problems. Overt aggressive defending

was related to individual and interpersonal problems. The youth who reported using overt aggressive defending were more likely to be overtly victimized themselves, and to perceive themselves as being more rejected. Overt aggressive reactions to a peers' victimization could be compared to reactive aggression, which is defined as an angry and emotionally dysregulated aggression in reaction to being victimized oneself (or perceiving oneself to be victimized) and is associated with similar negative outcomes (Card & Little, 2006). It seems that this visible, aggressive reaction to another's peer victimization leads to a negative evaluation by peers. Aggression and bullying are typically enacted by those who have more power in the peer group, and often by those considered to be "cool" (Rodkin, Farmer, Pearl, & Van Acker, 2000). Standing up to these powerful aggressors through aggressive means may undermine the power structure in these situations which may not sit well with the aggressors, assistants, and reinforcers who support the aggressor, and through this support the aggressor's position of power. Those who endorsed using overt aggressive defending strategies also reported depressive symptoms. It could also be that those youth who utilize overt aggressive strategies of defending recognize the plight of other victims due to their own experience with overt victimization, but do not have the social skills to utilize different, more socially acceptable forms of defending; this lack of social skills could be an unmeasured predictor of social adjustment. Longitudinal studies are needed to disentangle these effects, but it seems that these youth may be stuck in a cycle of aggressive reactive defending which puts them at risk for interpersonal adjustment problems and depression. Victims have been found to defend each other (Huitsing et al., 2014), and because of their lack of social status and maybe social skills as well, they may lack other strategies with which to defend. Redirecting these youth toward prosocial strategies of defending that do not lead to altercation or peer problems, such as telling an adult or comforting their victimized peer,

may be important ways for these youth to stand up for their peers without entering a cycle of aggression, and may actually result in more positive outcomes for them.

Those who enacted relationally aggressive defending did not experience the victimization, rejection, and depression those who endorsed overt aggressive defending experienced. Rather, those who reported more relationally aggressive defending reported engagement in relational aggression toward others. Although only marginally significant, those who reported using relational aggressive defending also tended to have a perception of oneself as someone who is *not* unpopular. This result is shared with caution; relationally aggressive defending did not predict perception of oneself as popular. Overall it seems that those who defended through relationally aggressive means were not at social risk the way those who defended through overtly aggressive means were. There are two possible explanations for this. First, relationally aggressive defending may be a socially-acceptable, albeit aggressive strategy among youth. Relational aggression has been found to be more typical among this age group than overt aggression, in that by early adolescence overt aggression tends to decrease and relational aggression tends to increase (Côté et al., 2007), although youth in this sample reported enactment of both overt aggression and relational aggression at low frequencies overall. Additionally, a sizable minority of youth have reported that relational forms of victimization, such as social exclusion, do not constitute bullying (Boulton, Bucci, & Hawker, 1999). Therefore, adolescents who defend others through relationally aggressive means may not be acting inappropriately for their developmental stage and peers may not even perceive their actions as problematic. The youth endorsing these strategies are not gaining social status or affection, but they are lot losing it either. They also might be successful in their use of this strategy, since it led to engaging in more overt and relational aggression toward others and was

not associated with victimization of either form (although, importantly, due to the concurrent nature of the data, it could be that relational aggression precedes or precedes and follows relationally aggressive defending). It could also be that aggressive defending is generally not accepted among youth, but that verbal retaliation (overt aggressive defending) is visible among the peer group, while the more covert form of aggressive defending, relationally aggressive defending, is not. If youth do not recognize their peers' use of these covert aggressive defending strategies, it may have little social impact on the relationally aggressive defenders themselves, and may embolden these youth to engage in further aggression. Research that investigates not only the behaviors, but perceptions of acceptable behavior among the peer group along with peer-reported observations of different behavior could help elucidate these effects.

As seen in previous research (Sutton & Smith, 1999), these results show that defenders are not "pure" defenders, but that there may be secondary classifications of youth in that there are defenders who also use aggression toward others. The findings of this dissertation showed that relationally aggressive defenders also enacted aggression toward their peers. Some youth have been known to be relationally aggressive within friendships; it would be an interesting future direction to investigate who is defending whom with relationally aggressive defending strategies and to whom these same youth are directing their relational aggression to better understand the relationships affected by this behavior of relationally aggressive defending. It is especially important for adults and youth to be aware of the potential for youth to respond in relationally aggressive ways in order to defend their victimized peers, and that these youth do not seem to experience negative social repercussions. This could potentially be problematic, in that aggressors who are victimized themselves as a result of their bullying may, rather than shying

away from aggression, react to this victimization by aggressing again in order to reclaim their status.

Telling an adult as a strategy of defending was negatively associated with both overt and relational aggression. Youth who made adults aware of their peers' victimization may be especially aware of the problems of victimization and avoid involvement with aggression themselves. The youth who reported that they "told some adult" about a peer's victimization were not rewarded by their peers with increased acceptance or popularity, but neither were they ostracized by the peer group. This strategy seems to have no measured negative consequences. However, evidence that telling an adult is an effective means to stopping peer victimization from continuing is needed. Further, it could be possible that peers are unaware of their peers' use of this strategy.

The only strategy of defending that was clearly associated with a positive outcome was comforting the victim afterward. Those who reported comforting a victim afterward also reported being more accepted by their peers. Again, the effectiveness of this strategy should be investigated. Further, whether the comforting takes place in public or private could be differentiated. If comforting occurs in private, it may have the effect of letting the victim know that they are not alone, and that someone is on their side. This could at least lead to the victim feeling less hopeless and rejected. As has been stated by Salmivalli and colleagues, even if children continue to be victimized, the victims are likely to feel differently if they know someone is on their side, rather than if they feel they have no one on their side (Salmivalli, Voeten, & Poskiparta, 2011). Comforting in public, however, in front of other peers, might signal to the peers that the victim has an ally. An understanding of the context of comforting would also help explain the association with acceptance. In the context of a private conversation, the acceptance

could be a result of the defender feeling like victims especially like them; previous research has found victims to nominate peers who defend them as those who they also like (Sainio et al., 2010). In the context of the larger peer group, comforting defenders may be perceived as particularly kind. Especially in light of the positive outcome for comforting defenders themselves, further investigation of this strategy and how exactly it works to help peer victims is of interest.

The general conclusion from this section is that not all strategies of defending are beneficial to defenders themselves; some are associated with negative consequences, some are neutral, and some are associated with positive outcomes for defenders. Prosocial assertive and non-confrontational strategies seem to have no negative effects on defenders, while use of aggressive defending strategies was associated with negative outcomes. It is important that researchers as well as educators and interventionists are aware that all of these strategies were endorsed at some level by the youth in this sample, and that not all forms of defending are beneficial to defenders, even if they are acting in seemingly prosocial ways by standing up for a victimized peer.

Part 4: Age Effects on Strategies of Defending

The strategies with the most positive associations were endorsed less among older youth, while the strategy with the worst outcomes was endorsed to a higher degree among older youth. After controlling for gender, younger age was associated with endorsement of the prosocial strategies of defending: assertive strategies, and the two non-confrontational defending strategies, telling some adult and comforting the victim. Previous research has found younger adolescents to report using the assertive and non-confrontational defending strategies of telling the bully to stop or talking to an adult about the bullying (Trach et al., 2010). Although there was

no association between age and relationally aggressive defending, older youth were found to report more use of overt aggressive defending strategies. This, too, has generally been found in previous research, although the specific retaliatory strategy was not specified. Older adolescents, in comparison to younger adolescents, reported getting their friends to get back at the bully more frequently (Trach et al., 2010).

As previously mentioned, overt aggression tends to decrease as youth move through adolescence, although verbal overt aggression drops off less quickly (Björkqvist, Österman, & Kaukiainen, 1992). However, adolescence is also a time when there is less defending in general than among younger youth (Menesini et al., 1997; Pöyhönen et al., 2010; Pozzoli et al., 2012; Salmivalli & Voeten, 2004). It is possible that as youth reach adolescence, they tend to perceive interference in other peoples' problems, even through defending, as unwanted or unnecessary. Although there were no observed negative outcomes associated with prosocial defending, it could be that these strategies are not effective when enacted among adolescents. Perhaps, although associated with negative outcomes for defenders themselves, the blatant demonstration of aggression in response to a peer's victimization is perceived as more effective in helping the victim among this older group.

Although more reporting of overt aggressive defending among older youth seems counterintuitive, it is important to remember that the overt aggressive defending reported by the participants in the study was verbal retaliation; verbal aggression drops off less quickly in adolescence than does physical overt aggression (Björkqvist et al., 1992). Indeed, there was post hoc evidence of a quadratic effect of age on overt aggressive defending. Although the model with the linear effect was better fitting, this is an interesting effect to investigate and attempt to replicate in future research, perhaps in a sample with a wider age range. Also, particularly in

honor cultures, such as that of the American Southern and Western regions including the state where this sample resides, the competition for honor and status is greatest in late adolescence and early adulthood. In cultures of honor, threats and insults to the reputation of one's self, family, and property are taken seriously, and violent responses to these sorts of insults may be perceived as culturally appropriate (Cohen, 1998). It would be of interest to understand if this phenomenon of more reporting of overt aggressive defending, which could be a noticeable reaction to the insult to the honor or reputation of a peer, is universal, or whether this tendency might be culturally situated. Although defending the honor of another may be deemed socially appropriate by a defender himself and provide positive reinforcement to the defender in that he is acting in line with his values, this blatant interruption of a powerful aggressor's goals could still result in negative consequences for the defender. Nonaggressive strategies of defending among adolescents, while still well-meaning, may not demonstrate the serious reaction to the victimization that an aggressive verbal retaliatory response does and could potentially be less effective. Whether this strategy would be enacted in response to any peer's victimization or to a close peer's victimization is an important question for future research. Again, studies on who defends whom using specific strategies could help understand these effects.

Part 5: Age Moderation

The moderation effects were investigated to further elucidate the processes under investigation by demonstrating for whom the previously-established associations between use of defending strategies and outcomes occurred. However, it is important to interpret the results from the interaction model with caution for two reasons. First, according to CFI and NNFI, the interaction model was ill-fitting. This means that the model was not a good representation of the data. Second, it is important to note that many interaction effects were tested and few were

statistically significant. There is always a chance of Type I error, finding an effect as a matter of chance when in reality there is no such effect. Future research, preferably with a larger sample, could attempt to replicate the observed effects to help establish whether the results were found due to chance alone or were indicating a real phenomenon of age differences in the consequence of enacted defending strategies.

An important piece that came from the moderation results was the significant negative association between assertive defending strategies and depressive symptoms for older youth. In the Part 3 model, there were no significant associations between assertive defending and any of the dependent variables, which, while not suggesting any harmful outcomes associated with assertive defending, did not make it seem a particularly attractive defending strategy either, in terms of gains in status. However, this finding that older youth who engage in this form of defending experience fewer depressive symptoms is encouraging; by standing up for what these youth believe is right, they may feel they are helping the problem versus being part of the problem of peer victimization among youth, by assertively demonstrating anti-victimization behavior rather than serving as a passive bystander or only trying to get help from others. Because of the negative outcomes associated with enactment of aggressive forms of defending, assertion may be one place to redirect the desire to defend, among all aged youth. Youth who feel that they are saving face for someone, by acting to uphold someone's reputation or honor (e.g. Cohen, 1998) by defending, could also accomplish this goal through assertive actions, which still demonstrate power within the peer group, but do not lead to involvement with more aggressive behavior or victimization of the defender him or herself.

Limitations and Future Directions

This dissertation was the first research to assess multiple prosocial and aggressive strategies of defending victimized peers in relation to defender outcomes. The findings are valuable for their potential to inform empirical research on participant roles and interventions that promote defending as a component due to the understanding that not all defending is necessarily beneficial to the defender or to the peer group. The results showed that there are differentiable strategies of defending that youth use to defend their victimized peers, and that these different strategies are related to different outcomes.

However, there are limitations to this study that must be taken into account. First, all constructs were created from self-reported responses to the questionnaire. Reliance on self-reported data only could introduce problems into the analyses due to shared method variance. Further, some of the constructs under investigation in this study represent individuals' perceptions of their status in the peer group, rather than the peer group's assessment of individuals' social standing. In one respect, individuals' perceptions of their own peer status might be especially important if there is an underlying assumption that these perceptions may motivate behavior and be related to psychological adjustment. However, it might be of interest to also know how enactment of different defending strategies is related to the peer group's perception of children and adolescents as well. Future studies should incorporate both types of indicators of peer status in order to assess whether reporter contributes to the associations between variables.

Another limitation of this dissertation is the concurrent nature of the data. Many conclusions were described which suggested that engagement in different defending strategies "caused" particular outcomes. It may well be the case that particular characteristics that were treated as outcomes, such as aggression and victimization, peer status, and depressive symptoms,

may lead to engagement in defending strategies or that they may serve as both antecedents and consequences to enactment of different defending strategies. For instance, participants in this study who endorsed overt aggressive defending items also reported more overt victimization. Youth who are overtly victimized might respond by "fighting back" when their peers are victimized through aggressive means. This could lead to a cycle of aggression in that this reactive behavior might result in more aggression over time. Longitudinal research or even experimental research is necessarily to begin to establish temporal precedence of the investigated effects.

An important consideration to make when interpreting these results is that youth have been shown to report intentions to defend at higher rates than actual defending is observed. In other words, it seems as though youth overestimate their likelihood to defend their victimized peers (Barhight, Hubbard, & Hyde, 2013). Many youth who participated in this study may have reported on the behavior they believe they would engage in during a specific episode of peer victimization, but in the event of an actual conflict, due to other factors, such as who is victimizing whom, the setting, or one's self-efficacy to defend and beliefs about the outcome of their defending, they may not actually defend. Demonstrating which types of defending specifically have positive outcomes or at least no negative consequences for youth could encourage current bystanders to become defenders. This information is shared with a caution, however, in that all youth may not have the social skills to defend in prosocial ways, and those who are not prepared to defend peers without putting themselves in harm's way should not.

