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Code of Silence: Students' Perceptions of School Climate and Willingness to Intervene in a Peer's Dangerous Plan

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Abstract

The current study presented 1,933 adolescents from 13 schools with a scenario about a hypothetical peer's plan to "do something dangerous" at school and asked how likely they would be to respond with four different actions: intervene directly, tell a teacher or principal, discuss it with a friend but not an adult, and do nothing. High school students were less likely than those in middle school to say they would approach the peer directly or confide in a teacher or principal. Students were most likely to favor taking action on their own over all of the other response strategies. Students with positive perceptions of their schools were more likely to say they would do something rather than ignore their peer's dangerous intentions. These relationships were mediated by students' beliefs that confiding in a teacher may have unfavorable consequences. Findings from this study support the important role schools play in creating a culture where students take responsibility for one another.

Keywords

school climate; adolescents; teachers; intervention; peers

On March 5th, 2001, Charles "Andy" Williams stomped into Santana High School in Santee, California, and opened gunfire. In 6 min, he killed 2 students, injured 13 others, and stripped an entire community of its sense of security. As many as 20 students were privy to Williams' intentions to "shoot up the school on Monday," yet this information was never revealed to an adult (Figueroa & Rogers, 2005; Moran, 2001, 2002). The fact that peers knew but did not take action is not unique to this instance. Statistics in the Safe School Initiative report funded by the U.S. Secret Service and the U.S. Department of Education reveal that in 81% of school shootings between 1974 and 2000, the attacker told someone about his plans—almost always a peer, sibling, or friend (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002). Yet, these young people decided not to alert anyone in authority about the attack.

Despite myriad popular press stories on this "code of silence" surrounding school shootings (e.g., Dedman, 2000; Moran & Kucher, 2001; Roth, 2001; Springer, 2005) and youth culture more generally, the extant literature that might help to explain the phenomenon is rather scant. This leads to the question, What is the psychology underlying the inaction of fellow students

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who might have prevented harm by acting on their knowledge of a peer's dangerous intentions? While incidents of lethal school violence are rare, situations in which classmates have knowledge of a peer's plan to do something dangerous are not. Less "extreme" cases of students ignoring the dangerous behaviors of peers play out every day in schools. Our goal is to understand this code of silence. Thus, the current study presented adolescents with a scenario about a hypothetical peer's plans to "do something dangerous" at school and asked the participating youths how likely they would be to respond with four different actions. We looked at differences between middle school and high school students' endorsements of various response strategies. In addition, we tested the relationship between students' perceptions of school climate (both teachers' relationships with students and students' relationships with fellow classmates) and students' beliefs about the implications of confiding in teachers on their responses to the hypothetical dilemma (i.e., the likelihood of using each of the four response strategies).

Peer Intervention

What little is known about bystander behavior in young people comes from the literature on bullying prevention. Naturalistic observations of elementary school children by O'Connell, Pepler, and Craig (1999) revealed that although 41% of children say in surveys that they would "try to help" if they witnessed a bullying incident, only one in four actually does. The gap between intention and actual behavior suggests that although young people may have a positive orientation toward intervening, they may shy away for a multiplicity of reasons (O'Connell et al., 1999; Rigby & Johnson, 2006; Salmivalli, Lagerspetz, Bjorkqvist, Osterman, & Kaukiainen, 1996), including lacking the skills or the confidence to intervene (Hamilton & Flanagan, 2007; O'Connell et al., 1999). Nonetheless, additional findings from these naturalistic observations indicated that when young people do intervene, they are likely (i.e., 57% of the time) to be effective in stopping the bullying behavior (Hawkins, Pepler, & Craig, 2001).

Correspondingly, our research on adolescents' reactions to hypothetical vignettes concerning friends' substance use and risk-taking behavior revealed that although there is variability across gender and age, adolescents are generally willing to intervene to deter the substance use behaviors of their friends (Bertelsen, 2005; Flanagan, Elek-Fisk, & Gallay, 2004). Early, middle, and late adolescents are far more likely to say they would take action to stop a friend than they are to ignore the friend's behavior. Thus, the literature on peer intervention suggests that young people are willing to respond to the risky behaviors of others by taking socially responsible action.

Studies in social psychology demonstrate that feelings of social responsibility do not end with one's friends. When people identify with a group, they are willing to forego self-interest to benefit the group (Brewer & Gardner, 1996). There is consistent evidence that feelings of belonging beget action and reduce bystander behavior (Baumeister & Leary, 1995). Darley and Latané (1968), for instance, found that the bystander effect (i.e., seeing or knowing of an emergency and failing to respond) remained stable within groups of strangers but not within cohesive groups (Rutkowski, Gruder, & Romer, 1983). Baumeister and Leary cited work by Gottlieb and Carver (1980) that suggested that "even the mere anticipation of future interaction among group members is enough to eliminate the bystander effect, making group members quite willing and likely to come to each other's aid" (p. 519). Indeed, it is plausible that the

¹Analyses on previous waves of this dataset did not include the vignette analyzed in this article. The drinking, smoking, drug use, and party vignettes analyzed in the article by Flanagan and colleagues (2004) were set within the confines of friendship (e.g., "You think that one of your friends has started taking drugs. How likely is it that you would do each of the following?") as opposed to the school vignette in which adolescents are asked how they would respond if they had knowledge of a peer's (i.e., someone with whom they may not have formed a close intimate relationship) dangerous intention.

bystander effect is similarly reduced when students develop an obligation to one another at school.

School Climate

The thesis guiding the present study is that students' perceptions of a democratic, cohesive school climate will positively relate to their willingness to act on knowledge of a peer's intention to do something dangerous by seeking the assistance of an adult or directly intervening. *School climate* is a term commonly used in educational research, but one that is difficult to succinctly define. Yet, researchers generally agree that at the broadest conceptual level, school climate taps individuals' perceptions of the school as a space for learning and interacting with peers and authority figures (see Anderson, 1982; Freiberg, 1998; Libbey, 2004; Nwankwo, 1979). Accordingly, we conceive of schools as settings in which young people can learn a sense of membership in and obligation to a group. In such climates, we expect that young people will be more concerned about fellow students and more inclined to dissuade them from engaging in behaviors that might endanger themselves (e.g., self-injury such as cutting) or others. We look at three dimensions of the school climate: perceptions of the adult authority (i.e., teachers) as fair and democratic, perceptions of the student body as cohesive, and the students' personal perceptions of how they fit in.

