National School Climate Center

Educating Minds and Hearts...Because the Three Rs are Not Enough

SCHOOL CLIMATE RESEARCH SUMMARY: August 2012

Authors[1] : Amrit Thapa, Ph.D., Jonathan Cohen, Ph.D., Ann Higgins-D'Alessandro, Ph.D., & Shawn Guffey

[1]Amrit Thapa, Ph.D. (Research Director) and Jonathan Cohen, Ph.D. (President) are at National School Climate Center, 341 W, 38th Street, 9th Floor, New York, NY 10018. Ann Higgins-D'Alessandro, Ph.D. (Associate Professor of Psychology), and Shawn Guffey (Graduate Student) are at Fordham University, Department of Psychology, Dealy 226E,441 East Fordham Road, Bronx, NY 10458.

Introduction

Over the past three decades, researchers and educators have increasingly recognized the importance of K-12 school climate. This summary builds on previous school climate reviews[1] (Cohen, McCabe, Michelli, & Pickeral, 2009; Cohen & Geier, 2010) and details how school climate is associated with and/or promotes safety, healthy relationships, engaged learning and teaching and school improvement efforts[2].

In America and around the world, there is growing interest in school climate reform and appreciation that this is a viable, data driven school improvement strategy that promotes safer, more supportive and civil K-12 schools. The Centers for Disease Control and Prevention (2009) recommends school climate reform as a data driven strategy that promotes healthy relationships, school connectedness, and dropout prevention. The Institute for Educational Sciences includes school climate as a sound strategy for dropout prevention (Dynarski, Clarke, Cobb, Finn, Rumberger, & Smink, 2008). The U. S Department of Education (2007) has invested in the *Safe and Supportive Schools* (S3) grant program to support state-wide school climate measurement and the study of school climate improvement efforts. A growing number of State Departments of Education are focusing on school climate reform as an essential component of school improvement and/or bully prevention. And, a growing number of educational ministries from around the world (e.g. China, France, Israel, Peru, Singapore, Spain) (Cohen, 2012), and the UN Children's Fund are invested in supporting school climate reform efforts[3] (Shaeffer, 1999).

The National School Climate Council (2007) recommends that "school climate" and a "positive and sustained school climate" be defined in the following ways:

"School climate is based on patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures."

"A sustainable, positive school climate fosters youth development and learning necessary for a productive, contributive, and satisfying life in a democratic society. This climate includes norms, values, and expectations that support people feeling socially, emotionally and physically safe. People are engaged and respected. Students, families and educators work together to develop, live, and contribute to a shared school vision. Educators model and nurture an attitude that emphasizes the benefits of, and satisfaction from, learning. Each person contributes to the operations of the school as well as the care of the physical environment (p.4)."

While early educational reformers such as Perry (1908), Dewey (1916), and Durkheim (1961) recognized that the distinctive culture of a school affects the life and learning of its students, the rise of systematic, empirical study of school climate grew out of industrial/organizational research coupled with the observation that school-specific processes accounted for a great deal of variation in student achievement (Anderson, 1982; Kreft, 1993; Purkey & Smith, 1983). Ever since, the research in school climate has been growing systematically, and in recent years many countries are showing a keen interest in this area. Literature in this field suggests that there are empirical evidences being documented on various aspects of school climate in several languages (for summary, see Benbenisty & Astor, 2005; Cohen et al., 2009 in English; Debarbieux, 1996; Janosz, Georges, & Parent (1998) in French; and Del Rey, Ortega & Feria, 2009 in Spanish).

In this review, we address five essential areas of focus: 1. Safety (e.g. rules and norms; physical safety; social-emotional safety); 2. Relationships (e.g. respect for diversity; school connectedness/engagement; social support; leadership); 3.

---

[2]Cohen & Geier (2010) summary study had132 citations, whereas this review includes194 citations.

[3]The citations below represent approximately 5 % of experimental studies, 45 % of correlational studies, 25 % literature reviews and 25 % other descriptive studies (including qualitative studies) that have been published in peer-reviewed journals (with few exceptions).

[4]When we conducted our first school climate research summary in 2009, there were 8,180,000 results from Google. In August 2012, there are 19,400,000 results.

