Quality of Teacher-student Relationships: Moderator of the Effects of Peer

Victimization

by

Paul Kenneth Kremer

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Graduate Supervisory Committee:

Becky Kochenderfer-Ladd, Chair
Elsie Moore
Kathryn Nakagawa

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ABSTRACT

The associations among teacher-student relationships (e.g., close, conflictual, and dependent), peer victimization, internalizing (e.g., sadness, loneliness, and anxiety), and school attitudes (e.g., avoidance, liking) were investigated in a sample of 153 (76 boys and 77 girls) racially diverse (42% Latino and 46% White) third grade students and their teachers ($N = 30$: 15 T1; 15 T2). Specifically, a two year longitudinal design was used in which data were gathered using self and teacher questionnaires which were administered during the spring of third grade and then a year later when children were in fourth grade. Findings showed that conflictual and overly dependent teacher-student relationships were positively correlated with peer victimization; however, closeness as a quality of teacher-student relationships was not associated with peer victimization, internalizing, school liking, or school avoidance. Support for the hypothesis that teacher-student relationships moderated the relations between peer victimization and internalizing was mixed. Specifically, conflictual teacher-student relationships were found to exacerbate the effects of victimization on internalizing problems whereas no such relationships were found for close or dependent relationships. Taken together, findings from this study offer further evidence that the relationships students form with their teachers, especially conflictual and overly dependent teacher-student relationships, contribute to their psychological development, and may be especially influential for children who are victimized by classmates.

This dissertation is dedicated to my family. I am blessed to have a Graceful God and a loving family. I am blessed to have Leslie as my wife. Leslie patiently endured my graduate work over the last decade. Throughout this time, she provided wisdom, encouragement, support, and a sense of balance to our family. Finally, I would like to dedicate this work to our children, Jack, Madelyn, Owen, and Harrison. I am so proud of each of you and love you with all of my heart!

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Introduction

When studying the factors that contribute to the wellbeing of children in school, the types of relationships that students form with their teachers and peers are important considerations. For example, researchers have shown that children who form secure and warm relationships with their teachers tend to have positive school experiences. They strive for higher levels of academic performance, enjoy their school experience more, and are more self-directed and fully engaged in school (Birch & Ladd, 1997). In contrast, children who form relationships with teachers that are overly dependent or conflictual tend to develop negative attitudes toward school (e.g., dislike school and try to avoid it), demonstrate poor academic performance, and are less engaged in learning (Birch & Ladd). Moreover, the quality of relationships that teachers form with their students is correlated with the nature of relationships students have with peers. For example, children with close relationships with their teachers tend to also have more positive peer relationships (Howes, Matheson, & Hamilton, 1994; Pianta, Steinberg, & Rollins, 1995).

This study examines teachers' influence on their students' peer relationships, especially the degree to which they relate to children's vulnerability to peer victimization and its deleterious effects. This study focuses on younger elementary school children because younger students rely more on their teachers to protect them. Although bullying occurs at all grade levels, the highest occurrences of bullying are reported by students in the early elementary school years, with a lower frequency being reported at older ages. For example, Kochenderfer and Ladd (1996) found that 23% of their kindergarten sample could

be classified as victims, whereas other investigators report that about 17% of older children say they have been bullied (Nansel et al., 2001). Moreover, research is needed during this developmental period because the ill-effects of peer victimization, such as internalizing problems (Juvonen & Graham, 2001) and the development of negative school attitudes (Kochenderfer & Ladd, 1996) can emerge early in a child's school experience, and may trigger a trajectory of adjustment difficulties that remain long after the victimization ends (see Kochenderfer-Ladd & Wardrop, 2001).

This study takes the position that the quality of the relationship that children form with teachers has a strong influence on students' developmental experiences and outcomes. Specifically, I examined the proposition that teacher-student relationships (TSRs; close, conflictual, or dependent) may attenuate or exacerbate children's risk for victimization as well as its harmful consequences.

<center>**Literature Review**</center>

Attachment Theory

Before discussing how the quality of the TSR has an effect on student-related and school-related variables, it is important to have a theoretical framework for why relationships, in general, have an impact on children's development. To this end, a brief review of Attachment Theory follows.

The groundbreaking work of Bowlby and Ainsworth's Attachment Theory has advanced our understanding of the influence that developing relationships between adults and infants exert on life trajectories. Most notably, their theory proposes a framework for explaining how these early relationships (i.e., attachments) impact children's risk for adjustment problems later in life. According to Bowlby (1982), attachment relationships served several related functions for the developing infant, such as reducing distress, helping in the regulation of emotion, and promoting exploration of the environment. Central to attachment theory is the tenet that the quality of a relationship that is formed between an infant and his or her primary caregiver will, in large part, influence the child's developmental trajectory (Bowlby, 1982).

Briefly, Attachment Theory states that through each unique experience between primary caregivers and infants, infants develop a "felt security" and expectations or "working models" for how their primary caregivers would respond to them in the future. For example, Bowlby (1982) identified sensitive and caring responsiveness to infants' signals as contributors to a secure infant-caregiver attachment. Thus, infants whose mothers respond appropriately and

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quickly to cues learn that they can count on their mothers to help them when they are in need. In this manner, it is argued that children develop internal working models regarding their social world based on the quality of these early attachments with primary caregivers. Specifically, as infants experience positive, reliable, caring, supportive, nurturing interactions with their caregivers, or negative, unreliable, stressful, and even abusive ones, they begin to develop a worldview of others. That is, they begin to develop a set of expectations for social interactions (i.e., a working schema of self, others and self-other relationships) that guide their interactions with their caregivers as well as others.

To test the hypothesis that infants form some kind of meaningful internalized model, Mary Ainsworth (1978) developed the Strange Situation Test. This test has become a widely used technique for determining the quality of attachment toddlers have formed with their primary caregivers. Specifically, the Strange Situation Task involves observing 1 to 2 year olds in a series of separation and reunions with the primary attachment figure and noting how the child reacts to both the separations and reunion. Based on their reactions, their attachment is classified as secure, avoidant, resistant or disorganized. For example, secure attachments are characterized by children who use the parent as a secure base to explore the new environment, and after separation, actively seek out contact and interaction upon reunion with their primary caregiver. In contrast, children who, upon reunion, actively avoid their primary caregiver by ignoring, turning away, moving away, and looking away from their caregiver would be classified as having an avoidant attachment. Moreover, avoidantly-attached

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children tended to relate to strangers in the same way they do with their caregivers.

Using these classifications, research has shown that securely attached children are likely to become socially competent as well as have a functional protective factor when facing risk. In contrast, children with insecure attachments (i.e., avoidant, resistant, or disorganized) are more likely to have internalizing and externalizing problems throughout life (Berlin, Cassidy, & Appleyard, 2008). Moreover, using Ainsworth's strange situation paradigm, Egeland, Carlson and Sroufe (1993) found that secure attachments resulting from sensitive and responsive care giving from a primary attachment caregiver served as a protective factor (resilience factor) for later mental health problems for children experiencing poverty, family stress, or various forms of abuse.

Support for the contention that the parent-child attachment reflects the development of a child's internalized working model of relationships can be found in studies showing that children with secure attachments with their parents tend to also have better relationships with their peers and are more adept at navigating their social environments (Cassidy & Shaver, 1999). Such findings suggest that securely attached children have developed internal working models of others as reliable, trustworthy, and helpful. Because children bring their internal working models with them into the classroom, they may interpret and react to teachers' and peers' social overtures accordingly.

Attachment Theory and Teacher-student Relationships

Although the majority of early research on Attachment Theory focuses on parent-infant relationships, there is a growing field which examines how other adult-child relationships influence a child's life, such as how a relationship that is formed between a teacher and her student would effect a child's psychological and school development. Support to find linkages between parent-child and teacher-student relationships began when, Sroufe (1983) postulated that the quality of the parent-child relationship would influence the type of relationships children form with teachers when they enter the school context (for an overview, see Pianta, 1994.) Since that time, many other studies have supported the view that TSRs can be considered as another important type of adult-child dyads (Howes & Richie, 2002; Pianta, 1999). In other words, children's interactions with other adults (other than their parents) can build, modify, and even alter internal working models that are formed in the earlier years of life. Research has shown that teacher-student relationships closely mirror parent-child relationships (see Pianta, 1999). For example, students who have secure attachment relationships with their primary caregivers will likely expect similar positive, caring interactions with teachers and form healthy close relationships with teachers whereas those with insecure internal working models are more likely to be wary and distrustful of teachers, and continue patterns of conflict with adults. These students also will expect adults to be physically and/or emotionally unavailable during times of distress. Likewise, some students will have an

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abnormal amount of dependence on adults leaving these students vulnerable during times when adults are not available to help.