Previous research has established that youth may defend certain youth with whom they share common characteristics such as gender or sharing a common bully (Huitsing et al., 2014; Huitsing & Veenstra, 2012). Due to the self-reported data utilized in the current study, we were

unable to investigate strategies used among youth who defend each other, or whether different strategies were endorsed depending on who the victim and aggressor are in relation to the defender, and also in relation to the rest of the peer group (e.g. youth with more or less status). These different factors could potentially affect the rate of endorsement of different strategies, and an investigation of whether previously found associations would hold under the investigation of different defending strategies would also be of interest.

Although almost complete data were available for the EDS, the planned missingness design was utilized to gather the data used in the assessment of the effects of different defending strategies on all dependent variables. Our results showed expected associations (more positive outcomes for those who endorse prosocial strategies and more negative outcomes for those who endorse aggressive strategies), and therefore we expect that our results would replicate with a complete surveying procedure. However, we believe it would be prudent to test the scale and factor associations with dependent variables with a complete surveying procedure among a larger sample to ensure replicability.

Additionally, the participants whose data was included in this study were Southwestern American youth enrolled in Catholic schools. Replication of the study among samples from different locations and from secular schools would be important before making statements about the generalizability of the results.

In regard to the limitations of the impact the results of this study can make on the understanding of defending and its effects, these results do not speak to how effective different strategies are from the perception of the defender or the victim. This is important for two reasons. First, if defending of specific forms helps victims or makes positive change in the peer

group, these specific strategies should be taught and encouraged. Assertive strategies have been shown in previous research to be just as effective as aggressive strategies of defending (Hawkins et al., 2001). There is, to our knowledge, little research comparing the effectiveness of different youth defending strategies. There has been research on the effects of telling a teacher when victims themselves report their peer victimization to a teacher. Results have shown that teacher intervention leads to many youth perceiving that their situation has stayed the same or become worse (Bradshaw, Sawyer, & O'Brennan, 2007; Smith & Shu, 2001), however when youth in another study were asked whether telling an adult more generally made things worse, only 1% responded that it did (Jones et al., 2015); about half of victimized participants reported that telling an adult made things better in this study. Although the findings from this third study suggest that telling an adult rarely leads to things getting worse for a victim, there were many youth who did not report a benefit from telling an adult about their victimization. The dissertation findings showed that youth who tell some adult are less likely to engage in victimizing their peers through overt or relational means themselves with no measured negative consequences for those who defend using this strategy, but this strategy is only worth using if adults are able to intervene effectively or provide advice to help defenders or victims themselves overcome their situation.

Second, if, as previously observed, aggressive strategies are effective (Hawkins et al., 2001), this may reinforce defenders' and their peers' use of these strategies to defend victimized peers. If research finds that prosocial defending strategies are just as effective, this supports the notion that perhaps aggressive strategies could be replaced with prosocial strategies, that have, in the current research, been shown to be beneficial and not detrimental to defenders' themselves. If, however, prosocial strategies are less successful than aggressive strategies, it suggests a need

to rethink urging youth to defend their victimized peers without specific training and support for doing so in safe and prosocial ways. If youth understand that aggressive strategies are successful, teaching them that their aggressive defending could have unwanted negative consequences for them could be one way to curb this well-intentioned but aggressive behavior.

Interdependence theory can be used to frame research on participant roles, but it suggests that either consciously or unconsciously, youth are weighing the pros and cons for their interdependent partner (the victim) and themselves when they choose to defend in particular ways. Future research could empirically establish relationship factors, personal factors, informational conditions and response conditions (Kelley et al., 2003) that predict defending utilizing different strategies. The current research begins to shed light on some of these relationships, but a study that more broadly assesses multiple predictors and consequences of different forms of defending in a longitudinal framework would begin to establish the temporal order of effects. Studies of hypothetical defending situations that ask youth about their reactions to specific peer victimization situations and then to report what their next action would be (similar to Bellmore et al., 2012) might additionally show which defender characteristics and perceptions precede engagement in different defending strategies.

It may be that certain strategies are more or less successful in particular circumstances or in victimization situations including youth with certain characteristics. This is an area ripe for future research. Understanding when and under what circumstances different defending strategies are more or less successful will help interventionists develop strategies that will be most effective to help unique victims in their specific victimization situation. In general, anti-bullying approaches have been found to be only somewhat effective (Merrell, Gueldner, Ross, & Isava, 2008; Ttofi & Farrington, 2011), and ineffective among older adolescents (Yeager, Fong,

Lee, & Espelage, 2015). It might take attention to specific interactions to understand how to best support victims of peer harassment.

Conclusions and Implications

Although research on the prosocial behavior of defending, shown to decrease peer victimization among youth, is growing, the different forms of defending behavior that are potentially enacted by defenders have seldom been considered. In addition to establishing that there are distinguishable defending strategies enacted by youth to defend their peers, this study importantly showed that there are positive and negative outcomes associated with engaging in different defending strategies; all strategies of defending did not predict positive outcomes for defenders themselves. This is important for multiple reasons. First, there is limited research on the effects of received defending on victims (Sainio et al., 2010), and this research has not differentiated between forms of defending to investigate which strategies have a positive impact on victims. Hawkins and colleagues' (2001) study showed aggressive and assertive strategies to be equally effective among their sample, but this study has shown a negative impact of engaging in aggressive defending strategies on defenders themselves. Both victims and defenders' wellbeing must be taken into account if youth are to be encouraged to defend victimized peers.

This study also showed that there are defending strategies that are endorsed more among younger youth and less among older youth. An understanding of why older youth do not engage in defending as commonly, and when they do defend why they are more likely to report engaging in overt aggressive strategies of defending, is an important area of future research.

It is important for researchers, interventionists, and those working with young people to understand that all forms of defending may not be prosocial or beneficial to defenders

themselves. Aggressive, assertive, and passive strategies may all be used to defend peers from peer victimization. Although aggressive strategies might be successful, they introduce a cycle of aggression into the peer group and may result in punishment in institutions where aggressive means of problem solving are unacceptable. Comforting the victim, a non-confrontational strategy, was found to be positively associated with acceptance. This strategy is one way youth can attempt to help their victimized peers and potentially gain positive peer regard without putting themselves as risk. Generally speaking this research shed light on the fact that different forms of defending strategies can be differentiated, and that enactment of different forms of defending is differentially related to defender wellbeing.

Table 1.

Constructs Included in Each of the Tested Models of the Enacted Defending Scale

Model	Included Constructs
Model 1	Assertive
	Aggressive
	Non-confrontational
Model 2	Assertive
	Aggressive
	Non-confrontational (tell adult)
	Non-confrontational (comfort victim)
Model 3	Assertive to defend overt victimization
	Aggressive to defend overt victimization
	Non-confrontational to defend overt victimization
	Assertive to defend relational victimization
	Aggressive to defend relational victimization
	Non-confrontational to defend relational victimization
Model 4	Assertive to defend overt victimization
	Aggressive to defend overt victimization
	Non-confrontational to defend overt victimization (tell adult)
	Non-confrontational to defend overt victimization (comfort victim)
	Assertive to defend relational victimization
	Aggressive to defend relational victimization
	Non-confrontational to defend relational victimization (tell adult)
	Non-confrontational to defend relational victimization (comfort victim)
Model 5	Assertive to defend any victimization
	Overt aggression to defend any victimization
	Relational aggression to defend any victimization
	Non-confrontational to defend any victimization
Model 6	Assertive to defend any victimization
	Overt aggression to defend any victimization
	Relational aggression to defend any victimization
	Non-confrontational to defend any victimization (tell adult)
	Non-confrontational to defend any victimization (comfort victim)
Model 7	Assertive to defend overt victimization
	Overt aggression to defend overt victimization
	Relational aggression to defend overt victimization
	Non-confrontational to defend overt victimization
	Assertive to defend relational victimization
	Overt aggression to defend relational victimization
	Relational aggression to defend relational victimization
	Non-confrontational to defend relational victimization
Model 8	Assertive to defend overt victimization
	Overt aggression to defend overt victimization
	Relational aggression to defend overt victimization
	Non-confrontational to defend overt victimization (tell adult)
	Non-confrontational to defend overt victimization (comfort victim)
	Assertive to defend relational victimization
	Overt aggression to defend relational victimization
	Relational aggression to defend relational victimization
	Non-confrontational to defend relational victimization (tell adult)
	Non-confrontational to defend relational victimization (comfort victim)

Table 2.

Enacted Defending Scale (EDS)

Leading sentences paired with each strategy	
1) If someone is being hit or kicked, I try to stop it by…	
2) If a person is saying mean things to someone or calling them names, I try to stop it by...	
3) If a person is spreading rumors about someone else, I try to stop it by...	
4) If a person is trying to keep someone out of an activity or group on purpose, I try to stop it by….	
Aggressive	Yelling at the person doing the hitting or kicking.
	Hitting or kicking the person hitting or kicking my peer to get them to stop.
	Trying to keep the person doing the hitting or kicking out of activities or groups.
	Spreading a rumor about the person doing the hitting or kicking.
Assertive	Telling the person doing the hitting or kicking to stop it e.g. cut it out.
	Trying to separate the people.
	Telling the person doing the hitting or kicking it's not right to treat people like that.
Non-confrontational	Telling some adult about it.
	Comforting the person getting hit or kicked afterward.

Notes. Leading sentences 1 and 2 refer to overt victimization situations. Leading sentences 3 and 4 refer to relational victimization situations.

Table 3.

Items Included in Dissertation Analyses and their Inclusion in the 10-Form Planned Missingness Survey

Scale and Construct Names	Survey Form									
Demographic Variables	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Age										
Birth Month	X	X	X	X	X	X	X	X	X	X
Birth Year	X	X	X	X	X	X	X	X	X	X
Gender	X	X	X	X	X	X	X	X	X	X
Race	X	X	X	X	X	X	X	X	X	X
Enacted Defending Scale (EDS)										
Defending of overt victimization: If someone is being hit or kicked, I try to stop it by…										
Telling the person doing the hitting or kicking to stop it e.g. cut it out.	X	X	X	X	X	X	X	X	X	X
Yelling at the person doing the hitting or kicking.	X	X	X	X	X	X	X	X	X	X
Trying to separate the people.	X	X	X	X	X	X	X	X	X	X
Hitting or kicking the person hitting or kicking my peer to get them to stop.	X	X	X	X	X	X	X	X	X	X
Telling the person doing the hitting or kicking it's not right to treat people like that.	X	X	X	X	X	X	X	X	X	X
Trying to keep the person doing the hitting or kicking out of activities or groups.	X	X	X	X	X	X	X	X	X	X
Spreading a rumor about the person doing the hitting or kicking.	X	X	X	X	X	X	X	X	X	X
Telling some adult about it.	X	X	X	X	X	X	X	X	X	X
Comforting the person getting hit or kicked afterward.	X	X	X	X	X	X	X	X	X	X
Defending of overt victimization: If a person is saying mean things to someone or calling them names, I try to stop it by...										
Telling the person saying mean things to stop it e.g. cut it out.	X	X	X	X	X	X	X	X	X	X
Yelling at the person saying mean things.	X	X	X	X	X	X	X	X	X	X
Trying to separate the people.	X	X	X	X	X	X	X	X	X	X
Hitting or kicking the person saying mean things to get them to stop.	X	X	X	X	X	X	X	X	X	X
Telling the person saying mean things that it's not right to treat people like that.	X	X	X	X	X	X	X	X	X	X
Trying to keep the person saying mean things out of activities or groups.	X	X	X	X	X	X	X	X	X	X
Spreading a rumor about the person saying mean things.	X	X	X	X	X	X	X	X	X	X
Telling some adult about it.	X	X	X	X	X	X	X	X	X	X
Comforting the person who had mean things said about them afterward.	X	X	X	X	X	X	X	X	X	X
Defending of Relat. Vict.: If a person is trying to keep someone out of an activity or group on purpose, I try to stop it by….										
Telling the person leaving others out to stop it e.g. cut it out.	X	X	X	X	X	X	X	X	X	X
Yelling at the person leaving others out.	X	X	X	X	X	X	X	X	X	X
Trying to separate the people.	X	X	X	X	X	X	X	X	X	X
Hitting or kicking the person leaving others out to get them to stop.	X	X	X	X	X	X	X	X	X	X
Telling the person leaving others out it's not right to treat people like that.	X	X	X	X	X	X	X	X	X	X
Keeping the person leaving others out from being in my activities or groups.	X	X	X	X	X	X	X	X	X	X

Spreading a rumor about the person leaving others out.	X	X	X	X	X	X	X	X	X	X
Telling some adult about it.	X	X	X	X	X	X	X	X	X	X
Comforting the person who was left out afterward.	X	X	X	X	X	X	X	X	X	X
Defending of Relat. Vict.: If someone spreading rumors about someone else, I try to stop it by...										
Telling the person spreading rumors about others to stop it e.g. cut it out.	X	X	X	X	X	X	X	X	X	X
Yelling at the person spreading rumors about others.	X	X	X	X	X	X	X	X	X	X
Trying to separate the people.	X	X	X	X	X	X	X	X	X	X
Hitting or kicking the person spreading rumors about others to get them to stop.	X	X	X	X	X	X	X	X	X	X
Telling the person spreading rumors about others it's not right to treat people like that.	X	X	X	X	X	X	X	X	X	X
Keeping the person spreading rumors about others out of my activities or groups.	X	X	X	X	X	X	X	X	X	X
Spreading a rumor about the person who spreads rumors about others.	X	X	X	X	X	X	X	X	X	X
Telling some adult about it.	X	X	X	X	X	X	X	X	X	X
Comforting the person who had rumors spread about them.	X	X	X	X	X	X	X	X	X	X
Overt Victimization										
Kids push me around			X			X		X		X
Kids hit or kick me				X			X		X	X
Kids say mean things to me or call me names	X	X	X	X						
Relational Victimization										
Kids ignore me or stop talking to me				X			X		X	X
Kids keep me from being part of activities or groups	X	X	X	X						
Kids start rumors about me	X				X	X	X			
Overt Aggression										
I push others around	X	X	X	X						
I hit or kick others	X				X	X	X			
I say mean things to others or call them names		X			X			X	X	
Relational Aggression										
I try to make my friends ignore or stop talking to others	X				X	X	X			
I try to keep others from being part of activities or groups		X			X			X	X	
I start rumors about others			X			X		X		X
Acceptance, Rejection, Popularity, Unpopularity										
Others like me.	X	X	X	X						
Others dislike me.	X				X	X	X			
I am popular.			X			X		X		X
I am not popular.				X			X		X	X
CESD-10 Depression Inventory										
I was bothered by things that usually don't bother me	X	X	X	X						
I had trouble keeping my mind on what I was doing	X				X	X	X			
I felt depressed		X			X			X	X	
I felt that everything I did was an effort			X			X		X		X
I felt hopeful about the future				X			X		X	X

I felt fearful	X	X	X	X						
My sleep was restless	X				X	X	X			
I was happy		X			X			X	X	
I felt lonely			X			X		X		X
I could not ‘get going’				X			X		X	X
Grades	X	X	X	X	X	X	X	X	X	X

Note: Enacted defending scale items presented in order they were presented to participants.

