

## School Climate Associated with School Dropout Among Tenth Graders<sup>1</sup>

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### Abstract

**Objective.** This study evaluated the association between high school dropout and six dimensions of school climate. **Method.** The sample consisted of 638 tenth graders who participated in the *Healthy Teens Longitudinal Study*. Participants attended school in Northeast Georgia, United States of America; they were surveyed even if they dropped out of school. Information about dropout was obtained through twelfth grade. Logistic regression was used to identify predictors of dropout. **Results.** More boys (22.1%) than girls (14.4%) dropped out of school. Compared to students who remained in school, students who dropped out of school reported significantly higher overt and relational peer victimization and lower positive relationships with peers, school connectedness, caring adults at school, and meaningful participation in school. In the logistic regression model, male gender (AOR = 1.68) and relational victimization (AOR = 1.51) increased the odds of dropping out, and school connectedness (AOR = 0.78) and the presence of a caring adult at school (AOR = 0.73) decreased odds of dropping out. **Conclusion.** The dimensions of school climate in tenth grade were associated with the decision to abandon or persist in school. Its multiple dimensions can guide educators to develop programs and practices to reduce high school dropout.

**Keywords.** School climate, bullying, dropout, adolescents.

## Ambiente escolar asociado con la deserción de los alumnos de décimo grado

### Resumen

**Objetivo.** El estudio evaluó la asociación entre los desertores de bachillerato y seis dimensiones de ambiente escolar. **Método.** La muestra consistía en 638 estudiantes de décimo grado quienes participaron en el Estudio Longitudinal de Adolescentes Saludables. Los estudiantes iban al colegio al Noreste de Georgia, Estados Unidos; eran encuestados aún si desertaban del colegio. La información relacionada con la deserción se obtiene en grado doce. Se utilizó la regresión logística para identificar indicadores de deserción. **Resultados.** Más niños (22.1%) que niñas (14.4%) desertaron del colegio. Comparado con los estudiantes que permanecieron en el colegio, los que desertaron mostraron un alto nivel de muestra de victimización relacional con sus pares y menos relaciones positivas con estos, poca conexión con el colegio, menos relación con un adulto protector

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dentro del mismo y menos participación significativa. En el modelo de logística regresiva, el género masculino (AOR = 1.68) y victimización relacional (AOR = 1.51) aumentaron las probabilidades de desertar, mientras que la conexión con el colegio (AOR = 0.78) y la presencia de un adulto protector (AOR = 0.73) disminuyen las posibilidades de la deserción. **Conclusión.** Las dimensiones del ambiente escolar en décimo grado fueron asociadas con la decisión de abandonar o persistir en el colegio. Sus múltiples dimensiones pueden llevar a los educadores a desarrollar programas y prácticas para reducir la deserción en bachillerato.

**Palabras clave.** Ambiente escolar, matoneo, deserción, adolescentes.

## Clima escolar asociado à desercão escolar entre alunos de primeiro ano de ensino médio

### Resumo

**Escopo.** Este estudo avalia a associação entre desercão escolar em ensino médio e seis dimensões do clima escolar. **Metodologia.** A amostra consistiu em 638 estudantes de primeiro ano de ensino médio que participaram no Estudo Longitudinal de Adolescentes Saudáveis. Os participantes eram estudantes de uma escola no nordeste de Georgia, Estados Unidos; eles formaram parte da pesquisa ainda que eles tivessem deixado a escola. A informação sobre desercão escolar foi obtida a través do terceiro ano de ensino médio. A regressão logística foi usada para identificar preditores de desercão. **Resultados.** Mais homens (22.1%) que mulheres (14.4%) deixaram a escola. Comparando com estudantes que ficaram na escola, os estudantes que a deixaram reportaram uma significativamente maior evidente e relacional vitimização dos pares, e menores relações positivas com pares, conexão com a escola, atenção dos adultos na escola e participação significativa na escola. No modelo de regressão logística, o gênero masculino (AOR = 1.68) e vitimização relacional (AOR = 1.51) acrescentaram a probabilidade de desercão escolar, e a conexão com a escola (AOR = 0.78) e a presença de adultos que prestavam assistência aos alunos na escola (AOR = 0.73) reduziram a probabilidade de desercão escolar. **Conclusão.** As dimensões do clima escolar em alunos do primeiro ano de ensino médio foram associados à decisão de abandonar ou ficar na escola. Estas dimensões múltiplas podem guiar aos educadores a desenvolver programas e práticas para reduzir a desercão escolar no ensino médio.