Democratic Authority Structure

A supportive authority structure is one that provides a rational and effective disciplinary climate (Murphy, Weil, Hallinger, & Mitman, 1985), promotes positive teacher–student relationships, and emphasizes fairness, respect, and free expression. Students take cues from teachers about how people should treat one another in a community of learners. Through instructional and noninstructional interactions with teachers, students gauge whether they are cared for, what role students are expected to play in the school, and if teachers are interested in them as individuals (Bryk & Schneider, 2002; Osterman, 2000). One way that teachers show support and concern for students is by listening to students' opinions and creating a climate in which students are encouraged to share their thoughts. In their study of 14-year-olds in 28 countries, Torney-Purta, Lehmann, Oswald, and Schulz (2001) defined an open, or democratic, classroom climate as one in which "students experience their classrooms as places to investigate issues and explore their opinions and those of their peers" (p. 138). Students' reports of an open classroom climate are positively correlated with their ability to think critically about social issues (Weinstein, 1991) and their tolerance of diverse opinions (Berman, 1997). In a study of student-teacher relationships, Wentzel (1997) asked a sample of middle school students to describe teachers who care. The students responded by describing teachers who exhibited democratic interaction styles (e.g., open communication, equitable treatment of students), established expectations for student behavior, and modeled a caring attitude toward the students and their own work.

Research on the authority aspects of school climate provides convincing evidence that democratic exchanges between students and school authority figures result in positive student outcomes (e.g., Torney-Purta, 2002). To the extent that students come to believe that caring adult relationships and the sharing of thoughts are normative in the school context, students come to feel a sense of belonging and ownership in their education and in the school (Berman, 1997). Our previous work on the correlates of adolescents' civic values found a direct association between students' perceptions of the classroom climate as democratic and fair and students' endorsement of social responsibility (i.e., belief that people should contribute to and look out for the common good; Flanagan, Bowes, Jonsson, Csapo, & Sheblanova, 1998). Moreover, adolescents' civic commitments were higher among youths whose teachers (a) established an ethic of mutual respect for one another's perspectives, (b) held the same high expectations for all students, and (c) actively intervened to stop instances of intolerance among

students (Flanagan, Cumsille, Gill, & Gallay, 2007; Flanagan, Gill, & Gallay, 1998). In this article, we extend these findings and argue that in democratic educational contexts in which teachers promote an ethic of respect and consideration for others, students will be more likely to intervene in the dangerous intentions of a peer in order to prevent that person from harming themselves and/or fellow students and teachers.

Community

Students' sense of community has been an important variable in educational research on school climate. As Battistich, Solomon, Watson, and Schaps (1997) summarized, "communities are defined as places where members care about and support each other, actively participate in and have influence on the group's activities and decisions, feel a sense of belonging and identification with the group, and have common norms, goals, and values" (p. 137). Tellingly, research has illustrated inverse relationships between students' shared feelings of community and a host of negative outcomes (e.g., Blum & Rinehart, 2001; Resnick et al., 1997). Sense of community has been measured at the classroom and at the school levels. Although both are equally viable assessments of climate, the classroom-level measurement is typically thought to be more appropriate for elementary school settings. Middle and high school students change classes throughout the day, making it difficult to capture students' perceptions of classroom-level community as the mix of teachers and peers fluctuates from class to class (Battistich, Solomon, et al., 1997). Thus, school-level measurement of community may be more appropriate for older students.

In this study, we measured middle and high school students' sense of community at school in two ways: first, we tapped their reports of the general climate and relationships among students at school (i.e., school solidarity). School solidarity embodies the extent to which students perceive their schools to be places where students generally exhibit a shared sense of pride and concern for one another. These affective bonds to school have been found to positively correlate with students' civic commitments (Flanagan et al., 1998), and thus, we expected that they would also play a role in the development of social responsibility for others. Second, although rarely done in the school climate literature, we measured students' personal assessment of how they and their friends fit into the culture of their schools (i.e., personal belonging). A strong sense of personal integration into the school social structure fills the very basic human need to belong (Baumeister & Leary, 1995; Maslow, 1968; Osterman, 2000). Schools are a key institution in providing a group identity and sense of belonging for students (Bryk, Lee, & Holland, 1993). Students' feelings of belonging have been linked to positive social behaviors like helping others with academic problems (Wentzel, 1998) and with academic achievement (Hawkins, Guo, Hill, Battin-Pearson, & Abbott, 2001), while feelings of rejection have been associated with negative outcomes such as substance use and dropping out (e.g., Battistich & Hom, 1997; Brand, Felner, Shim, Seitsinger, & Dumas, 2003; Guo, Hawkins, Hill, & Abbott, 2001; Osterman, 2000; Simons-Morton, Crump, Haynie & Saylor, 1999).

In summary, studies of school climate provide compelling evidence that students' perceptions of a democratic authority structure, school solidarity, and opportunities to belong to a cohesive community of peers protects them from a host of academic and developmental risks. We contend that a probable dynamic underlying this association is the sense of identification with the common good that develops in caring school climates. We expected that this sense of cohesion with teachers and students would motivate young people to take action if the safety and security of their shared school environment were threatened by a peer's plan to do something dangerous.

Consequences of Confiding in an Adult

When adolescents make important decisions, they weigh the costs and benefits of their choices. In the decision of whether to go to a teacher or principal in order to stop a peer from acting on a dangerous plan, adolescents likely consider many factors. One of the salient costs that adolescents may take into account is whether disclosing to an adult would result in more trouble for them or their peer. Our prior work on adolescents' intentions to intervene in their friends' alcohol, tobacco, and drug use indicates that regardless of age, the more adolescents believe that telling an adult would get them or their friend into more trouble, the less likely they are to go to an adult (Bertelsen, 2005). This finding seems rational, as few people are willing to do something that they perceive could result in unfavorable consequences for themselves or someone they care about.

Deadly Lessons, a report funded by the National Research Council and the Institute of Medicine (2003), examined case studies of incidents of lethal school violence, providing a rare glimpse into the peer and school cultures surrounding school shootings. The authors of the report determined that there was sufficient evidence across the eight case studies to conclude that the sense of cohesion between youth and adults in these schools was lacking. The authors described a disturbing disconnect: teachers and school administrators in these schools seemed to be unaware of students' concerns about status issues, experiences of peer victimization, and overall ability to respond to social situations. Taken together, these findings prompted the authors to conclude that the students in these schools may have felt that they had "nowhere to turn" with their concerns, creating a climate of silence and inaction (p. 6). On the basis of this work, we hypothesized that students who believed that confiding their concerns to an adult would have negative consequences and those who reported that their teachers were not open to students' views would be less likely to approach a teacher or principal with their concerns.

