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Perceptions of Teachers’ Actions During Conflicts: Evidence of a Protective Role for Ethnic Minority Adolescents Attending High Conflict Schools

By

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A dissertation submitted in partial satisfaction of the requirements for the degree of

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University of California, Berkeley

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Abstract

Perceptions of Teachers’ Actions During Conflicts: Evidence of a Protective Role for Ethnic Minority Adolescents Attending High Conflict Schools

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Conflict resolution skills exhibited by teachers are a key contributor to the perceptions that students have of school authority, especially in schools with high rates of conflict. Perceptions about the way teachers deal with student conflicts have been shown to affect adolescent decision making and proclivity to work with school authorities during victimization scenarios (Aceves, Hinshaw, Mendoza-Denton, & Page-Gould, 2010). Thus, these perceptions shape some aspects of the student-teacher relationship, but there have been no empirical investigations into whether perceptions of teachers’ actions during conflicts (TAC) actually influence student functioning within academic domains.

This dissertation explored the relationship between perceptions of TAC and school outcomes of institutional identity, institutional belonging, and academic achievement among an at-risk sample of 188 ethnic minority urban adolescents. A theoretical model was proposed in which perceptions of TAC function as a protective buffer against poor school outcomes in the face of two risk factors: victimization experience and low academic self-efficacy. Adolescents completed self-report measures of perceptions of TAC, school victimization experiences, academic self-efficacy, institutional identity, and institutional belonging 3.5 months into the school year (Time 1). Grade point average (GPA) was accessed through school records at the end of the school year (Time 2) as an indicator of academic achievement. Multiple regression analyses were modeled to test whether perceptions of TAC moderated the relationship between the two risk factors (victimization experience and self-efficacy), and the three dependent variables (institutional identity and institutional belonging at Time 1; GPA at Time 2).

Controlling for student-teacher relationship quality, student perceptions of teacher fairness, biological sex, grade level, and aggression variables, perceptions of TAC positively predicted student institutional identity, but not institutional belonging. A test of statistical interaction showed that victimized adolescents with negative perceptions of TAC had the lowest levels of institutional identity; victims with positive perceptions of TAC were buffered against low identity and actually reported a higher sense of institutional identity than did non-victimized adolescents. Academic self-efficacy predicted Time 2 GPA, but this association was moderated
by perceptions of TAC. As hypothesized, students who reported negative academic self-efficacy beliefs but positive perceptions of TAC at Time 1 were protected against GPA decline at Time 2. This finding remained significant even when controlling for Time 1 GPA. Perceptions of TAC did not appear to have an effect on Time 2 GPA for students with positive self-efficacy beliefs. These findings suggest that adolescents who perceive effective teacher management of conflicts are protected against the negative effects of hostile school environments, victimization, and negative self-efficacy beliefs. The implications for high-risk ethnic minority urban adolescents are discussed in the context of developmental and cognitive theories of adolescence.
Dedications

This doctoral dissertation is dedicated to my mother, who has guided me with love, understanding, and stalwart parenting since birth. To my wife, for being caring and loving throughout my academic endeavors. And, to Professors Jeffrey Cookston and Sacha Bunge for directing me towards this goal many years ago.
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Perceptions of Teachers’ Actions During Conflicts: Evidence of a Protective Role for Ethnic Minority Adolescents Attending High Conflict Schools

As figures of authority, teachers play a central role in preventing student conflicts that occur on school grounds. A majority of anti-violence and anti-bullying interventions have thus been tailored to teachers and their potential for preventing aggressive student behaviors (e.g. Merrell, Isava, Gueldner, & Ross, 2008). However, teachers’ efforts to manage student conflicts are not always successful (Dake et al., 2004; Merrell et al., 2008; see also Dinkes, Kemp, Baum, & Snyder, 2008), leading to pervasive problems with aggression and violence in many schools. Allowing aggressive behaviors to persist on school grounds carries consequences that can supersede matters of violence, extending to the perceptions of students who observe teachers’ actions during uncontrollable school conflict (Aceves, Hinshaw, Mendoza-Denton, & Page-Gould, 2010; Rigby & Bagshaw, 2003). These perceptions—when negative—are far from benign, and require empirical attention given their potential influence on the functioning of students while at school.

This dissertation examined whether perceptions of teachers’ actions during conflicts (TAC) play a role in the development of bonds that urban, ethnic minority adolescents form with their educational institution, as well as their academic achievement. Recent research suggests perceptions of TAC affect adolescent students’ cognitive processing and decision making during victimization scenarios (Aceves, et al., 2010), yet this body of research has not been further explored. Here, I expand this sparse literature by examining the role that perceptions of TAC play in moderating the relationship between risk factors of school failure, and school outcomes. Specifically, I test the moderating role of these perceptions on the association between two specific risk factors—victimization experience and negative academic self-efficacy—and the school outcomes of institutional identity, a sense of institutional belonging, and academic achievement.

Definitions and Dissertation Outline

Prior to reviewing relevant literature, I provide working definitions for key terms and constructs under consideration herein, followed by an organizational outline of the dissertation.

Working definitions. Negative academic self-efficacy beliefs and victimization experience are two school variables that will be conceptualized as risk factors, given their potential to negatively influence the outcomes of interest in this research. Academic self-efficacy is defined generally as a student’s belief in his or her ability to succeed academically (see Bong & Skaalvik, 2003; Pajares, 1996). Adolescents considered to be at risk for school failure are those with negative self-efficacy beliefs. I define the second risk factor of victimization experience as having been victimized by a peer through various aggressive physical actions (e.g. being pushed or hit; Olweus, 2001) and/or violent actions (e.g. being threatened with a weapon, stabbed, or shot; e.g. Aceves & Cookston, 2007 Finkelhor, Omrod, Heather, & Hamby, 2005). Adolescents who are considered at-risk in this dissertation will be termed victims—that is, individuals having experienced many forms of victimization at school. Both definitions are in line with the way both academic self-efficacy and victimization experience have been conceptualized in published literature.

The three school outcome variables evaluated in this dissertation will be defined as follows: Institutional identity is the extent to which a student positively identifies as a member of
the school. Institutional belonging is defined as the extent to which a student feels that s/he has a legitimate, welcomed, and valued role in the school community. These constructs have been defined similarly in achievement-related research, and are important contributors to attitudes towards school authority and academic engagement (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002; Murray & Greenburg, 2000; Page-Gould & Mendoza-Denton, 2008). Academic achievement broadly refers to excelling academically in school; I operationalize via grade point average (GPA).

For abbreviation purposes, I will at times refer to institutional identity and institutional belonging collectively as school bond. This working definition is based on previous work that has conceptualized the identity and sense of belonging that students form with their educational institution as a trust-like bond (e.g. Aceves, 2007; see also Sztompka, 1999). Furthermore, all three outcome variables (institutional identity, institutional belonging, and academic achievement) will collectively be referred to as school outcomes. Although the term school outcomes may elsewhere refer to a broad, enveloping category of variables indicative of student functioning within an educational institutional, it was necessary to collectively abbreviate the three outcome variables as such for clarity.

**Organizational Outline.** I begin the dissertation by explaining the necessity of conducting this line of research in a school with high rates of conflicts. In particular, urban, low income schools are argued to be an ideal setting for this research because frequent peer conflicts are a salient part of these students’ social and academic development (Bowen & Bowen, 1999; Tolan, Gorman-Smith, & Henry, 2003). Next, I explain why ethnic minority adolescents specifically require empirical attention in this line of research, given the probable salience that perceptions of TAC play in conjunction with risk factors and poor school outcomes that disproportionately affect ethnic minority youth. This is followed by a review of research on student perceptions of TAC. Central to this dissertation, I will argue that perceptions of TAC moderate the relationship between risk factors and school outcomes within schools with high rates of conflict (Figure 2). Last, I outline the central hypothesis of this dissertation, describe the research design and its intention, and then lead into a presentation of data to support my claims.