**Palavras chave.** Clima escolar, bullying, desercão, adolescentes.

### Introduction

Dropping out of school has consequences that may last a lifetime. Adolescents who do not complete high school will be more likely to be incarcerated, have difficulty finding steady jobs, use more social services, and die at a younger age (Freudenberg & Ruglis, 2007; Hummer & Hernandez, 2013; Rumberger, 2011).

The decision to drop out of school is complex. At a macro level, dropping out of school may be influenced by family poverty and other social inequalities (De Witte, Cabus, Thyssen, Groot, & van den Brink, 2013). Beyond socio-economic status, family conflict and lack of parental support for education can also influence a child's decision

to abandon school (Blondal & Adalbjarnardottir, 2009; Ensminger & Slusarcick, 1992; Lessard et al., 2008). Educators, however, have little control over the characteristics of the child's neighborhood and family. Conversely, school administrators, teachers, counselors and other school professionals can strongly influence the academic and social environment of the school. Understanding risk and resilience factors at the school level can help educators develop programs and practices to mitigate school abandonment.

School climate is a multidimensional construct that denotes the character and quality of school life. Dimensions of school climate include the sense of physical and emotional safety, the quality of teaching and learning, the quality of relationships

in the school, and structural characteristics of the school (Cohen, McCabe, Michelli, & Pickeral, 2009). A positive school climate refers to an environment that nurtures the best qualities of individuals and promotes academic achievement (Orpinas & Horne, 2006). Scholars have stressed that a positive school environment equates to planting in rich soil. If one plants a seed in fertile soil, it will germinate; if the same seed is planted in rocks, it may die (Bosworth, Orpinas, & Hein, 2009; Jones, 2000). A positive school climate is associated with less bullying and higher commitment to school (Bosworth & Judkins, 2014; Mehta, Cornell, Fan, & Gregory, 2013), reduced extreme and delinquent behaviors (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005; Patton et al., 2006), better academic outcomes (Battistich, Schaps, & Wilson, 2004), psychological wellbeing (Shochet, Dadds, Ham, & Montague, 2006), and an overall increase in feeling connected to school (Townsend & McWhirter, 2005).

Research on the effect of school climate on school dropout is limited. A meta-analysis of 165 studies identified one aspect of school climate, classroom or instructional management, as associated with reduced dropout (Wilson, Gottfredson, & Najaka, 2001). In a retrospective study of 97 students, those who dropped out of school rated the overall school climate as significantly worse than students who graduated (Worrell & Hale, 2001). A prospective study of schools in Virginia, United States of America, linked bullying victimization in ninth grade to later school dropout (Cornell, Gregory, Huang, & Fan, 2013). A study in Quebec, Canada, showed that dropout was associated with low or decreased engagement in school (Archambault, Janosz, Morizot, & Pagani, 2009). Given that school climate is modifiable, improving school climate can be an important focus to prevent dropout, but more research is needed to understand which aspects of school climate are linked to academic completion. In the current study, we examine the association of high school dropout with six aspects of school climate: (a) peer victimization (overt and relational), (b) positive relationship with peers, (c) school connectedness, (d) caring adult at school, and (e) meaningful participation in school.