School Level: Middle School Versus High School

As we have argued above, context matters. Thus, in addition to considering the role of schools' social climates, we think it is also important to note a few differences based on school level. Educational research comparing middle-level (i.e., junior high, middle school) and high schools reveals the latter typically to be a much more impersonal setting. Whereas middle-level schools generally adopt a more student-centered focus, high schools tend to be more subject centered. Moreover, high schools often enroll more students than middle-level schools, thereby decreasing the number of opportunities that teachers and students have to interact, which is the foundation of building a shared sense of trust, caring, and community. Because of the inverse relationship between level of schooling and positive perceptions of school climate (Gallay & Pong, 2005; Roberts, Hom, & Battistich, 1995; Simons-Morton et al., 1999), we expected students attending high school to report less positive perceptions of the school climate and to also be less willing to intervene in the dangerous plan of a peer.

Gender Differences in Intervening

Our previous research on adolescents' reactions to hypothetical vignettes concerning their friends' substance use and risk-taking behavior shows significant gender differences in young people's willingness to intervene (Flanagan et al., 2004): females are consistently more likely to say they will take action to stop a friend from engaging in risky behaviors. These findings align with the literature on adolescent relationships, which shows that females have a tendency to express more intimacy, communicate more openly, and resolve conflicts more readily in their relationships than do their male peers (Maccoby, 1990; Parker & Asher, 1993; Rose & Asher, 1999). Our findings (Flanagan et al., 2004) also reinforce the notion that females display higher levels of responsibility for their peers and, in turn, exhibit higher levels of guilt when those responsibilities are neglected (Eisenberg & Morris, 2004; Williams & Bybee, 1994).

Given that these findings are buttressed by a rich literature on gender differences in prosocial behavior, we expected to find similar gender differences in the way that males and females responded to dangerous situations in the school context, with females being more inclined to intervene.

Hypotheses

To understand how school climate influences young people's willingness to intervene in the dangerous plan of a peer, we examined the relationship between adolescents' perceptions of the adult authority at school as democratic and open, school solidarity, and personal feelings of belonging and how they respond to a hypothetical vignette in which a peer is planning to do something dangerous at school. In addition, we examined whether the relationship between each of the school climate factors and the four response strategies is mediated by students' beliefs that going to a teacher with their concerns may result in more trouble.

In light of possible differences between middle and high school settings, we expected to find a main effect for school level. Specifically, we speculated that high school students would have less positive perceptions of the school climate and would be less likely to endorse intervention behaviors than middle school students. Likewise, the literature documenting gender differences in prosocial behavior led us to expect that females would be more likely than their male peers to take direct action or go to a teacher with their concerns about a peer's plan to do something dangerous at school.

In this article, we posit that the protective function of a supportive, democratic authority structure and shared sense of community among students is that young people identify as members of the school and feel responsible for one another. Thus, we anticipated that all three indicators of school climate would positively predict adolescents' willingness to intervene (either by directly taking action or telling an adult) rather than to ignore or talk about a fellow student's plan to do something dangerous at school with a friend but not an adult. We speculated, however, that the positive relationship between perceptions of a democratic authority structure, school solidarity, and personal sense of belonging and adolescents' intentions to intervene by taking direct action or telling an adult at school would be mediated by students' beliefs that confiding in an adult would only get them into trouble.

Method

Participants

To recruit schools into the project, we contacted the majority of school districts within one mid-Atlantic state and one larger school district in a midwestern city to describe the project and gauge interest. We visited interested school districts on multiple occasions to describe the project to superintendents, administrators, teachers, and community members, and to build trust. Six school districts, five from the mid-Atlantic state and one from the Midwest, agreed to participate in the longitudinal study. Four of the districts have between 2,000-4,500 students and are located in a semiurban setting; one is a smaller, rural district with 800 students; and another district consists of nearly 12,000 students and is in a large, multiethnic city. Three of the semiurban school districts had only one middle-level and one high school. The rural district combined Grades 7–12 into a single high school. The largest of the semiurban districts had two middle-level and two high schools—all of which agreed to participate in the study. The urban district included several schools at each level; one middle-level and one high school were selected to participate because of their long-term commitment and interest in the project. In total, six middle-level and seven high schools participated. On average, more than a third of students in each middle-level (M = 38%, SD = 19%, range: 22% - 75%) and high (M = 43%, SD = 19%, range: 22% - 75%)SD = 19%, range: 25%-67%) school qualified for free or reduced-cost lunch. Schools in three

of the more urban school districts had a percentage of students who qualified for free or reduced-cost lunch that exceeded 50% of the student population.

Surveys were distributed to 7th–12th grade students via their 45-min social studies class in the spring of 2004. Active parental consent and student assent were required to participate. Requiring active parental consent lowered our overall response rate to 54%, a figure comparable to other school-based studies with active parent and child consent procedures (Esbensen et al., 1996). The refusal rate of those participants who returned parental consents varied by district, ranging from 5% to 10%. Less than 5% of participants in any of the districts refused or gave unusable survey data. In total, 1,933 students completed valid surveys.²

The ethnic background of the participants was 77% European American, 12% African American, 4% Latino American, and 2% Asian American. An additional 5% of participants self-identified as being of some other ethnicity. The sizes of these ethnic groupings reflected the overall student populations in the school districts. According to students' self-reports, the approximate median level of parent education involved some training after high school.

The diversity that exists across middle school/junior high and high school contexts necessitated our testing for a main effect of being a high school versus junior high/middle school student. For purposes of simplicity, we did not differentiate between attending a junior high as compared with a middle school, although we acknowledge that the structure and climate of these two types of schools may differ in subtle ways. We refer to students attending either of these middle-level schools as middle school students. The mean age of the 776 middle school students in our study was 13.1 years (SD = 0.81). Fifty-four percent of these students were female. The mean age of the 964 high school students was 15.8 years (SD = 1.37). Fifty-three percent of the high school students were female.

Measures

All of the measures used in the present study were based on students' self-assessments. Twenty items were used across the independent, dependent, and mediator variables. Table 1 reports the descriptive statistics for the variables used in the analysis and the unstandardized and standardized factor loadings for each item in a latent construct.

Response strategies—Participants were presented with the following short vignette: "Suppose some kid was talking about doing something dangerous at school." After which they were asked to indicate on a 5-point Likert scale (from 1 = very unlikely to 5 = very likely) the likelihood that they would respond by intervening (two strategies), telling a friend but not an adult (one strategy), or ignoring (one strategy). Given our broader interest in understanding developmental change in adolescents' willingness to use (or not use) various intervention strategies, we decided to ask participants to report the likelihood of using each action rather than which action they were most likely to do. In other words, we did not create mutually exclusive categories. While, ultimately, adolescents can only take one action at a time, that does not preclude the possibility that if one strategy does not work, adolescents might try another strategy. For example, if their peer refuses to listen to them when they approach him or her directly, then they may turn to an adult with their concerns.