Teaching and Learning (e.g. social, emotional, ethical and civic learning; support for academic learning; support for professional relationships); 4. Institutional Environment (e.g. physical surrounding) and; 5.School climate, the Processes of School Improvement. Although there is not yet a consensus about which dimensions are essential to measuring school climate validly, we believe that empirical reviews such as these may help to refine and focus our understanding of the aspects of school climate that can and need to be assessed. To date, there have been three independent reviews of school climate measures (Clifford, Menon, Condon, & Hornung; 2012; Gangi, 2010; Haggerty, Elgin, & Woodley, 2010).

As detailed below, the ever-growing body of research on school climate continuously attests to its importance in a variety of overlapping ways, including social, emotional, intellectual and physical safety; positive youth development, mental health, and healthy relationships; higher graduation rates; school connectedness and engagement; academic achievement; social, emotional and civic learning; teacher retention; and effective school reform. Further, it must be understood that both the effects of school climate and the conditions that give rise to them are deeply interconnected, growing out of the shared experience of a dynamic ecological system (Bronfenbrenner, 1979; Ma, Phelps, Lerner, & Lerner, 2009). Thus, information in one section may relate to another dimension as well. Before we review the literature on the above five categories, it is worthwhile to discuss research on outcomes associated with overall school climate.

Outcomes associated with positive school climate

There is extensive research that shows school climate having a profound impact on students' mental and physical health. School climate has been shown to affect middle school students' self-esteem (Hoge, Smit, & Hanson, 1990), mitigate the negative effects of self-criticism (Kuperminic, Leadbeater, & Blatt, 2001), and affect a wide range of emotional and mental health outcomes (Kuperminic, Leadbeater, Emmons, & Blatt, 1997; Payton et al., 2008; Power, Higgins, & Kohlberg, 1989; Shochet, Dadds, Ham, & Montague, 2006; Way, Reddy, & Rhodes, 2007). Research has also revealed a positive correlation between school climate and student self-

concept (Cairns, 1987; Heal, 1978; Reynolds, Jones, Leger, & Murgatroyd, 1980; Rutter, Maughan, Mortimore, & Ouston, 1979).

A positive and sound socio-emotional climate of a school is also related to the frequency of its students' substance abuse and psychiatric problems (Kasen, Johnson, & Cohen, 1990; LaRusso, Romer, & Selman, 2008; Ruus et al., 2007; Shochet et al., 2006). More specifically, a positive school climate is linked to lower levels of drug use as well as less self-reports of psychiatric problems among high school students (LaRusso et al., 2008). In early adolescence, a positive school climate is predictive of better psychological well-being (Ruus et al., 2007; Shochet et al., 2006; Virtanen et al., 2009).

Moreover, a series of studies revealed that a positive school climate is correlated with decreased student absenteeism in middle school and high school (deJung & Duckworth, 1986; Gottfredson & Gottfredson, 1989; Purkey & Smith, 1983; Reid, 1982; Rumberger, 1987; Sommer, 1985) and with lower rates of student suspension in high school (Wu, Pink, Crain, & Moles, 1982; Lee, Cornell, Gregory & Fan, 2011). Furthermore, a growing body of research indicates that positive school climate is critical to effective risk prevention (Berkowitz & Bier, 2006; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Greenberg et al., 2003) and health promotion efforts (Cohen, 2001; Najaka, Gottfredson, & Wilson, 2002; Rand Corporation, 2004; Wang, Haertel, & Walberg, 1993).

In overall, there seems to be abundant literature on school climate from different parts of the world that documents a positive school climate: i) having a powerful influence on the motivation to learn (Eccles et al., 1993); ii) mitigating the negative impact of the socioeconomic context on academic success (Astor, Benbenisty, & Estrada, 2010); iii) contributing to less aggression and violence (Karcher, 2002a, Gregory, Cornell, Fan, Sheras, Shih, & Huang, 2010; less harassment (Kosciw & Elizabeth, 2006; Blaya, 2006) and less sexual harassment (Attar-Schwartz, 2009); and iv) acting as a protective factor for the learning and positive life development of young people (Ortega, Sanchez, Ortega Rivera, & Viejo, 2011). In addition to these areas, studies around the world also indicate that quality of the school climate is also

responsible for academic outcomes as well as the personal development and well-being of pupils (see, for example, Haahr, Nielsen, Hansen, & Jakobsen, 2005; OECD, 2009). Studies on the evidence of the relationship between school climate and academic outcomes will be discussed in more detail in the 'teaching and learning' section.