Peer relationships, particularly peer victimization, is an important dimension of school climate. The quality of peer relationships helps shape students' experiences of school. Developing friendships is a developmentally important part of

childhood and adolescence. Peer victimization, including bullying, subverts this basic human need for connection and can contribute to dropout and related problems. Children who are frequently victimized by their peers are significantly more likely to suffer from depression and emotional problems, including suicidal ideation, than those who are not victimized (Fekkes, Pijpers, Fredriks, Vogels, & Verloove-Vanhorick, 2006; Forero, McLellan, Rissel, & Bauman, 1999; Holt et al., 2015). Lack of social skills and not having good friends are associated with school victimization and lower rates of school completion (Fox & Boulton, 2006). Researchers have examined different types of victimization. The types most frequently evaluated are physical victimization (i.e., hitting, pushing, shoving) and relational victimization (i.e., spreading negative rumors, damaging one's reputation, being excluded from a group). The prevalence of both types is highest in Grades 6 to 8, and then declines in high school (Orpinas & Horne, 2006; Orpinas, McNicholas, & Nahapetyan, 2014).

Positive peer relationships, conversely, can promote healthy development and success in school. Positive peers can be thought of those who hold pro-social norms, such as believing in doing well in school, and who show care and support. Connections with friends who work hard and value education can serve as a powerful motivator to achieve in school (Brown, Bakken, Ameringer, & Mahon, 2008). Positive connections with friends can also mitigate the impact of other risk factors. Friends may be particularly important for those children who have less cohesive families (Gauze, Bukowski, AquanAssee, & Sippola, 1996).

School connectedness is another indicator of school climate. Students who feel connected to school report less depression (Langille, Rasic, Kisely, Flowerdew, & Cobbett, 2012), are more involved in extracurricular activities (Bonny, Britto, Klostermann, Hornung, & Slap, 2000), and in general report less health-compromising behaviors, such as using alcohol or drugs (Aspy et al., 2012; Resnick et al., 1997).

An important aspect of a positive school climate is having a strong, caring relationship with teachers or, at least, with one adult in the school (McNeely & Falci, 2004). In a qualitative study of high- and low-aggression in high school, students emphasized the critical role of a caring adult (particularly coaches) in persisting to graduation (Ehrenreich, Reeves, Corley, & Orpinas, 2012).

The presence of caring adults was also associated with the perception of school safety (Gregory et al., 2010) and with an overall better school climate and a stronger sense of belonging (LaRusso, Romer, & Selman, 2008). However, Canadian researchers found no association between student - teacher relationship and school dropout (Lessard, Poirier, & Fortin, 2010).

Another feature of a positive school climate is students' perception that their work and opinions do matter—in other words, that their participation is meaningful and that they are involved in the decisions that will affect them (Jennings, 2003; Oliver, Collin, Burns, & Nicholas, 2006).

The purpose of this study was to evaluate the association of high school dropout with multiple dimensions of school climate: (a) peer victimization (overt and relational), (b) positive relationship with peers, (c) school connectedness, (d) caring adult at school, and (e) meaningful participation in school. Compared to students who remained in high school, we hypothesized that students who dropped out of school would report worse peer relationships at school (more overt victimization, more relational victimization, and less positive friendships), less connectedness to school, weaker caring relationships with adults at school, and less meaningful participation at school than students who persisted in school. Although overt and relational victimization are two distinct types of aggression, it is likely that they are related, as perpetration of different types of aggression tend to overlap (Swahn et al., 2008). Thus, we expected a strong, positive correlation between overt and relational victimization. Given that friends can protect children from victimization (Bollmer, Milich, Harris, & Maras, 2005; Fox & Boulton, 2006), we expected a negative correlation between victimization and positive friends.