**High Conflict Schools and At-Risk Ethnic Minority Urban Adolescents**

Schools with high rates of peer conflict provide an ideal environment in which to study perceptions of TAC. Students who observe aggressive behaviors and victimization on a daily basis are more likely to become familiar with how teachers respond to conflicts—including whether or not teachers are responsive, effective, caring, fair, and trustworthy within the context of addressing conflicts. When frequently exposed to conflicts, students have a greater number of incidents to develop, change, or reinforce their perceptions that teachers either can or cannot be turned to for support with issues related to aggression, victimization, and violence. For this reason, perceptions of TAC have been argued to be especially relevant in high conflict urban schools (Aceves et al., 2010).

**Ethnic minority students and violence at school.** Within such high conflict urban schools, ethnic minority adolescent students are more likely to be exposed to risk factors that lead to poor outcomes (e.g. Bowen & Bowen, 1999). Reporting on a nationally representative multi-sample analysis, the Bureau of Justice Statistics’ *Indicators of School Crime and Safety* (Dinkes et al., 2008), reported that twice as many Black (9%) and Latino (7%) adolescents feared being attacked while at school, compared to White students (4%). Likewise, over twice as many Black
(38%) and Latino (36%) students reported the presence of gangs at school, compared to 16% and 17% of White and Asian students. Similar trends were found for victimization on school grounds, with ethnic minority adolescents being more likely to experience violent victimization across independent, large sample studies conducted between the years of 1993 to 2007.

Ethnic minority students are also more likely to question their academic ability, which is a critical factor for developing identity, behavior, academic performance, and school perseverance (Bong & Skaalvik, 2003; Davis-Kean, Huesmann, Jager, Collins, Bates, & Lansford, 2008). Among academically stigmatized youth such as Latinos and Blacks (see Bowen & Bok, 1998; Neblett, Philip, & Cogburn; Steinberg, Dornbusch, & Brown, 1993), various factors rooted in racism and ethnic identity can undermine academic self-efficacy beliefs. Such factors contribute to not only a disparity in academic self-efficacy beliefs between Whites and ethnic minority students, but to an imbalance in school outcomes between these groups.

Further adding to the risk of school failure, ethnic minority students attending urban schools with high rates of conflict must coexist with aggressive peers who create social tension (i.e., threat of victimization), which in itself is negatively associated with academic achievement. Victimization, for example, predicts disengagement from school and poor academic performance (Bowen & Bowen, 1999; Buhs, Ladd, & Herald, 2006; Graham, Bellmore, & Wise, 2006; Ozer, 2005; Ozer & Weinstein, 2004; Schwartz, Gormon, Nakamoto, & Toblin, 2005; Woods & Wolke, 2004). Drop-out rates from urban schools also point to violence exposure as a key preventer of successful school completion (Boivon, Hymel, & Bukowski, 1995; Fried & Fried, 1996). Thus, when negative academic self-efficacy beliefs combine with exposure to a hostile school environment, the risk of poor school outcomes is further compounded.

Such findings provide the foundation for a predictive model whereby victimization and self-efficacy risk factors prevalent among ethnic minority adolescents, increase the chances of poor school outcomes (see Figure 1). Given the link suggested in Figure 1, an existing concern of educators and researchers alike has been to determine ways to mitigate poor school outcomes despite the presence of negative self-efficacy and victimization risk factors.

Perceptions of TAC as a Protective Buffer for At-risk Adolescents

Students who are exposed to frequent conflicts observe and judge teachers’ actions during conflict resolution attempts (Aceves et al., 2010; Rigby & Bagshaw, 2003). Perceptions of how teachers manage conflict may thus be an important variable for determining how students view teachers, school, and academic activities. In light of risk factors that emerge in hostile school environments, I argue that perceptions of TAC provide a mechanism whereby the effects of negative academic self-efficacy beliefs and victimization experience can either be mitigated or augmented (see Figure 2). Consider an adolescent who fears peer victimization at school. How might this adolescent’s functioning differ depending on whether (a) she has positive perceptions of TAC, and thus knows she can turn to teachers for support; or (b) she has negative perceptions of TAC, and feels she cannot rely on teachers?

To provide a background on perceptions of TAC and their potential role in shaping school outcomes, I now describe previous research in this area. I begin by summarizing two key studies conducted on the TAC construct specifically. I then describe indirect evidence suggesting perceptions of TAC may be linked to school outcomes, in light of the fact that there has been no direct examination of such a relationship previously.
Perceptions of TAC research. The first empirical examination of student perceptions of TAC was conducted with two large samples of 7,723 Australian adolescents (Rigby & Bagshaw, 2003). In their first study, Rigby and Bagshaw administered interviews and surveys to 7,091 of the adolescents and found that a majority of their sample was skeptical of teachers’ abilities to prevent the aggressive behaviors of bullies. In Study 1, 40% of adolescent boys and girls felt that teachers were not interested in stopping bullying at school. Although 43% of girls either definitely believed, or were unsure that teachers and students should not work together to stop bullying, over 50% of boys endorsed these same negative beliefs.

In Study 2, the authors employed a more sophisticated measure of perceptions of TAC, which included dimensions of perceived fairness, effectiveness, and helpfulness of teachers in a conflict resolution capacity. This second cohort of adolescents (n = 693) judged teachers negatively across the dimensions of perceived fairness, effectiveness, helpfulness of school authority. Additionally, the authors found that perceived fairness, effectiveness of teachers, and general teacher appraisals, were predicted in part by a student’s status as either a bully or victim. Specifically, students who were not involved in conflicts had more positive perceptions of TAC when compared to bullies or victims.

Although notable for its groundbreaking nature, the work of Rigby and Bagshaw (2003) had a number of limitations. In addition to its methodological simplicity, the results could be generalized only to Australian youth populations: the sample speaks little to the racial dynamics that are prevalent in the United States. Second, there was little focus on urban schools with particularly high rates of student conflict. Conducting this research in schools with high rates of conflict may have produced different findings, given that conflict and teacher interventions are more common and relevant in hostile settings (see Aceves et al., 2010). Last, the authors were mainly concerned with identifying variables that predicted perceptions of TAC. As I will soon explain, a firmer understanding of these perceptions’ would be achieved by examining TAC as a predictor of various variables including cognitive processing, behaviors, and school outcomes.

In a recent article (Aceves et al., 2010), my colleagues and I examined how individual differences in perceptions of TAC influenced student responses to victimization scenarios. Using victimization vignettes, we found that perceptions of TAC influenced the likelihood that ethnic minority urban adolescents would respond to victimization by either seeking help from school authority or aggressively fighting back in self-defense. Students with positive perceptions of TAC were more inclined to seek help from school authority when victimized. In turn, proclivity to seek help from teachers was negatively associated with responding to the victimization scenarios with physical aggression. Thus, perceptions of TAC had an indirect effect on reactive aggression, implying that these perceptions—when positive—mitigate reactively aggressive behavior on school grounds (see Figure 3).

Using path analysis, we further demonstrated that perceptions of TAC were one of a number of variables that predicted how the sample responded to the victimization vignettes. Compared to girls, boys were both less likely to seek help from school authority and more likely to react to each vignette with physical aggression. Both previous levels of reactive aggressive behaviors and normative beliefs about aggression predicted reactive aggressive responses to the vignettes. Overall, this more inclusive path model showed that perceptions of TAC function within a more complicated cognitive processing model whereby biological sex, beliefs about aggression, and previous aggressive behavior collectively predict responses to aggressive social events.
There were a number of limitations in this previous study. Aceves et al. (2010) examined how perceptions of TAC influenced decision making within hypothetical victimization scenarios. Beyond these hypothetical vignettes, it was unclear how such perceptions affected adolescent behavior and functioning in real-world settings. Second, beyond conflict-specific domains it was unclear whether perceptions of TAC influenced other aspects of adolescent functioning. Third, we did not explore whether perceptions of TAC functioned similarly for all students or whether these perceptions had a more significant effect for victims (e.g. Rigby & Bagshaw, 2003).