1. Safety

Feeling safe – socially, emotionally, intellectually and physically is a fundamental human need (Maslow, 1943). Feeling safe in school powerfully promotes student learning and healthy development (Devine & Cohen, 2007). However, there is a great deal of research that shows that many students do not feel physically and emotionally safe in schools, largely as a result of breakdowns in the interpersonal and contextual variables that define a school's climate. In schools without supportive norms, structures, and relationships, students are more likely to experience violence, peer-victimization, and punitive disciplinary actions, often accompanied by high levels of absenteeism, and reduced academic achievement (Astor, Guerra, & Van Acker, 2010). Studies have also shown that students feel less safe in large schools and that verbal bullying is more likely to occur at such schools (Lleras, 2008). The NSCC's school climate assessment work with thousands of schools across America has shown that the adults in the school community (school personnel and parents/guardians) typically believe that bullying and social violence are a "mild" to "moderately severe" problem while students consistently report that it is a "severe" problem (Cohen, 2006). Cornell, Sheras, Gregory, and Fan (2009) explored the usefulness of threat assessment in targeting violence in which 9th grade students from 280 Virginia public high schools were compared to 95 high schools using the Virginia threat assessment guidelines (Cornell & Sheras, 2006), 131 following locally developed threat assessment procedures, and 54 not using a threat assessment approach. Their study found that in schools where threat assessment guidelines were followed, students reported less bullying, felt more comfortable seeking help, and possessed more positive perceptions of school climate. In addition, these schools had fewer long-term suspensions. Likewise, in another study, Gregory et al. (2010), using

hierarchical linear modeling and with a statewide sample of over 7,300 ninth-grade students and 2,900 teachers randomly selected from 290 high schools showed that consistent enforcement of school discipline (structure) and availability of caring adults (support) were associated with school safety. Klein, Cornell & Konold (in press), using a sample of 3,687 high school students who completed the School Climate Bullying Survey and questions about risk behavior from the Youth Risk Behavior Surveillance Survey (YRBS), found that positive school climate were associated with lower student risk behavior.

Although many urban and economically disadvantaged schools are plagued by physical violence, most students are not exposed to physical violence (Mayer & Furlong, 2010). Unfortunately, this is not the case for social, emotional and intellectual safety. In fact, bully-victim behavior is a serious public health problem. Research from the Health Resources and Services Administration's (HRSA) National Bullying Campaign showed that up to 25 percent of U.S. students are bullied each year (Melton et al., 1998). As many as 160,000 students may stay home from school on any given day because they are afraid of being bullied (Nansel et al., 2001). The growing trend of cyber bullying penetrates the home via computers and cellular phones. At least one out of three adolescents report being seriously threatened online, and 60 percent of teens say they have participated in online bullying. A growing body of research has underscored that bully-victim behavior is toxic; it undermines K-12 students' capacity to learn and develop in healthy ways. When students bully and/or are victimized repeatedly, it dramatically increases the likelihood that they will develop significant psychosocial problems over time (Wolke, Woods, Bloomfield, & Karstadt, 2000). Additionally, bullying affects student engagement and lowers their commitment to schoolwork. Bullying seems to adversely affect the witnesses, too. For example, a recent study of more than 2,000 students (ages 12 to 16) found that those who witnessed bullying reported more feelings of depression, anxiety, hostility and inferiority than either the bullies or victims themselves (Rivers, Poteat, Noret, & Ashurst, 2009).

Homophobia is one of the most common causes of bully-victim behavior (Birkett, Espelage, & Koenig, 2009).

A recent school climate survey of 6,209 middle school and high school students revealed that roughly nine out of ten Lesbian, Gay, Bisexual and Transgender (LGBT) students (86.2 %) experienced harassment at school in the previous year (Kosciw, Diaz, & Greytak, 2008). In general, differences (e.g., race, gender, sexual identity, disability, socio-economic and/or cultural differences) are a common focus for bullying. McGuire, Anderson, Toomey and Russell (2010) found that school harassment due to transgender identity was pervasive, and this harassment was negatively associated with feelings of safety.