There are two types of intervention strategies: directly intervening with the peer and reporting the issue to adults at school. A pair of items (r = .64) were used to assess students' willingness to directly intervene with their peer by (a) telling the peer not to do it and (b) telling their friends and together trying to stop the peer from following through with his or her dangerous plan. To

²Of the 1,933 participants who provided data, 193 were missing data indicating their school and grade. Thus, these students were not included in the count of middle and high school students.

capture students' propensity toward going to an adult at school with their concerns, we asked students to indicate on two separate items (r = .74) the likelihood that they would (a) tell a teacher whom they felt they could trust and (b) tell the principal.

Participants were also asked to indicate the likelihood that they would use a third strategy. Students were asked one item to assess how likely they would be to tell a friend about a peer's plan but not tell an adult. Note that this item does not clearly indicate whether the adolescents would or would not intervene. Unlike the previous intervention strategy in which the participants were asked whether they would tell their friends and together try to stop their peer, this item suggested that the participants may not intervene and instead just opt to talk, or "gossip," about their peer's dangerous plan.

Along with the other strategies, students were asked how likely they would be to ignore their peer's plan to do something dangerous at school. Drawing from the developmental and bystander literature, we asked students to indicate the likelihood that they would (a) ignore it because they did not believe it would really happen, (b) ignore it because it was none of their business, (c) not say anything because they would be embarrassed, and (d) ignore it because it would not do any good. These four items make up the latent Ignore construct ($\alpha = .91$).

Democratic authority structure—The Democratic Authority Structure measure (α = .69) was created to assess adolescents' perceptions of the school authority structure as democratic and open. This measure was a latent factor consisting of the following three items: (a) In my school, students can disagree with teachers as long as they are respectful; (b) In my school, students have an opportunity to debate and discuss issues; and (c) In my school, students are encouraged to voice their opinions, even if they are different from what most people think. Participants responded to each of these items by indicating on a 5-point scale their level of agreement (1 = strongly disagree to 5 = strongly agree).

Community—A sense of community among students captures their feelings of ownership and belonging in the school environment. Two unique measures were used in this study to assess participants' sense of community with peers at school: School Solidarity and Personal Belonging. The former represented perceptions of the general climate created by the student body, and the latter reflected a more personal sense of integration. Although both of these measures tapped the meta-concept of community, each of these dimensions also uniquely assessed a qualitatively different dimension of the school climate. The School Solidarity construct measured participants' perceptions that students at their school generally care about one another and feel a shared sense of ownership in maintaining a positive school climate. The five items in the School Solidarity ($\alpha = .85$) measure asked students whether in their school (a) students have a lot of school spirit; (b) students feel like they are an important part of the school; (c) everyone tries to keep the school looking good; (d) most students take pride in the school; and (e) most students seem to care about each other, even people they do not know well. The measure of Personal Belonging assessed the extent to which students felt they were accepted by students (i.e., they did not espouse feelings of alienation). The Personal Belonging (r = .56) measure consisted of two items, which have been reverse coded. These items in their original form read: (a) In my school, my friends and I feel like we don't belong, and (b) This school seems too big and unfriendly. All of the items in both the School Solidarity and Personal Belonging constructs were measured on a 5-point Likert scale on which a low score (1) indicated strong disagreement and a high score (5) indicated strong agreement.

Mediator: Beliefs about getting into trouble—The Beliefs About Getting into Trouble measure consisted of a single item that gauged the extent to which students believed that if they went to a teacher with their concerns about a friend's dangerous behavior, they or their

friend would get into more trouble. Responses to this item were scored on a 5-point scale, ranging from *strongly disagree* (1) to *strongly agree* (5).

Covariates—Prior research on adolescents' willingness to intervene in the risky behaviors of their friends has suggested a marked gender difference, with females consistently reporting a greater willingness to intervene (Flanagan et al., 2004; O'Connell et al., 1999). Thus, gender was used as a covariate. Additionally, Gallay and Pong (2005) found that students with less educated parents tend to perceive the school climate and school adults less positively. With this in mind, we included parents' mean education (in years) as a covariate in the model.

Missing Data

Missing data were rare for the variables used to create the latent constructs for this analysis. For the construct items, the percentage of cases classified as missing ranged from 1% to 5% across the sample and were missing randomly across constructs, age levels, and gender. Rather than use listwise deletion of cases with missing data, we analyzed the data using full information maximum likelihood estimation (Eliason, 1993). Full information maximum likelihood estimation provides better estimates of population parameters than listwise deletion when the data are assumed to be missing at random (Allison, 2003).

Analytic Strategy

Data were analyzed using the Mplus Version 4.2 statistical software package (Muthén & Muthén, 2007). The analysis consisted of three steps. First, a confirmatory factor analysis was performed to show that our measurement model provided an adequate fit for our data and to provide information about the nature of the associations among our independent and dependent factors. Second, a structural equation model was estimated in which the response strategies (direct intervention, tell adults at school, discuss peer's intentions with a friend but not an adult, and ignore) were regressed on students' perceptions of their schools' authority structure, perceptions of school solidarity, personal sense of belonging at school, being in high school versus being in middle school, and the covariates (i.e., being female and parents' educational level). Third, a structural equation model was estimated that included students' beliefs about getting into trouble as a mediator of the relationship between students' perceptions of school climate and the response strategies (Figure 1). The mediation analysis was used to test whether students' beliefs about getting into trouble accounted for the association between school climate and their response to a peer's plan to do something dangerous. For each analysis, the results that we report are maximum likelihood parameter estimates with conventional standard errors and chi-square test statistics. All latent constructs are standardized with a mean of 0 and a standard deviation of 1. The fit statistics for the measurement, structural, and mediation models are summarized in Table 2.

Results

Measurement Model

The standardized item loadings range from .56 to .93 (see Table 1). Higher loadings indicate greater consistency among the items used to create the latent constructs and therefore represent better measurement of the underlying psychological constructs. We assessed model fit by evaluating the overall pattern of the fit indices, including the chi-square, comparative fit index (CFI), and the root-mean-square error of approximation (RMSEA). The model had a chi-square value of 613.72, with 143 degrees of freedom (p < .001). Given the chi-square's sensitivity to large sample size (N = 1,933), we focused our interpretation of the model fit on the latter two practical fit indices that have been shown to be reasonably unaffected by sample size (see Marsh, Balla, & McDonald, 1988). The following guidelines have been established as indicators that a model adequately fits the data: CFI of .90 or greater (Bentler, 1990) and

RMSEA of .08 or less (Browne & Cudeck, 1993). The overall pattern of the practical fit indices for the latent measurement model suggests that it has good fit: CFI = .97, RMSEA = .04.

Table 3 reports the correlations of the factors in the measurement model. First, we discuss the zero order correlations among the dependent factors (i.e., the likelihood that students would take four different actions in response to the hypothetical dilemma) and the mediator variable (Beliefs About Getting into Trouble). Second, we discuss the zero order correlations among the three independent factors (i.e., Democratic Authority, School Solidarity, and Personal Belonging) and the mediator. Finally, we discuss the correlational patterns between the independent and dependent factors.