Perceptions of TAC and academic variables. No work to date has examined the link between perceptions of TAC and school outcomes such as institutional identity, institutional belonging, and academic achievement. Here, I discuss three bodies of literature that indirectly link perceptions of TAC to these broader academic variables. The first is a collection of research showing how general perceptions about teachers predict classroom behaviors and academic functioning. The second includes selected works from the victimization literature, illustrating the caustic effects of victimization on academic functioning. Last, I explain findings from the justice literature, which provides a theoretical framework underscoring a students’ tendency to judge the effectiveness and fairness of teachers during their attempts at conflict resolution.

General perceptions about teachers and academic outcomes. The general perceptions that students have of teachers’ level of care and fairness are indicative of student-teacher relationship quality. It is not surprising then that general perceptions of teacher quality are correlated with functional school behaviors, academic motivation, and achievement (Birch & Ladd, 1997; Brock, Nishida, Chiong, Grimm, & Rimm-Kaufmann, 2006; Imber, 1973; Murray & Greenburg, 2000; Rolland & Galloway, 2002; Teven & McCroskey, 1996; Wentzel, 1997). Evidence further suggests that the associations between perceptions of teachers and school functioning may be causal, as shown in classroom intervention studies (e.g. Brock et al., 2006). Although studies on general perceptions about teachers do not take into account how students view teachers in conflict resolution capacities, they do support two key points relevant for this dissertation. First, they demonstrate that students find certain qualities (or dimensions) of teachers important—including care, support, and fairness. Second, these studies have tested and confirmed the directionality of the association between perceptions and school outcomes, highlighting a longitudinal effect.

Arguably, general perceptions about teachers shape school outcomes because of the weight of a given quality on academics. For example, having a caring teacher is important because it provides students with a sense of support and value. Thus, students who report having caring teachers are also likely to be motivated and achieve academically (see Wentzel, 1997, 1998). Likewise, having a fair teacher is important because students concerned with grades need to know that their performance will be evaluated fairly. As I have argued, conflict resolution skills emerge as a relevant teacher quality in schools with frequent conflicts. In hostile settings, perceptions of TAC may emerge as a specific predictor of school outcomes, over and above the views that students have of general teacher qualities.

The effects of victimization on academic outcomes. Children and adolescents in violent school environments experience psychosocial maladjustment, withdraw socially, and are more likely to struggle academically (Dinkes et al., 2008; Graham & Juvonen, 2001; Hawker & Bolton, 2000; Holt, Finkelhor, & Kantor, 2007; Lopez & Dubois, 2005). This relationship may be due in part to the resulting negative perceptions that emerge when victims and bystanders observe unsuccessful conflict-intervention attempts by teachers. However, when teachers effectively deal with conflicts at schools, students may feel safer, trust teachers, and be more
inclined to engage academically. In support of this idea, multi-school studies have found correlations between teachers’ control of school violence and academic performance (Marachi, Astor & Benbenishty, 2007). Based on these previous data, I propose that negative attitudes about teachers and their capacity to manage conflict carry over to students’ feelings about school (i.e., the school as an institution), and thus affect academic outcomes.

Perceptions of teacher justice and academic variables. When teachers are unable to assist victimized and disadvantaged students in need of aid, observers may perceive the lack of a school’s effective action as an injustice. Perceptions of TAC as measured in previous research have included items that center on the fairness and effectiveness of conflict resolution attempts. The TAC construct is thus rooted in justice principles (Aceves et al., 2010; Rigby & Bagshaw, 2003; see also Lind & Tyler, 1988). Gouveia-Pereira, Vala, Palmonari, & Rubini (2003), found that perceived classroom injustice predicted lower academic performance, behavior problems, and an overall mistrust of authority among Portuguese adolescents. Similar studies demonstrate how perceived classroom injustice leads to hostility towards and distancing from one’s educational institution and teachers (e.g. Correia & Dalbert, 2007; Chory-Assad & Paulsel, 2004; Mendoza-Denton et al., 2002; Tyler & Degoe, 1995).

Collectively, these three bodies of research suggest that perceptions of TAC may be directionally related to school outcomes. However, I am not positing a direct effect. Rather, I propose that students who are at greater risk for academic failure (i.e., those with low academic self-efficacy), and those directly involved in school conflicts as victims, will be affected by their perceptions of TAC to a greater extent than those at lower risk, or those less likely to be victims. Perceptions of TAC may thus function as a moderating variable, with the potential to buffer against negative school outcomes. I predict that at-risk adolescents stand to further benefit or suffer from their perceptions of TAC, depending on whether these perceptions are positive or negative. Figure 2 illustrates this proposed association in which perceptions of TAC moderate the effects of victimization experience and low academic self-efficacy on school outcomes.

Perceptions of TAC as a Buffer for At-Risk Students

Why might at-risk minority adolescents be particularly sensitive to teachers’ actions during conflicts? Consider first that positive academic self-efficacy is a robust resilience factor that predicts academic achievement, regardless of exposure to hostile environments (see Multon, Brown, & Lent, 1991). On the other hand, adolescents with negative academic self-efficacy beliefs who are at risk for school failure may be more sensitive to environmental disturbances that stem from conflicts—the same conflicts that hurt academic aspirations and promote a sense of futility (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Hinton-Nelson, Roberts, & Snyder, 1996). As a result, students with negative self-efficacy beliefs may rely on their perceptions of teachers’ actions during conflicts as indicators that teachers can be engaged (or that they should be avoided).

Likewise, perceptions of TAC may function differently for those students directly involved in conflicts as victims, as opposed to bystander witnesses (Aceves, 2007; Ribgy & Bagshaw, 2003). Victims rely heavily on teachers to assist them during confrontations, as they are often unable to defend themselves (Berstein & Watson, 1997). In an experimental vignette study on perceptions of TAC, I previously found participants reading a victimization scenario from a victim’s perspective reported lower trust towards teachers, than did non-victim witnesses (Aceves, 2007). Rigby and Bagshaw (2003) have also found that victims are critical of teachers
and relatively unlikely to endorse the prospect of working together to stop bullying. Non-victim students, on the other hand, do not experience the negative sequelae of victimization, are free from a reliance on teachers for their own safety, and thus place less value on teachers’ ability to resolve conflicts. Additionally, victims experience first-hand the “play-by-play” of TAC, and are directly affected by the outcomes of each teachers’ action.

The Present Study

The purpose of this dissertation was to examine the role that adolescent perceptions of TAC play in shaping institutional identity, institutional belonging, and academic achievement. I conducted a follow-up assessment of the same sample reported in Aceves et al., (2010). The environment of this school, and experiences of the students, have already been shown to meet the criteria of a high conflict environment, and are thus ideal for this line of research.

Using a longitudinal correlational design, I tested the model depicted in Figure 2. I hypothesized that perceptions of TAC moderated the relationship between (a) the risk factors of academic self-efficacy and victimization experience and (b) school outcomes. Specifically, I hypothesized that perceptions of TAC affect school outcomes among students for whom these perceptions are more relevant. I predicted that students who experienced more victimization on school grounds (classified as victims) would demonstrate a positive association between their perceptions of TAC and school outcomes. Second, I predicted that students at risk for school failure (those with negative academic self-efficacy beliefs) would be buffered by positive perceptions of TAC against negative school outcomes.