Recent research suggests that positive school climate is associated with reduced aggression and violence (Karcher, 2002b; Goldstein, Young, & Boyd, 2008; Brookmeyer, Fanti, & Henrich, 2006; Gregory, et al., 2010) as well as reduced bullying behavior (Kosciw & Elizabeth, 2006; Meyer-Adams & Conner, 2008; Yoneyama & Rigby, 2006; Birkett et al., 2009; Meraviglia, Becker, Rosenbluth, Sanchez, & Robertson, 2003) and sexual harassment, regardless of sexual orientation (Attar-Schwartz, 2009). However, this relationship has not been fully elucidated. One study revealed that the association between school climate and level of aggression and victimization is dependent upon each student's feelings of connectedness to the school (Wilson, 2004). Because the bullying of any one person is unacceptable and because violence in schools is documented as a real problem, future research needs to critically examine the complex set of individual, group, and organizational factors that shape and predict violent behavior in schools in order to better prevent it.

What is clear is that comprehensive, ecologically informed violence prevention efforts provide the essential foundation for improvement. Recent reviews of effective school discipline and bully prevention efforts underscore that we need to recognize and target individual, peer, school, family, and community processes (Osher, Bear, Sprague & Doyle, 2010; Swearer, Espelage, Vallancourt & Hymel, 2010; Gregory & Cornell, 2009).

There is growing evidence that educators also feel unsafe in schools. A significant number of teachers are threatened and/or assaulted by students every year (Dworkin, Haney, & Telschow, 1998; Novotney, 2009). Gregory, Cornell, & Fan (in press), using regression analyses in a statewide sample of 280 high schools showed that both structure (measured by student- and teacher-reported clarity of school rules) and support (measured by teacher-reported help seeking) were associated with less teacher victimization, controlled for school and neighborhood demographics. Their study also found that student support was a consistent predictor of school records of threats against faculty.

1.1. Rules and norms

Another important safety-related dimension is rules and norms. Research underscores the importance of school rules and perceived fairness in regard to dealing with students' behavior. There is evidence that schools in which rules are effectively enforced (i.e., better discipline management) have lower rates of student victimization and student delinquency (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005). One of the most important explicit or implicit norms in schools relates to "witness-related" behaviors: either being a passive bystander who, knowingly or not, colludes with and supports bully-victim behavior or being an upstander who, directly or indirectly, says "no" to bully-victim behavior. Twemlow and his colleagues have been involved with a bully prevention program that focuses on promoting upstander behavior (Twemlow, Fonagy, Gies, Evans & Ewbank, 2001; Fonagy, Twemlow, Vernberg, Sacco, & Little, 2005). Building on and replicating these past empirical studies, for example, a recent cluster-level randomized controlled trial with stratified restricted allocation for 1,345 third to fifth graders in nine elementary schools in a medium-sized Midwestern city found that the teacher-implemented school-wide intervention that did not focus on disturbed children substantially reduced aggression and improved classroom behavior (Fonagy et al., 2009). The bully prevention/pro-upstander effort was also associated with pronounced improvements in elementary students achievement test scores (Fonagy et al., 2005).

How rules are enforced (e.g. the extent to which they are consistently and fairly enforced) is another factor that shapes how safe people feel in school. Consistent enforcement of school rules and availability of caring adults have been

referred to as "structure and support" (Gregory et al., 2010). Studies have shown that structure and support are linked to lower suspension rates and more student willingness to seek help in bullying situations (Eliot, Cornell, Gregory & Fan, 2010; Gregory, Cornell & Fan, 2011). Findings from Nesdale and Lawson (2011) on the study of the effects of social group norms (inclusion vs. exclusion vs. exclusion-plus-relational aggression) and school norms (inclusion vs. no norm) on a total of 383 children's (7 and 10-year-old) intergroup attitudes indicated that children's out-group attitudes reflected their group's norm but, with increasing age, they liked their in-group less, and the out-group more, if the group had an exclusion norm.