However, researchers also contend that as children age that they can differentiate the care they receive from parents from the care they receive from teachers. This occurs primarily when children experience different qualities of pre-school and elementary school care (Hamilton & Howes, 1992; Howes, 1988; Pianta & Nimetz, 1991). Thus, some children develop relationships with their teachers which compliment previous parent-child relationship while other children may develop relationships with their teachers that are very different in nature compared to the quality of care that what was received with a primary caregiver. For example, Howes & Matheson (1992) found that rates of concordance between the parent-child and teacher-student varied as much as 40% to 64% depending on the type and quality of childcare. In another study, Pianta (1999) found that a caring and warm teacher-student relationship was able to compensate for earlier risks associated with poorer quality parent child relationships that were experienced in earlier developmental years.

It is also important to bear in mind that teachers bring their own internal working models into the relationships they form with their students. Based on recent developments in adult attachment theory, Riley (2011) theorizes that it is a teacher's attachment style which has the largest effect on child and classroom relationships. Regardless of emphasis (the internal working model of student as it relates to the teacher-student relationship or vice-versa), attachment theory

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provides a framework for researchers when investigating teacher-student relationships within the school context.

Having an understanding of attachment theory and its' relation to teacher-student relationships also provides a practical way to communicate with professionals who work with children (i.e., students) as to the qualities of relationships that they form with their students. Using an attachment perspective also affords educators an opportunity to try to understand what a specific child's internal working model might be as well as make sense of their own relationship formation with their students. Researchers coming from this framework would also stress the importance of emotional quality of adults' interactions with children as well as their responsiveness (e.g., frequency and consistency) to children's needs.

Close, Conflictual, and Dependent Teacher-student Relationships

To define the qualities of TSRs, this study relies on the prevailing conceptualization of teacher-student attachments developed by Pianta and colleagues (Pianta, 1994; Pianta & Steinberg, 1992). Pianta developed a measure which distinguishes three qualitative features in the TSR: *closeness, dependency*, and *conflict.* Numerous other studies have used Pianta's teacher-report questionnaire or similar truncated versions of the original instrument and have reported a high degree of validity and reliability (Henricsson & Rydell, 2004). This measure has been previously used in elementary classrooms (e.g., Pianta, Steinberg, & Rollins, 1995) and in investigations of the link between teacher-student and peer-peer relations (Birch & Ladd, 1997). Further, Birch and Ladd

(1997) examined the effect of TSRs on children's adjustment during early schooling and found that the three types of relationships (i.e., close, conflictual, and dependent) reliably described the types of relationships children form with their teachers. This earlier research is presented below.

Close TSRs are construed as secure attachments that provide a secure base for students to thrive in academic and social settings. In general, the main features of a close teacher-child relationship are warmth and openness in verbal and non-verbal communication between the teacher and child (Pianta, 1994). Positive, close and warm teacher-child relationships benefit students who have previously demonstrated behavioral problems (Hamre & Pianta, 2001) or predict children's academic success in school (Pianta & Stuhlman, 2004). Additionally, Birch and Ladd (1997) found that close relationships had a positive effect on students' attitudes toward school as well as their engagement in school activities.

In contrast to close TSRs, conflictual TSRs are negative, sometimes hurtful, and potentially can exert harmful stress, which, in turn, can affect school achievement (Ladd, Birch, & Buhs, 1999). The effects of insecure, negative, and conflictual TSRs on a student's ability to adjust to school are well documented. Moreover, conflictual relationships with teachers are associated with troublesome peer relationships (Howes, Matheson, & Hamilton, 1994; Howes & Smith, 1995; Pianta et al., 1995).

The third type of TSRs is characterized by students' over-reliance or dependency on their teachers. Researchers have linked dependent TSRs with poor peer relationships (Birch & Ladd, 1997; Pianta & Nimetz, 1991). For example,

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Birch and Ladd (1997) posit that children's dependency on adults may be a sign of social immaturity and a lack of social skills; then, because children are either ineffective with peers, or are rebuffed by peers, they turn to teachers for social interaction. The result is increased risk for anxiety, loneliness, and depression. In fact, Murray and Murray (2004) discovered that, in both overly dependent and conflictual TSRs, internalizing problems increased.

In summary, evidence shows that the quality of TSRs is correlated with both children's peer relationships and their adjustment in school; however, to date, no study has investigated how TSRs may moderate the effects of poor peer relationships (e.g., rejection or victimization) on children's adjustment. Bear in mind that past research has demonstrated that parent-child relationships have an effect on peer victimization. For instance, in a study of preschoolers, Troy and Sroufe (1987) found that those with avoidant attachment histories with parents tended to be victimized more often by peers. On the other hand, they found students with secure attachments with their parents were seldom victimized while at school. Avoidant attachment histories involved children who upon reunion with their primary caregiver, after separation from their primary caregiver, actively avoided their primary caregiver by ignoring, turning away, moving away, and looking away from their caregiver. These same children also did nothing to avoid strangers; in fact, reacting and relating to strangers with similar affect as what was observed between the child and their primary caregiver. Secure attachments were characterized by children who actively sought out contact and interaction upon reunion with their primary caregiver after being separated from their primary

caregiver. Therefore, this study has similar hypotheses which state that the quality of the TSR either protects or exacerbates problems associated with children who are victims of bullying.

Defining Peer Victimization

Many students who are victims of bullying behavior are at risk for internalizing problems, such as loneliness, anxiety, and depression (see Hawker & Boulton, 2000, for a meta-analytic review) and for developing negative attitudes about school (Kochenderfer & Ladd, 1996); however, some victimized students appear to be relatively unaffected (Hoover, Oliver, & Hazler, 1992). This is an encouraging finding which highlights the need to identify factors that may buffer children from the ill-effects of victimization.

Regardless of the age group, most experts agree that peer victimization is a systematic abuse of power (Rigby, 2002) in which specific children (typically those who are incapable of defending themselves) are repeatedly singled out as victims of intentional bullying behavior (Olweus, 1999).

Bullying behavior is easiest to discern when the aggression is direct and overt. Consequently, the forms of peer victimization that are most commonly investigated and discussed are physical and verbal. For example, in their study of peer victimization in 14 countries, Smith, Cowie, Olafsson and Liefooghe (2002) found a consensus among students that victimization is both physical and verbal in form. Such types of victimization are generally referred to as *direct victimization*.

In contrast, it is also argued that victimization may be more subtle or covert. Some investigators contend that social exclusion is a form of victimization that is just as pervasive and detrimental to a child's development as more direct forms (Crick & Bigbee, 1998; Underwood, 2002). Such forms of victimization are referred to as *indirect*. One form of indirect victimization that has received increased research attention in recent years is known as *relational victimization*. Relational aggression involves the spreading of lies or rumors about others in order to harm their relationships, their reputations, or both. Evidence suggests that relational bullying is a widespread problem in the primary grades (Wolke, Woods, Bloomfield, & Karstadt, 2000). Girls tend to be targeted more for indirect or relational aggression than direct victimization (Crick & Bigbee, 1998). Boys are just as likely as girls to be victims of indirect aggression; but boys are more likely than girls to be physically victimized (see Kochenderfer & Ladd, 1996).

In addition to the above-mentioned forms of victimization, researchers have begun to examine other types of victimization, such as attacks on property. Consistent with the contention that bullying takes different forms, Mynard and Joseph (2000) identified four forms of victimization shown to have convergent validity with self-reports. These forms are physical, verbal, social manipulation, and attacks on property.

In sum, although investigators may focus their research attention on divergent forms of victimization, most agree that, broadly speaking, victimization takes various forms including: direct (i.e. hitting, name-calling), indirect (i.e. relational, spreading rumors or lies), or more general (i.e. picking on someone or

attacking their property). For the present study, then, peer victimization is defined as *being frequently targeted for physical, verbal, relational or general aggression*.

Effects of Peer Victimization

Many of the earlier studies on victimization focused on the delineation of the negative consequences of being victimized. One robust and well-documented outcome is the correlation between victimization and internalizing problems, which is often manifested in loneliness, anxiety, and depression. Hawker and Boulton (2000) conducted a meta-analytic review of cross-sectional studies that investigated the relationship between victimization and internalizing difficulties and found strong evidence that peer victimization is positively correlated with loneliness, anxiety, and most strongly, with depression. Their findings corroborated the findings of other researchers who reported that victimization is related to internalizing problems such as loneliness (Kochenderfer & Ladd, 1996; Ladd, Kochenderfer & Coleman, 1997), anxiety (Slee, 1994), and depression (Björkqvist, Ekman, & Lagerspetz, 1982; Graham & Juvonen, 2001; Kochenderfer-Ladd & Wardrop, 2001).

Additionally, peer victimization has consequences that range beyond the development of internalizing problems and has been linked to a number of other school-related adjustment difficulties, including low academic achievement and negative attitudes about school and learning (Kochenderfer & Ladd, 1996). It makes intuitive sense that children who are bullied would want to avoid attending school where most of the bullying takes place. It is to be expected that students

who struggle to cope with the prospect of being victimized by peers will evidence a greater dislike for school and do whatever they can to avoid it.