Because school outcomes are heavily influenced by variables other than academic self-efficacy, victimization experience, and perceptions of TAC, it was necessary to control for possible confounding variables in my analyses. One might postulate that variables such as biological sex, student-teacher closeness, or aggressiveness may be reflected in student reports of TAC. To account for this possibility, I included the control variables of biological sex, grade level, student-teacher relationship quality, perceptions of teacher fairness, and aggressive behavior, based on previous research demonstrating their associations with violence and school outcome variables (Aceves et al., 2010; Birch & Ladd, 1997; Hughes, Luo, Kwo, & Loyd, 2008; Murray & Malgrem, 2005; Murray, Murray, & Waas, 2008; Rigby & Bagshaw, 2003). Finally, I hypothesized that the buffering effect of TAC would remain significant even after controlling for these other variables that have been shown to predict school outcomes.

Method

Recruitment and Procedure

Participants and research setting. Following the premise of this research, a local high school was selected based the criteria that conflicts were frequent occurrences on school grounds, the campus located in an urban, low-income neighborhood, and the attending students of ethnic minority background (see Aceves et al., 2010). The inability to control many of the students’ aggressive behaviors was communicated by the principal, prior to the planning and conducting of the study.

One hundred eighty-eight ethnic minority adolescents (49% female) consented to complete a survey about aggression, victimization, student-teacher and peer relationships. School records classified 51.5% of the sample as Latino, 24.2% as Asian, 18.9% as African
American, and 5.3% as other, including students of mixed ethnicities. There was one student who was identified as European American in the school records. Given the nature of the hypothesis, this student was dropped from the analyses. Participants ranged in age from 13 to 19 ($M = 15.68, SD = 1.34$); 41.8% were in the 9th grade at the time of the survey, 22.4% were in 10th grade, 18.4% were in the 11th grade, and 17.3% were in 12th grade. The clear reductions in class size as grade level advances are indicative of a high drop-out rate.

**Procedure.** The study and its research methods were first reviewed and approved by the Institutional Review Board of the University of California, Berkeley. Data collection occurred during two time points. Time 1 data collection occurred 3.5 months into the 2006-2007 school year, during which the research survey was administered to consenting students over the course of two days. Additional procedural details for survey administration are described in Aceves et al. (2010). At the completion of the school year (Time 2), I returned to collect GPA from school records for students who completed the survey at Time 1. In line with the dissertation’s hypothesis, the purpose of the Time 2 GPA collection was to determine whether victimization experience, academic self-efficacy beliefs (i.e. risk factors), and perceptions of TAC (moderating variable) longitudinally predicted the academic achievement of each student.

Of the original 188 students who completed the survey during Time 1, 165 (87.8%) successfully completed the 2006-2007 academic year. Those students no longer enrolled at Time 2 could have been dropped due to behavioral issues, extended truancy, consistent low grades (e.g., 0.0 GPA per term), or parental withdrawal of the student from the school. Analyses were thus conducted on two sub-samples. Analyses examining Time 1 variables as outcomes were conducted on the overall sample of 188. Longitudinal analyses modeled to predict Time 2 GPA were conducted using the subset of 165 students who completed the school year. T-tests revealed that students who were no longer enrolled at Time 2 had a lower Time 1 GPA ($M = 1.77, SD = .98$) compared to the prospective sample of 165 ($M = 2.42, SD = 1.08$). No other statistical differences between these subgroups emerged among all variables used in these analyses (all $t$’s $< 1$).

**Time 1 Independent Variables**

**Perceptions of Teachers Actions During Conflicts (TAC).** Student perceptions of TAC were measured using nine items assessing the fairness, justice, and outcome success of teachers’ actions during conflicts (see Aceves et al., 2010). These nine items (provided in Table 1) were averaged to form a measure of perceptions of TAC, with higher scores indicating positive views of teacher fairness, effectiveness, and success during conflict interventions ($\alpha = .86; M = 2.89, SD = .67$). Additional details on this measure, including justification for its averaging, and single factor structure are provided in Aceves et al. (2010).

**Academic self-efficacy (Risk-factor 1).** Three items were used to assess students’ perceived ability to succeed academically at the high school. Items were answered on a 5-point likert scale, with lower values indicating disagreement, and higher values indicating agreement with each statement. The items were as follows: *I am confident about finishing high-school and graduating successfully, I am confident about succeeding academically at this school, and I have considered dropping out of school* (reverse coded; $\alpha = .63, M = 4.14, SD = .74$). Although this measure was constructed with limited items due to time constraints, the three items were in line with conceptualizations of academic self-efficacy (Parajes, 1996; Bong & Skaalvik, 2003).
Victimization Experience (Risk-factor 2). Victimization experience was assessed by tallying counts for each time a participant was victimized in one of nine physical ways. Incidents occurring on school grounds, as opposed to off campus, were exclusively counted. Example items included the number of times the adolescent had been pushed, hit, stabbed, threatened with a weapon, shot, or seriously injured in a fight they did not start. These items captured both what is considered to be less serious physical victimization, or peer harassment (Olweus, 2001), as well as serious, violent victimization (Aceves & Cookston, 2007; Dinkes et al., 2008; Fagan, 2003). The hostile state of the school, coupled with the seriousness of victimization events that have occurred on campus in the past, warranted the assessment of victimization across a wide range of severity. Both minor (e.g. being pushed, hit) and violent (e.g. being threatened with a weapon or shot) were merged into a single victimization count measure.

The initial victimization counts for each item were extremely skewed, with a majority of adolescents reporting not having been at the receiving end of these events since the start of the school year. Victimization counts were thus dichotomized following recommendations for statistically transforming extremely skewed data (Tabachnik & Fidell, 1989). Each victimization event was coded as 0 to indicate the event had not occurred, or 1 to indicate the event had occurred. Following this transformation, all nine victimization experiences were summed. The resulting count scale documented whether the adolescent had experienced each particular form of victimization on a yes or no basis, with 0 indicating no victimization experienced at school, and 9 indicating all forms of victimization were experienced. This particular method for measuring victimization experience has been used and validated in previous research (Aceves & Cookston, 2007).

A majority of students were fortunate enough to not experience any form of the victimization since the start of the school year (37.2%). However, victimization was a fairly common experience for the remainder of this sample. Stratified groups are reported here for descriptive purposes only. Thirty-three percent of the sample experienced one to three forms of victimization, 13.3% experienced four to six forms of victimization, and 16.5% experienced 7-9 forms of victimization.

Time 1 Covariates

Reactive and Proactive Aggression. The reactive-proactive aggression questionnaire (RPQ; Raine et al., 2006) is a 21-item self-report measure of aggression. Items on the RPQ are answered on a three-point scale measuring how often an individual engages in a specific aggressive behavior, with 0 indicating never, 1 indicating sometimes, and 2 indicating often. This scale has a two-factor structure, with 11 reactive aggression items and 12 proactive aggression items. Each subscale has demonstrated good internal reliability in previous publications, and has been validated in an adolescent sample (Raine et al., 2006).

Reactive and proactive scores are derived by summing responses from the 11 and 12 items respectively. In the current sample, the reactive ($\alpha = .86$, $M = 8.33$, $SD = 4.80$), and proactive ($\alpha = .89$, $M = 3.61$, $SD = 4.37$,) subscales were internally consistent and highly but not perfectly correlated, $r (148) = .67$, $p < .001$.

Student-teacher relationship quality. The Trust in and Respect for Teachers scale (Battistich, Schaps, & Wilson, 2004) consists of 10 items measuring student perceptions of how caring, responsive, and trustworthy the teachers are. The questions are meant to tap students’
general evaluations of their teachers, as opposed to more domain specific measures such as perceptions of TAC. Responses were averaged as a perception of student-teacher relationship quality. Controlling for this was necessary to determine whether conflict-related perceptions such as those measured in the TAC construct predict school outcomes above and beyond general teacher qualities (α = .76, M = 3.17, SD = .64).