In summary, feeling safe in school is fundamental for educators to be able to effectively teach and for to students to effectively learn. Since 1998 the problems of school violence and of bullying and harassment have been documented and estimated to affect 25 percent of all students (Cohen, 2006; Devine & Cohen, 2007; Melton et al., 1998). School bullying and harassment have moved to the virtual school, which is comprised of the social media that groups or individual students use to harass their peers (Campbell, 2005). Both in person and virtually bullying and harassment are most often based on perceived differences of sexual orientation, ethnicity, social class, and gender, alerting educators to the need for diversity education as well as violence prevention interventions. Violence against educators and staff has also risen in recent years (Novotney, 2009). Safety must be the first concern of every school, but school climate research (Cohen, in press) shows that the best ways to address safety concerns is by building strong school communities with respectful and trusting relationships among and between teachers and students with parents, school staff, and the surrounding community.

2. Relationships

The process of teaching and learning is fundamentally relational. The patterns of norms, goals, values and interactions that shape relationships in schools provide an essential area of school climate. One of the most important aspects of relationships in school is how connected people feel to one another. From a psychological point of view, relationships refer not only to relations with others but relations with ourselves - how we feel about and take care of ourselves.

Research has also shown that in schools where students perceive a better structured and school discipline and more positive student-teacher relationships, there are lower associations with the "probability and frequency of subsequent behavioral problems" (Wang, Selman, Dishion, & Stormshak, 2010; Gregory & Cornell, 2009). Furthermore, it was found for both Chinese and American students that when students' perceived teacher-student support and student-student support, these perceptions were positively associated with self-esteem and grade point average while negatively associated with depressive symptoms (Jia et al., 2009).

If a teacher-student relationship is negative and conflictual in kindergarten, it is more likely that the student will have behavioral and academic problems in later grades (Hamre & Pianta, 2001). Also, teachers' interactions with students can directly affect students' behavioral and emotional engagement in the classroom (Skinner & Belmont, 1993). When teachers support and interact positively with students, then students are more likely to be engaged and behave appropriately (Skinner & Belmont, 1993). Another study on the effects of the 4Rs program (Reading, Writing, Respect, and Resolution) using a cluster randomized controlled trial design suggested positive effects of teachers' perceived emotional ability on classroom quality (Brown, Jones, LaRusso, & Aber , 2010).

Research has also shown that teachers' work environment, peer relationships and feeling of inclusion and respect are important aspects too. In a study of 12 middle schools, Guo (2012) found that the teachers' work environment ,which may be considered as an indicator of teachers' relationships with each other and school administrators, fully mediated the path from a whole school character intervention to school climate change. This indicates the critical foundational role of positive adult relationships for a positive school climate. In the same schools, Higgins-D'Alessandro and Sakwarawich (2011) demonstrated that students with special needs, those who had *Individual Education Plans* (IEPs), only were able to benefit from the positive school climate if they felt included and respected by other students, indicating the

critical role of peer relationships in the well-being of students with differences.

In summary, safe, caring, participatory and responsive school climates tend to foster a greater attachment to school and provide the optimal foundation for social, emotional and academic learning for middle school and high school students (Blum, McNeely, & Rinehart, 2002; Goodenow & Grady, 1993; Lee, Smith, Perry, & Smylie, 1999; Osterman, 2000; Wentzel, 1997). These research findings have contributed to the U.S. Department of Justice (2004), the U.S. Department of Education's (2007) *Safe and Drug Free Schools network*, the U.S. Department of Health and Human Services and a growing number of State Departments of Education emphasizing the importance of safe, civil and caring schools. Moreover, one of the very crucial components of sound relationships has been identified as 'trust' among members of the school community. For example, Bryk and his colleagues found evidence that schools with high relational trust (good social relationships among members of the school community) are more likely to make changes that improve student achievement (Bryk & Schneider, 2002).

3. Teaching and Learning

Teaching and learning represents one of the most important dimensions of school climate. School leaders and teachers should strive to clearly define the sets of norms, goals, and values that shape the learning and teaching environment. Research supports the notion that a positive school climate promotes students' abilities to learn. A positive school climate promotes cooperative learning, group cohesion, respect, and mutual trust. These particular aspects have been shown to directly improve the learning environment (Ghaith, 2003; Kerr, Ireland, Lopes, Craig, & Cleaver, 2004; Finnan, Schnepel, & Anderson, 2003). For example, as also outlined in the relationships section, research shows that the student-teacher relationship in kindergarten is related to later academic success and positive behavioral outcomes for students (Pianta, Steinberg, & Rollins, 1995; Hamre & Pianta, 2001).