The Present Study

The literature on TSRs demonstrates how elementary teachers who are caring and maintain close relationships with their students foster their students' healthy school and psychological adjustment. Unfortunately, research also shows that conflictual and overly dependent TSRs have adverse effects, such as aggravating some children's school adjustment problems including increasing their feelings of sadness, anxiety, and loneliness. Given the heightened awareness to the pervasive problem of peer victimization in elementary schools, this study of how TSRs may affect children's risk for peer victimization and related adjustment problems, is extremely timely.

The first goal of this study was to confirm that three distinct (albeit, related) types of TSRs could be reliably assessed in the current sample of elementary school-aged students. Further, it was hypothesized that these three types of TSRs would correlate to one another such that close TSRs would negatively correlate with conflictual TSRs. In addition, dependent TSRs were expected to correlate positively with both close and conflictual relationships, indicating both positive and negative aspects of dependency.

Second, this study sought to replicate previous research findings demonstrating the links between TSRs and internalizing problems, school liking, and school avoidance tendencies. Specifically, it was expected that close TSRs would be negatively correlated with internalizing problems and school avoidance

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and positively correlated with school liking. On the other hand, conflictual and dependent TSRs were expected to be positively correlated with both internalizing and school avoidance and negatively correlated with school liking.

Next, consistent with previous research showing that peer victimization is a debilitating experience associated with internalizing (loneliness, depression, and anxiety) problems as well as the development of negative school attitudes (school avoidance; Kochenderfer & Ladd, 1996), it was hypothesized that greater frequency of peer victimization will be positively associated with internalizing problems (i.e., anxiety, loneliness, and sadness) and school avoidant tendencies. Conversely, it was expected that peer victimization would be negatively associated with school liking.

Third, this research investigated a previously unexplored relationship between TSRs and peer victimization. It was hypothesized that close TSRs would be negatively correlated with peer victimization whereas conflictual and overly dependent relationships which would be positively correlated with peer victimization.

Assuming that previous findings would be replicated and new hypotheses supported in this sample of elementary school-aged children, the final goal of this study was to explore whether the quality of TSRs (i.e., close, conflictual, and dependent) moderates the effects of peer victimization on students' internalizing and school avoidance problems. Briefly, close TSRs were expected to protect victims of bullying from internalizing problems or tendencies to want to avoid school. In contrast, conflictual and dependent TSRs were hypothesized to

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exacerbate the effects of peer victimization on internalizing and school avoidance problems.

Specifically, the following moderation hypotheses were tested: (a) Close TSRs would moderate the effects of peer victimization such that victims with close relationships would evidence lower levels of internalizing and school avoidance problems and higher levels of school liking than their counterparts who do not enjoy close interactions with their teachers and (b) Conflictual and dependant TSRs would intensify victimized children's internalizing problems and extent to which they would dislike and want to avoid school compared to victims who are not in conflict or are overly dependent on their teachers.

Method

Sample

  This study was part of a larger, four-year longitudinal project. The students and teachers who were interviewed for this study were recruited from four schools serving lower and middle class families in an urban setting in southwestern United States. Parental consent was obtained for each child that was interviewed, and the children who were interviewed gave their verbal assent. The sample used in this study was comprised of 153 students (81 boys and 72 girls) and their third (T1) and fourth (T2) grade teachers. Data were collected in the spring of each grade). The sample was an ethnically and socio-economically diverse population, consisting of 42% Hispanic, 46% White, 2% African American, 4% Native American, 1% Asian, and 5% biracial. Economic diversity was determined by examining the percent of free lunches at the four schools that participated in the study (26%, 56%, 79% and 95% respectively). Fifteen 3rd grade and 15 4th grade teachers participated at Time 1 and Time 2, respectively; two of the 15 3rd grade teachers at T1 were also 4th grade teachers (T2).

Procedure

  For their participation, teachers received monetary compensation in the amount of $5 per questionnaire filled out for each of their students with parental permission to participate. To give teachers time to develop relationships with their students, data were collected from teachers in the spring of each of the school years. Teachers were allowed to complete the questionnaire anytime in the spring as long as they returned the questionnaires before the end of the school year. The

questionnaires that were used with participating teachers included written instructions that explained the format of the questionnaire to ensure that teachers understood what was being asked and included a clear explanation regarding how to complete and return the questionnaires.

Before collecting data, graduate students who were working on the larger longitudinal study were thoroughly trained and tested on child assent, questionnaire administration, how to maintain a standardized environment, and other pertinent checks of internal validity by the Principal Investigator of the project, Dr. Becky Kochenderfer-Ladd. The questionnaires were administered in groups, with children remaining in their classrooms whenever possible. The same graduate students facilitated group administration of the questionnaires. The ratio of interview administrators to sample students was typically 1 to 5. If individual students needed special assistance, a trained interviewer was available to help those students fill out their measures. Students completing the questionnaires were told not to talk with one another during the process. The graduate student facilitators verbally reassured student participants that all of their answers would be kept confidential.

Due to a high percentage of Spanish/bilingual students at the schools, all questions were presented in both English and Spanish. Additionally, both English-speaking and Spanish-speaking interviewers worked one-on-one with students who were identified by their teachers as needing additional language help.

Measures

  Peer victimization. Teachers were asked to report on the frequency to which each of their students were victimized by peers (Ladd & Kochenderfer-Ladd, 2002; see *This Child's Interactions with Peers* in Appendix A). Specifically, teachers used a five-point scale ranging from 1 (*never*) to 5 (*always*) to indicate how often each student experienced four different types of victimization: (a) general (i.e., picked on or teased); (b) physical (i.e., hit or pushed); (c) verbal (i.e., called names or other hurtful things); and (d) relational (i.e., said mean things, or lies, about). Scores were created by averaging across the four items (Ms = 1.78 and 1.67, SDs = .77 and .64, for T1 and T2, respectively) and the scales evidenced adequate internal consistency, (αs = .92 and .85, for T1 and T2, respectively).

  Internalizing. To assess problems with internalizing, items from several documented measures, with known reliability and validity (see Cassidy & Asher's *Children's Loneliness and Social Dissatisfaction Questionnaire,* 1992; Achenbach's *Child Behavior Checklist,* 1991; and Ladd & Profilet's *Child Behavior Scale,* 1996) were combined into a single questionnaire entitled, *About Me* (see Appendix A). For example, students were asked how often they felt a certain way about things (e.g. did you feel lonely, did you feel nervous, and did you feel sad in school) that may have happened to them in the last few weeks. Ratings on the nine items were averaged to create a scale for internalizing problems (Ms = 2.03 and 1.61, SDs = .67 and .63, for T1 and T2, respectively) that was reliable at both time points: αs = .80 and .85, for T1 and T2, respectively.

School avoidance. Student attitudes regarding school were measured

using eight items from Ladd, Kochenderfer, and Coleman's (1997) *School Liking*

and Avoidance Questionnaire. Four items tapping school avoidance (see *About*

Me questionnaire in the Appendix A) were used to measure the children's school

avoidance tendencies, such as "How often do you ask to stay home from school?"

Items were averaged (*M*s = 1.86 and 1.72, *SD*s = .61 and .66, for T1 and T2,

respectively). These scales evidenced low, but adequate, reliability: T1 α = .63

and T2 α = .67.

School liking. School liking was measured using four items from Ladd,

Kochenderfer, and Coleman's (1997) *School Liking and Avoidance Questionnaire*

(see *About Me* in Appendix A). Specifically, children were asked to rate items

such as how much they liked being in school from 1 = *not at all* to 4 = *a lot*. The

four items were averaged to determine the degree in which students liked school

(*M*s = 3.20 and 3.12, *SD*s = .79 and .80, for T1 and T2, respectively). These

resultant scales demonstrated good reliability (T1 α = .82; T2 α = .86).

Teacher-student relationships. A truncated version of Pianta's (1994*)*

Student-Teacher Relationship Scale (STRS; see *Teacher Relationship with this*

Child in Appendix A) was used to assess teachers' perceptions of their attachment

relationships with students. In this study, 19 items were eliminated from the STRS

to reduce the number of questions teachers would be asked as part of the protocol

for the larger longitudinal study. Sixteen of Pianta's original 35 items were

retained. This instrument is a documented assessment of attachment relationships

between teachers and young students. Using this instrument, teachers rate the

degree to which each description of their relationship is true with each student on a 4-point scale (1 = *definitely not true*; 2 = *somewhat untrue*; 3 = *somewhat true*; 4 = *definitely true*). An example question regarding closeness is, "I share an affectionate, warm relationship with this student." One question that taps conflict between the teacher and student is, "Despite my best efforts, this student and I do not get along." Finally, one example question for dependent TSRs is, "This student is overly dependent on me." Table 1 provides a summary of the means, standard deviations, and reliability alphas.