Table 4.

Descriptive Statistics and Percent Missing Data of Dependent Variable Indicators

Indicator/ Construct	Mean/ Frequency	SD	Range	% Missing
Covariate				
Gender	179 girls, 183 boys	-	-	2
Overt Aggression 1	1.60	.84	1-5	59
Overt Aggression 2	1.31	.65	1-5	61
Overt Aggression 3	2.01	.92	1-5	60
Overt Aggression Average	1.86	.84	1-5	11
Relational Aggression 1	1.21	.61	1-5	62
Relational Aggression 2	1.49	.71	1-4	61
Relational Aggression 3	1.34	.63	1-5	62
Relational Aggression Average	1.35	.64	1-5	13
Overt Victimization 1	1.62	.94	1-5	61
Overt Victimization 2	1.32	.69	1-5	61
Overt Victimization 3	2.40	1.26	1-5	61
Relational Victimization 1	1.73	.97	1-5	61
Relational Victimization 2	1.82	1.07	1-5	60
Relational Victimization 3	1.75	.92	1-5	62
Acceptance	3.91	.79	1-5	60
Rejection	2.65	.90	1-5	61
Popularity	3.24	.98	1-5	62
Unpopularity	2.56	1.11	1-5	61
Depressive Symptoms				
CESD 1	1.88	.97	1-4	61
CESD 2	2.30	1.00	1-4	62
CESD 3	1.60	.78	1-4	61
CESD 4	2.88	.98	1-4	62
CESD 5 (reversed)	2.17	.96	1-4	61
CESD 6	1.58	.87	1-4	62
CESD 7	1.97	1.00	1-4	62
CESD 8 (reversed)	1.68	.71	1-4	60
CESD 9	1.69	.93	1-4	63
CESD 10	1.79	.83	1-4	62
CESD Average	1.95	.59	1-4	2
Age	14.88	1.95	10.25-18.42	6

Table 5.

Covariances from the CFA of Defending Strategies Predicting Dependent Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Assertive Defending	--												
2. Overt Aggressive Defending	-.03 (.07)	--											
3. Relational Aggressive Defending	-.42** (.06)	.34** (.06)	--										
4. Non-confrontational Defending, Telling Adult	.55** (.05)	.23** (.07)	-.23** (.06)	--									
5. Non-confrontational Defending, Comforting	.63** (.06)	.03 (.07)	- .27** (.07)	.35** (.06)	--								
6. Overt Aggression	-.23** (.06)	.15* (.06)	.22** (.06)	-.26** (.06)	-.22** (.07)	--							
7. Relational Aggression	-.10 (.07)	.07 (.06)	.24** (.09)	-.18* (.07)	-.03 (.07)	.24** (.07)	--						
8. Overt Victimization	-.09 (.08)	.28** (.09)	.14 (.09)	-.17* (.08)	-.11 (.09)	.33** (.10)	.27* (.13)	--					
9. Relational Victimization	-.08 (.08)	.14 (.09)	.12 (.08)	-.17* (.08)	-.07 (.09)	.18* (.09)	.22* (.10)	.74** (.09)	--				
10. Acceptance	.03 (.08)	-.20* (.09)	-.11 (.08)	.06 (.08)	.23* (.09)	-.06 (.09)	- .03 (.06)	-.34** (.11)	-.53** (.09)	--			
11. Rejection	-.04 (.09)	.26** (.08)	.10 (.08)	-.07 (.08)	.01 (.09)	.11 (.11)	.01 (.10)	.39** (.14)	.61** (.09)	-.48** (.10)	--		
12. Popularity	.07 (.09)	-.02 (.08)	.08 (.10)	.04 (.08)	-.09 (.09)	.07 (.07)	.07 (.07)	-.21* (.10)	-.21* (.11)	.55** (.10)	-.26 (.14)	--	
13. Unpopularity	.13 (.09)	.11 (.10)	-.15 (.10)	.03 (.08)	.16 (.09)	.02 (.09)	-.04 (.08)	.21* (.10)	.26* (.10)	-.35 (.18)	.63** (.07)	-.71** (.19)	--
14. Depression	-.09 (.06)	.22** (.06)	.15** (.06)	.13* (.06)	-.01 (.06)	.09 (.06)	.10 (.08)	.37** (.08)	.61** (.06)	-.32** (.06)	.38** (.07)	-.13 (.09)	.20* (.08)

Notes: Values in cells = Standardized covariance (Std. Error). * p < .01. ** p < .05.

Table 6.

Covariances from the SEM of Defending Strategies Predicting Dependent Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Assertive Defending	--												
2. Overt Aggressive Defending	-.03 (.07)	--											
3. Relational Aggressive Defending	-.42** (.06)	.34** (.06)	--										
4. Non-confrontational Defending, Telling Adult	.55** (.05)	-.23** (.07)	-.23** (.06)	--									
5. Non-confrontational Defending, Comforting	.63** (.06)	.03 (.07)	- .27** (.07)	.35** (.06)	--								
6. Overt Aggression	--	--	--	--	--	--							
7. Relational Aggression	--	--	--	--	--	.18* (.08)	--						
8. Overt Victimization	--	--	--	--	--	.28** (.10)	.25 (.13)	--					
9. Relational Victimization	--	--	--	--	--	.16 (.09)	.19* (.10)	.73** (.09)	--				
10. Acceptance	--	--	--	--	--	-.00 (.09)	-.03 (.07)	-.29* (.12)	-.53** (.10)	--			
11. Rejection	--	--	--	--	--	.10 (.11)	-.00 (.10)	.35* (.14)	.60** (.10)	-.48** (.11)	--		
12. Popularity	--	--	--	--	--	.06 (.08)	.06 (.08)	-.23* (.10)	-.23* (.11)	.66** (.09)	-.26 (.15)	--	
13. Unpopularity	--	--	--	--	--	.08 (.10)	-.00 (.07)	.21* (.10)	.38** (.10)	-.39 (.21)	.64** (.07)	-.73** (.17)	--
14. Depression	--	--	--	--	--	.07 (.06)	.08 (.07)	.34** (.08)	.58** (.07)	-.30** (.07)	.34** (.08)	-.13 (.09)	.18* (.08)

Notes: Values in cells = Standardized covariance (Std. Error). * $p < .01$. ** $p < .05$.

Table 7.

Regression Coefficients and Standard Errors from the SEM of Defending Strategies Predicting Dependent Variables

	Overt Aggression	Relational Aggression	Overt Victimization	Relational Victimization	Acceptance	Rejection	Popularity	Unpopularity	Depression
Boy	.18** (.12)	.05 (.13)	.01 (.16)	-.16* (.15)	.04 (.16)	-.09 (.16)	.02 (16)	-.11 (.18)	-.19** (.11)
Assert. Def.	.01 (.11)	.08 (.10)	.05 (.15)	.04 (.15)	-.22 (.20)	-.08 (.18)	.28 (.16)	-.02 (.16)	-.08 (.11)
OAD	.05 (.07)	-.07 (.07)	.24* (.11)	.12* (.11)	-.21 (.13)	.28* (.12)	-.06 (.09)	.19 (.12)	.21** (.07)
RAD	.15 (.09)	.28** (.10)	.02 (.11)	.05 (.10)	-.03 (.11)	-.02 (.11)	.15 (.12)	-.20 (.11)	.03 (.07)
Tell Adult	-.18* (.08)	-.20* (.09)	-.10 (.10)	-.14 (.11)	-.00 (.15)	.03 (.12)	-.02 (.11)	-.00 (.12)	-.04 (.08)
Comfort	-.07 (.10)	.09 (.09)	-.11 (.13)	-.08 (.13)	.39** (.16)	.02 (.13)	-.21 (.14)	.08 (.14)	.01 (.09)

Notes: Values in cells = Standardized regression coefficient (Std. Error). For gender, 0 = girl, 1 = boy. * p < .01. ** p < .05. OAD = Overt Aggressive Defending; RAD = Relationally Aggressive Defending.

Table 8.

Full Regression Results from the Part 4 Model

	Assert	OAD	RAD	Tell Adult	Comfort
Boy	-.18** (.12)	.10 (.12)	.01 (.12)	-.05 (.11)	-.26** (.06)
Age	-.22** (.06)	.24** (.06)	.08 (.06)	-.44** (.06)	-.12* (.06)

Notes: Values in cells = Standardized regression coefficient (Std. Error). For gender, 0 = girl, 1 = boy. *M* of age =14.88 years (*SD* = 1.95), range = 10.25-18.42. * $p < .01$. ** $p < .05$. OAD = Overt Aggressive Defending; RAD = Relationally Aggressive Defending

Table 9.

Covariances from the SEM of Defending Strategies Predicting Dependent Variables, Moderated by Age

	1	2	3	4	5	6	7	8	9	10	12	13	14	15	16	17	18	19
1. Assert. Defending	--																	
2. OAD	-.03 (.07)	--																
3. RAD	-.42** (.06)	.35** (.06)	--															
4. Tell Adult	.55** (.05)	-.23** (.07)	-.23** (.06)	--														
5. Comfort	.63** (.06)	.03 (.07)	-.27** (.07)	.35** (.06)	--													
6. Age	-.22** (.06)	.24** (.06)	.08 (.06)	-.44** (.05)	-.12* (.06)	--												
7. Assert * Age	.06 (.11)	.18** (.07)	.09 (.07)	-.03 (.07)	.12 (.09)	.06 (.09)	--											
8. OAD * Age	.18** (.07)	-.02 (.10)	-.07 (.07)	.18** (.07)	.13 (.08)	-.24** (.08)	-.03 (.10)	--										
9. RAD * Age	.09 (.07)	-.06 (.07)	-.03 (.13)	.06 (.08)	.10 (.07)	-.04 (.10)	-.42** (.09)	.39** (.07)	--									
10. Tell Adult * Age	-.04 (.07)	.20** (.06)	.09 (.08)	.03 (.08)	-.10 (.07)	.26** (.08)	.58** (.06)	-.27** (.09)	-.32** (.11)	--								
11. Comfort * Age	.12 (.08)	.12 (.09)	.10 (.07)	-.08 (.07)	-.05 (.15)	-.00 (.09)	.49** (.13)	.05 (.12)	-.20 (.10)	.34** (.09)								
12. Overt Aggression	--	--	--	--	--	--	--	--	--	--	--							
13. Relational Aggression	--	--	--	--	--	--	--	--	--	--	.17* (.07)	--						
14. Overt Victimization	--	--	--	--	--	--	--	--	--	--	.30** (.10)	.23 (.13)	--					
15. Relational Victimization	--	--	--	--	--	--	--	--	--	--	.16 (.09)	.14 (.10)	.74** (.11)	--				
16. Acceptance	--	--	--	--	--	--	--	--	--	--	.01 (.10)	-.01 (.08)	-.33** (.12)	-.52** (.10)	--			
17. Rejection	--	--	--	--	--	--	--	--	--	--	.11 (.11)	-.05 (.10)	.32* (.13)	.61** (.10)	-.45** (.13)	--		

18. Popularity	--	--	--	--	--	--	--	--	--	--	.06 (.08)	.06 (.09)	-.25* (.11)	-.26* (.12)	.65** (.13)	-.26 (.16)	--	
19. Unpopularity	--	--	--	--	--						.09 (.10)	-.03 (.07)	.28** (.11)	.47** (.09)	-.39* (.19)	.64** (.06)	-.73** (.18)	--
20. Depression	--	--	--	--	--						.08 (.06)	.06 (.07)	.33** (.09)	.58** (.07)	-.30** (.07)	.32** (.08)	-.15 (.10)	.21* (.08)

Notes: Values in cells = Standardized covariance (Std. Error). * $p < .01$. ** $p < .05$. OAD = Overt Aggressive Defending; RAD = Relationally Aggressive Defending

Table 10.