Additionally, knowing an organizational culture and climate helps in "understanding individual as well as collective attitudes, behavior, and performance" (Ostroff, Kinicky,

& Tamkins, 2003). A series of correlational studies have shown that school climate is directly related to academic achievement. The evidence found in the literature demonstrates that this is true for the elementary schools (Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1977; Brookover et al., 1978; Brookover & Lezotte, 1979; Cook, Murphy & Hunt, 2000; Freiberg, 1999; Griffith, 1995; Shipman, 1981; Sherblom, Marshall & Sherblom, 2006; Sterbinksky, Ross & Redfield, 2006), middle schools (Brand, Felner, Shim, Seitsinger, & Dumas, 2003; Ma & Klinger, 2000), high schools (Lee & Bryk ,1989; Power et al., 1989; Stewart, 2008) and for all levels of schooling (Gottfredson & Gottfredson, 1989; MacNeil, Prater, & Busch, 2009). In this connection, studies also point out the need to identify and include a wide range of factors such as classroom and school processes and multiple school climate indicators when examining student outcomes (Good & Weinstein, 1986; Madaus, Airasian, & Kellaghan, 1980; Rutter, 1983; Rutter et al., 1979; Fleming et al., 2005). Moreover, there is also evidence that the effect of positive school climate not only contributes to immediate student achievement, but its affect seems to persist for years (Hoy, Hannum, & Tschannen-Moran, 1998). The relevant literature also indicates that the prevalence of peer victimization in high school is an important factor in high school academic performance. Cornell, Gregory, Huang, & Fan (in press), in their study of 276 Virginia public high schools, found that the prevalence of teasing and bullying (PTB) as perceived by both ninth grade students and teachers was predictive of dropout rates for the cohort four years later. Researchers have also looked at the relationship between school climate and academic achievement in relation to student classroom participation. Studies show that when students are encouraged to participate in academic learning, their potential for academic achievement increases (Voelkl, 1995; Ladd, Birch, & Buhs, 1999).

3.1. Social, emotional, civic and ethical education

The specific nature and goals of K-12 instruction impact academic achievement in a variety of ways. Educators (like parents) are always teaching social, emotional, civic, and ethical as well as intellectual lessons, intentionally or not (Higgins-

D'Alessandro, in press). Research shows that evidence-based character education programs lead to higher achievement scores for elementary school students (Benninga, Berkowitz, Kuehn, & Smith, 2003). Also, evidence-based socio-moral emotional learning programs have resulted in impressive gains in achievement test scores and in increasing the academic emphasis of elementary and middle school students (Battistich, Schaps, & Wilson, 2004; Bradshaw, Koth, Thornton, & Leaf, 2009; Elias & Haynes, 2008). A meta-analysis of over 700 positive youth development, social emotional learning (SEL) and character education studies that revealed evidence-based SEL programs had many significant positive effects, including improving students' achievement test scores by 11 to 17 percentile points (Payton et al., 2008).[4] Evidence also comes from another meta-analysis conducted on 213 school-based, universal social and emotional learning (SEL) programs involving 270,034 kindergarten through high school students that suggested that Socio Emotional Learning (SEL) participants, compared to the control groups, demonstrated significantly improved social and emotional skills, attitudes, behavior, and academic performance that reflected an 11-percentile-point gain in achievement (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

3.2. Service learning

Implementing learning activities beyond the classroom is an effective way to incorporate civic education into a school and these activities, in turn, promote student learning. Encouraging active and collaborative learning through authentic projects is most effective in an environment with a civic mission that encourages trusting relationships between all members of the school community (Carnegie Corporation of New York & Center for Information and Research on Civic Learning and Education, 2003; Wentzel, 1997; Skinner & Chapman,

---

[4]This work overlaps with recent research findings about risk/protective factors which the Search Institute has synthesized into their "developmental assets" framework (Scales & Roehlkepartain, 2003) and the focus on 21st Century skills by the Partnership for 21st Century Skills, 2009). Each of these organizations have synthesized important pro-social and risk prevention research findings to develop models and instructional goals that complement the socio-moral emotional learning/character education research noted above.

1999).