Results

Before testing the primary hypotheses of the study, descriptive statistics were calculated to test for adequate variability within the measures and ensure individual variability across time. Next, a series of correlational analyses were conducted to investigate the associations among the different qualities of TSRs as well as to examine the relationships between the TSRs (e.g., closeness, conflict, and dependency), peer victimization, and adjustment outcomes (e.g., internalizing, disliking school, and avoiding school). Correlations were computed separately by time and by sex and time. These correlational analyses were followed by a series of regression analyses to test the main moderation hypotheses of this study. Three sets of regression analyses were conducted. The first two sets examined whether TSRs made unique (independent) or overlapping contributions to predictions of concurrent (T1 and T2) victimization and adjustment outcomes as well as if TSRs moderate the effects of peer victimization on internalizing problems, school liking sentiments, or school avoidance tendencies. The final set of analyses was conducted to investigate whether or not TSR's would predict changes in victimization or adjustment over time and/or moderate the effects of victimization on changes in adjustment outcomes.

Descriptive Statistics

An examination of the means reported in Table 1 suggest that, overall, children are doing well in school and have developed healthy relationships with their teachers. Specifically, teachers tended to report low frequencies of victimization among their students (and they reported higher levels of close

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relationships with students compared to conflictual or dependent ones). Moreover, based on student self-reports, most students appear to be well-adjusted to school, such that they tend to like school, do not want to avoid school, and report few internalizing problems (see Table 1); however, standard deviations between .61 and 1.01 indicated wide variability across these constructs.

Correlations among Constructs

Preliminary correlational analyses were conducted to examine the associations among the types of TSRs. Correlations were computed separately by time (see Table 2) as well as by sex and time (see Tables 3 and 4). As expected, close TSRs were negatively correlated with conflictual TSRs; moreover, this association was found across time and sex (see Tables 2-4). Also as expected, dependent TSRs were positively correlated with conflictual relationships both over time and across sex (see Tables 2-4); however, contrary to our hypothesis, dependency was not consistently correlated with closeness, and, in fact, they were only positively correlated at T1, and this association appears to be more likely among boys (T1 $r = .29$, $p < .05$) than girls (T1 $r = .16$, $p > .05$).

An examination of the stability coefficients for the TSRs revealed low to moderate stability in the quality of relationships children form with their students, such that the types relationships they had with their third-grade teachers tended to be reported again by their fourth-grade teachers (see diagonal on Table 2). Overall, these patterns of correlation support distinctiveness of the three types of TSRS; thus, all three are retained for analyses.

Correlations between quality the teacher-student relationships and peer victimization. Next it was of interest to examine if the quality of the TSR was correlated with peer victimization and children's adjustment. Findings revealed that although close TSRs were statistically uncorrelated to peer victimization, the direction of effect suggests that closer relationships are associated with less vulnerability to peer victimization (albeit only T_2 was significant at $p \leq .05$ when boys and girls were pooled together). Moreover, with only one exception (i.e., school liking at T2 when using the full sample), close TSRs were not associated with internalizing problems, school avoidance tendencies or school liking (see Tables 2-4).

In stark contrast to non-significant links between close TSRs and peer victimization and adjustment, moderate to strong correlations were found for conflictual TSRs (see Tables 2-4). Specifically, conflictual TSRs were positively associated with peer victimization for both boys and girls at both time points. In addition, conflictual TSRs consistently (i.e., across time) correlated positively with internalizing problems and school avoidance (although by T2, these associations were not significant for girls). Findings with school liking were not so clear; that is, although in general, conflict in the TSR correlated negatively with school liking, this correlations only reached statistical significance at T2 when the full sample was used ($r = -.23$).

Last, dependent TSRs were consistently correlated with peer victimization (across time and sex; see Tables 2-4), such that greater dependency was associated with more frequent victimization; however, findings with adjustment

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outcomes differed by sex such that, for boys, dependent TSRs were positively correlated with internalizing problems (T1 and T2) and school avoidance (T2 only) whereas, for girls, dependent TSRs were negatively related to school liking only at T2.

Correlations between peer victimization and adjustment outcomes. Support was obtained for the hypothesis that peer victimization is associated with adjustment problems. Specifically, consistent with past research (e.g., Hawker & Boulton, 2000; Kochenderfer & Ladd, 1996), great frequency of peer victimization was associated with higher levels of internalizing problems and school avoidance tendencies at both time points and for both boys and girls. In addition, victimization was negatively correlated with school liking at both time points; however, this correlation was only significant for girls at T2 and was never significant for boys.

Regression Analyses

The primary goal of this study was to examine the relationships between the quality of TSRs and children's risk for peer victimization and adjustment problems. In addition, it was of interest to determine whether the quality of these relationships moderate the effects of peer victimization on the development of adjustment problems (i.e., internalizing problems, school avoidance and school dislike). To address these aims, linear regression analyses using continuous variables were used. Because this study utilized continuous variables, the following steps were used to conduct analyses using SPSS (see Aiken & West, 1991; Judd & McClelland, 1989). First, to increase the interpretability of

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interactions, the predictor and moderator variables were mean-centered; that is,

T1 peer victimization scores and T1 TSR variables (close, conflict, and

dependant) were centered by subtracting their respective means from each data-

point. Next, interaction terms were created by multiplying the appropriate

centered variables (e.g., Interaction terms = T1 Victim x T1 Close, T1 Victim x

T1 Conflict, and T1 Victim x T1 Depend).

Three sets of regression analyses were conducted. First, it was of interest

to examine if TSRs predicted concurrent peer victimization and adjustment

outcomes, or moderated the effects of victimization on adjustment outcomes.

Thus, the first two sets of equations included 4 equations for each time point. The

last set of equation addressed questions of whether the TSRs predicted changes in

children's peer victimization or their adjustment over time or moderated the

effects of victimization on changes (development) in adjustment outcomes. For

each equation, peer victimization, close TSR, conflictual TSR and dependent TSR

scores were entered simultaneously on step one followed by the three

corresponding peer victimization x TSR interaction terms (see Tables 5-7).

Regression equations predicting concurrent time 1 and time 2 peer

victimization and adjustment. With only one exception (i.e., equation for school

liking), all Time 1 equations were statistically significant: (a) T1 victimization,

$F(6,146) = 19.18, p < .001$; (b) T1 internalizing $F(7,145) = 3.24, p < .01$; (c) T1

school liking $F(7,145) = 1.73, p > .05$; and 4) T1 school avoidance $F(7,145) =$

$3.95, p < .001$

All Time 2 equations were statistically significant: (a) T2 victimization, $F(6,146) = 18.94$, $p < .001$; (b) T2 internalizing $F(7,145) = 4.00$, $p < .001$; (c) T2 school liking $F(7,145) = 2.63$, $p < .05$; and (d) T2 school avoidance $F(7,145) = 4.03$, $p < .001$

Both T1 and T2 findings demonstrated a main effect for peer victimization on internalizing problems for students. That is, students with greater frequencies of peer victimization reported more sadness, anxiety, and lonliness at both points in time. T1 also demonstrated that close, conflictual, and dependent teacher-student relationships had a main effect on peer victimization. Specifically, students with close teacher student relationships evidenced lower amounts of peer victimization compared to students in conflictual and dependent teacher-student relationships; however, T2 did not evidence main effects for close or dependent teacher-student relationships but did indicate that conflictual teacher-student relationships had a main effect on peer victimization. Only one interaction between teacher-student relationships and peer victimization on adjustment emerged in the concurrent T1 regression equations; specifically, conflictual TSRs appear to exacerbate the effects of peer victimization on school avoidance at T1.

Regression equation predicting changes in peer victimization. Findings for the equation predicting changes in peer victimization ($F(7,145) = 17.85$, $p < .001$) showed that victimization in third grade predicted higher levels of victimization in fourth grade. Moreover, results failed to support the hypothesis that TSRs are associated with changes in children's risk for peer victimization,

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However, interaction effects were found which showed that conflictual and dependent TSRs moderated the effects of earlier victimization on later victimization. These interactions were broken down by computing predicted T2 peer victimization scores at ± 1.5 SD from the means for victimization and conflictual TSRs, and then, dependent TSRs. These points (predicted scores) are plotted in Figures 1 and 2. Figure 1 shows that, whereas higher levels of peer victimization in third grade are associated with higher levels of victimization in fourth grade regardless of the amount of conflict in their relationships with teachers, victimization is even greater at T2 for those who had conflictual relationships at T1. In comparison, a disordinal interaction was found with dependent TSRs. Specifically, Figure 2 shows that, again whereas higher levels of peer victimization in third grade are associated with higher levels of victimization in fourth grade regardless of dependency on teachers, they are not any more likely to be victimized if they have highly dependent TSRs. In fact, the disordinal interaction suggests that dependency may actually decrease the likelihood of victimization at T2 for highly victimized children while *increasing* vulnerability for victimization for those at low levels of victimization at T1.

Findings did not support the hypotheses that close TSRs protect children from victimization, nor do such relationships protect victims of bullying from subsequent victimization.