Standardized Regression Coefficients from the SEM of Defending Strategies Predicting Dependent Variables, Moderated by Age

	Overt Aggression	Relational Aggression	Overt Victimization	Relational Victimization	Acceptance	Rejection	Popularity	Unpopularity	Depression
Assert. Defending	.06 (.13)	.15 (.13)	.11 (.17)	.10 (.17)	-.26 (.21)	-.07 (.20)	.25 (.18)	-.06 (.16)	-.10 (.12)
OAD	.03 (.07)	-.04 (.08)	.30** (.13)	.15 (.12)	-.17 (.14)	.28* (.13)	-.06 (.10)	.22 (.13)	.23** (.08)
RAD	.17* (.09)	.29** (.10)	.01 (.12)	.06 (.10)	-.04 (.13)	-.00 (.12)	.14 (.13)	-.26* (.13)	.03 (.07)
Tell Adult	-.17* (.09)	-.22** (08)	-.24* (.14)	-.24 (.15)	.10 (.17)	.03 (.14)	-.01 (.13)	.04 (.14)	-.10 (.09)
Comfort	-.09 (.12)	.05 (.12)	-.16 (.16)	-.08 (.14)	.34* (.16)	.01 (.16)	-.24 (.15)	.11 (.14)	.07 (.10)
Boy	.18** (.13)	.08 (.13)	.02 (.17)	-.14* (.15)	-.02 (.17)	-.07 (.17)	.00 (.18)	-.10 (.18)	-.17** (.11)
Age	.10 (.07)	.02 (.07)	-.28* (.13)	-.16 (.11)	.19 (.12)	-.02 (.10)	.01 (.10)	-.02 (.10)	-.10 (.08)
Assert * Age	-.04 (.11)	-.02 (.12)	.11 (.17)	-.13 (.18)	.04 (.21)	-.02 (.20)	.04 (.17)	.07 (.16)	-.21 (.13)
OAD * Age	-.00 (.08)	-.08 (.09)	-.03 (.13)	-.00 (.14)	.20 (.16)	-.09 (.15)	.18 (.11)	-.22* (.11)	.03 (.09)
RAD * Age	-.01 (.10)	.17 (.11)	.12 (.09)	.15 (.10)	-.18 (.11)	.25* (.14)	-.01 (.10)	.10 (.11)	.07 (.09)
Tell Adult * Age	.06 (.09)	-.06 (.10)	-.06 (.17)	.17 (.18)	-.22 (.20)	.11 (.17)	-.04 (.12)	-.16 (.14)	.10 (.10)
Comfort * Age	-.09 (.10)	-.13 (.10)	-.19 (.13)	-.15 (.13)	.02 (.15)	-.02 (.15)	-.04 (.13)	.19 (.12)	.07 (.08)

Notes: Values in cells = Standardized regression coefficient (Std. Error). For gender, 0 = girl, 1 = boy. *M* of age =14.88 years (*SD* = 1.95), range = 10.25-18.42. * $p < .01$. ** $p < .05$. OAD = Overt Aggressive Defending; RAD = Relationally Aggressive Defending

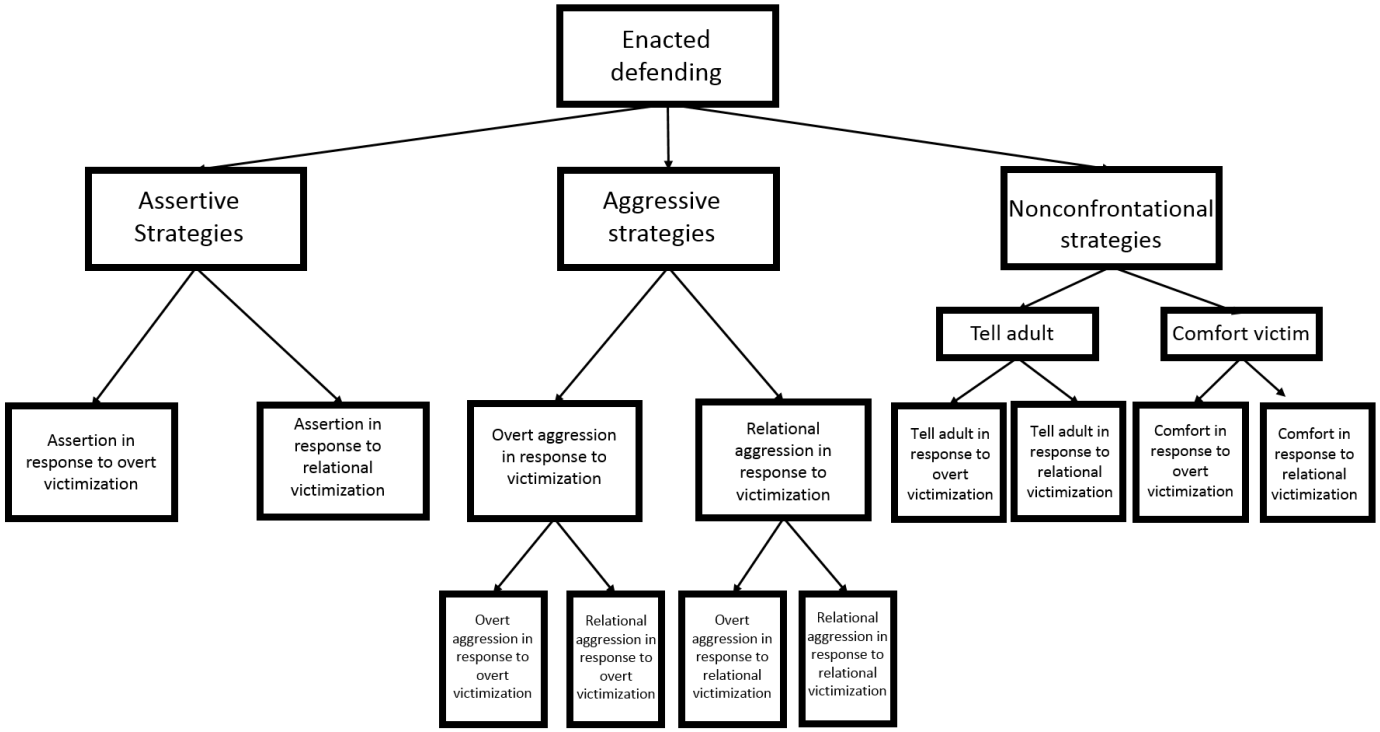

Figure 1. Visual depiction of levels of constructs of enacted defending to be evaluted.

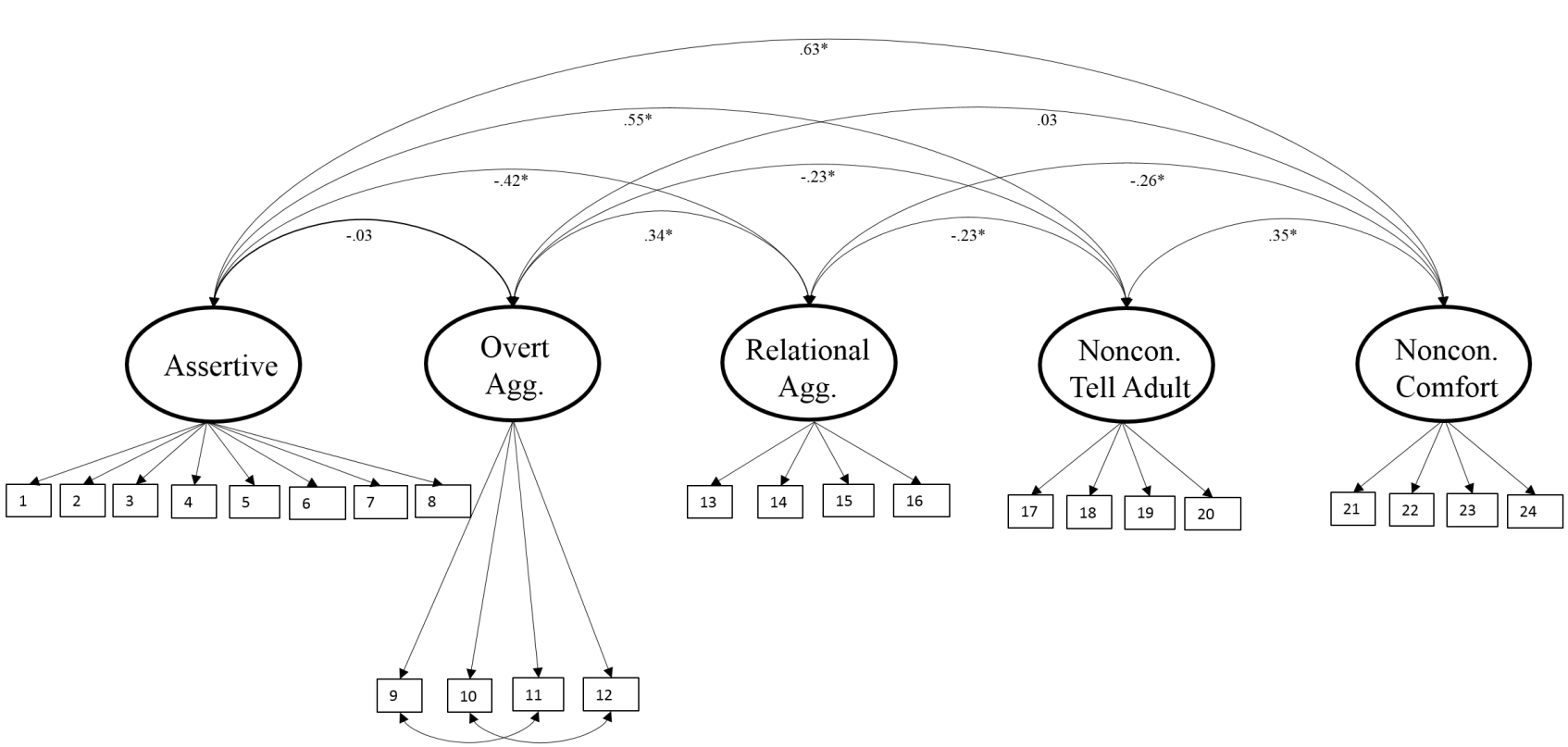

Figure 2. Covariances between constructs of the Enacted Defending Scale (EDS). Estimates are standardized completely. *$p < .01$. Agg. = Aggressive, Noncon. = Non-confrontational. All indicator loadings significant at $p < .01$ level. Model fit: χ^2 (242) = 495.45 ($p < .01$); RMSEA = .05 (90% CI: .05 - .06); NNFI=.93; CFI=.93.

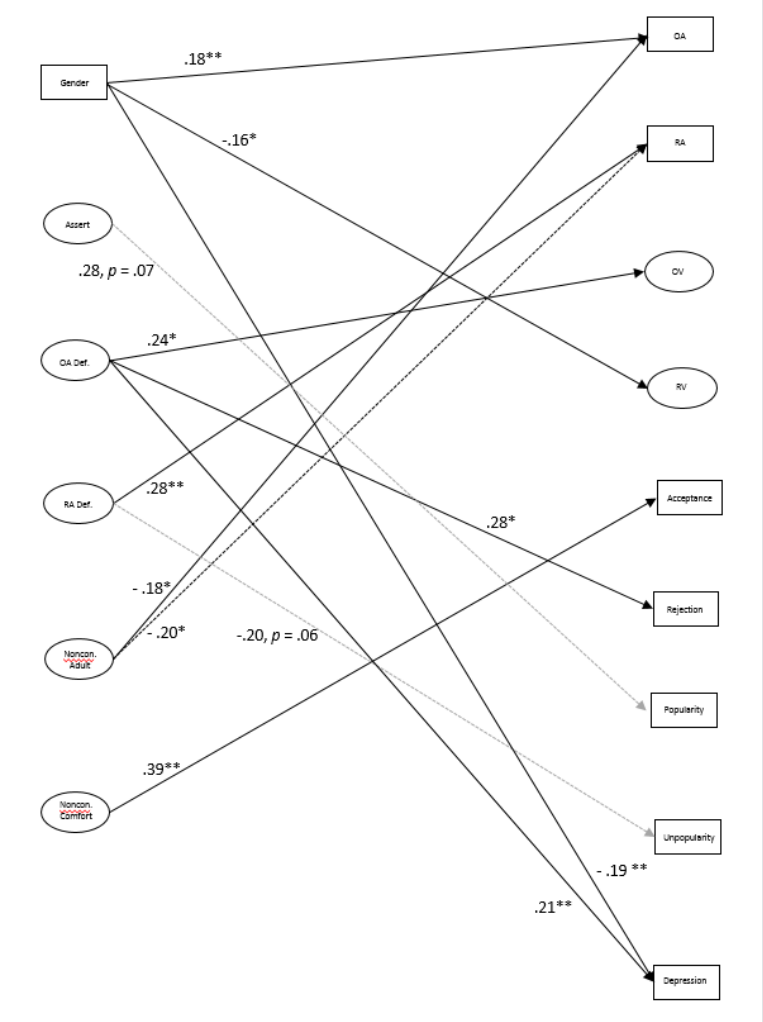

Figure 3. Effect of endorsement of defending strategies on dependent variables, controlling for gender. Only significant associations depicted. Predictors were allowed to covary, as were dependent variable constructs. χ^2 (573) = 826.46 (p < .01); RMSEA = .04 (90% CI: .03-.04); CFI = .93 NNFI = .91. For gender, 0 = girl, 1 = boy. *p < .05; **p < .01. Assert = Assertive, OA Def. = Overt Aggressive Defending, RA Def. = Relational Aggressive Defending, Noncon. Adult = Non-confrontational Defending, Telling an Adult, Noncon. Comfort = Non-confrontational Defending, Comforting the Victim.