Service learning projects promote civic education because these activities teach students how to apply classroom material to real life situations (Morgan & Streb, 2001; Bandura, 2001; Torney-Purta, Lehmann, Oswald, & Schulz, 2001). For example, activities like community service and debates about what kind of service to engage in enhance the learning environment by providing students opportunities to participate and to begin forming their own opinions of social and government systems (Torney-Purta, 2002; Youniss et al., 2002). Moreover, when these activities are presented in a collaborative environment, they encourage students to interact and build upon one another's ideas (Wentzel & Watkins, 2002; Ghaith, 2003). If students are given ownership and choice in their service learning projects, there is evidence that students' self-concept and tolerance for diversity will increase (Morgan & Streb, 2001).

Furthermore, school climate influences how educators feel about being in school and how they teach. Recent research shows that school climate powerfully affects the lives of educators and increases teacher retention. School climate enhances or minimizes emotional exhaustion, depersonalization, and feelings of low personal accomplishment (Grayson & Alvarez, 2008; Higgins-D'Alessandro, 2002) as well as attrition (Miller, Brownell, & Smith, 1999). Research shows that when teachers feel supported by both the principal and their peers, teachers are more committed to their profession (Singh & Billingsley, 1998). A positive school climate is also associated with the development of teachers' beliefs that they can positively affect student learning (Guo & Higgins-D'Alessandro, 2011; Hoy & Woolfolk, 1993). The National Commission on Teaching and America's Future defines school climate in terms of a learning community and argues that poor school climate is an important factor contributing to teacher retention (Fulton, Yoon, & Lee, 2005).

3.3. Perceptions of school climate

Comparing teachers' perceptions to students' perceptions is also an important aspect to consider with regard to teaching and learning. When a study was conducted regarding student and teacher perceptions of overall school climate and academ-

ic emphasis, it was found that teachers perceptions of school climate were more sensitive to classroom-level factors, such as "poor classroom management and proportion of students with disruptive behaviors" while students' perceptions were more sensitive to school-level factors such as "student mobility, student-teacher relationships, and principal turnover" (Mitchell, Bradshaw, & Leaf, 2010). Moreover, studies have also demonstrated that individual-level predictors, such as having behavior problems at school, being held back a grade, coming from a single-parent family, lower parents' education level, gender and students' ethnic background, gender, and age play significant roles in student perceptions of school climate (Fan, Williams, & Corkin, 2011; Schneider & Duran, 2010). These differences show that it is important to assess both sets of perceptions in relation to school climate improvement. In a study by Johnson and Stevens (2006), teachers' perceptions of school climate in 59 elementary schools were assessed using a modified version of the School-Level Environment Questionnaire (SLEQ). The study found a positive relationship between school mean teachers' perceptions of school climate and school mean student achievement.

The literature also shows that perception of the racial climate is another determining factor in student achievement. For example, Mattison and Aber (2007), using data from 382 African American and 1456 European American students, showed that positive perceptions of the racial climate were associated with higher student achievement and fewer discipline problems. The study found that racial differences in students' grades and discipline outcomes were associated with differences in perceptions of racial climate.

4. Institutional Environment

This section includes studies on the institutional environment, which can be broadly categorized in two aspects: i) school connectedness/engagement and, ii) physical layout and surroundings of school.

The Centers for Disease Control and Prevention (2009) defines school connectedness as "the belief by students that adults and peers in the school care about their learning as well as about them as individuals." There is a growing body of research that suggests that school connectedness is a powerful predictor of and/or is associated with adolescent health and academic outcomes (McNeely, Nonnemaker, & Blum, 2002; Whitlock, 2006; Ruus et al., 2007; Resnick et al., 1997). Studies also show that school connectedness is associated with violence prevention (Karcher, 2002a, 2002b; Skiba et al., 2004), and student satisfaction and conduct problems (Loukas, Suzuki, & Horton, 2006). Moreover, school climate research indicates that school connectedness is a protective factor against risky sexual, violence and drug use behaviors (Catalano, Haggerty, Oesterie, Fleming, & Hawkins, 2004; Kirby, 2001)[5].

In this context, the literature also documents evidence on the relationship between perception of school climate and student engagement. For example, Bandyopadhyay, Cornell, Fan, & Gregory (2012), using the statewide sample of 7,058 ninth-graders randomly selected from 289 schools participating in the Virginia High School Safety Study, found that individual differences in perception of school climate characterized by bullying were associated with lower commitment to school, but not less involvement in school activities. The findings from the study also suggested that school level differences in student perceptions of bullying climate were associated with both lower commitments to school and less involvement in school activities.