## Method

### Participants

Data for this study was obtained from the *Healthy Teens Longitudinal Study*. We followed students for seven years from Grade 6 to Grade 12. Participants attended schools in Northeast Georgia, United States of America. The schools were located in counties with more students living in poverty and with more juvenile crime than the United States as a whole

(Henry, Farrell, & Multisite Violence Prevention Project, 2004). Schools differed in the racial composition of students, urban and rural location, and level of poverty, but as a group they represent the diversity of the region. In sixth grade, 1070 students from nine middle schools were invited to participate. Of these students, 839 (78%) accepted. In 2006, tenth graders completed the student survey ( $n = 654$ ; 78%). There were 16 records of students not included in this analysis since there was no information about dropout. Thus, the final sample consisted of 638 students (47% girls; 46% White, 38% Black, 11% Latino;  $M = 15.8$  years; age range: 15 to 18 years).

Participating students were recruited through two different mechanisms. In sixth grade, approximately 100 students per school were randomly selected. In addition, two core teachers were asked to nominate approximately 20 students per school who were: (a) more aggressive than their peers—that is, gets into fights, intimidates others, gets angry easily, and encourages fights; and (b) influential among classmates. Some students were both randomly selected and identified by teachers as aggressive. Including this more aggressive sample is important for this study as these students are at greater risk for dropping out of school (Orpinas, Raczynski, Peters, Colman, & Bandalos, 2014). The final sample of tenth graders included 581 randomly-selected students and 161 selected based on sixth-grade aggression; 104 students were selected in both groups.

### Instruments

#### Overt victimization.

Is a 6-item scale ( $\alpha = 0.85$ ) that assesses the frequency of being hit, pushed, yelled at or threatened by other students.

#### Relational victimization.

Is a 6-item scale ( $\alpha = 0.76$ ) that assesses the frequency of having been the victim of negative rumors or lies, left out on purpose, or forced to do things to be liked (Farrell, Kung, White, & Valois, 2000). The time frame for both scales was the month prior to the survey. Response categories ranged from *never* (1) to *20 or more times* (6). The scales were computed as the average of the items, with higher scores indicating more victimization.

### Positive Relationships with Peers.

Is a 5-item scale ( $\alpha = 0.86$ ) that measures relationships with pro-social peers (My friends: try to do what is right, do well in school) and having a friend their own age who shows care (My friend: really cares about me, talks with me about my problems, helps me when I am having a hard time) (Constantine & Benard, 2001). Response categories ranged from *not at all true* (1) to *very much true* (4). The scale was computed as the average of the items, with higher scores reflecting a more positive relationship.

### School Connectedness.

Is a 5-item scale ( $\alpha = 0.89$ ) that measures feelings of social support, engagement, fairness, and safety at the school (Blum, McNeely, & Rinehart, 2002; McNeely, Nonnemaker, & Blum, 2002). Students indicated how strongly they agreed with the following statements indicating a positive connection to school: "I feel close to people at this school, I am happy to be at this school, I feel like I am part of this school, teachers at this school treat students fairly, I feel safe at this school". Response categories ranged from *strongly disagree* (1) to *strongly agree* (5). The scale was computed as the average of the items, with higher scores showing a stronger connection to the school.

### Caring Adult at School.

Is a 6-item scale ( $\alpha = 0.95$ ) that measures positive relationships with an adult at school. The stem is, "At my school, there is a teacher or other adult who" followed by a description of a caring or supportive behavior (tells me when I do a good job, really cares about me, notices when I'm not there, always wants me to do my best, listens when I have something to say, believes I will be a success) (Constantine & Benard, 2001). Response categories ranged from *not at all* (1) to *very much* (4). The scale was computed as the average of the items, with higher scores indicating a stronger positive relationship with an adult at school.

### Meaningful Participation at School.

Is a 3-item scale ( $\alpha = 0.85$ ) that measures self-reported meaningful participation in school

activities (I do things that make a difference, I do interesting activities, I help decide things like activities or rules) (Constantine & Benard, 2001). Response categories range from *not at all* (1) to *very much* (4). The scale was computed as the average of the items, with higher scores reflecting a stronger support for the construct.