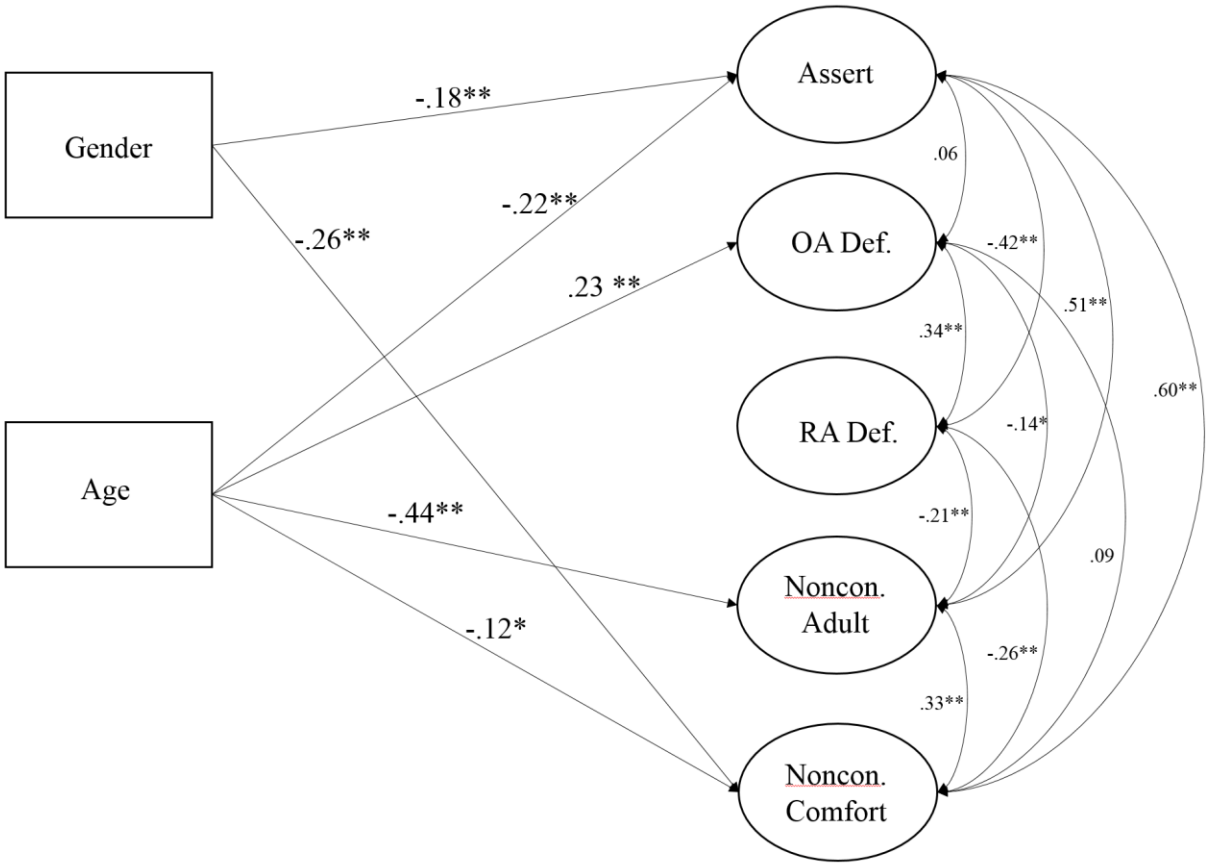

Figure 4. Effect of age on endorsement of defending strategies, controlling for gender. Only significant associations depicted. χ^2 (281) = 560.78 (p < .01); RMSEA = .05 (90% CI: .05-.06); NNFI=.92; CFI=.93. For gender, 0 = girl, 1 = boy. *M* of age =14.88 years (*SD* = 1.95), range = 10.25-18.42. *p < .05; **p < .01. Assert = Assertive, OA Def. = Overt Aggressive Defending, RA Def. = Relational Aggressive Defending, Noncon. Tell Adult = Non-confrontational Defending, Telling an Adult, Noncon. Comfort = Non-confrontational Defending, Comforting the Victim.

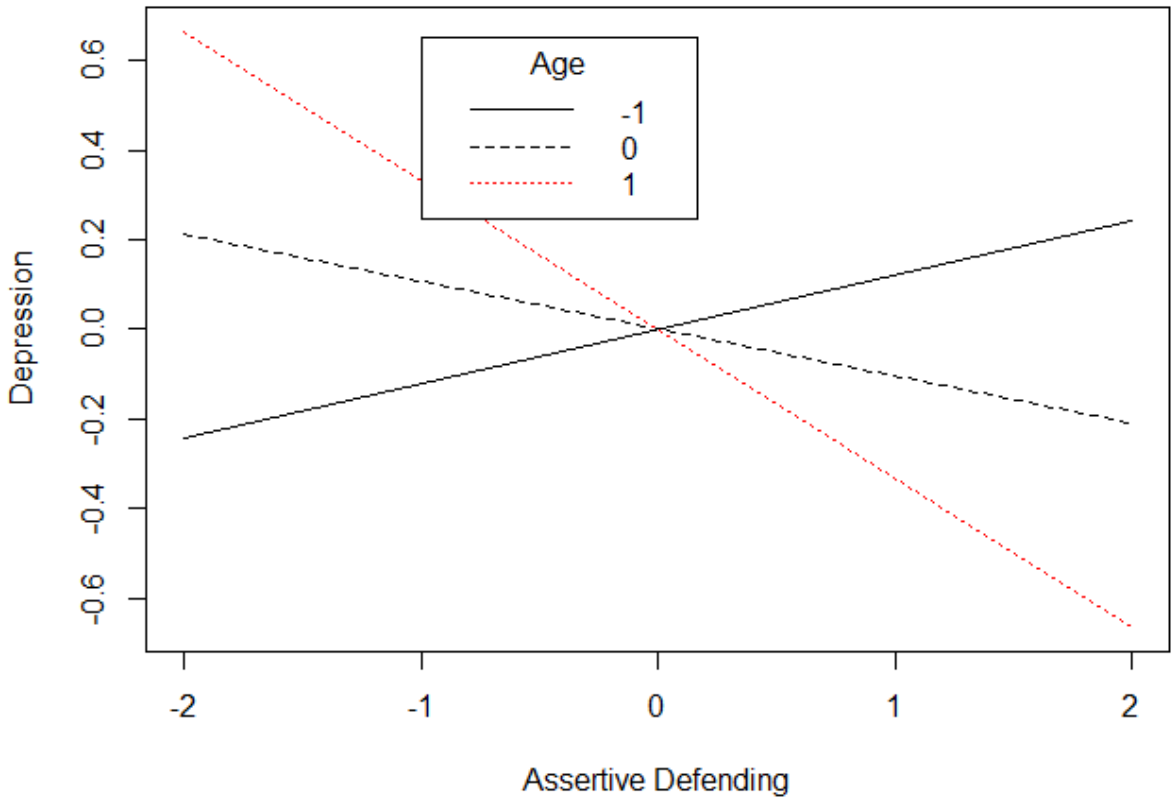

Figure 5. The relation between assertive defending and depression at different levels of age. Constructs were standardized with a mean of zero and variance of one. Predictor variables were double mean centered and outcome variable was centered prior to entering them into the model. -1 represents younger youth in the sample, while 1 represents older youth.

Appendix A.

All indicators of original EDS, prior to model fitting. Indicators that were later removed from the EDS are marked through. These strategies were a) the assertive strategy of trying to separate the people, b) the relationally aggressive strategy of trying to keep aggressors out of activities or groups, and c) the overt aggressive strategy of hitting or kicking.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Percent Missing
Assertive Defending in response to Overt Aggression						
w1ed_oa_as1	8	6	29	170	151	2
~~w1ed_oa_as2~~	7	18	68	181	93	2
w1ed_oa_as3	10	19	36	156	139	3
w1ed_oa_as4	9	10	47	197	98	3
~~w1ed_oa_as5~~	9	36	106	169	40	3
w1ed_oa_as6	4	17	47	182	107	4
Assertive Defending in response to Relational Aggression						
w1ed_ra_as1	3	15	53	212	81	2
~~w1ed_ra_as2~~	19	66	154	92	29	3
w1ed_ra_as3	10	18	68	184	85	2
w1ed_ra_as4	7	12	58	181	99	4
~~w1ed_ra_as5~~	16	56	112	141	27	5
w1ed_ra_as6	9	21	59	165	112	1
Overt Aggressive Defending in Response to Overt Aggression						
w1ed_oa_oag1	53	92	89	98	31	2
~~w1ed_oa_oag2~~	144	109	56	35	20	2
w1ed_oa_oag3	49	142	100	62	8	3
~~w1ed_oa_oag4~~	192	115	40	14	0	4
Overt Aggressive Defending in response to Relational Aggression						
w1ed_ra_oag1	62	148	109	38	4	3
~~w1ed_ra_oag2~~	204	104	40	12	2	2
w1ed_ra_oag3	58	139	107	48	3	4
~~w1ed_ra_oag4~~	191	114	43	9	1	4
Relationally Aggression Defending in response to Overt Aggression						
~~w1ed_oa_rag1~~	33	83	123	100	20	3
w1ed_oa_rag2	140	151	55	10	2	4
~~w1ed_oa_rag3~~	39	96	130	75	14	5
w1ed_oa_rag4	148	154	40	11	1	5
Relational Aggressive Defending in response to Relational Aggression						
~~w1ed_ra_rag1~~	46	129	129	38	13	4
w1ed_ra_rag2	141	154	57	10	2	2
~~w1ed_ra_rag3~~	36	95	139	76	18	2
w1ed_ra_rag4	141	157	54	11	2	2
Telling an Adult in Response to Overt Aggression						
w1ed_oa_neu1	27	42	65	134	90	4
w1ed_oa_neu3	32	61	88	118	55	5

Telling Some Adult in response to Relational Aggression						
w1ed_ra_neu1	33	68	108	121	33	2
w1ed_ra_neu3	33	57	88	125	63	1
Comforting the Victim in response to Overt Aggression						
w1ed_oa_neu2	5	9	42	155	150	3
w1ed_oa_neu4	4	12	48	173	117	55
Comforting the Victim in response to Relational Victimization						
w1ed_ra_neu2	7	10	68	178	97	3
w1ed_ra_neu4	2	15	60	167	123	1

Appendix B.

Model fits and detailed description of all tested models prior to final model comparisons.

Series 1.

Model 1 assessed a 3-factor model, with indicators loading onto 3 constructs: assertive, aggressive and non-confrontational defending, χ^2 (591) = 2770.99 ($p < .01$); RMSEA = .10 (90% CI: .10-.10); NNFI=.58; CFI=.61. According the RMSEA, NNFI, and CFI, this model did not fit the data adequately. Model 2 was the 4-factor model, which separated assertive and aggressive defending, and also differentiated two forms of non-confrontational defending, telling an adult, and comforting the victim, χ^2 (588) = 2352.43 ($p < .01$); RMSEA = .09 (90% CI: .09-.09); NNFI=.66; CFI=.68. Model 2 fit the data significantly better than Model 1 ($\Delta \chi^2$ (3) = 418.56, $p < .01$), but the fit was inadequate. Model 3 tested a variation of Model 1. It was a 6-factor model, which differentiated aggressive, assertive, and non-confrontational strategies into responses to overt victimization and responses to relational victimization. This model was not positive definite. Model 4 was a variation of Model 2. In this model, the 4-factor model representative of assertive, aggressive, and the two non-confrontational strategies, telling an adult and comforting the victim, were further differentiated by whether they were responses to overt or relational victimization. This model was not positive definite. Model 5 was a variation of the 3-factor Model 1. Model 5 additionally differentiated between responding to victimization of any form with overt and relational aggression. Model 2, the best fitting model so far, fit significantly better than Model 5, represented by lower AIC and BIC in Model 2 (see AICs and BICs in table below). Model 6 was much like Model 2, the 4-factor model, only it additionally differentiated overt aggressive defending and relational aggressive defending in response to either form of victimization. The fit of Model 6 was better than that of the previous models, but still was not

good model fit, χ^2 (584) = 2082.51 ($p < .01$); RMSEA = .08 (90% CI: .08-.09); NNFI=.71; CFI=.73. The fit of Model 6 was better than that of Model 2, $\Delta\chi^2$ (4) = 269.92, $p < .01$). Model 7 differentiated responses to overt and relational victimization and additionally differentiated forms of aggressive strategies used to defend, but in this model non-confrontational defending was *not* separated into two forms (8-factor model). Model 8 was the same as Model 7, only this model *did* separate the non-confrontational forms of defending into 2 factors (10-factor model). Neither Model 7 nor Model 8 were positive definite. From this series of models, it seems that different non-confrontational defending strategies should be separated, and that different forms of aggressive defending (overt and relational) should additionally be differentiated. However, even the best-fitting model, Model 6, had inadequate fit.

Model	df	χ^2	RMSEA	95% CI	NNFI	CFI	AIC	BIC
1.1	591	2770.99*	.10	.10-.10	.58	.61	31846.21	32281.32
1.2	588	2352.43*	.09	.09-.09	.66	.68	31434.36	31880.50
1.3	579	2681.76*	.10	.10-.10	.59	.62	31781.69	32263.05
1.4	568	2217.56*	.09	.09-.09	.67	.70	31339.49	31863.90
1.5	588	2501.07*	.09	.09-.10	.63	.66	31583.00	32029.14
1.6	584	2082.51*	.08	.08-.09	.71	.73	31172.44	31634.23
1.7	566	2047.92*	.09	.09-.10	.63	.67	31533.85	32066.09
1.8	553	1949.91*	.08	.08-.09	.71	.75	31101.84	31212.22

Series 2.

Model 2 fit significantly better than Model 1, $\Delta\chi^2$ (3) = 416.62, $p < .01$. Model 3 was again non-positive definite as was Model 4. Model 5 converged successfully, but Model 2 fit better than Model 5 (see AIC and BIC below). Model 6 was again the best-fitting model, χ^2 (454) = 1493.86 ($p < .01$); RMSEA = .08 (90% CI: .07-.08); NNFI=.77; CFI=.79, and fit significantly better than Model 2, $\Delta\chi^2$ (4) = 266.34, $p < .01$. Model 7 and Model 8 were not positive definite.