**Teacher Fairness.** Perceptions of fairness have been shown to predict positive attitudes towards school authority (Chory, 2007; Chory-Assad & Paulsel, 2004; Tata, 1999). To establish whether the conflict-resolution fairness within the TAC measure was a unique predictor of school outcomes, a teacher fairness covariate was constructed. The mean of three items measured on a five-point likert scale measured fairness of the teachers in general, non-conflict related domains. The items were, *How fair are you treated by the teachers and Principal at the [high school]?, How fair are the procedures used by the teachers at the [high-school] to reach their decisions about student matters, such as rules?,* and *How fair are the grading procedures used in the school?* (α = .69, M = 3.32, SD = .84).

**Sex, Grade level, and Time 1 GPA.** Last, I controlled for biological sex and grade level. Biological sex has been closely linked to social processes involving aggression and victimization (Dodge, Coie, & Lynam, 2006), necessitating the statistical control of this variable. Grade level was also necessary to control, given a high drop-out rate that suggested upper classmen remaining in the school performed academically adequate to avoid expulsion. Time 1 GPA was controlled in the longitudinal analysis in which predicting academic achievement was the intention. This baseline measure of GPA was collected from school records, and was calculated for the term just prior to the survey’s administration (M = 2.42, SD = 1.08)

**Time 1 Dependent Variables**

**Institutional Identity and Institutional Belonging.** I used items from an institutional legitimacy scale that was developed to assess student attitudes towards their academic institution and feelings of authority legitimacy (see Mendoza-Denton et al., 2002; Mendoza-Denton et al., 2008; Tyler & Degoe, 1995). Four institutional identity items (e.g., *I am proud to think of myself as a member of the [high school] α = .64, M = 3.25, SD = .79*), and 3 institutional belonging items (e.g., *People at this high school respect my values, α = .64, M = 3.33, SD = .82*) were averaged to obtain the school bond dependent variables.

**Time 2 Dependent Variable: GPA**

I accessed school records at the end of the academic year to obtain a measure of Time 2 GPA. The Time 2 measure of GPA was calculated using each student’s academic performance across the entire second semester (M = 2.14, SD = 1.13).

**Data analysis plan**

First, I conducted correlational statistics to determine the relationship between each study variable. Next, I tested the hypothesis that perceptions of TAC buffer at risk students from poor school outcomes by using a series of multiple regressions to test for statistical interactions. Three multiple regression analyses were used, testing the interaction terms as predictors of (a) institutional identity, (b) institutional belonging, and (c) Time 2 GPA. In short, these regressions
determined whether perceptions of TAC had a stronger effect on school outcomes for victims and for students with negative self-efficacy beliefs than for non-victims and for students with positive self-efficacy beliefs, as tested via statistical interaction terms.

Results

All analyses were conducted using SPSS version 16. Means, standard deviations, and pairwise correlations for all measured variables are provided in Table 2. Student perceptions of TAC were positively correlated with institutional identity ($r = .58$, $p < .001$) and institutional belonging ($r = .31$, $p < .001$), providing preliminary support for the hypothesized associations between these variables. Perceptions of TAC were also highly correlated with student-teacher relationship quality ($r = .62$, $p < .001$), and with teacher fairness ($r = .56$, $p < .001$). The implications of these covariances are discussed later in the dissertation.

Test of Interactions—Regression Models

I first report the results of the two multiple regressions that were modeled to examine predictors of institutional identity and institutional belonging at Time 1. Second, I report the same set of independent variables as predictors of Time 2 GPA.

Initial regression model. Identical covariates were entered into each model, and included biological sex, grade level, teacher-student relationship quality, perceptions of teacher fairness, and proactive and reactive aggression. The independent variables of interest—perceptions of TAC, academic self-efficacy, and victimization experience—were entered into the next multiple regression step. Following multiple regression techniques outlined by Aiken & West (1991), interaction terms for TAC X self-efficacy, TAC X victimization experience, and self-efficacy X victimization experience were computed and entered as predictors in the third step of the regression model. Finally, a three-way interaction of TAC X academic self-efficacy X victimization experience was computed and entered into the final step of the regression model.

Regression model re-specification. The results of these initial regressions revealed that the three-way interaction term (TAC X academic self-efficacy X victimization experience) and a two-way interaction term (self-efficacy X victimization experience) were non-significant predictors of all three outcome variables. These non-significant interaction terms were dropped from all subsequently reported analyses, an action which is statistically justified (Cohen, Cohen, Aiken & West, 2003). The self-efficacy X victimization interaction term was irrelevant for testing the hypothesis, although its initial inclusion in the model assured these variables did not interact with one another when predicting the school outcomes.

Regression Results: Testing Time 1 Institutional Identity and Belonging as Outcomes

Time 1 institutional identity and institutional belonging were first tested as criteria (i.e. separate dependent variables), following the model outlined above. Predictor variables were entered as block hierarchical steps. The covariates were entered as Step 1, the independent variables as Step 2, and the two interaction terms (TAC X academic self-efficacy, TAC X victimization experience) as Step 3. Table 3 summarizes the results of these multiple regression analyses with all variables entered as predictors.
**Institutional identity.** Perceptions of teacher fairness emerged as the only significant covariate \((\beta = .23, p < .01)\) to predict institutional identity. As hypothesized, perceptions of TAC significantly predicted institutional identity \((\beta = .44, p < .001)\), as did academic self-efficacy \((\beta = .13, p < .01)\). The association between perceptions of TAC and institutional identity was positive, suggesting that positive perceptions of TAC were linked with higher levels of institutional identity, even when controlling for all covariates.

Of the two interaction terms, only perceptions of TAC X victimization experience was significant \((\beta = .11, p < .05)\) in predicting institutional identity. Probing of this significant term was performed by graphing the interaction following the method of Aiken & West (1991). Figure 4 illustrates the level of institutional identity for four categories of adolescents: those who experienced low and high levels of victimization on school grounds, and those who reported negative and positive levels of TAC. Thus, this technique allowed a comparison of how perceptions of TAC influenced the institutional identity of students who experienced many forms of victimization, versus those who did not.

When graphed, the victimization experience X perceptions of TAC interaction supported the hypothesis (see Figure 4). Students who rarely experienced victimization on school grounds reported levels of institutional identity that did not vary based on their perceptions of TAC. However, victimized adolescents with positive perceptions of TAC reported a higher mean level of institutional identity \((M = 4.06)\), when compared to victimized adolescents with negative perceptions of TAC \((M = 2.37)\). Figure 4 further highlights this disparity, demonstrating that victimized adolescents with negative perceptions of TAC had lower levels of institutional identity relative to all other groups represented in the graph. On the other hand positive perceptions of TAC seemed to not only buffer against declines, but elevate the institutional identity reported by victimized adolescents. The overall regression model predicted 46% of the variance in institutional identity.

**Institutional belonging.** To predict institutional belonging, I conducted a multiple regression analysis identical to the technique described above. However, the second multiple regression modeled to test institutional belonging as a criterion did not support the hypothesis (see Table 3). General teacher fairness \((\beta = .24, p < .05)\) emerged as the only significant predictor of institutional belonging with all independent variables in the model. Contrary to the hypothesis, neither perceptions of TAC nor the interaction terms emerged as significant predictors of institutional belonging (see Table 3).

**Regression Results: Testing Time 2 GPA as the Outcome**

Next, I employed longitudinal modeling to determine significant predictors of Time 2 GPA using the same covariates, independent variables, and interaction terms outlined above. This next multiple regression analysis tested whether perceptions of TAC moderated the relationship between academic self-efficacy and victimization experience (risk factors), and future academic achievement.