Dropout status refers to participants who did not complete high school (Grade 12), because they abandoned school or were expelled. Adolescents who were enrolled in any type of high school, had completed their high school diploma, or were home-schooled were not defined as dropouts. Dropout status was defined based on school records and student interviews. In this longitudinal study, survey data and dropout information was collected even if students moved to a different school.

### Procedure

All research procedures were approved by the university's Institutional Review Board. After obtaining parental permission and student assent to participate in the study, students completed the survey online during the last three months of the academic year. Student survey data for the current study were collected in Grade 10. Participants were surveyed even if they dropped out of school. We tracked dropout and school enrollment through Grade 12; thus, students may have dropped from school after tenth grade. Respondents received a small gift for their participation. Trained project staff proctored the data collection.

### Data Analysis

All analyses were conducted in SPSS, version 22. Pearson correlations were used to examine associations among constructs. We used chi-square tests and one-way ANOVAS to compare scores of students who dropped out to those who did not. Logistic regression was used to test the association of the six measures of school climate on dropout status. All six constructs were initially entered into the model, along with race and gender. A backwards stepwise process was used to identify the most parsimonious model. Variables were removed from the model in a stepwise fashion based on the probability of the likelihood ratio statistic given the conditional parameter estimates at each step. The cutoff criterion for removal was 0.10.

## Results

A total of 118 students (18.5%) dropped out of school by the end of grade 12. Significantly more boys (22.1%) than girls (14.4%) dropped out of high school ( $\chi^2 = 6.32$ ,  $df = 1$ ,  $p = 0.012$ ). No statistically significant differences were found in dropout rates by race/ethnicity.

Table 1 depicts Pearson correlations for all dependent variables. Several statistically significant correlations were quite strong, including the relation

between the presence of a caring adult at school and school connectedness ( $r = 0.56$ ,  $p < .01$ ), the presence of a caring adult at school and meaningful participation at school ( $r = 0.54$ ,  $p < .01$ ), and overt victimization and relational victimization ( $r = 0.50$ ,  $p < .01$ ). Three correlations were not statistically significant and very weak: positive peers and relational victimization, meaningful participation in school and overt victimization, and meaningful participation in school and relational victimization.

Table 1

*Pearson correlations among student self-reported constructs (n = 638)*

Constructs	1	2	3	4	5
1. Overt victimization	—				
2. Relational victimization	0.50**	—			
3. Positive peers	-0.10*	-0.05	—		
4. School connectedness	-0.22**	-0.22**	0.38**	—	
5. Caring adult at school	-0.15**	-0.10*	0.47**	0.56**	—
6. Meaningful participation	-0.07	-0.04	0.36**	0.48**	0.54**

\*\*  $p < 0.01$ ; \*  $p < 0.05$  level

Table 2 presents means and standard deviations for all constructs by dropout status, along with results of the one-way ANOVAs. For each construct, the difference in means between the students who dropped out and those who did not was statistically significant in the expected direction. That is,

compared to students who did not drop out, students who dropped out reported experiencing more overt and relational victimization, less positive peer relationships, less connectedness to school, less interaction with caring adults at school, and less meaningful participation at school.

Table 2

*Comparison of students who dropped out and did not drop out of school based on student self-reports (n = 638)*

Constructs	Did not drop out M (SD) (n = 520)	Dropped out M (SD) (n = 118)	F score; p value
Overt victimization	1.37 (0.63)	1.51 (0.73)	4.8; $p = 0.028$
Relational victimization	1.28 (0.49)	1.45 (0.68)	9.5; $p = 0.002$
Positive peers	3.31 (0.62)	3.06 (0.69)	11.9; $p = 0.001$
School connectedness	3.42 (0.95)	2.96 (1.17)	20.6; $p < 0.001$
Caring adult at school	3.14 (0.82)	2.76 (0.86)	21.1; $p < 0.001$
Meaningful participation at school	2.68 (0.89)	2.38 (0.87)	11.2; $p = 0.001$