Regression equation predicting changes in adjustment outcomes. All equations predicting changes in adjustment outcomes were statistically

significant: (a) internalizing $F(8,144) = 7.55$, $p < .001$; (b) school liking $F(8,144)$ = 4.13, $p < .001$; and (c) school avoidance $F(8,144) = 4.65$, $p < .001$

With one singular exception, findings failed to support the hypotheses that conflictual and dependent TSRs predict increases in adjustment problems over time or exacerbate the effects of victimization on the assessed outcome variables (i.e., internalizing problems, school avoidance, disliking school); however, a significant interaction effect did reveal that conflictual TSRs moderated the effect of peer victimization on changes in internalizing problems. A breakdown of this interaction effect is presented in Figure 3 and shows that children who are both victimized and have conflict with their teachers at T1 evidence the most internalizing problems at T2. Moreover, children with conflictual TSRs, but are not victimized, report as much internalizing problems at T2 as classmates who are highly victimized but do not have conflictual relationships with teachers.

Discussion

Guided by the literature on TSRs, this study addressed several aims: (a) examine if TSRs could be reliably assessed in a new sample of elementary school-aged children and the distinctiveness of each scale is apparent. Specifically, (b) TSRs would be correlated with children's school adjustment and (c) TSRs would moderate. Although not all the hypotheses were supported, several important findings were replicated offering further evidence of the effects of TSRs and peer victimization on children's adjustment. Moreover, as will be discussed in the following sections, the results of this study support the contention that the quality of TSRs, in particular conflictual TSRs, are important variables to consider when examining children's risk for peer victimization and poor adjustment outcomes in elementary schools.

It is now common practice for developmental scholars and school professionals to employ a relational perspective to understanding child development in the school context. The evidence shows that kind, caring, and close TSRs foster social and emotional growth, and promote higher levels of academic achievement, whereas high levels of conflict and over dependency hinder positive development (e.g., Baker, 2006; Hamre & Pianta, 2001; Pianta, Steinberg, & Rollins, 1995; Pianta & Stuhlman, 2004).

To study the nature of TSRs in schools, this study used a truncated version of the Student-Teacher Relationship Scale developed by Pianta (2001). This Likert-style scale is the most widely used instrument to assess a teacher's perception of his or her relationship with students in the elementary grades. For

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this study, teachers were asked questions regarding their perceived level of closeness, conflict, and dependency shared with their students. Based on the results (and as expected), positive relationships between teachers and their students (considered close) were negatively associated with relationships that were negative (considered conflictual) relationships. Because this preliminary hypothesis was confirmed, both closeness and conflict were treated as separate and distinct variables for this study. Likewise, dependency and conflictual teacher-student relations were positively associated with each other. This is due to the fact that, based on Pianta's scale and teacher-student research, both conflictual and dependent TSRs are considered insecure and negative types of relationships. Finally, because close TSRs and dependent relationships were not associated, in this study all three teacher-student variables (close, conflictual, and dependency) were maintained for future analyses.

The present study also confirmed presumptions made regarding TSRs and their associations with school-related variables. For example, conflictual TSRs evidenced a correlation with internalizing and negative school adjustment. This is consistent with other research that has examined the effects of the teacher-child relationship on students' adjustments. Birch and Ladd (1997), for instance, found close relationships had a positive effect on school attitudes and engagement in school activities; whereas, Murray and Murray (2004) discovered internalizing problems increased for those students in relationships that were overly dependent or conflictual. The current study also provides supporting evidence that TSRs have an effect on children's attitudes toward school. Specifically, data revealed

that students in conflictual relationships with their teacher disliked school. The same held true for school avoidance where students in conflictual relationships with their teacher indicated that they would try to avoid school.

Not until recently have other researchers explored the associations between TSRs and peer victimization (Reavis, Keane, & Calkins, 2010). This is an important variable to study, provided teachers and students are contextually bound to one another within schools and classrooms. Interestingly, in this study, some of the strongest correlational associations were between peer victimization and conflictual or dependent TSRs. In fact, the hypotheses related to this aspect of the study were supported. Some explanation could be that although most teachers may feel like they attend to all of their students needs, it is possible that some are less likely to intervene when they feel students are already overly dependent on them for help in social situations. Boulton (1997) also found that not all teachers sympathize with victims. Having a conflictual relationship with a student may decrease a teacher's sympathy to an even greater degree, leaving students vulnerable and left alone to cope with a bully. Therefore, enhancing TSRs should not be thought of merely as an added burden of responsibility; but rather it should be considered fundamental to improving the context for learning.

In this study, close TSRs were negatively associated with peer victimization; however, this association was only significant at T2. One explanation for the lack of significant association could be due to the fact that most students in this sample already enjoyed close relationships with their teachers, thereby increasing the variability of closeness within the sample.

Another plausible explanation is that the degree of closeness between the teacher and student may influence whether or not a student is victimized. Both a mildly close and a very intense close TSR may actually be related to whether or not a student is victimized at school.

Support for intense close relationships and their association with peer victimization is found in the work conducted by Ladd and Kochenderfer-Ladd (1998), where it was found that intense closeness between parents and kindergarteners was associated with higher levels of peer victimization for boys. Interestingly, close TSRs have also been positively correlated with overdependence (a negative TSR). In fact, in this study, close TSRs were positively associated with dependent TSRs at T1.

Due to the fact that most of the prevailing research assumes that students fit into one of three heterogeneous groups with their teachers – close, conflictual, or dependent, perhaps future research could use alternative ways of classifying these relationships. One potential approach would be to use cluster analysis because this method does not assume that students fit into one of these groups, instead allowing for types of relationships to emerge based on the dimensions of closeness, conflict, and dependency. This could be a response to the fact that TSR research has been largely unsuccessful in determining how dependency or aspects of dependency relate to student outcomes. It is highly likely that all relationships, whether close, conflictual, or dependent, share characteristics or overlap with other dimensions (also observed in correlational analyses; see Table 2).

Another potential way to classify these relationships is to create a latent variable based only on the negative aspects of TSRs, such as intense closeness, overdependence, or conflict. This method was used by Hamre and Pianta (2001) and provided a means to understand the impact on TSRs on student outcomes (e.g. grades, test score, work habits, and discipline records). Unfortunately, very few studies have used this method to define and study the nature of TSRs.

This study also underscored findings that are related to peer victimization. Beginning with Olweus (1978), researchers have recognized bullying as a problem in elementary schools associated with negative adjustment outcomes, such as depression, anxiety, and loneliness (Hawker & Boulton, 2000). Internalizing problems continue to receive attention from researchers seeking to better understand the negative effects of peer victimization. Findings from this study supported the hypothesis that victimized students would develop internalizing problems and negative attitudes toward school. This finding replicated the work done by Kochenderfer-Ladd (2003) and provides further support for the importance of studying school liking and school avoidance as they may be precursors of truancy problems, extreme negative school attitudes, and withdrawal or avoidance of school-related activities.

There are a few suggestions to combat the negative effects of peer victimization after victimization occurs. Due to the fact that all of the adjustment outcomes varied based on the frequency of victimization, one suggestion is that, in addition to prevention efforts (e.g., school-wide programs), it is important to include targeted intervention efforts for students who are regularly experiencing

victimization. There are many school-based bullying prevention programs that include specific teacher training to create bully-free environments (e.g., Bully Busters; Newman, Horne, & Bartolomucci, 2000); however, targeting intervention efforts toward these frequently victimized students is especially critical given that "school-wide" anti-bullying programs are not always enforced and may have an opposite effect on indirect bullying behaviors (Woods & Wolke, 2003). In fact, preliminary evidence is surfacing which indicates that selective prevention strategies for bullied students can ease the effects of peer victimization (Card & Hodges, 2008). Recently, one selective prevention program called *Lunchtime Buddies* paired fourth- and fifth-grade students who had been identified as the victims of bullying with volunteer college students. Compared to control groups, the victims who participated in the program experienced a reduction in peer victimization from the fall to the spring in the same school year (Elledge, Cavell, Ogle, & Newgent, 2010).

In their discussion, Hawker and Boulton (2000) strongly implied that victimization research needs to move past what is already known (i.e. victims are distressed) and ask questions about risk and intervention. Some of these questions are addressed in the current study. It is imperative for this and other moderator and mediator variables to be explored. Other conceivable moderator variables are the relationships students share with mentors, counselors, volunteers, coaches, or other significant adults. In one study, the positive effects of a mentor were strong for children in a deviant peer group (Zimmerman, Bingenheimer, & Notaro, 2002). It is possible that teachers are overburdened with academic responsibilities.

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If that is the case, it may be an unrealistic expectation for teachers to find new ways to build quality relationships with all of their students. In a similar vein, teachers are restricted to the context of their classroom and class size, both of which may adversely affect their ability to create close personal relationships, as opposed to conflictual and dependent relationships with their students. On the other hand, mentors, counselors, and other adults might have more time to interact with students on an individual basis. They may also be in a better position to listen to students' personal problems with bullies – and provide better coping strategies.