Among the dependent factors, there was a strong positive relationship between students' reports that they would directly intervene and talk to an adult at school. In other words, if a student said he or she would take one of these actions, that student was highly likely to endorse the other as a course of action. In addition, endorsing these actions was moderately inversely related to ignoring a peer's dangerous plan. The option of telling a friend but not an adult showed a distinct pattern: whereas there was a very small but significant inverse relationship between this option and talking to adults at school, this option was moderately and positively correlated both with directly intervening and ignoring their peer's dangerous plan. This pattern suggests that the option of "telling a friend but not an adult" may be picking up on a peer culture of handling matters themselves—either by talking among themselves and ignoring their peer's dangerous intentions or by taking matters directly into their own hands. Beliefs that confiding concerns to a teacher would result in trouble was inversely related to directly intervening, as well as talking to an adult at school about a peer's plan to do something dangerous. As expected, beliefs about getting into trouble were positively associated with discussing their peer's dangerous plan with a friend but not with an adult and with doing nothing.

Turning next to the independent factors, there was a strong positive correlation between participants' reports that adult authorities encouraged a democratic climate and their reports of a positive sense of solidarity among students. However, these two broad factors of school climate were only modestly and positively correlated with the personal sense of belonging that students reported. Students' beliefs about getting into trouble were negatively correlated with all three of the school climate factors.

Finally, the three school climate factors were moderately and positively correlated with directly intervening and telling an adult and negatively correlated with ignoring their peer's dangerous plan. Telling a friend but not an adult was not related to any of the school climate factors.

Structural Model

Table 4 displays the standardized path coefficients for the model regressing adolescent response strategies on the school climate factors and covariates. There were consistent relationships between being in high school and all of the dependent factors. High school students were less likely than their middle school peers to say they would directly intervene or confide in adults if they had knowledge that a peer was planning to do something dangerous. ³ Quite the reverse, high school students were more likely to say they would discuss the peer's intentions with a friend but would not go to an adult and would ignore the situation. An interesting finding is the strength of the effect of being in high school on whether an adolescent would go to an adult if he or she heard that a classmate was planning something dangerous. Being in high school was the second strongest predictor, after perceiving teachers as fair and

³On the basis of previous research suggesting that young people's self-reported intentions to intervene decline with age (Flanagan et al., 2004; Rigby & Johnson, 2006), we performed analyses with both age and school level (middle school vs. high school) in the models. With school level in the model, age was never significant.

democratic, of telling a teacher or principal, and the relationship was negative. Moreover, being in high school was the only significant predictor of confiding one's knowledge of a peer's dangerous plan to a friend but not to an adult. This relation was positive and among the strongest in the model.

There was also a consistent relationship between being female and three of the response strategies. Females were more likely than males to report that they would directly intervene in the situation or would talk to an adult. Further, compared with males, females were less likely to say they would ignore their peer's dangerous plan. These findings are consistent with gender differences frequently described in the prosocial behavior literature (e.g., Eisenberg & Morris, 2004). Parents' education was not related to any of the response strategies.

Students who have positive perceptions of adult authority at their school said they would directly intervene or go to an adult if a peer were planning to do something dangerous. Moreover, they were less likely to ignore their peer's intentions. Perceptions of the authority structure were unrelated to students' willingness to tell a friend but not an adult. Students who felt the student body shared a sense of solidarity would go to an adult and were marginally more likely to say they would take direct action to intervene in a peer's dangerous plan. School solidarity was not significantly associated with telling a friend but not an adult or ignoring the situation. Students' reports of personal belonging at school were negatively associated with ignoring a potentially dangerous situation and were positively associated with directly intervening and telling a teacher or principal. Like the two other school climate factors, students' feelings of belonging were unrelated to their willingness to talk to a friend but not an adult about a peer's dangerous plan.

Mediating Effect of Beliefs About Getting into Trouble

A second structural equation model was estimated with students' beliefs that they would get into trouble if they confided in a teacher included as a mediator. In this model, the four response strategies were regressed on the school climate factors and students' beliefs about getting into trouble. Additionally, students' beliefs about getting into trouble were regressed on the school climate factors (see Table 5).

Students who expressed positive perceptions of the sense of solidarity shared among students at their school and those who felt they belonged were unlikely to believe they would get into trouble if they went to an adult. The same is also true for students who felt their interactions with teachers were fair and democratic, although this relationship was weak. Thus, all three school climate measures had a significant negative effect on the mediator. After the school climate measures were controlled, beliefs that going to teachers would result in trouble decreased the likelihood of telling adults at school about a peer's dangerous plan and increased the likelihood of telling a friend but not an adult and of ignoring the peer's plan to do something dangerous. The relationship between students' beliefs about getting into trouble and direct intervention was negative but nonsignificant. Thus, these findings confirm that the effects of the school climate measures on students' intentions to go to an adult, tell a friend but not an adult, or ignore their peer's dangerous intentions were each mediated by students' beliefs that going to a teacher would get them and/or their friend into more trouble. Direct intervention was the only outcome that was not mediated.

Once beliefs about getting into trouble were controlled, the strength of the association between each of the four response strategies and being female or in high school was reduced. Similarly, accounting for students' beliefs about getting into trouble reduced the effect of school solidarity, democratic authority, and personal belonging on the likelihood of telling a school adult. The effect of the latter two school climate factors and ignoring the peer's dangerous plans were similarly reduced. Adding students' beliefs about getting into trouble increased the

association between school solidarity and ignoring, although this finding remained nonsignificant. Finally, the relationship between all three school climate factors and the likelihood that students would tell a friend but not an adult changed once beliefs about getting into trouble were controlled. The coefficients for perceptions of a democratic authority structure, personal feelings of belonging, and school solidarity each became more positive, although the latter coefficient was still negative. In sum, beliefs about getting into trouble play an important role as a mediator of the influence of school climate on the likelihood of telling an adult at school, telling a friend but not an adult, and ignoring a situation in which an adolescent has knowledge of a peer's plan to do something dangerous.

A decomposition of the effect of the school climate factors on each of the four ways of responding to a peer's dangerous plan is presented in Table 6. In addition to the positive direct effect of perceptions of the school's democratic authority structure on telling an adult about the peer, there was also a significant, indirect effect. In other words, students who feel that their teachers create an open and democratic climate are less likely to believe they will get into trouble if they go to an adult with a problem, and are thus more likely to tell a teacher or a principal if a classmate is planning to do something dangerous. Conversely, the positive direct effect of perceptions of school solidarity on seeking out a teacher or principal with one's concerns is weakened by a significant indirect effect that operates through beliefs that confiding in an adult will cause a student trouble. In contrast to the partially mediated relationship between democratic authority and telling an adult at school, the weak positive relationship between both school solidarity and personal belonging and the likelihood of telling an adult at school is fully mediated by students' beliefs about getting into trouble. That is, the relationship between the two student-level community factors and telling an adult is accounted for by students' beliefs about getting into trouble.