Table 3 presents the results of the logistic regression. The most parsimonious model included three school climate constructs —relational victimization, school connectedness, and caring adult at school— along with gender. The results indicated that relational victimization (AOR = 1.51) was associated with increased odds of dropping out, after controlling for other variables. School

connectedness (AOR = 0.78) and the presence of a caring adult at school (AOR = 0.73) were associated with decreased odds of dropping out, after controlling for other variables. Gender was also significantly related to dropout, with boys more likely than girls to drop out (AOR = 1.68). The model explained 9% of the variance in dropout status.

Table 3  
*Odds of dropping out of school based on student self-reports*

Significant constructs	Parameter Estimate	SE	<i>p</i> value	Adjusted Odds Ratio (95% CI)
Relational victimization	0.41	0.17	0.017	1.51 (1.08-2.13)
School connectedness	-0.25	0.13	0.044	0.78 (0.61-0.99)
Caring adult at school	-0.31	0.14	0.029	0.73 (0.55-0.97)
Gender (boy)	0.52	0.22	0.019	1.68 (1.09-2.58)

Note. Values adjusted for race/ethnicity and gender.

## Discussion

Researchers and educators understand the importance of working and studying in an environment that is safe, stimulating, and caring. As children and adolescents spend a large part of their life at school, the school environment can have a strong influence on their behavior. Researchers have concluded that a positive school climate leads to less student aggression, stronger feelings of psychological wellbeing, and better academic outcomes (Battistich et al., 2004; Mehta et al., 2013; Shochet et al., 2006). However, few studies have examined linkages among multiple dimensions of school climate on high school dropout, which could be identified as a strong measure of school failure. Thus, this study examined the association of six aspects of the school climate on school dropout, based on tenth graders' self-reports: (a) overt peer victimization, (b) relational victimization, (c) positive peers, (d) school connectedness, (e) caring adults, and (f) meaningful participation at school. We used data from Healthy Teens, one of the few longitudinal studies that assessed dropout status.

The study was conducted among tenth graders, but dropout could have occurred at any point of

their school career. In the United States of America, students are legally allowed to abandon school at age 16, and typically students turn 16 in tenth grade. Although ultimately dropping out is a binary outcome (students completed high school or not), the process towards dropping out is generally complex and starts early in high school. Students may waver between being in and out of school, juggling the different problems that disrupt their schooling (Lessard et al., 2008). Thus, even though students could have dropped out in Grades 10, 11 or 12, the problems that predicted dropout most likely were already present in tenth grade, as was shown in this study.

As hypothesized, all measures of school climate were significantly worse among students who dropped out of school than those who did not. Students who abandoned school reported statistically significant higher scores in overt and relational victimization, as well as lower scores in positive friends, connectedness to school, caring adults at school, and meaningful participation at school. These results suggest that by Grade 10, students who will eventually drop out were having a considerably more negative school experience than students who would remain in school.

In the logistic regression analysis, not all variables were statistically significant, which is expected given the high correlation among some measures. The most parsimonious model included being a boy, suffering from relational victimization, being less connected to school, and having less caring adults at school. Interestingly, even though school connectedness and the presence of a caring adult at school were strongly correlated, both remained in the final regression equation. This result suggests that these constructs are contributing uniquely to students' school experience vis-à-vis the decision to drop out. The model accounted for 9% of the variability in dropout status, which is fairly large, as high school dropout is influenced by multiple risk factors. The model did not include any academic, behavioral, mental health, family, or community factors that influence school dropout (De Witte et al., 2013; Jimerson, Egeland, Sroufe, & Carlson, 2000). From this perspective, school climate may play a relatively important role in the decision to drop out or persist in school, and enhancing a positive school climate is a strategy that schools have to control over to reduce high school dropout.