The multiple regression model was tested twice: once without controlling for Time 1 GPA, and again with Time 1 GPA entered as a covariate. The reason for testing these two models was based largely on high correlation between Time 1 and Time 2 GPA. It was my goal to determine first which variables among those used in the previous analyses predicted Time 1 GPA, and subsequently observe changes in the model once Time 1 GPA was covaried. The first analysis I report is the regression which excludes Time 1 GPA as a covariate in the model.
With all variables in the model, student grade level ($\beta = .26, p < .01$), academic self-efficacy ($\beta = .20, p < .05$), and the perception of TAC X academic-self efficacy interaction term ($\beta = -.21, p < .01$) significantly predicted Time 2 GPA (see Table 4). Thus, these initial multiple regression results supported the hypothesis.

I again tested the multiple regression model with Time 1 GPA added as a baseline control variable. As hypothesized, the perceptions of TAC x academic self-efficacy interaction remained significant ($\beta = -.11, p < .05$), when Time 1 GPA was added as a covariate. With all predictors in the model, Time 1 GPA was the largest predictor of Time 2 GPA ($\beta = .80, p < .001$); grade level continued to positively predict Time 2 GPA ($\beta = .13, p < .05$). Given the significant interaction, I performed post-hoc probing following the methods of Aiken & West (1991). Time 2 GPA was plotted in a graph for participants who were high (1 SD above the mean) and low (1 SD below the mean) in academic self-efficacy beliefs. The slope of this line is modeled once for participants who reported negative perceptions of TAC (1 SD below the mean), and again for participants who reported positive perceptions of TAC (1 SD above the mean).

When illustrated, the significant interaction again supported the hypothesis (see Figure 5), revealing a buffering effect for perceptions of TAC. Specifically, positive perceptions of TAC buffered students with negative academic self-efficacy beliefs from low GPA at Time 2. Students who reported negative academic self-efficacy beliefs and positive perceptions of TAC (i.e., at-risk, but buffered through perceptions), had higher mean GPA at Time 2 ($M = 2.42$), when compared to the same academically at-risk students who viewed teachers’ actions during conflicts negatively ($M = 1.39$). In line with the hypothesis, students with positive academic self-efficacy beliefs and positive perceptions of TAC (non-risk group) had similar Time 2 GPA ($M = 2.21$) when compared to the at-risk, yet buffered group. Unexpectedly, students with positive self-efficacy beliefs who reported negative perceptions of TAC had the highest Time 2 GPA ($M = 3.09$).

Discussion

Results supported the hypothesis that positive perceptions of TAC play a protective role for ethnic minority urban adolescents at-risk for negative school outcomes. Adolescents who experienced many forms of victimization but who also viewed teachers’ responses to conflicts positively, reported higher levels of institutional identity compared to non-victims. Conversely, negative perceptions of TAC predicted low levels of institutional identity among adolescent victims. Perceptions of TAC also moderated the longitudinal effect of academic self-efficacy on GPA. Students with negative academic self-efficacy beliefs—a group prone to school failure—had lower Time 2 GPA if they also had negative perceptions of TAC when compared to students with positive academic self-efficacy beliefs. However, this decline in GPA was not observed among students with negative self-efficacy beliefs who also endorsed positive perceptions of TAC, further illustrating its protective role.

Why might perceptions of TAC have played such a role among this group of adolescents? There are various explanations subject to speculation given that mechanism was not the focus of this investigation. However, outlining why perceptions of TAC contributed to school outcomes in a hostile environment is important for understanding these findings and for guiding future research in this area.

Perceptions of TAC and school safety. School safety is one important aspect of a conducive learning environment and may in part explain the effects of perceptions of TAC.
Positive perceptions of TAC may contribute to a sense of school safety, which in turn can promote engagement behaviors that lead to school bonds and achievement. Indeed, individual dimensions measured by perceptions of TAC also predict perceived and actual levels of school safety. In a recent study, Gregory et al., (2010) found that structure and support within schools were essential for establishing school safety. Structure was defined as the *enforcement of school discipline*, and support as teacher care; both are related to the constituent dimensions within the perceptions of TAC measure.

Objective and subjective measures of school safety often emerge as significant predictors of psychological and academic outcomes in youth studies (e.g., Leventhal & Brooks-Gunn, 2004; Ozer & Weinstein, 2004). For example, a recent nationally-representative adolescent study found that teacher support and school safety were significant predictors of academic engagement (You & Sharkey, 2009). When taken together, these studies provide support for the idea that positive perceptions of TAC may be derived from perceived school safety—or perhaps may lead to perceptions of school safety, in turn promoting academic engagement. Either way, the relationship between perceptions of TAC and school safety should be taken into account when attempting to uncover the mechanism explaining perception influence.

**Trust in teachers.** One other possibility is that teachers’ actions during conflicts contribute to the general image that students have of school authority. Earlier, I argued that perceptions of TAC are partially independent of general teaching qualities. However, both general and conflict-specific teacher qualities overlapped substantially in this data set (see also Aceves, 2007; Aceves et al., 2010). The correlations reported herein suggest teachers who are caring and effective when responding to conflicts are also likely to be caring and effective in all respects of academic activities. Qualities such as care, effectiveness, and supportiveness promote learning and achievement irrespective of conflicts (Lee, 2007; Muller, 2001; Wentzel, 2003). Responsiveness and effectiveness while addressing conflicts may be seen as particularly diagnostic of a teacher’s quality—a litmus test of whether a given teacher can be counted on as a caring and effective authority figure. As such, it is not surprising that perceptions of TAC and student-teacher relationship quality were highly correlated.

Yet, despite being highly correlated, the overlap between perceptions of TAC and teacher-student relationship quality did not alter the multiple regression models to disconfirm the hypothesis. Conclusively, perceptions of TAC were related to general teacher qualities but still measure independent conflict-specific aspects of teachers that are valued characteristics within hostile school climates. Furthermore, because these analyses included a host of control variables, one can conclude that these findings were not due to general student-teacher relationship quality, perceptions of teacher fairness, grade level, biological sex, or aggressiveness. This dissertation thus adds to a growing literature suggesting that perceptions of TAC have a unique influence on adolescent decision making (e.g. Aceves et al., 2010), the forging of school bonds, and academic achievement.

The theoretical speculations as to why perceptions of TAC moderated risk factor and school outcome variables should be examined in future research. These mechanism ideas can be explored using a mediation model that takes into account the interactions of the current study (see methods concerning the testing of conditional indirect effects, e.g. Preacher, Rucker, & Hayes, 2007; Muller, Judd, Yzerbyt, 2005). Studies designed for the testing of mediation may eventually assist in establishing why perceptions of TAC are relevant to adolescent students attending high conflict schools.
The Moderating Role of Perception of TAC

Students with negative academic self-efficacy. As hypothesized, perceptions of TAC played a different, predictive role depending on whether students experienced various forms of victimization, or had negative self-efficacy beliefs. Students with negative self-efficacy beliefs are more at risk for school failure, due in part to their sensitivity to disturbance within the school environment (e.g. Macmillan & Hagan, 2000). Students who are unsure of their academic abilities may find this uncertainty to give way to a worrisome coping style that is cognitively distracting. When coupled with exposure to a hostile environment in which teachers are perceived as being unable to control conflicts, the poor academic performance illustrated in this study may ensue. However, if teachers are perceived as capable of controlling school conflicts, the sense of safety and teacher care may allow students who are otherwise at risk for academic failure to focus and perform well academically (e.g. Muller, 2001).

Victimized students. Previously, it was argued that perceptions of TAC are relevant to both victims and non-victims alike (Aceves et al., 2010). This previous line of thought maintained that although victimized adolescents are on the receiving end of aggressive social exchanges, bystanders who witness these events observe and judge teachers on their responsiveness and effectiveness just as victims do. Prior to this dissertation however, this argument had not been tested, as my colleagues and I did not take into account victim status in our previous analysis.