There was a significant negative indirect effect and nonsignificant direct and total effect of each of the three school climate factors on the likelihood of telling a friend but not an adult about a peer's plan to do something dangerous. Thus, the only effect of the school climate factors on this response to a peer's dangerous plan is through students' beliefs about getting into trouble.

The relationships linking both perceptions of teachers as democratic and feelings of personal belonging to ignoring are partially mediated by students' beliefs that confiding in a teacher may result in more trouble. In other words, students who feel their teachers are democratic are less likely to believe that they will get into trouble, which, in turn, negatively relates to the likelihood of ignoring their peer's dangerous plan. Likewise, students who feel like they belong at school are less likely to believe that they will get into trouble if they confide their concerns about a peer's dangerous plan to a teacher and thus are also less likely to ignore the peer's plan to act dangerously. Unlike the other two school climate factors, the relationship between school solidarity and ignoring operates indirectly through their beliefs about getting into trouble. Thus, students who perceive high levels of school solidarity are less likely to feel that they would get in trouble if they went to a teacher, which makes them less likely to simply ignore a peer's plan to do something dangerous.

Discussion

At a time in history when metal detectors and safety drills are becoming commonplace in American schools, we think it is important to call attention to the social and contextual phenomena that undergird dangerous incidents at school and engender the culture of silence that often surrounds preventable tragedies (Culley, Conkling, Emshoff, Blakely, & Gorman, 2006; National Research Council and Institute of Medicine, 2003; O'Toole, 2000; Stancato, 2001). The results of our analyses illustrate that socio-contextual factors such as school climate

and relationships with others at school have a potential role in preventing dangerous behavior at school. Our findings show that adolescents' perceptions that their teachers create a democratic environment that is fair and open, and students' sense of solidarity with classmates and feelings of belonging each make a unique, positive contribution to the prediction of adolescents' willingness to take direct action and approach a teacher or principal with their concerns about a peer's dangerous plan. However, it was only students' perceptions of the authority structure as democratic and their feelings of belonging that predicted being unwilling to just stand by idly and ignore a peer's plan to act dangerously. None of the school climate measures significantly predicted students' willingness to discuss their peer's dangerous intentions with a friend but not tell an adult. "Gossiping," or sharing information exclusively with one's friends, is a normal peer process (Merten, 1999) that our findings suggest are unaffected by school climate. In other words, it is simply just what adolescents, particularly those in high school, do. Taken together, these findings demonstrate the association between perceiving the school climate as democratic and cohesive and students' motivation to speak up and take action when their safety and the safety of their classmates and their teachers might be compromised.

Our a priori hypothesis about the relationship between the two student-generated community measures and the response strategies posited that students' feelings of solidarity and belonging would positively predict their willingness to intervene and negatively predict their willingness to ignore their peer's intentions. The results of our analyses, however, only partially supported this hypothesis, as the two student community measures operate somewhat differently in the model. Although both feelings of school solidarity and personal belonging have a positive relationship with taking direct action (e.g., by approaching the peer on one's own or with friends), the relationship is only strong and significant for feelings of belonging. In addition, while feelings of solidarity and belonging both positively predict willingness to tell an adult, it was only those youths who reported a sense of belonging who were unlikely to ignore their peer's dangerous plan. This result may, in part, be explained by the discrete levels of community tapped by these measures. Whereas school solidarity gauges students' perceptions of the general student body, the belonging measure assesses students' sense of how they personally fit in at school. It appears that the latter is associated with a greater willingness to take action to protect the well-being of others at school. This can also be stated in the reverse: being highly alienated at school is associated with doing nothing when one has knowledge of a peer's plan to do something dangerous. It is interesting to point out that students' feelings of belonging are positively related to taking direct action and telling an adult. However, taking action on one's own appears to be the preferred intervention strategy. That is, when students feel accepted, they are likely to take action to disrupt a peer's dangerous plan, and although they are willing to do both, they prefer to talk to the peer directly rather than to get a teacher or principal involved.

Positive perceptions of the authority structure and feelings of belonging were both found to have negative associations with students' beliefs that going to adults would result in trouble. This same relationship, however, did not hold for students' sense of solidarity; that is, students' feelings of school solidarity were found to have a positive (albeit only marginally significant) relationship with their beliefs about getting into trouble. One possible explanation for this finding is that the feelings of solidarity students report having with their peers leads them to feel bonded against the administration (i.e., us vs. them), and thus makes them more likely to believe that going to adults will have negative consequences.

The relationship between the three school climate measures and students' willingness to take direct action to stop a peer from following through with a dangerous plan was not mediated by students' beliefs that telling a teacher might get them or their peer into trouble; in other words, students do not believe they will get in trouble if they intervene directly. This is a promising

finding. The students in our study clearly believe that they can directly intervene in a peer's plan to do something dangerous without involving a teacher or principal. From a developmental perspective, it is understandable why this strategy is the preferred response for adolescents: not only does it sidestep the possibility of involving adults, which may invite trouble, but also it reflects their growing sense of autonomy.

As expected, youth were more likely to say that they would ignore their peer's dangerous plan or talk about it among friends (but not with an adult) to the extent that they believed that going to an adult would result in more trouble. Not surprisingly, students who espoused this fear were also less likely to say that they would approach adults at school with their concerns about a peer's dangerous intentions. The relationship between the perceived consequences of telling a teacher and direct action was negative but not significant. Beliefs that going to an adult would result in more trouble partially mediated the influence of a democratic authority structure on the likelihood of telling an adult and ignoring the situation. The relationship between personal feelings of belonging and the likelihood of ignoring a peer's plan to do something dangerous was also partially mediated by students' beliefs about getting into trouble. Moreover, the relationship between both students' feelings of school solidarity and personal belonging and the likelihood of going to a teacher or principal with their concerns disappeared once we accounted for students' beliefs about getting into trouble.