The association between overt and relational victimization was high, that is, students who were victims of overt aggression were also likely to be victims of relational aggression. Other studies also have found that multiple forms of aggression are associated (Swahn et al., 2008). However, it was unexpected to find no association between peer victimization and positive friends. There is some evidence that friendships protect students from victimization (Bollmer et al., 2005; Fox & Boulton, 2006). In this study, we found a stronger association between having positive friends and the non-victimization measures of school climate, particularly with having a caring adult at school. Having positive friends was related to an overall pattern of positive connections to school.

Peer victimization is a complex problem, and it would be important to examine the influence of other factors, such as perpetration of aggression and socio-economic status. Some children are victimized simply because they are different, having done nothing to provoke the victimization. Other children are both perpetrators and victims, and they are at the greatest risk for psychological and academic problems (Orpinas & Horne, 2006). School climate may affect these groups of victims

differently. Peer victimization, particularly when the victim is also an aggressor, may be part of a larger problem behavior syndrome (Jessor et al., 2003). Reducing victimization is also a matter of social justice. Although peer victimization could affect any child, bullying increases depression particularly among children living in low-income conditions (Due, Damsgaard, Lund, & Holstein, 2009). Peer victimization is an offensive behavior in any context, but particularly unacceptable in schools, where it can impair academic achievement and be a catalyst for school dropout.

In addition to peer relationships, our results highlight the importance of three other dimensions of school climate: engaging students in school, having teachers who care about their students, and providing meaningful opportunities for participation. These dimensions were interrelated, as shown by high correlations, but also represented distinct areas that schools can emphasize to improve student retention. McNeely and Falci (2004) emphasized the need to distinguish between connectedness to school and support from teachers, as two distinct constructs. Researchers have stressed the importance of connectedness to school, as it can protect youth from emotional distress, violence, alcohol and drug use, and sexual debut at a young age (Resnick et al., 1997). In this study, as well as others, school connectedness measured an overall feeling of being happy and safe at school, engaged in school activities, and close to people. To improve academic completion, administrators and educators should evaluate with their students strategies to improve connectedness to school. Because bonding with peers in school is not necessarily positive (e.g., peers can incite to using drugs or violence), connections to adults in school play a pivotal role. Most likely, adults will be a conventional influence, promoting academic pursuits and other pro-social behaviors. Teachers can be particularly important for children who come from families with little support for schooling. Finally, the effectiveness of the curriculum and the quality of instruction are fundamental to provide meaningful learning opportunities (Bosworth et al., 2009).

This study has some limitations. The sample is from Northeast Georgia, and results may not be generalizable to other communities. Some students were lost-to-follow up, a common problem in longitudinal studies; however, we were able to reach a large proportion of students. This study did



not include family or neighborhood characteristics, which are risk factors for school dropout. As with all self-reports, it is possible that students under- or over-estimated their responses; however, students were always assured of the confidentiality of their responses. Because this is a quantitative study, the context of students' responses is unknown; thus, students may have had different reasons for how they rated the climate of their school. Qualitative information would be important for educators who plan to develop prevention programs. All the analyses were conducted with data from tenth graders, but students could have dropped as late as twelfth grade. In spite of it, we found statistically significant differences in scores between dropouts and non-dropouts, possibly because students who drop from school generally have a long period of turmoil before reaching that decision (Jimerson et al., 2000).

To conclude, this study contributes to the understanding of the importance of positive school climate to reduce school dropout. Schools are where teenagers spend the majority of their time, develop their social lives, and pursue their academic interests. Thus, a school with a positive climate is paramount for successful youth development. In our study, students who felt connected to school, believed that a teacher at school cared about them, and were not victims of peer aggression had less chance of dropping out of school. All people want to spend time in environments where they feel connected and cared for, and schools are no different. Improving the quality of students' experiences at school is a worthy goal in and of itself, and may have the added benefit of helping to prevent dropout.

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