In an experimental study (Aceves, 2007), I previously used victimization vignettes to examine how three factors that transpire when teachers respond to victimization—perspective (victim vs. witness), level of teacher care, and teacher effectiveness—affected trust and attitudes towards a hypothetical school authority. Victimization perspective did not interact with care and effectiveness factors, although a small main effect for this variable was found. Participants who read the scenario as victims reported slightly more negative attitudes and less trust towards teachers compared to witnesses. These findings were in line with Australian adolescent samples (Rigby & Bagshaw, 2003), which suggest that victimized adolescents are more critical towards teachers’ actions during conflicts when compared to non-victims.

The converging evidence suggesting that perceptions of TAC are particularly meaningful for adolescent victims makes theoretical sense. Experiences of victimization are traumatic, leading to various psychosocial problems throughout childhood, adolescence, and even adulthood (Macmillan & Hagan, 2000; Hanish & Guerra, 2002; Hawker & Bolton, 2000). Because victimized youth rely on teachers for safety (Bernstein & Watson, 1997), it is not surprising that victims who find teachers to be responsive and effective when dealing with conflicts (i.e., victimization) also feel strongly connected to their school. On the other hand, victimized adolescents who feel teachers’ actions during conflicts are non-existent or unreliable, may feel a sense of betrayal or injustice. The consequences of negative perceptions of TAC can range from an accumulating lack of trust in teachers, continued distress over victimization, and distancing from school (as seen in the low levels of institutional identity), eventually resulting in poor academic outcomes (see Macmillan & Hagan, 2000).

Yet, in this analysis, victimization experience was not correlated with GPA at either time point. Furthermore, the interaction term (victimization experience X perceptions of TAC) was non-significant in the longitudinal prediction model. Thus, the role victimization plays in actual academic achievement among similar adolescent samples is not totally clear. To further muddle interpretation, it is also possible that the risk-factor variables, perceptions of TAC, and academic...
achievement are related through a complex path not accounted for in this study. As Macmillan & Hagan (2000) have found, perhaps victimization in the absence of responsive and effective teachers leads to negative self-efficacy beliefs, which in turn prohibits optimal academic achievement. Clearly, additional research is needed in this area.

**Consideration of a Potential Anomaly**

One particular finding was both unexpected and not in line with the hypothesis. It is difficult to explain why students having positive self-efficacy beliefs while simultaneously endorsing negative perceptions of TAC, had the highest Time 2 GPA. This finding was not predicted a priori and makes little theoretical sense given the framework proposed. It was expected that adolescents with positive academic self-efficacy beliefs would perform well academically at Time 2. However, why might these adolescents have performed better when endorsing negative perceptions of TAC?

This may be purely an anomalous finding. However, it is also possible that students with academic confidence who have greater analytical skills are also likely to be more critical of teachers and their attempts to control conflicts. This critical mindset would allow not only greater academic achievement in light of positive self efficacy beliefs, but also lower perceptions of TAC, as they pick apart what they perceive to be “sorry” attempts at conflict resolution. As there are no strong empirical data available to substantiate this idea, additional research is required to delineate a meaningful finding from a statistical anomaly.

**A Small, Yet Important Effect**

TAC main effects on school outcomes were small, if not nil. One may conclude that these perceptions thus play little role in predicting objective measures of academic achievement. Additionally, the variance in Time 2 GPA predicted by perceptions of TAC and its interaction terms was relatively negligible when Time 1 GPA was included in the predictive model (although this is common during regression tests of interaction). Are perceptions of TAC even worthy of consideration given these small main effects?

First, consider that Time 1 and Time 2 GPA were highly correlated. Among all variables assessed in this study, the best way to predict how well a student would perform academically at the end of the semester was to assess their GPA at an earlier point in the school year. The substantial overlap within a regression model makes it difficult for competing variables to demonstrate a significant relationship with a criterion (see Pedhazur, 1997). Their unique, incremental contribution in predicting Time 2 GPA would have to be large and independent of Time 1 GPA. With such a monstrous covariate in these prediction models, a significant interaction suggests a meaningful pattern of data worthy of attention.

Second, interventions intended to promote positive perceptions of TAC are likely to be aimed at conflicts on school grounds—not necessarily academic outcomes. If successful, these interventions would increase the ability of teachers to respond and successfully prevent conflicts (including victimization), which in turn reduces school violence (e.g. Aceves et al., 2010; Macmillan & Hagan, 2000; Merrill et al., 2008; Marachi et al., 2007). However, these findings suggest such an intervention would also have positive effects on academic variables as well (see also Ozer & Weinstein, 2004). Thus, most interventions in which perceptions of TAC are indirectly targeted would unlikely view academic variables as a primary endpoint. The effects of
the perceptions of TAC on school outcomes are a welcomed product of interventions that are intended primarily for violence issues, demonstrating that TAC is worthy of attention despite small main effects.

**Subjective Perceptions of TAC**

Throughout this dissertation, it was implicitly assumed that perceptions of TAC were indicative of teachers’ actions during conflicts. Positive perceptions of TAC gauge exposure to effective teachers, while negative perceptions of TAC suggest teachers are unresponsive, or unable to successfully address conflicts. This may not always be the case, however, as perceptions of TAC can vary based on subjective experiences of students. For example, perceptions of TAC skew in a given direction depending on the role a student plays within peer conflicts (Rigby & Bagshaw, 2003). Additional evidence for the subjectivity of this measure comes from the variance found within the current sample. Additionally, aggression variables were negatively correlated with perceptions of TAC. It may be that aggressive students perceive unfair treatment whenever teachers step in to resolve a conflict. Thus, although a more objective observer may view a teacher’s actions during conflicts to be fair, aggressors during this same interaction may form negative perceptions due to their perspective in the exchange.

Yet, even if perceptions of TAC were purely subjective and inaccurate measures of teacher actions, they are a relevant variable to the student who endorses them. However, I argue that perceptions of TAC—although subjective—are reliable indicators of actual TAC that occurs on school grounds. The procedural justice literature supports this claim, with studies showing that youth are keen to justice principles, and have a fair sense of right and wrong (Tyler, 2006; Gouveia-Pereira et al., 2003).

*Implications for trust in community authority and behavior.* Perceptions of TAC also have implications for developmental perspectives on attitudes towards authority. Because adolescent experiences shape behavior and cognition during adulthood, the learned perceptions of TAC acquired and reinforced in high school may affect adult outcomes as well. Perceptions of TAC may lay a foundation from an early age by which youth come to recognize the trustworthiness and fairness of authority figures in their lives. Similar to internal working model theories (e.g. Bretherton & Munholland, 1999), early experiences with teachers as responsive and effective authority figures who manage conflicts effectively may transfer to police and other justice figures in the community. In fact, adolescent perception of procedural justice in schools has been found to predict attitudes towards police and other authority figures in the community (Gouveia-Pereira et al., 2003).

At a deeper psychological level, social information processing theories suggest a similar idea—namely that cognitive scripts or schema are reinforced with frequent exposure, and are later prone to activation in similar situations (see Fontaine, 2006; Fontaine & Dodge, 2006; Huesmann, 1998). When used to frame the current findings, social-information processing models suggest that adolescents with low perceptions of TAC learn that teachers (i.e., adult authority figures) are ineffective options for dealing with violence. Consequently, when adolescents with negative perceptions of TAC find themselves in a hostile situation, their tendency to turn toward authority will be less likely, given previous experiences (see Aceves et al., 2010; McClowskey, Berman, & Coccaro, 2005). These perceptions may thus play a striking role in violence and crime in the community. A developmental perspective in this line of
research is promising, and may provide insight when attempting to explain community violence, mistrust towards authority, and aggression that plagues low income urban communities.