In light of these findings, it is reasonable to assume that some adolescents view teachers as a viable outlet to whom they could go, without getting into trouble, if they need adult guidance regarding concerns about another's dangerous intentions. We must also consider the impact that school policies (e.g., zero tolerance) have in creating an atmosphere in which students feel they can (or cannot) confide in a teacher or principal. In this post-Columbine era, public education has seen an increase in zero tolerance policies, a blanket policy that sets forth strict rules and consequences for specific anti-social behaviors in the school environment (Cornell, 2003). Rules and appropriate consequences have a place in schools. At the same time, policy discussions such as the one led by Verdugo and Glenn (2002) suggest that zero tolerance policies are only partially effective and, in some cases, may exacerbate the problem behavior (see also Skiba & Peterson, 1999). It is possible that these policies create an environment that actually discourages students from revealing their concerns to teachers because of the increased "costs" of revelation. Not only might they be branded a "snitch" by their classmates, but they might also get themselves and/or their peer into serious trouble. Further, what if they doubt the veracity of the information? That is, what if their peer was just "joking"? Is it worth telling a teacher and suffering the consequences for something that might not even be true? For most adolescents, divulging a peer's confidence is a difficult decision that may be intensified by a zero tolerance climate. As was reflected in our findings, the more students believed that going to a teacher or principal would result in trouble, the more likely they were to ignore a peer's dangerous plan or to simply tell a friend (but not an adult). Fostering a caring school climate in which students (and teachers) feel a shared sense of responsibility to look out for one another and to take action to keep one another safe is something not taught in textbooks or made possible by metal detectors, but is built through the daily interactions teachers have with students and students have with one another.

When interpreting the results of the present study, readers should bear several caveats in mind. First, the language of the vignette is purposefully ambiguous because of ethical concerns about using more explicit language such as suggestions concerning a peer bringing a gun to school. By focusing students' attention on the "danger" posed by a peer's actions, students were cognizant that the act posed potential harm. Since other vignettes in the larger study asked students what they would do if a friend started using tobacco, alcohol, or other drugs, and those vignettes did not frame those actions as dangerous, we are confident that students considered the peer's "dangerous plan" as one that posed potential harm to their peer and/or others.

Second, the study focused on students' self-reported responses to a hypothetical scenario. In the bullying prevention literature, a sizeable discrepancy has been documented between students' attitudes toward intervening and actual behavior (O'Connell et al., 1999). Thus, we caution readers that the results of our study may be inflated with respect to what adolescents' actual behavior might be. Similarly, it is important to recognize that the school climate measures were based on students' individual perceptions. Ideally, future research would include either the school-level mean of students' perceptions or a combination of teacher- and student-level reports on climate measures. This would require the collection of data from more schools than in the present study. The inclusion of more schools would also allow for the use of a multilevel modeling approach. Multilevel modeling permits researchers to account for the fact that students are nested within schools (thus, making it likely that they are more similar to each other than to students in other schools) and tease apart school- and individual-level effects.

Third, research hints at scores of reasons—beyond school climate—as to why young people may or may not act on their intentions to intervene. For example, research on bystanders in emergency situations has documented the role of diffused responsibility (i.e., low inclination to act because they believe—or hope—others will) and ambiguity about the situation (Latané & Darley, 1968). Within the context of schools, students may not intervene or seek the assistance of an adult if they are uncertain about the validity of their information (i.e., Did the kid really mean it? Did I hear him right? Was it a joke?) or are skeptical that their actions will be effective at stopping the behavior. Further, given the normative tendency for adolescents to be sensitive to others' impressions, they may be hesitant to act out of fear of reacting inappropriately or being labeled a "snitch" or "narc." Another possible explanation, as shown in the present study, is that students do not intervene, at least by seeking the assistance of an adult at school, because of beliefs that telling an adult will only result in more trouble. Alternatively, individual differences (in social competence or moral values) may explain why some students would intervene while others would not.

Fourth, our understanding of the relationship between school climate and adolescents' willingness to intervene would be enhanced by exploring additional facets of school climate (e.g., teachers' or principal's care and support) and improving upon our assessment of students' personal sense of belonging and beliefs about getting in trouble. Single item measures, such as beliefs about getting in trouble, do not account for measurement error, thereby restricting the strength of modeled relationships.

Future research should also consider the role of risky friendships as not all students will either intervene or ignore—some might join in on the dangerous plan. In the case of school shootings, Vossekuil and colleagues (2002) found that in nearly half (44%; n = 18) of the cases, the attacker's friends had influenced the attacker's decision to mount the attack and/or had dared the attacker to carry out the act. Instead of going to adults, in some cases the attackers' friends had helped to secure weapons and to plan tactics (e.g., getting the weapon into the school undetected), had identified the whereabouts of specific students at the time of the shooting, and had updated the "target" list. To be sure, a range of psychosocial, developmental, and ecological factors need to be considered in order to fully understand why some adolescents are willing to intervene while others are not. However, some factors may be more amendable to policy change. Accordingly, future research should also investigate the specific school policies and practices that account for students' fears that going to a teacher or principal may have negative consequences for themselves and/or their peers.

The 20 students at Santee High School who had prior knowledge of Andy Williams' plan to bring a gun to school and kill were not unusual. As Chris Moran (2001), writer for *The San Diego Union–Tribune*, put it "they just had the misfortune of sitting on a threat that detonated

into a tragedy" (p. A1). As researchers in the fields of education and adolescent development, we have the opportunity to be proactive and avert future tragedy by working to understand the psychology of silence that surrounds peers' threats and the factors that prime adolescents' motivation to take action. Ultimately, we need to use that knowledge to work with adolescents, parents, teachers, school administrators, and policymakers to raise the level of consciousness of the consequences of concealing information about another person's dangerous intentions or behavior, create prosocial environments that engender an ethic of care and responsibility for others, and bring science to bear on reform initiatives that make schools, and students, safer.

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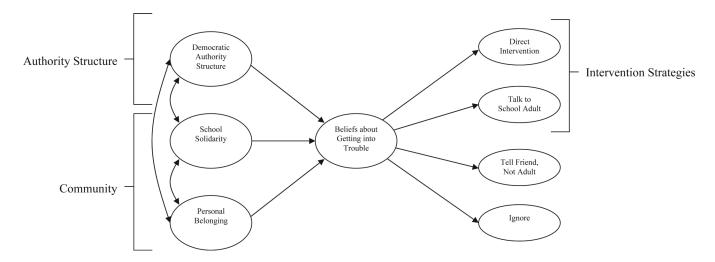


Figure 1.

Conceptual model of the mediated relationship between students' perceptions of the school climate and their expressed willingness to intervene in the dangerous intentions of a peer. The direct paths linking the school climate predictor constructs to the four response strategy outcome constructs and the covariates were omitted from the figure to maintain readability; however, these paths were estimated in the analysis.