Model	df	χ^2	RMSEA	95% CI	NNFI	CFI	AIC	BIC
2.1	461	2176.82*	.10	.10-.11	.63	.66	28008.19	28395.62
2.2	458	1760.20*	.09	.08-.09	.72	.74	27597.57	27996.75
2.3	449	2093.88*	.10	.10-.10	.64	.67	27949.25	28031.48
2.4	440	1642.05*	.09	.08-.09	.73	.76	27515.41	27985.03
2.5	458	1910.63*	.09	.09-.10	.69	.71	27748.00	28147.17
2.6	454	1493.86*	.08	.07-.08	.77	.79	27339.23	27754.06
2.7	436	1823.46*	.09	.09-.10	.68	.72	27704.83	28190.10
2.8	423	1369.73*	.08	.07-.08	.78	.81	27277.10	27378.59

Series 3.

Model 2 again fit the data better than Model 1, $\Delta \chi^2 (3) = 417.92$, $p < .01$. Model 3 was not positive definite. Model 4 was not positive definite. Model 2 (AIC = 23623) fit significantly better than Model 5 (AIC = 23757). The fit of Model 6 was better than had been observed in all previous models, $\chi^2 (340) = 1045.14$ ($p < .01$); RMSEA = .08 (90% CI: .07-.08); NNFI=.83; CFI=.84, and fit significantly better than Model 2, $\Delta \chi^2 (4) = 282.80$, $p < .01$. Models 7 and 8 were not positive definite.

Model	df	χ^2	RMSEA	95% CI	NNFI	CFI	AIC	BIC
3.1	347	1745.87*	.10	.10-.11	.66	.69	24034.65	24375.12
3.2	344	1327.95*	.09	.08-.09	.76	.78	23622.72	23974.94
3.3	335	1663.59*	.10	.10-.11	.67	.71	23976.36	24363.80
3.4	326	1210.23*	.09	.08-.09	.77	.81	23541.01	23963.67
3.5	344	1462.18*	.09	.09-.10	.73	.75	23756.96	24109.17
3.6	340	1045.14*	.08	.07-.08	.83	.84	23347.92	23715.79
3.7	324	1383.27*	.09	.09-.10	.73	.77	23718.05	24148.54
3.8	311	927.94*	.07	.07-.08	.84	.86	23288.78	23770.08

Series 4.

Model 2 fit significantly better than Model 1, $\Delta \chi^2$ (3) = 416.02, $p < .01$. Model 3 and Model 4 were not positive definite. Model 2 fit similarly to Model 5 (see AIC and BIC below), but the AIC and BIC values for Model 2 were slightly lower. The fit of Model 6 was better than had been observed in all previous models, χ^2 (289) = 694.95 ($p < .01$); RMSEA = .06 (90% CI: .06-.07); NNFI=.89; CFI=.90, and fit significantly better than Model 2, $\Delta \chi^2$ (4) = 414.44, $p < .01$. Models 7 and 8 were not positive definite.

Model	df	χ^2	RMSEA	95% CI	NNFI	CFI	AIC	BIC
4.1	296	1525.41*	.11	.10-.11	.67	.70	22561.57	22878.57
4.2	293	1109.40*	.09	.08-.09	.78	.80	22151.56	22480.29
4.3	284	1455.31*	.11	.10-.11	.67	.71	22515.48	22879.43
4.4	275	1002.84*	.09	.08-.09	.79	.82	22081.00	22480.17
4.5	293	1113.15*	.09	.08-.09	.78	.80	22155.31	22484.05
4.6	289	694.95*	.06	.06-.07	.89	.90	21745.12	22089.50
4.7	273	1033.72*	.09	.08-.09	.78	.81	22115.88	22192.93
4.8	260	574.99*	.06	.05-.06	.90	.92	21683.16	22141.04

Appendix C.

Unstandardized Indicator Intercepts and Standardized Loadings of EDS Indicators (Parts 1 & 2)

Indicator		Estimate	Std. Error	Standardized Factor Loading
Assertive				
1	If someone is being hit or kicked, I try to stop it by telling the person doing the hitting or kicking to stop it e.g. cut it out.	4.24	.04	.54
2	If someone is being hit or kicked, I try to stop it by telling the person doing the hitting or kicking it's not right to treat people like that.	4.09	.05	.68
3	If someone is saying mean things to someone or calling them names, I try to stop it by telling the person saying mean things to stop it e.g. cut it out.	4.01	.05	.50
4	If someone is saying mean things to someone or calling them names, I try to stop it by telling the person doing the hitting or kicking it's not right to treat people like that.	4.03	.05	.76
5	If a person is trying to keep someone out of an activity or group on purpose, I try to stop it by telling the person leaving others out to stop it e.g. cut it out.	3.97	.04	.66
6	If a person is trying to keep someone out of an activity or group on purpose, I try to stop it by telling the person leaving others out it's not right to treat people like that.	3.87	.05	.65
7	If someone is spreading rumors about someone else, I try to stop it by telling the person spreading rumors about others to stop it e.g. cut it out.	3.99	.05	.57
8	If someone is spreading rumors about someone else, I try to stop it by telling the person spreading rumors about others it's not right to treat people like that.	3.96	.05	.68
Overtly Aggressive				
9	If someone is being hit or kicked, I try to stop it by yelling at the person doing the hitting or kicking.	2.89	.06	.74
10	If someone is saying mean things to someone or calling them names, I try to stop it by yelling at the person saying mean things.	2.55	.05	.79
11	If a person is trying to keep someone out of an activity or group on purpose, I try to stop it by yelling at the person leaving others out.	2.38	.05	.75
12	If someone is spreading rumors about someone else, I try to stop it by yelling at the person spreading rumors about others.	2.43	.05	.70
Relationally Aggressive				
13	If someone is being hit or kicked, I try to stop it by spreading a rumor about the person doing the hitting or kicking.	1.84	.04	.68

13	If a person is saying mean things to someone or calling them names, I try to stop it by spreading a rumor about the person saying mean things.	1.77	.04	.83
15	If a person is trying to keep someone out of an activity or group on purpose, I try to stop it by spreading a rumor about the person leaving others out.	1.84	.04	.76
16	If someone spreading rumors about someone else, I try to stop it by spreading a rumor about the person who spreads rumors about others.	1.85	.04	.70
Non-confrontational, Tell Adult				
17	If someone is being hit or kicked, I try to stop it by telling some adult about it.	3.62	.06	.79
18	If a person is saying mean things to someone or calling them names, I try to stop it by telling some adult about it.	3.30	.06	.91
19	If a person is trying to keep someone out of an activity or group on purpose, I try to stop it by telling some adult about it.	3.15	.06	.84
20	If someone spreading rumors about someone else, I try to stop it by telling some adult about it.	3.35	.06	.90
Non-confrontational, Comfort				
21	If someone is being hit or kicked, I try to stop it by comforting the person getting hit or kicked afterward.	4.21	.05	.69
22	If a person is saying mean things to someone or calling them names, I try to stop it by comforting the person who had mean things said about them afterward.	4.09	.04	.79
23	If a person is trying to keep someone out of an activity or group on purpose, I try to stop it by comforting the person who was left out afterward.	3.97	.05	.61
24	If someone spreading rumors about someone else, I try to stop it by comforting the person who had rumors spread about them.	4.07	.04	.72

Note. All indicator loadings significant at the $p < .01$ level.

Appendix D.

Unstandardized Indicator Intercepts, Standard Errors, and Standardized Factor loadings from the Part 3 CFA

Indicator	Standardized Factor Loadings
Assertive Defending 1	.54*
Assertive Defending 2	.68*
Assertive Defending 3	.50*
Assertive Defending 4	.76*
Assertive Defending 5	.67*
Assertive Defending 6	.65*
Assertive Defending 7	.57*
Assertive Defending 8	.68*
Overt Aggressive Defending 1	.72*
Overt Aggressive Defending 2	.81*
Overt Aggressive Defending 3	.74*
Overt Aggressive Defending 4	.71*
Relational Aggressive Defending 1	.67*
Relational Aggressive Defending 2	.83*
Relational Aggressive Defending 3	.77*
Relational Aggressive Defending 4	.70*
Non-confrontational, Tell Adult 1	.79*
Non-confrontational, Tell Adult 2	.91*
Non-confrontational, Tell Adult 3	.84*
Non-confrontational, Tell Adult 4	.90*
Non-confrontational, Comfort, 1	.69*
Non-confrontational, Comfort, 2	.79*
Non-confrontational, Comfort, 3	.60*
Non-confrontational, Comfort, 4	.73*
Overt Aggression	1.00*

Relational Aggression	1.00*
Overt Victimization	.71*
Overt Victimization	.64*
Overt Victimization	.86*
Relational Victimization	.79*
Relational Victimization	.66*
Relational Victimization	.78*
Acceptance	1.00*
Rejection	1.00*
Popularity	1.00*
Unpopularity	1.00*
Depressive Symptoms	1.00*

Notes: $N = 370$. * $p < .01$.

Appendix E.

Correlations, Means, and Standard Deviations of EDS Indicators and Age

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	*M*	*SD*
1. Assertive	1.00																							4.24	.82
2. Assertive	.50**	1.00																						4.10	.97
3. Assertive	.29**	.37**	1.00																					4.01	.86
4. Assertive	.43**	.56**	.38**	1.00																				4.04	.85
5. Assertive	.35**	.42**	.31**	.48**	1.00																			3.97	.78
6. Assertive	.28**	.42**	.34**	.45**	.48**	1.00																		3.87	.92
7. Assertive	.23**	.39**	.28**	.42**	.41**	.33**	1.00																	3.99	.87
8. Assertive	.33**	.41**	.33**	.49**	.44**	.50**	.45**	1.00																3.96	.96
9. OAD	.15**	.08	.06	.03	.02	.01	-.04	.02	1.00															2.90	1.20
10. OAD	.01	-.06	.01	.01	-.06	-.11	-.10	-.04	.60**	1.00														2.55	1.00
11. OAD	-.07	-.08	-.02	-.05	-.01	-.02	-.05	.01	.52**	.59**	1.00													2.37	.93
12. OAD	-.03	-.06	.00	.07	.03	-.07	-.04	-.01	.49**	.55**	.55**	1.00												2.43	.95
13. RAD	-.12*	-.13*	-.11*	-.17**	-.28**	-.23**	-.17**	-.16**	.19**	.06	.15**	.15**	1.00											1.84	.83
14. RAD	-.20**	-.19**	-.21**	-.20**	-.21**	-.19**	-.20**	-.24**	.16**	.18**	.23**	.28**	.56**	1.00										1.77	.79
15. RAD	-.22**	-.23**	-.18**	-.21**	-.22**	-.27**	-.18**	-.24**	.15**	.22**	.23**	.26**	.55**	.62**	1.00									1.84	.82
16. RAD	-.22**	-.20**	-.20**	-.21**	-.17**	-.18**	-.17**	-.19**	.17**	.14**	.19**	.25**	.44**	.59**	.50**	1.00								1.84	.82
17. Tell Ad	.37**	.39**	.29**	.41**	.32**	.40**	.31**	.38**	-.12*	-.16**	-.09	-.07	-.15**	-.23**	-.14*	-.17**	1.00							3.61	1.20
18. Tell Ad	.26**	.27**	.16**	.39**	.30**	.34**	.30**	.36**	-.18**	-.24**	-.06	-.04	-.13*	-.15**	-.16**	-.09	.72**	1.00						3.29	1.19
19. Tell Ad	.24**	.29**	.16**	.36**	.23**	.34**	.29**	.30**	-.24**	-.18**	-.12	-.05	-.13*	-.15**	-.10	-.13*	.67**	.77**	1.00					3.15	1.11
20. Tell Ad	.26**	.30**	.14**	.35**	.28**	.28**	.31**	.36**	-.21**	-.24**	-.09	-.07	-.17**	-.19**	-.16**	-.12*	.70**	.83**	.75**	1.00				3.35	1.20
21. Comf	.26**	.32**	.21**	.31**	.24**	.22**	.20**	.25**	.02	.02	-.02	-.01	-.14**	-.15**	-.15**	-.12*	.34**	.19**	.17**	.19**	1.00			4.21	.85
22. Comf	.23**	.29**	.20**	.41**	.29**	.22**	.19**	.28**	.00	.00	.00	.03	-.10	-.11*	-.13*	-.10	.23**	.26**	.20**	.20**	.60**	1.00		4.09	.83
23. Comf	.17**	.28**	.20**	.35**	.35**	.35**	.27**	.26**	.03	-.01	.10	.06	-.07	-.13*	-.12*	-.08	.22**	.20**	.25**	.22**	.34**	.49**	1.00	3.97	.86
24. Comf	.22**	.27**	.25**	.34**	.40**	.33**	.33**	.40**	.06	.05	.02	-.04	-.16**	-.20**	-.22**	-.20**	.19**	.21**	.17**	.24**	.49**	.56**	.43**	4.07	.84
25. Age	-.13*	-.16**	-.06	-.17**	-.15**	-.15**	-.15**	-.20**	.27**	.14*	.12*	.15**	.05	.11	.02	.01	-.29**	-.40**	-.41**	-.39**	-.06	-.06**	-.14**	14.88	1.95

Notes. OAD = overt aggressive defending; RAD = relationally aggressive defending; Tell Ad = non-confrontational telling some adult; Comf = non-confrontational comforting the victim. Missing data were deleted pairwise for correlations and listwise for means and standard deviations. .

REFERENCES

Austin, S., & Joseph, S. (1996). Assessment of bully/victim problems in 8 to 11 year-olds. *British Journal of Educational Psychology*, *66*, 447-456.