Another pertinent variable to consider in future victimization research is personal courage in the form of bravery. In the emerging field of positive psychology, courage is classified as *strength of character*, and bravery is defined as one aspect of courage (Peterson & Seligman, 2004). In general, bravery is defined as doing what needs to be done, in spite of threat and danger (Peterson & Seligman, 2004). Courage and bravery seem appropriate factors to explore, considering that victimized students are expected to go to school and face risk, danger, and personal injury – all outcomes associated with being bullied (Peterson & Seligman, 2004). Moreover, being brave in response to psychological risk and dangers is included in some of the research on bravery (Putnam, 1997). An empirical understanding of how one develops bravery is still in its early stages, but existing research does suggest some enabling factors of bravery. For example, research shows that bravery is facilitated by secure attachments with adults and prosocial role models (Shepla et al., 1999; Way, 1998).

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Returning to the main goal of this study – to investigate the interaction between victimization and the quality of the TSRs on negative outcomes in elementary school – the moderation hypotheses were partially supported. In fact, the interaction between peer victimization and conflictual TSRs in T1 predicted internalizing problems (i.e., sadness, anxiety, and loneliness) in T2. At the same time however, important information regarding victimization and TSRs was obtained.

First, it should be noted that a longitudinal design that includes several more years of a child's educational progress, rather than this study's two-year longitudinal design, would do a better job of explicating the direction of effects.

Second, the current study adopts a focus on TSRs as predictive of childhood outcomes, and this position requires a full understanding as to why different types of attachment relationships exist between teachers and their students. Unfortunately, a full understanding of TSRs is limited due to the under explored types of teacher-student dyads. For example, most of the TSRs in this sample were between a female teacher and her student. Until more research is conducted that includes male teachers, this is a limitation because it is conceivable that relationships are formed based on whether or not a student has a male or female teacher. Future research could explore if having male-to-male, female-to-female, or a mix of male-to-female teacher-student dyads should be a potential consideration.

Similarly, another limitation for this study is that the majority of the teachers were Caucasian. In this case, the teacher-student ethnicity match could

be problematic because approximately 50% of the student sample was Hispanic. This concern was addressed by Saft and Pianta (2001), who found that when a child and teacher had the same ethnicity teachers rated their relationships with their students more positively.

Finally, in this sample the different types of teacher-student qualities were based on the perspectives of the teachers. Additional studies that include the student's perspective would illuminate the importance of the TSR.

It could also be argued that peer reports would serve as an additional perspective from which to study peer victimization in this study; however, it should be noted that most researchers who use peer nomination reports to identify victims, do so with older students (Perry, Kusel, & Perry, 1988). Moreover, the peer reports that were used in the larger research project (this study being one small part) were used to more broadly measure peer friendships and not to specifically measure peer victimization.

Often times, peer victimization research focuses on individual child characteristics (e.g., cognitive, behavioral, psychological); however, classroom climate is another key variable and appears to have a major influence in how bullying manifests itself and wreaks havoc on those who are victimized. Based on the work of others (Evans, Harvey, Buckley, & Yan, 2009), and supported by the present study, there is good reason to think that classroom climate is important, especially the emotional climate of the classroom as established by the teacher. For example, a child's connection to school is likely to be an important factor if he or she is a victim of bullying. *Connection to school* is defined, in part, as a

school climate in which a student knows his teachers care about him and he can feel close to his teachers (Wilson, 2004).

There is a moderate to high degree of correlation between peer victimization and conflictual or dependent TSRs in the present study. Perhaps this helps explain why some studies report that some bullied children do not tell their teacher when they are being bullied. For example, Fekkes, Pijpers, and Verloove-Vanhorick (2005) found that almost half of bullied students did not report a bulling occurrence to their teacher. This finding suggests that teachers need to be aware of lost opportunities for all students to report bulling. It also suggests that an issue in a student-teacher relationship can account for at least some of these lost opportunities. It is possible to imagine that students in conflict with their teachers are less likely to talk to them about conflicts they may be having with others students. Lonely, sad, and anxious, these students will instead make a choice to withdraw and remain silent (another finding supported by the present study).

Other contextual factors, such as friendships, have shown to have a positive effect for victims of bullying (Hodges, Boivin, Vitaro, & Bukowski, 1999). Based on one study, internalizing problems only occurred for victims who could not identify as having a best friend (Hodges et al., 1999). Moreover, when bystanders intervene and try to stop bullying, their action is in most cases effective (Hawkins, Pepler, & Craig, 2001).

Educators should also share in the role of preventing and helping students cope with problems related to bullying. Here it should first be noted that the strongest predictor of teacher intervention in bullying occurs immediately after

the teacher has been told about bullying behavior by the student who is being

bullied (Novich & Isaacs, 2010). Forming close relationships with students rather

than conflictual relationships may increase the likelihood of students reporting

bullying behavior. Understandably, it is not easy for teachers to form high quality

and close relationships with all students; however, forming caring and loving

relationships with all students needs to be the gold standard for teachers.

It is also possible to combine child and environment factors, as suggested

by Kochenderfer-Ladd and Ladd (2009). In fact, "settings tend to vary in the

extent to which they permit or are conducive to bullying or peer victimization"

(Kochenderfer-Ladd & Ladd, 2009). Smith (2010) further noted that victimization

occurs in different contexts. As such, it remains important for future research to

be open to the fact that peer victimization can become worse when teachers are

not in close relationships with their students, thereby making them responsible (de

facto) for encouraging episodes of bullying at school. Smith (2010), in his

comments from a special issue of *Merrill-Palmer Quarterly* on peer victimization,

reminded readers that teachers can themselves be sources of bullying in

classrooms. Smith cited a study in Australia in which close to 10% of students

reported being picked on by a teacher (Delfabbro et al., 2006). Because one of the

most salient and influential factors for peer victimization is the school

environment, classrooms and teachers need to meet the needs (e.g., sad, lonely,

anxious) of children being victimized by bullies. Where students sense they

belong and that they have teachers who display warmth and responsiveness to

their needs, the problem of bullying is less prevalent (Newman, Murray, &

Lussier, 2001).

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Table 1

*Descriptive Statistics for Study Variables (*n = *153)*

	Time 1		Time 2	
Variable	α	*M* (*SD*)	α	*M* (*SD*)
Peer Victimization	.92	1.78 (.77)	.85	1.67 (.64)
Close TSR	.89	3.92 (.84)	.82	3.98 (.69)
Conflictual TSR	.80	1.70 (.75)	.91	1.53 (.79)
Dependent TSR	.81	1.86 (1.01)	.73	1.74 (.78)
Internalizing	.80	2.03 (.67)	.85	1.61 (.63)
School Avoidance	.63	1.86 (.61)	.67	1.72 (.66)
School Liking	.82	3.20 (.79)	.86	3.12 (.80)

Note. TSR = Teacher-student relationship.

Table 2

*Zero-order Correlations among Study Variables (*n = *153)*

Variable	1	2	3	4	5	6	7
1 Peer Victimization	.63**	-.15	.52**	.52**	.33**	.28**	-.17*
2 Close TSR	-.17*	.29**	-.31**	.25**	-.09	-.13	.02
3 Conflictual TSR	.65**	-.36**	.46**	.40**	.24**	.33**	-.14
4 Dependent TSR	.39**	.07	.42**	.35**	.23**	.15	.02
5 Internalizing	.38**	.02	.21*	.23**	.43**	.66**	-.07
6 School Avoidance	.39**	-.04	.27**	.12	.42**	.39**	-.37**
7 School Liking	-.24**	.16*	-.23**	-.11	-.21**	-.57**	.34**

Note. Time 1 correlations are above the diagonal, whereas Time 2 correlations are below the diagonal. Stability coefficients are along the diagonal. TSR = Teacher-student relationship. *p < .05; **p < .01.

Table 3

Time 1 Zero-order Correlations among Study Variables by Gender (boys = 76;

girls = 77)

Variable	1	2	3	4	5	6	7
1 Peer Victimization		-.15	.46**	.48**	.49**	.35**	-.18
2 Close TSR	-.05		-.24**	.29**	-.07	-.15	.09
3 Conflictual TSR	.62**	-.38**		.31**	.29**	.40**	-.19
4 Dependent TSR	.64**	.16	.56**		.35**	.12	.07
5 Internalizing	.21	-.21	.24*	.11		.60**	.08
6 School Avoidance	.16	-.09	.23	.20	.76**		-.42**
7 School Liking	-.10	-.22	.00	-.07	-.32**	-.30**	

Note. Correlations for boys are above the diagonal, whereas correlations for girls are below the diagonal. TSR = Teacher-student relationship. $^*p < .05$; $^{**}p < .01$.