Table 1

Descriptive Statistics for Variables Used in Analysis and Item Loadings for Latent Factors in the Measurement Model

				Factor loading	ıng
Variable	N	M	SD	Unstandardized	Standardized
Dependent variable					
Direct intervention					
Tell kid not to do it ^a	1,801	3.62	1.15	1.000	0.780
Tell friends and try to stop kid	1,806	3.33	1.12	1.009	0.812
Tell school adults					
Tell trusted teacher ^a	1,802	3.33	1.20	1.000	0.916
Tell principal	1,801	2.92	1.25	0.916	0.804
Tell friend, not an adult	1,808	3.02	1.14	1.000	I
Ignore					
Don't believe it will happen a	1,809	2.45	1.12	1.000	0.868
None of your business	1,803	2.35	1.08	1.033	0.934
Too embarrassed	1,801	2.12	0.99	0.733	0.727
Wouldn't do any good	1,803	2.25	1.04	0.880	0.825
Independent variable					
Democratic authority					
Students can disagree ^a	1,902	3.51	1.11	1.000	0.560
Debate and discuss issues	1,906	3.43	1.01	1.127	0.687
Voice opinions	1,900	3.44	0.94	1.086	0.720
School solidarity					
Students have spirit ^a	1,906	3.22	1.12	1.000	0.664
Students important part of school	1,899	3.07	0.97	1.006	0.769
Keep school looking good	1,905	2.76	1.01	1.038	0.761
Student pride	1,902	3.07	1.04	1.157	0.827
Students care about each other	1,900	2.83	1.03	0.904	0.649
Personal belonging					
Friends and I belong a	1,895	3.81	1.10	1.000	0.702

				Factor loading	
Variable	N	M	as	Unstandardized	Standardized
School is friendly	1,901 3.55	i	1.03	1.074	0.802
High school student	1,740 0.57	0.57		1	I
Mediator variable					
Get into trouble by telling teacher	1,838	3.00	1.13	1.000	I
Covariate					
Female	1,893	1,893 0.54		I	I
Parent's education (years)	1,807	1,807 14.18	2.25		

Note. Model fit: $\chi^2(143) = 613.719$, p = <.001; comparative fit index = 0.971; root-mean-square error of approximation = 0.041. Disparity in N reported here as compared with N = 1.933 for the full sample is due to missing data (some respondents did not provide data for these variables).

 $^{\it q}$ Item loading constrained to a value of one as reference for other loadings.

Table 2

Fit Statistics for Model

Model	χ^2	df	d	CFI	RMSEA
Measurement	613.719	143	< .001	.971	.041
Structural	704.514	167	< .001	996.	.041
Mediation	720.220	179	< .001	.967	.040

Note. χ^2 = chi-square test; df = degrees of freedom; CFI = comparative fit index; RMSEA = root-mean-square error of approximation.

Table 3

Correlations of Latent Factors in Measurement Model

Variable	1	2	3	4	5	9	7	8
1. Direct intervention	I							
2. Tell school adults	.653***							
3. Tell friend, not adult	.285***	065	1					
4. Ignore	314***	376***	.279***	1				
5. Get in trouble	144***	303***	.194***	.271***	I			
6. Democratic authority	.293***	.352***	900.	221 ***	218***	I		
7. School solidarity	.256***	.290***	046	160***	256***	.603***	I	
8. Personal belonging	.256***	.190***	023	250***	213***	.288***	.306***	

p < .001.

Table 4

Standardized Path Coefficients of Structural Model

				The state of the s				
	Direct intervention	ıtion	Tell school adult	dult	Tell friend, not adult	t adult	Ignore	
Independent factor/variable	r	SE	r	SE	r	SE	r	SE
Democratic authority	.187	990.	.269	7.20.	.040	.075	162***	990.
School solidarity	÷080.	.050	*060.	.057	052	.058	.013	.050
Personal belonging	.169***	.038	*240.	.042	900'-	.043	197***	.038
High school student	139*	.055	196***	.063	.224***	.064	.126*	.058
Female	.140**	.048	*660.	.054	.025	.055	115*	.048
Parents' education	014	.010	011	.012	014	.012	021	.010
R ²	.134		.153		.014		.101.	

Note. Model fit: $\chi^2(167) = 704.514$; comparative fit index = .966; root-mean-square error of approximation = .041.

$$p < .10$$
.

p < .01.

Table 5

Standardized Path Coefficients of Mediation Model

					Dependent factor	tor				
	Beliefs about get trouble	etting into e	Direct intervention	ention	Tell school adult	ıdult	Tell friend, not adult	ot adult	Ignore	
Independent factor/variable		SE	i.	SE	i.	SE	٤.	SE	i.	SE
Beliefs about getting into trouble			038	.022	212***	.025	.193***	.025	.200***	.022
Democratic authority	077	.074	.183***	990.	.248***	.075	090.	.074	142**	.064
School solidarity	165***	.053	.074	.050	.062	.056	025	.057	.041	.049
Personal belonging	140***	.042	.165	.038	.046	.042	610.	.043	171***	.037
High school	I	l	064*	.056	076	.062	**940.	.064	*290.	.055
Female	I	l	**690.	.048	.045	.053	.015	.054	053*	.047
Parents' education	l		013	.010	017	.012	009	.012	016	.010
R ²	680:		.135		191.		.047		.135	

Note. Model fit: χ^2 (179) = 720.220; comparative fit index = .967; root-mean-square error of approximation = .040.

* p < .05. p < .01.

p < .01.

*** p < .001.

Table 6

Decomposition of Effects of School Climate on Response Strategies

		Di	Direct intervention	erventic	u 0			- '	Tell school	ool adult				Ţ	Tell friend, not adult	ot adult					Ignore	е		
	Direct effect	# # 1	Indirect effect	rect	Total effect		Direct effect		Indirect effect	,	Total effect	- -	Direct effect	,	Indirect effect	,	Total effect	 	Direct effect		Indirect effect	ot !	Total effect	
Variable		SE	r SE	SE		SE		SE		SE		SE	r SE	SE		SE	r	SE	i.	SE		SE	i.	SE
Democratic authority .183*** .066	.183***	990.	.003	.004	.004 .186*** .066 .248*** .075	990.	.248***	.075	.016*	.014	.264***	.077	090:	.074	015*	.014	.045	.075	142**	.064	016*	.012	157***	.065
School solidarity	.074 [†]	.050	900.	900.	*050 .006 .006 .080	.050	.062	.056	.056 .035**	.013	*460.	.057	025 .057		032***	.012	057	.058	.041 .049	.049	033**	.011	.008	.050
Personal belonging .165*** .038 .005 .005 .171*** .038 .046	.165***	.038	.005	.005	.171***	.038		.042	.042 .030***	.010	*970.	.042	.019 .043	.043		010	008	.043	171***	.037	028*** .014	.014	199***	.038

Note. Standardized coefficients are reported for all effects. All coefficients and standard errors for the indirect effects were estimated using the MODEL INDIRECT command in Mplus Version 4.2. Mplus implements indirect effects that are the product of the two regression coefficients, that is, a multiplied by b. The delta method was used to calculate standard errors of the indirect effects. Page 27

 $t^{\dagger}_{p < .10}$.

p < .05.

p < .001. p < .01.