Barchia, K., & Bussey, K. (2011). Predictors of student defenders of peer aggression victims: Empathy and social cognitive factors. *International Journal of Behavioral Development, 35*(4), 289-297. doi: 10.1177/0165025410396746

Barhight, L. R., Hubbard, J. A., Grassetti, S. N., & Morrow, M. T. (2015). Relations between actual group norms, perceived peer behavior, and bystander children's intervention to bullying. *Journal of Clinical Child & Adolescent Psychology*, 1-7. doi: 10.1080/15374416.2015.1046180

Barhight, L. R., Hubbard, J. A., & Hyde, C. T. (2013). Children's physiological and emotional reactions to witnessing bullying predict bystander intervention. *Child development*, *84*(1), 375-390. 10.1111/j.1467-8624.2012.01839.x

Bellmore, A., Ma, T.-L., You, J.-i., & Hughes, M. (2012). A two-method investigation of early adolescents' responses upon witnessing peer victimization in school. *Journal of Adolescence*, *35*(5), 1265-1276. doi: 10.1016/j.adolescence.2012.04.012

Björkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex roles*, *30*(3-4), 177-188. doi: 10.1007/BF01420988

Björkqvist, K., Österman, K., & Kaukiainen, A. (1992). The development of direct and indirect aggressive strategies in males and females. (pp. 51-64). In K. Björkqvist & P. Niemelä

(Eds.), *Of mice and women: Aspects of female aggression.* San Diego, CA, US: Academic Press

Boivin, M., Hymel, S., & Bukowski, W. M. (1995). The roles of social withdrawal, peer rejection, and victimization by peers in predicting loneliness and depressed mood in childhood. *Development and Psychopathology, 7*(04), 765-785. doi:10.1017/S0954579400006830

Boulton, M. J., Bucci, E., & Hawker, D. D. S. (1999). Swedish and English secondary school pupils' attitudes towards, and conceptions of, bullying: Concurrent links with bully/victim involvement. *Scandinavian Journal of Psychology*, *40*(4). doi: 10.1111/1467-9450.404127

Boulton, M. J., Trueman, M., & Flemington, I. (2002). Associations between secondary school pupils' definitions of bullying, attitudes towards bullying, and tendencies to engage in bullying: Age and sex differences. *Educational Studies, 28*(4), 353-370. doi: 10.1080/0305569022000042390

Boulton, M. J., & Underwood, K. (1992). Bully/victim problems among middle school children. *British Journal of Educational Psychology, 62*(1), 73-87. doi: 10.1111/j.2044-8279.1992.tb01000.x

Bradshaw, C. P., Sawyer, A. L., & O'Brennan, L. M. (2007). Bullying and peer victimization at school: Perceptual differences between students and school staff. *School Psychology Review, 36*(3), 361-382.

Bukowski, W. M., & Sippola, L. K. (2001). Groups, individuals, and victimization: A view of the peer system. (pp. 355-377). In J. Juvonen & S. G. Graham (Eds.), *Peer harassment in the school: The plight of the vulnerable and the victimized*. New York: Guilford Press.

Cairns, R. B., Cairns, B. D., Neckerman, H. J., Ferguson, L. L., & Gariépy, J.-L. (1989). Growth and aggression: I. Childhood to early adolescence. *Developmental Psychology, 25*(2), 320-330. doi: 10.1037/0012-1649.25.2.320

Caravita, S. C. S., Di Blasio, P., & Salmivalli, C. (2009). Unique and interactive effects of empathy and social status on involvement in bullying. *Social Development, 18*(1), 140-163. doi: 10.1111/j.1467-9507.2008.00465.x

Caravita, S. C. S., Di Blasio, P., & Salmivalli, C. (2010). Early adolescents' participation in bullying: Is ToM involved? *The Journal of Early Adolescence, 30*(1), 138-170. doi: 10.1177/0272431609342983

Caravita, S., Gini, G., & Pozzoli, T. (2012). Main and moderated effects of moral cognition and status on bullying and defending. *Aggressive Behavior, 38*(6), 456-468. doi: 10.1002/ab.21447

Card, N. A., & Hodges, E. V. E. (2008). Peer victimization among schoolchildren: Correlations, causes, consequences, and considerations in assessment and intervention. *School Psychology Quarterly, 23*(4), 451-461. doi: 10.1037/a0012769

Card, N. A., Isaacs, J., & Hodges, E. V. E. (2007). Correlates of school victimization: Implications for prevention and intervention. In J. E. Zins, M. J. Elias & C. A. Maher (Eds.), *Bullying, victimization, and peer harassment: A handbook of prevention and intervention* (pp. 339-366). New York: Haworth Press.

Card, N. A., & Little, T. D. (2006). Proactive and reactive aggression in childhood and adolescence: A meta-analysis of differential relations with psychosocial

adjustment. *International Journal of Behavioral Development, 30*(5), 466-480. doi: 10.1177/0165025406071904

Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development, 79*(5), 1185-1229. doi: 10.1111/j.1467-8624.2008.01184.x

Casper, D. M. (2013). *Participant roles in aggression: Analysis of the overt and relational aggression participant role scales with confirmatory factor analysis. ProQuest Dissertations and Theses,* 146. Retrieved from http://ezproxy.library.arizona.edu/login?url=http://search.proquest.com/docview/1477859675?accountid=8360. (1477859675).

Cohen, D. (1998). Culture, social organization, and patterns of violence. *Journal of Personality and Social Psychology, 75*(2), 408-419. doi: 10.1037/0022-3514.75.2.408

Correia, I., Alves, H., De Almeida, A. N. A. T., & Garcia, D. J. (2010). Norms regarding secondary victimization of bullying victims: Do they differ according to the victim's categorization? *Scandinavian Journal of Psychology, 51*(2), 164-170. doi: 10.1111/j.1467-9450.2009.00732.x

Côté, S. M., Vaillancourt, T., Barker, E. D., Nagin, D., & Tremblay, R. E. (2007). The joint development of physical and indirect aggression: Predictors of continuity and change during childhood. *Development and Psychopathology,19*(01), 37-55. doi: 10.1017/S0954579407070034

Craig, W. M., & Pepler, D. J. (1998). Observations of bullying and victimization in the school yard. *Canadian Journal of School Psychology, 13*(2), 41-59. doi: 10.1177/082957359801300205

Craig, W. M., Pepler, D., & Atlas, R. (2000). Observations of bullying in the playground and in the classroom. *School Psychology International, 21*(1), 22-36. doi: 10.1177/0143034300211002

Crapanzano, A. M., Frick, P. J., Childs, K., & Terranova, A. M. (2011). Gender differences in the assessment, stability, and correlates to bullying roles in middle school children. *Behavioral Sciences & the Law, 29*(5), 677-694. doi: 10.1002/bsl.1000

Crick, N. R. & Grotpeter, J. K. (1995), Relational aggression, gender, and social-psychological adjustment. *Child Development, 66*(3), 710–722. doi: 10.1111/j.1467-8624.1995.tb00900.x

Crick, N. R., & Grotpeter, J. K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology, 8*(02), 367-380. doi: doi:10.1017/S0954579400007148

Denny, S., Peterson, E. R., Stuart, J. Utter, J., Bullen, P., Fleming, T., Ameratunga, S., Clark, T., & Milfont, T. (2015). Bystander intervention, bullying, and victimization: A multilevel analysis of New Zealand high schools. *Journal of School Violence*, *14*(3), 245-272. doi: 10.1080/15388220.2014.910470

Demaray, M. K., Summers, K. H., Jenkins, L. N., & Becker, L. D. (2014). Bullying Participant Behaviors Questionnaire (BPBQ): Establishing a reliable and valid measure. *Journal of School Violence*, 1-31. doi: 10.1080/15388220.2014.964801

Enders, C. K. (2010). *Applied missing data analysis*. Guilford Press.

Espelage, D., Green, H., & Polanin, J. (2012). Willingness to intervene in bullying episodes among middle school students individual and peer-group influences. *The Journal of Early Adolescence, 32*(6), 776-801. doi: 10.1177/0272431611423017

Evans, C. B. R. & Smokowski, P. R. (2015). Prosocial bystander behavior in bullying dynamics: Assessing the impact of social capital. *Journal of Youth and Adolescence,* 1-19. doi: 10.1007/s10964-015-0338-5

Fitzpatrick, S., & Bussey, K. (2011). The development of the Social Bullying Involvement Scales. *Aggressive Behavior, 37*(2), 177-192. doi: 10.1002/ab.20379

Forsberg, C., Thornberg, R., & Samuelsson, M. (2014). Bystanders to bullying: fourth- to seventh-grade students' perspectives on their reactions. *Research Papers in Education*, 1-20. doi: 10.1080/02671522.2013.878375

Gini, G. (2006). Social cognition and moral cognition in bullying: what's wrong? *Aggressive Behavior, 32*(6), 528-539. doi: 10.1002/ab.20153

Gini, G., Albiero, P., Benelli, B., & Altoè, G. (2007). Does empathy predict adolescents' bullying and defending behavior? *Aggressive Behavior, 33*(5), 467-476. doi: 10.1002/ab.20204

Gini, G., Albiero, P., Benelli, B., & Altoè, G. (2008). Determinants of adolescents' active defending and passive bystanding behavior in bullying. *Journal of Adolescence, 31*(1), 93-105.

Gini, G., Pozzoli, T., Borghi, F., & Franzoni, L. (2008). The role of bystanders in students' perception of bullying and sense of safety. *Journal of School Psychology, 46*(6), 617-638. doi: 10.1016/j.jsp.2008.02.001

Goossens, F. A., Olthof, T., & Dekker, P. H. (2006). New Participant Role Scales: comparison between various criteria for assigning roles and indications for their validity. *Aggressive Behavior, 32*(4), 343-357. doi: 10.1002/ab.20133

Graham, S., & Juvonen, J. (1998). Self-blame and peer victimization in middle school: An attributional analysis. *Developmental Psychology, 34*(3), 587-599. doi: 10.1037/0012-1649.34.3.587

Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychiatry, 41*(4), 441-455. doi: 10.1111/1469-7610.00629

Hawkins, D. L., Pepler, D. J., & Craig, W. M. (2001). Naturalistic Observations of Peer Interventions in Bullying. *Social Development, 10*(4), 512-527. doi: 10.1111/1467-9507.00178

Hodges, E. V., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*(1), 94-101. doi: 10.1037/0012-1649.35.1.94

Hodges, E. V. E., & Perry, D. G. (1999). Personal and interpersonal antecedents and consequences of victimization by peers. *Journal of Personality and Social Psychology, 76*(4), 677-685. doi: 10.1037/0022-3514.76.4.677

Huitsing, G., Snijders, T. A., Van Duijn, M. A., & Veenstra, R. (2014). Victims, bullies, and their defenders: A longitudinal study of the coevolution of positive and negative networks. *Development and Psychopathology,* 1-15. doi: 10.1017/S0954579414000297

Huitsing, G. & Veenstra, R. (2012) Bullying in classrooms: Participant Roles from a social network perspective, *Aggressive Behavior, 38*(6), 494-509. doi: 10.1002/ab.21438

Jia, F., Moore, E. W. G., Kinai, R., Crowe, K. S., Schoemann, A. M., & Little, T. D. (2014). Planned missing data designs with small sample sizes: How small is too small? *International Journal of Behavioral Development, 38*(5), 435-452. doi: 10.1177/0165025414531095

Jones, L. M., Mitchell, K. J., & Turner, H. A. (2015). Victim reports of bystander reactions to in-person and online peer harassment: A national survey of adolescents. *Journal of Youth and Adolescence*, 1-13. doi: 10.1007/s10964-015-0342-9

Juvonen, J., & Galván, A. (2008). Peer influence in involuntary social groups: Lessons from research on bullying. (pp. 225-244). In M. J. Prinstein & K. A. Dodge (Eds.), *Understanding peer influence in children and adolescents*. New York: Guilford Press.

Kanetsuna, T., Smith, P. K., & Morita, Y. (2006). Coping with bullying at school: children's recommended strategies and attitudes to school-based interventions in England and Japan. *Aggressive Behavior, 32*(6), 570-580. doi: 10.1002/ab.20156

Kärnä, A., Voeten, M., Poskiparta, E., & Salmivalli, C. (2010). Vulnerable children in varying classroom contexts: Bystanders' behaviors moderate the effects of risk factors on victimization. *Merrill-Palmer Quarterly, 56*(3), 261-282. doi: 10.1353/mpq.0.0052

Kelley, H. H., Holmes, J. G., Kerr, N. L., Reis, H. T., Rusbult, C. E. & Van Lange, P. A. M. (2003). *An Atlas of Interpersonal Situations.* New York: Cambridge University Press.

Klein, A. & Moosbrugger, H. (2000). Maximum likelihood estimations of latent interaction effects with the LMS method. *Psychometrika, 65*(4), 457-474. doi: 10.1007/BF02296338

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: Guilford.

Kochenderfer, B. J., & Ladd, G. W. (1996). Peer victimization: Cause or consequence of school maladjustment? *Child development*, *67*(4), 1305-1317. doi: 10.1111/j.1467-8624.1996.tb01797.x

Kochenderfer, B. J., & Ladd, G. W. (1997). Victimized children's responses to peers' aggression: Behaviors associated with reduced versus continued victimization. *Development and Psychopathology, 9*(01), 59-73.

Lin, G. C., Wen, Z., Marsh, H. W., & Lin, H. S. (2010). Structural equation models of latent interactions: Clarification of orthogonalizing and double-mean-centering strategies. *Structural Equation Modeling*, *17*(3), 374-391. doi: 10.1080/10705511.2010.488999

Lindstrom Johnson, S., Waasdorp, T. E., Debnam, K., & Bradshaw, C. P. (2013). The Role of Bystander Perceptions and School Climate in Influencing Victims' Responses to Bullying: To Retaliate or Seek Support? *Journal of Criminology*, *2013*. doi: 10.1155/2013/780460

Little, T. D. (2013). *Longitudinal Structural Equation Modeling*. New York: Guilford

Little, T. D., Jorgensen, T. D., Lang, K. M., & Moore, E. W. G. (2013). On the Joys of Missing Data. *Journal of Pediatric Psychology*, *39*(2), 151-162. doi: 10.1093/jpepsy/jst048

Little, T. D., & Rhemtulla, M. (2013). Planned Missing Data Designs for Developmental Researchers. *Child Development Perspectives, 7*(4), 199-204. doi: 10.1111/cdep.12043

Low, S., Frey, K. S., & Brockman, C. J. (2010). Gossip on the playground: Changes associated with universal intervention, retaliation beliefs, and supportive friends. *School Psychology Review*, *39*(4), 536-551.