Table 4

Time 2 Zero-order Correlations among Study Variables by Gender (boys = 76;

girls = 77)

Variable	1	2	3	4	5	6	7
1 Peer Victimization		-.15	.64**	.33**	.46**	.41**	-.19
2 Close TSR	-.11		-.31**	.07	.10	-.02	.12
3 Conflictual TSR	.64**	-.28*		.46**	.26*	.33**	-.18
4 Dependent TSR	.57**	-.08	.57**		.25*	.27*	-.06
5 Internalizing	.30*	-.14	.19	.21		.43**	-.28*
6 School Avoidance	.29*	.16	.04	.04	.48**		-.63**
7 School Liking	-.26*	.02	-.22	-.26*	-.17	-.42**	

Note. Correlations for boys are above the diagonal, whereas correlations for girls are below the diagonal. TSR = Teacher-student relationship. $^*p < .05$; $^{**}p < .01$.

Table 5

*Summary of Regression Analyses Results Predicting Concurrent Time 1 Peer Victimization and Adjustment (*n =
153)*

Predictor	T1 Peer Victimization		T1 Internalizing		T1 School Liking		T1 School Avoidance	
	β	t	β	t	B	t	β	t
T1 Peer Victimization			.21	2.03**	-.21	-1.92	.12	1.22
T1 Close TSR	-.21	-2.86**	-.09	-.92	-.09	-.88	-.04	-.47
T1 Conflictual TSR	.23	2.69**	-.01	-.12	-.07	-.64	.14	1.28
T1 Dependent TSR	.42	5.22**	.13	1.23	.19	1.67	.04	.39
T1 Victimization X Close TSR	-.06	-.72	-.05	-.54	.06	.59	-.02	-.18
T1 Victimization X Conflictual TSR	.04	.36	.12	.98	-.13	-.99	.27	2.16*
T1 Victimization X Dependent TSR	.19	1.73	.02	.15	.00	.01	-.13	-.93

*p < .05.

Table 6

*Summary of Regression Analyses Results Predicting Concurrent Time 2 Peer Victimization and Adjustment (*n =

153)

Predictor	T2 Peer Victimization		T2 Internalizing		T2 School Liking		T2 School Avoidance	
	β	*t*	*β*	*t*	*β*	*t*	*β*	*t*
T2 Peer Victimization			.39	3.83***	-.15	-1.46	.36	3.56
T2 Close TSR	.02	.23	.06	.66	.10	1.12	.07	.77
T2 Conflictual TSR	.57	4.76***	-.00	-.01	-.28	-1.69	.21	1.3
T2 Dependent TSR	.15	1.73	.07	.66	.04	.36	-.10	-.97
T2 Victimization X Close TSR	.06	.96	.04	.52	-.15	-1.77	.06	.75
T2 Victimization X Conflictual TSR	.05	.50	-.06	-.50	.16	1.24	-.12	-.91
T2 Victimization X Dependent TSR	-.01	-.16	.05	.48	.03	.29	.01	.08

*p < .05.

Table 7

*Summary of Regression Analyses Results Predicting Changes in Peer Victimization and Adjustment Over Time (*n

= 153)

| Predictor	T2 Peer Victimization		T2 Internalizing		T2 School Liking		T2 School Avoidance	
	β	t	β	t	β	t	B	t
T1 Adjustment	.---	.---	.32	4.19*	.32	4.12*	.31	3.79*
T1 Peer Victimization	.53	6.54*	.11	1.10	-.01	-.09	.15	1.53
T1 Close TSR	.01	.15	-.09	-.98	.11	1.15	-.04	-.46
T1 Conflictual TSR	.11	1.20	.02	.24	-.04	-.37	.02	.17
T1 Dependent TSR	.08	.98	.09	.87	-.12	-1.15	.05	.47
T1 Victimization X Close TSR	.06	.79	.07	.85	-.17	-1.76	.06	.70
T1 Victimization X Conflictual TSR	.27	2.72*	.31	2.67*	-.20	-1.59	.17	1.38
T1 Victimization X Dependent TSR	-.29	-2.69*	-.14	1.13	.17	1.31	-.23	-1.78

*$p < .05$.
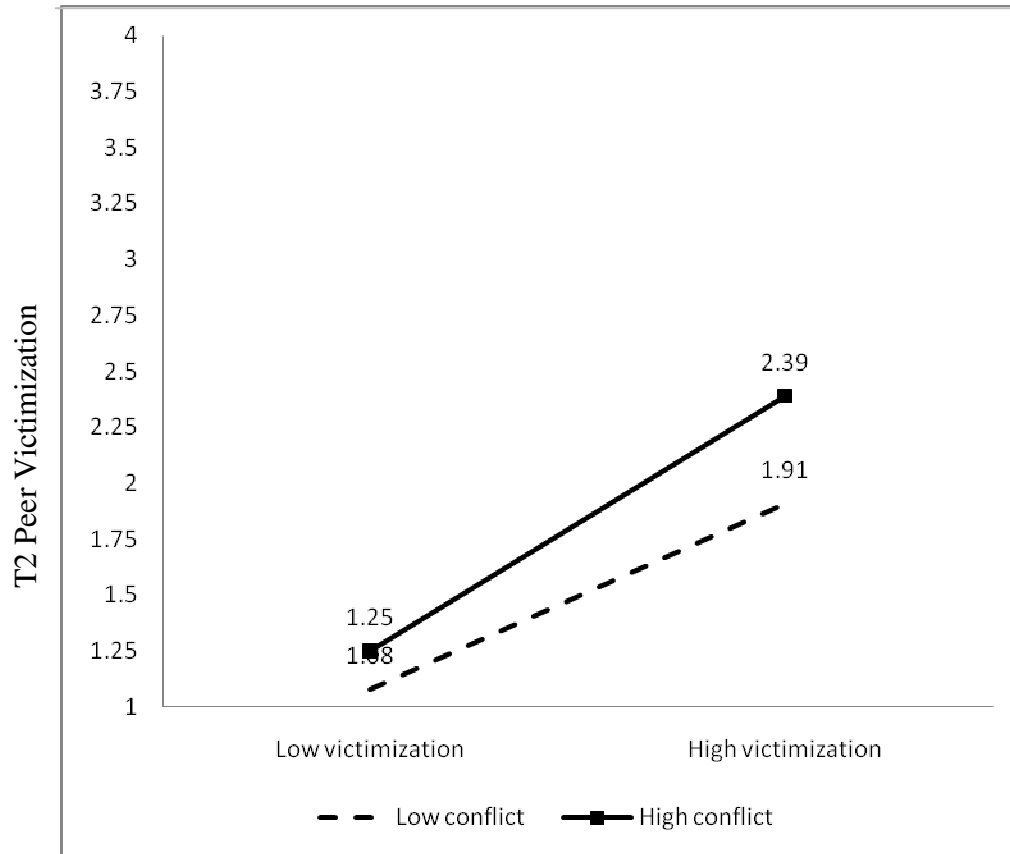
Figure 1. Plot of interaction showing moderation effect of conflictual teacher-student relationships on changes in peer victimization at ± 1.5SD T1 conflictual teacher-student relationship and T1 victimization.
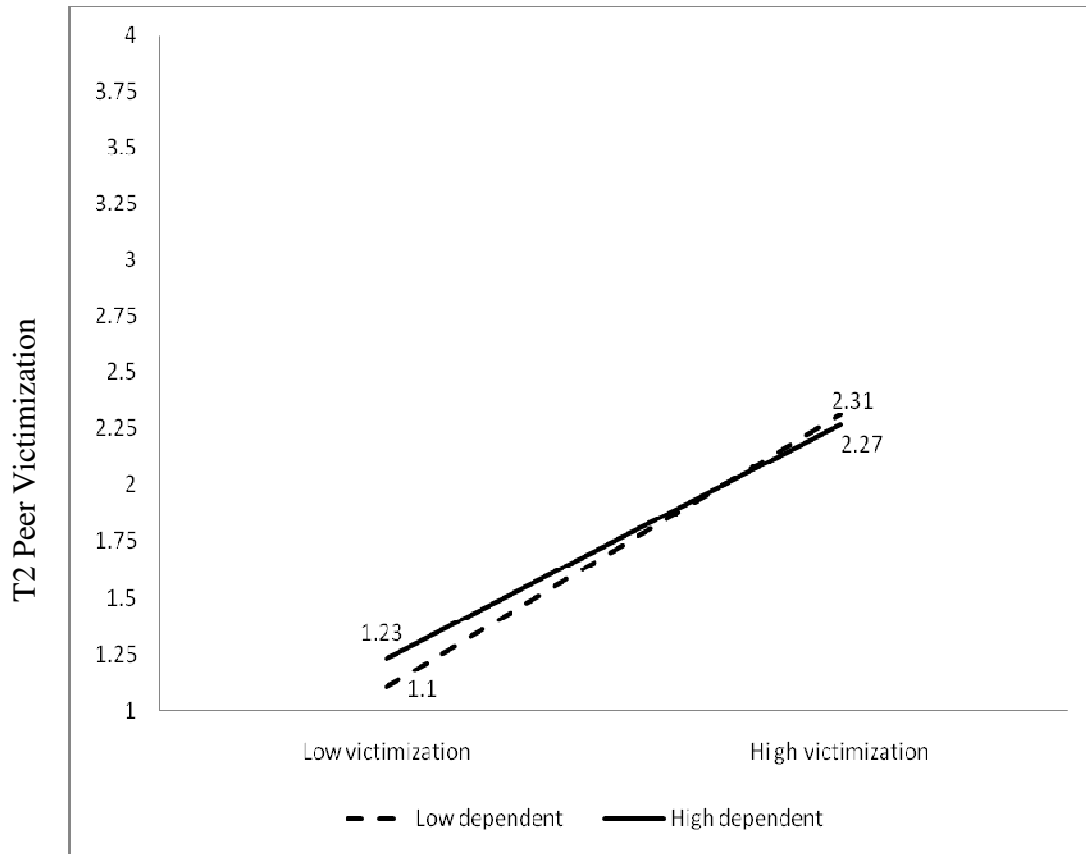
Figure 2. Plot of interaction showing moderation effect of dependent teacher-student relationships on changes in peer victimization at ± 1.5SD of T1 dependent teacher-student relationship and T1 peer victimization.
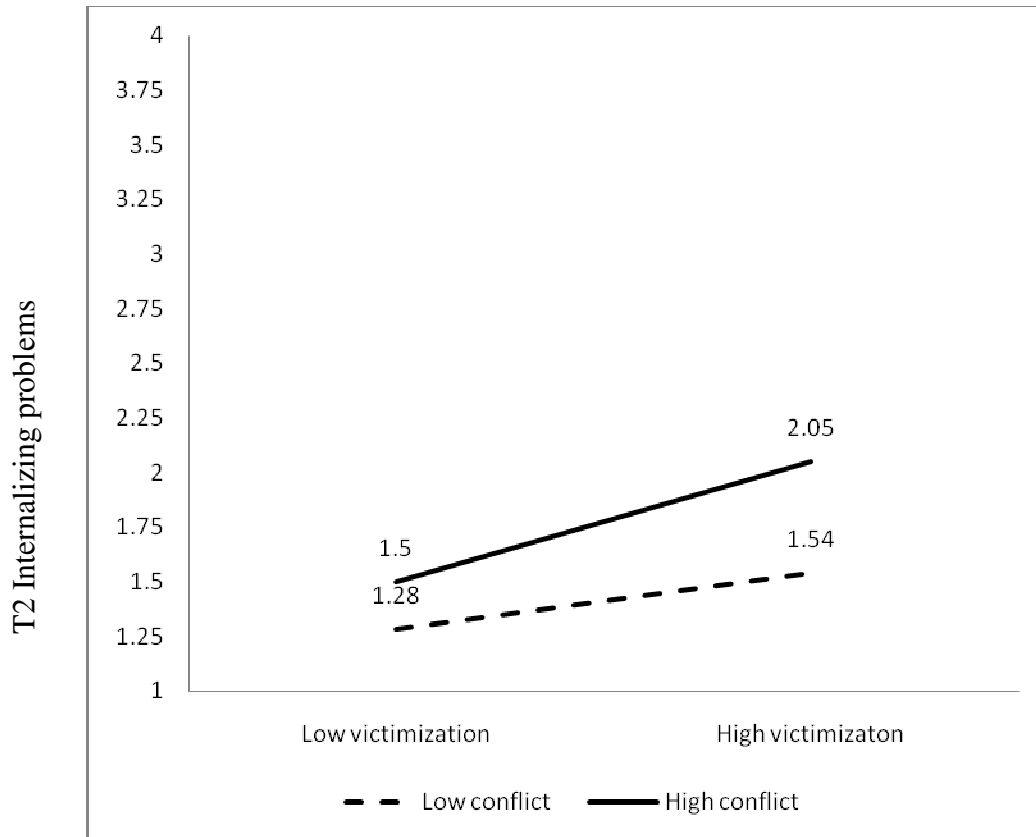
Figure 3. Plot of interaction showing moderation effect of conflictual teacher-student relationships on changes in internalizing at ± 1.5SD T1 conflictual teacher-student relationship and T1 victimization.