Limitations

I now consider a number of limitations in the present study. First, time constraints during survey administration prevented longer measures from being administered to students. This unfortunately introduced issues of reliability as well as validity in study measures. Some measures, such as academic self-efficacy, were assessed through an aggregate of a few survey items. Whereas this has a number of implications for reliability, it may spur the development of multi-item, multi-method measures to address such shortcomings in future work.

Second, sample demographics limit the generalizability of these findings to ethnic minority adolescents who attend high conflict, low-income urban high schools. The findings cannot be generalized to students in schools with low rates of conflict, different ethnic make-up, or higher income level. Perceptions of TAC may emerge as moderating variables in environments where the high frequency of conflicts allows students to regularly observe how teachers react to violence. But what about schools with low rates of victimization, or those where students are exposed to non-violent forms of peer harassment? These more stable classrooms undoubtedly require less teacher intervention, presenting students with fewer opportunities to observe levels of teacher responsiveness and effectiveness within the context of conflict resolution.

On the other hand, work by Gregory et al. (2010) provides evidence that perceptions of TAC may function similarly within stable, low conflict schools. The authors found that structure and support—two variables implicit in how teachers address conflicts—significantly predicted levels of school safety even when controlling for income and violence levels of the schools. Future research should examine whether perceptions of TAC have similar effects within schools with greater social stability, higher income, and different ethnic demographics.

Despite evidence that perceptions of TAC predict school outcomes, the current data cannot infer causal relationships. Clearly, the study is correlational in nature. Although it is my belief that perceptions of TAC are directionally related with school outcomes, experimental designs are necessary to confirm this argument (see Aceves et al., 2010). There is also the possibility that another variable may explain why perceptions of TAC buffer at-risk adolescents from negative school outcomes. For example, perhaps perceptions of TAC are actually a self-report proxy for another unaccounted third variable. The control of possible confounding variables reduces the chance that perceptions of TAC are a proxy for other social, psychological, or behavioral variables. However, future research should examine the role that unaccounted variables play in contributing to perceptions of TAC, as well school outcome.

Finally, a multi-measure assessment method should ideally be used in this line of research because perceptions of TAC are subjective to each student. Although perceptions can be relied on to drive decision making and personal behavior (e.g. Aceves et al., 2010), they may be poor reflections of the actual school environment. However unlikely given previous publications (e.g. Aceves et al., 2010; Ozer & Weinstein, 2004; Bellmore, Witkow, Graham, & Juvonen, 2005), I urge future researchers to obtain objective measures of TAC in a given school environment. By doing so, they can forge a better understanding of the unique role of subjective experience and interpretation, versus the the effects of teachers’ actual actions in the school environment.
Conclusion

This dissertation contributes to developmental, psychological, and educational literatures by illustrating how perceptions of TAC are relevant to ethnic minority, urban adolescents exposed to frequent conflicts at school. Though preliminary in nature, it expands on a rarely examined topic by exploring the effects of these perceptions on school outcomes. The implications of this research extend to both efforts to reduce aggressive behaviors, as well as addressing academic issues present among ethnic minority adolescents. It is my hope that this study will prompt future empirical work on this topic, and contribute to addressing violence and academic disparity among at-risk ethnic minority adolescents.
Footnotes

1. Subsequent descriptive statistics are based on the available data from the Time 1 sample. All analyses utilizing Time 2 GPA are conducted using the subsample of 165.

2. It should be noted that this victimization count scale required additional statistical correction via transformation. Although counts (categorized by ranges) are provided for descriptive purposes, a more functional transformed version of this victimization count variable was used in the subsequent analyses.

3. To address scattered missing data points throughout this dataset, linear interpolation was used prior to constructing the measures of interest.

4. Post-hoc probing and graphing of the significant interaction term is based on the first of two multiple regression analyses examining longitudinal predictors of Time 2 GPA. Justification for presenting the interaction plot without the effect of the Time 1 GPA control variable was based on the collinearity of GPA at both time points. When Time 1 GPA was introduced into the model, unstandardized beta weights for the independent variables were grossly reduced, severely warping the main effects of these variables. The result was an interaction term graph that demonstrated a washout of the effects of the constituent variables. The value in the multiple regression analysis of including Time 1 GPA is the demonstration that the interaction term remained significant, even with a covariate that was highly correlated with the criterion variable. See writings by Aiken & West (1991) and Cohen et al. (2003) regarding interaction terms and the washing out of relevant information through the inclusion of a variable that predicts an overwhelming amount of a criterion’s variance.
References


Table 1. Student Perceptions of Teachers’ Actions during Conflicts (TAC)

<table>
<thead>
<tr>
<th>Measure Items</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General conflict items</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. How satisfied are you with the procedures teachers use to resolve student disputes (such as arguments, fights)?</td>
<td>3.04</td>
<td>.93</td>
</tr>
<tr>
<td>2. How satisfied are you with the outcomes of student disputes (such as arguments or fights) when teachers get involved?</td>
<td>2.97</td>
<td>.93</td>
</tr>
<tr>
<td>3. How much would you trust the teachers at the [high school] to resolve a future student dispute?</td>
<td>3.12</td>
<td>1.05</td>
</tr>
<tr>
<td>4. How effective are teachers and the administration at preventing fights between students?</td>
<td>2.78</td>
<td>1.02</td>
</tr>
<tr>
<td>5. How often are the teachers successful in stopping fights between students?</td>
<td>2.79</td>
<td>1.10</td>
</tr>
<tr>
<td><strong>Incident specific- Victimization items</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. How satisfied were you with the procedures the teacher(s) used to resolve the conflict?</td>
<td>2.90</td>
<td>.83</td>
</tr>
<tr>
<td>7. How satisfied were you with the outcomes of the conflict, after the teachers stepped in?</td>
<td>2.95</td>
<td>.88</td>
</tr>
<tr>
<td>8. How good were the teachers at stopping the conflict when it happened?</td>
<td>2.78</td>
<td>.96</td>
</tr>
<tr>
<td>9. How good were the teachers at stopping the conflict from happening again in the future?</td>
<td>2.74</td>
<td>1.01</td>
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Published in Aceves et al., (2010). *Journal of Youth and Adolescence*
Table 2. Means, Standard Deviations, and Pairwise Correlations

<table>
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<tr>
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* p < .05; ** p < .01; *** p < .001
Table 3. Hierarchical Multiple Regression Examining TAC Unique Association with Institutional Identity and Institutional Belonging

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<th>DV: Institutional Belonging</th>
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*p < .05, **p < .01, ***p < .001.

Note: Statistical significance levels for ΔR² are based on F tests of the model’s variance, contributed the independent variables of each regression step. Statistical significance levels for total R² are from F tests of the overall regression model.
Table 4. Multiple Regressions testing Longitudinal Predictors of GPA

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

Note: Statistical significance for Total R² is based on F-tests for the over-all model.
Figure 1. Academic and Victimization Risk Factors that Predict Poor School Outcomes.

Figure 2. Hypothesized Model: Perceptions of TAC as a Moderator of the Association Between Risk Factors and Poor School Outcomes.

Figure 3. Perceptions of TAC influence aggressive responses to victimization through an effect on proclivity to seek help from teachers.

Figure 4. Perceptions of TAC $X$ Victimization Experience Interaction as a Predictor of Institutional Identity.

Figure 5. Perceptions of TAC $X$ Academic Self Efficacy Interaction as a Predictor of Time 2 GPA.
Risk Factors:
- Low Self-Efficacy
- Victimization Experiences

School Outcomes:
- Institutional Identity
- Institutional Belonging
- Academic Performance
Perceptions of TAC

Risk Factors:
- Negative Academic Self-Efficacy Beliefs
- Victimization Experiences

School Outcomes:
- Institutional Identity
- Institutional Belonging
- Academic Achievement