Maslowski, J., Jager, J., Hemken, D. (2014). Estimating and interpreting latent variable interactions: A tutorial for applying the latent moderated structural equations method. *International Journal of Behavioral Development.* doi:10.1177/0165025414552301

McDonald, R. P. (1999). *Test theory: A unified treatment*. Mahwah, NJ: Erlbaum.

Menesini, E., Codecasa, E., Benelli, B., & Cowie, H. (2003). Enhancing children's responsibility to take action against bullying: Evaluation of a befriending intervention in Italian middle schools. *Aggressive Behavior, 29*(1), 1-14. doi: 10.1002/ab.80012

Menesini, E., Eslea, M., Smith, P. K., Genta, M. L., Giannetti, E., Fonzi, A., & Costabile, A. (1997). Cross-national comparison of children's attitudes towards bully/victim problems in school. *Aggressive Behavior, 23*(4), 245-257. doi: 10.1002/(sici)1098-2337(1997)23:4<245::aid-ab3>3.0.co;2-j

Merrell, K. W., Gueldner, B. A., Ross, S. W., & Isava, D. M. (2008). How effective are school bullying intervention programs? A meta-analysis of intervention research. *School Psychology Quarterly*, *23*(1), 26. doi: 10.1016/j.appdev.2014.11.005

Meter, D. J. & Card, N. A. (In press). Defenders of Victims of Peer Aggression: Interdependence Theory and an Exploration of Individual, Interpersonal, and Contextual Effects on the Defender Participant Role. *Developmental Review*.

Meter, D. J., & Card, N. A. (2015). Effects of Defending: The Longitudinal Relations Among Peer-perceived Defending of Victimized Peers, Victimization, and Liking. *Social Development*, n/a-n/a. doi: 10.1111/sode.12129

Nakamoto, J., & Schwartz, D. (2010). Is peer victimization associated with academic achievement? A meta-analytic review. *Social Development, 19*(2), 221-242. doi: 10.1111/j.1467-9507.2009.00539.x

Nickerson, A. B., Mele, D., & Princiotta, D. (2008). Attachment and empathy as predictors of roles as defenders or outsiders in bullying interactions. *Journal of School Psychology, 46,* 687-703. doi: 10.1016/j.jsp.2008.06.002

O'Connell, P., Pepler, D., & Craig, W. (1999). Peer involvement in bullying: insights and challenges for intervention. *Journal of Adolescence, 22*(4), 437-452. doi: 10.1006/jado.1999.0238

Oh, I., & Hazler, R. J. (2009).f Contributions of personal and situational factors to bystanders' reactions to school bullying. *School Psychology International, 30*(3), 291-310. doi: 10.1177/0143034309106499

Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school-based intervention program. In K. Rubin & D. Pepler (Eds.), *The development and treatment of childhood aggression* (pp. 411-448). Hillsdate, NJ: Erlbaum.

Palmer, S., & Cameron, L. (2010, July). Bystander intervention in subtle and explicit racist incidents. Paper session presented at the meeting of Developmental Perspectives on Intergroup Prejudice: Advances in Theory, Measurement, and Intervention, EASP Small Group Meeting, Lisbon, Portugal.

Peets, K., Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2015). Classroom norms of bullying alter the degree to which children defend in response to their affective empathy and power. *Developmental Psychology, 51*(7), 913-920. doi: 10.1037/a0039287

Perry, D. G., Kusel, S. J., & Perry, L. C. (1988). Victims of peer aggression. *Developmental Psychology, 24*(6), 807-814. doi: 10.1037/0012-1649.24.6.807

Perry, D. C., Williard, J. C., & Perry, L. C. (1990). Peers' perceptions of the consequences that victimized children provide aggressors. *Child Development, 61*(5), 1310-1325. doi: 10.1111/j.1467-8624.1990.tb02863.x

Pouwels, J. L., Lansu, T. A. M., & Cillessen, A. H. N. (2015) Participant roles of bullying in adolescence: Status characteristics, social behaviors, and assignment criteria. *Aggressive Behavior*. doi: 10.1002/ab.21614

Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2010). What does it take to stand up for the victim of bullying? The interplay between personal and social factors. *Merrill-Palmer Quarterly, 56*(2), 143-163. doi: 10.1353/mpq.0.0046

Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2012). Standing Up for the Victim, Siding with the Bully or Standing by? Bystander Responses in Bullying Situations. *Social Development, 21*(4), 722-741. doi: 10.1111/j.1467-9507.2012.00662.x

Pozzoli, T., Ang, R. P., & Gini, G. (2012). Bystanders' Reactions to Bullying: A Cross-cultural Analysis of Personal Correlates Among Italian and Singaporean Students. *Social Development, 21*(4), 686-703. doi: 10.1111/j.1467-9507.2011.00651.x

Pozzoli, T., & Gini, G. (2010). Active defending and passive bystanding behavior in bullying: The role of personal characteristics and perceived peer pressure. *Journal of Abnormal Child Psychology, 38*, 815-827. doi: 10.1007/s10802-010-9399-9

Pozzoli, T., Gini, G., & Vieno, A. (2012). The role of individual correlates and class norms in defending and passive bystanding behavior in bullying: A multilevel analysis. *Child Development, 83*(6), 1917-1931. doi: 10.1111/j.1467-8624.2012.01831.x

Preacher, K. J., & Coffman, D. L. (2006, May). Computing power and minimum sample size for RMSEA [Computer software]. Available from http://quantpsy.org/.

Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child and Adolescent Psychology 30*(4), 479-491. doi: 10.1207/S15374424JCCP3004_05

Pronk, J., Goossens, F. A., Olthof, T., De Mey, L., & Willemen, A. M. (2013). Children's intervention strategies in situations of victimization by bullying: Social cognitions of outsiders versus defenders. *Journal of School Psychology*, 51(6), 669-682. doi: 10.1016/j.jsp.2013.09.002

Pronk, J., Olthof, T., & Goossens, F. A. (2014). Factors influencing interventions on behalf of victims of bullying: A counterfactual approach to the social cognitions of outsiders and defenders. *Journal of Early Adolescence*, 1-25. doi:10.1177/0272431614562836

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385-401. doi: 10.1177/014662167700100306

Radloff, L. (1991). The use of the Center for Epidemiologic Studies Depression Scale in adolescents and young adults. *Journal of Youth and Adolescence, 20*(2), 149-166. doi: 10.1007/bf01537606

Reijntjes, A., Kamphuis, J. H., Prinzie, P., & Telch, M. J. (2010). Peer victimization and internalizing problems in children: A meta-analysis of longitudinal studies. *Child abuse & Neglect, 34*(4), 244-252. doi: 10.1016/j.chiabu.2009.07.009

Rigby, K., & Johnson, B. (2006). Expressed readiness of Australian schoolchildren to act as bystanders in support of children who are being bullied. *Educational psychology, 26*(3), 425-440. doi: 10.1080/01443410500342047

Rigby, K., & Slee, P. T. (1991). Bullying among Australian school children: Reported behavior and attitudes toward victims. *The Journal of Social Psychology, 131*(5), 615-627. doi: 10.1080/00224545.1991.9924646

Rivers, I., Poteat, V. P., Noret, N., & Ashurst, N. (2009). Observing bullying at school: The mental health implications of witness status. *School Psychology Quarterly, 24*(4), 211-223. doi: 10.1037/a0018164

Rodkin, P. C., Farmer, T. W., Pearl, R., & Van Acker, R. (2000). Heterogeneity of popular boys: antisocial and prosocial configurations. *Developmental Psychology, 36*(1), 14. doi: 10.1037/0012-1649.36.1.14

Rosseel, Y. (2012). lavaan: An R Package for Structural Equation Modeling. Journal of Statistical Software, 48(2), 1-36. Retrieved from http://www.jstatsoft.org/v48/i02/.

Sainio, M., Veenstra, R., Huitsing, G., & Salmivalli, C. (2010). Victims and their defenders: A dyadic approach. *International Journal of Behavioral Development, 35*(2), 144-151. doi: 10.1177/0165025410378068

Salmivalli, C. (2001). Group view on victimization: Empirical findings and their implications. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 398-419). New York: Guilford Press.

Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior, 15*(2), 112-120. doi:10.1016/j.avb.2009.08.007

Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior, 22*(1), 1-15. doi: 10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T

Salmivalli, C., Lappalainen, M., & Lagerspetz, K. M. J. (1998). Stability and change of behavior in connection with bullying in schools: A two-year follow-up. *Aggressive Behavior, 24*(3), 205-218. doi:10.1002/(SICI)1098-2337(1998)24:3<205::AID-AB5>3.0.CO;2-J

Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms, and behaviour in bullying situations. *International Journal of Behavioral Development, 28*(3), 246-258. doi: 10.1080/01650250344000488

Salmivalli, C., Voeten, M., & Poskiparta, E. (2011). Bystanders matter: Associations between reinforcing, defending, and the frequency of bullying behavior in classrooms. *Journal of*

Clinical Child & Adolescent Psychology, 40(5), 668-676. doi: 10.1080/15374416.2011.597090

Sandstrom, M., Makover, H., & Bartini, M. (2013). Social context of bullying: Do misperceptions of group norms influence children's responses to witnessed episodes? *Social Influence, 8*(2-3), 196-215. doi: 10.1080/15534510.2011.651302

Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology, 57*(1), 1-10. doi: 10.1037/a0018082

Schwartz, D., Dodge, K. A., & Coie, J. D. (1993). The emergence of chronic peer victimization in boys' play groups. *Child Development, 64*(6), 1755-1772. doi: 10.1111/j.1467-8624.1993.tb04211.x

Schwartz, D., Gorman, A. H., Nakamoto, J., & Toblin, R. L. (2005). Victimization in the peer group and children's academic functioning. *Journal of Educational Psychology, 97*(3), 425-435. doi: 10.1037/0022-0663.97.3.425

Schwartz, D., McFadyen–Ketchum, S. A., Dodge, K. A., Pettit, G. S., & Bates, J. E. (1998). Peer group victimization as a predictor of children's behavior problems at home and in school. *Development and Psychopathology, 10*(01), 87-99.

Smith, P. K. (2014). *Understanding school bullying: Its nature and prevention strategies*: SAGE.

Smith, P., K., & Shu, S. (2000). What good schools can do about bullying: Findings from a survey in English schools after a decade of research and action. *Childhood, 7*(2), 193-212. doi: 10.1177/0907568200007002005

Sulkowski, M. L., Bauman, S. A., Dinner, S., Nixon, C. & Davis, S. (2014). An investigation into how students respond to being victimization by peer aggression. *Journal of School Violence 13*(4), 339-358. doi: 10.1080/15388220.2013.857344

Sutton, J., & Smith, P. K. (1999). Bullying as a group process: An adaptation of the participant role approach. *Aggressive Behavior, 25*(2), 97-111. doi: 10.1002/(sici)1098-2337(1999)25:2<97::aid-ab3>3.0.co;2-7

Tisak, M. S., & Tisak, J. (1996). Expectations and judgments regarding bystanders» and victims responses to peer aggression among early adolescents. *Journal of Adolescence*, *19*(4), 383-392. doi:10.1006/jado.1996.0036

Trach, J., Hymel, S., Waterhouse, T., & Neale, K. (2010). Bystander Responses to School Bullying: A Cross-Sectional Investigation of Grade and Sex Differences. *Canadian Journal of School Psychology, 25*(1), 114-130. doi: 10.1177/0829573509357553

Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review. *Journal of Experimental Criminology, 7*(1), 27-56. doi: 10.1007/s11292-010-9109-1

Unnever, J.D., Cornell, D.G. (2004) Middle School Victims of Bullying: Who Reports being Bullied? *Aggressive Behavior*, 30, 373-388. doi: 10.1002/ab.20030

Vaillancourt, T., Miller, J. L., Fagbemi, J., Côté, S., & Tremblay, R. E. (2007). Trajectories and predictors of indirect aggression: Results from a nationally representative longitudinal study of Canadian children aged 2–10. *Aggressive Behavior*, *33*(4), 314-326.

Visconti, K. J., Kochenderfer-Ladd, B., & Clifford, C. A. (2013). Children's attributions for peer victimization: A social comparison approach. *Journal of Applied Developmental Psychology*, *34*(6), 277-287. doi: 10.1016/j.appdev.2013.06.002

Waasdorp, T. E., & Bradshaw, C. P. (2011). Examining student responses to frequent bullying: A latent class approach. *Journal of Educational Psychology, 103*(2), 336-352. doi: 10.1037/a0022747

Weissman, M. M., Scholomskas, D., Pottenger, M., Prusoff, B., A., & Locke, B. Z. (1977). Assessing depressive symptoms in five psychiatric populations: A validation study. *American Journal of Epidemiology*, *106*(3), 203-214.

Werth, J. M., Nickerson, A. B., Aloe, A. M., & Swearer, S. M. (2015). Bullying victimization and the social and emotional maladjustment of bystanders: A propensity score analysis. *Journal of School Psychology*, *53*(4), 295-308. doi:10.1016/j.jsp.2015.05.004

Yeager, D. S., Fong, C. J., Lee, H. Y., & Espelage, D. L. (2015). Declines in efficacy of anti-bullying programs among older adolescents: A developmental theory and a three-level meta-analysis. *Journal of Applied Developmental Psychology 37*, 36-51. doi: 10.1016/j.appdev.2014.11.005