APPENDIX A

MEASURES

This Child's Interactions with Peers

Please consider the following items and rate how often the description applies to this child's interactions with peers. (1 Never, 2 Rarely, 3 Often, 4 A lot, 5 Always)

1. acts aggressively toward peers
2. threatens or bullies others
3. gets picked on or teased
4. gets called mean or hurtful things
5. shares with others
6. prefers to be alone
7. is helpful to peers
8. peers refuse to play with this child
9. gets other kids to gang up on a peer he/she does not like
10. bothers other kids when they are trying to work
11. makes many comments unrelated to what the group is doing
12. is not chosen for activities by peers
13. likes to be alone
14. keeps peers at a distance
15. seems concerned when others are distressed
16. takes turns
17. does things kids might think are strange
18. gets hit or pushed by other kids
19. kids say mean things about this child to others
20. is excluded from other kids' activities
21. is kind toward peers
22. is ignored by peers
23. acts in ways not typical for his or her sex
24. is often solitary
24. avoids peers
25. withdraws from peer activities
26. other kids might think this child is a "tomboy" or "sissy"
27. smiles and laughs during play

About Me (Acerca de Mí)

The following questions are about things that might have happened to you in the last few weeks. *Las siguientes preguntas son sobre cosas que te podrían haber pasado en las últimas semanas.*

1 = Never (Nunca)
2 = A Little (Un poco)
3 = Sometimes (A veces)
4 = A lot (Muchas veces)

In the past few weeks, how often…
En las últimas semanas, qué tan frecuentemente…
1. did you think school was fun?
pensaste que la escuela era divertida?
2. did you wish you didn't have to come to school?
deseaste no haber tenido que venir a la escuela?
3. did you feel safe in your class?
te sentiste seguro(a) en tu clase?
4. did you feel sad in school?
estuviste contento(a) en la escuela?
5. were you worried that another kid might hurt you?
te preocupó que otro niño te lastimara?
6. were you upset about having to go to school?
te sentiste disgustado(a) por tener que ir a la escuela?
7. did you do something really well?
hiciste algo realmente bien?
8. did you feel sad and alone?
te sentiste triste y solo(a)?
9. did you worry?
te preocupaste?
10. did you like school?
te gustá la escuela?
11. did you feel left out of things kids were doing?
sentiste que otros niños te dejaban por fuera?
12. did you feel lonely?
te sentiste solo(a)?
13. did you feel unhappy?
te sentiste triste?
14. did you feel that other kids really liked you?
sentiste que le caías bien a otros niños?
15. were you scared?
estuviste asustado (a)?
16. did you feel safe on the playground?
te sentiste seguro (a) en el patio de recreo?

17. did you feel nervous?   *te sentiste nervioso(a)?.*
18. did you ask to stay home from school?   *pediste quedarte en casa?*
19. did you like being in school?   *te gustó estar en la escuela?*
20. did you feel like crying?   *sentiste ganas de llorar?*
21. did you do well on your school work?   *hiciste bien tus trabajos de la escuela (e.g., tareas)?*
22. did you feel alone in school?   *te sentiste solo (a) en la escuela?*
23. did you pretend to be sick, so you could stay home?   *te hiciste el(la) enfermo(a) para poder quedarte en casa?*
24. were you excited to go to school?   *estuviste emocionado(a) de ir a la escuela?*
25. did you feel safe in the lunchroom?   *te sentiste seguro (a) en la cafetería?*
26. did you feel good about yourself at school?   *te sientes bien contigo mismo(a) en la escuela?*
27. did you feel sorry for kids you see getting picked on?   *te dan pena los niños que ves que otros niños molestan?*
28. did you feel sad when you see kids who don't have anyone to play   with? *te sientes triste cuando ves niños que no tienen con quién jugar?*
29. did you feel sad when you see someone get hurt?   *te sientes triste cuando ves que alguien se lastima?*

Teacher Relationship with this Child

Please reflect on the degree to which each of the following statements currently applies to your relationship with this student. Please put an "X" in only one box per item. 1 = Definitely NOT True 2 = Somewhat Untrue 3 = Somewhat True 4 = Definitely True
1. I share an affectionate, warm relationship with this student.
2. This student and I always seem to be struggling with each other.
3. If upset, this student will seek comfort from me.
4. This student values our relationship.
5. When I praise this student, he/she beams with pride.
6. This student reacts strongly to separation from me.
7. This student is overly dependent on me.
8. This student tries to please me.
9. This student feels that I treat him/her unfairly.
10. This student asks me for help when he or she does not really need it.
11. This student is sneaky or manipulative with me.
12. This student sees me as a source of punishment and criticism.
13. This student remains angry or resistant after being disciplined.
14. Despite my best efforts, this student and I do not get along.
15. This student whines when he/she wants something from me.
16. This student openly shares his/her feelings with me.