Research on this topic has also investigated how smaller schools can greatly improve school climate and how the physical layout of the school can affect safety. Studies on this topic show that there are various benefits to smaller schools for student achievement, safety, and relationships among members of the school community. For example, a study by McNeely et al. (2002) found that smaller schools are positively correlated to school connectedness. In addition, research suggests that, at the middle-school level, smaller schools lead to better academic performance though the picture is more complicated at the elementary and high school levels (Stevenson, 2006). However, reducing the school size is not the only way to improve the school environment. Instead, a school should strive to form smaller learning communities as a way to improve the learning environment (Cotton, 2001). On the other hand,

---

[5]For a summary of this research, see Centers for Disease Control and Prevention (2009)

Klein and Cornell (2010) found that while the total number of incidents was higher, the rate of bullying offenses was in fact lower in larger schools. Given these conflicting ideas and findings on the effect of school size on school climate, the field needs more research to better inform this debate.

School space is another environmental dimension that impacts students' feelings about safety. Astor et al., (2010) demonstrated that students felt unsafe in unsupervised areas of the school building. In fact, there is a growing body of research that illuminates how environmental variables such as classroom layout, activity schedules and student-teacher interactions can influence student behaviors and feelings of safety (Conroy & Fox, 1994; Van Acker, Grant, & Henry, 1996). It has been found that the quality of school facilities affects student achievement and that the mediator of this relationship is school climate (Uline & Tschannen-Moran, 2008).

5. School Climate, the Processes of School Improvement

School climate is an important factor in the successful implementation of school reform programs (Bulach & Malone, 1994; Dellar, 1998; Gittelsohn et al., 2003; Gregory, Henry, & Schoeny, 2007; Guo & Higgins-D'Alessandro, 2011). For example, teachers' perceptions of school climate influence their ability to implement school-based character and development programs (Beets et al., 2008; Guo, 2012). Studies about the implementation of character education programs suggest that the most effective ones are those incorporated into the school curriculum and developed holistically with the school community (Kerr et al., 2004). For example, teachers are expected to positively influence children and youth, not only teaching them to read, write, and think in words and numbers, but also to develop their social and moral sensitivities, character, and sense of citizenship (Higgins-D'Alessandro, 2002; in press; Cohen, in press). The core characteristics of a liberal education that are implicit in specific sets of required disciplines are the development of rational, critical, and imaginative thinking, an understanding of one's culture, its values and traditions, as well as engaging with other cultures, embracing diverse ideas, and being skilled in methods and technologies that facilitate communication of all kinds (Higgins-D'Alessandro, 2011). There is a growing body of scientifically-based research supporting the strong impact that enhanced socio-moral, civic and emotional behaviors can have on success in school and ultimately in life (Horan, Higgins-D'Alessandro, Vozzola, & Rosen, 2010; Zins et al., 2004).

Theoretically, school climate improvement efforts are grounded in ecological systems theories of child and youth development that recognize that characteristics of the individual, family, school, and other layers of the environment impact individual learning and behavior (Bronfenbrenner, 1979). Felner et al. (2001) argue, "whole school change efforts, when implemented comprehensively and with appropriate intensity and fidelity, may powerfully influence the prevention of socio-emotional, behavioral, and academic difficulties, as well as promotion of the acquisition of the full range of developmental competencies necessary for life success, well-being, and resilience (pg. 177)." Some of the most important research that elucidates the relationship between school climate and school improvement efforts has emerged from a multi-year study of schools in Chicago. Bryk and his colleagues found evidence that schools with high relational trust (good social relationships among members of the school community) are more likely to make changes that improve student achievement (Bryk & Schneider, 2002). In their most recent summary of this work, Bryk, Sebring, Allensworth, Luppescu, & Easton (2010) detail how the following four systems interact in ways that support or undermine school improvement efforts: (i) professional capacity (e.g., teachers' knowledge and skills; support for teacher learning; and school-based learning communities); (ii) order, safety and norms (labeled as "school learning climate"); (iii) parent-school-community ties; and (iv) instructional guidance (e.g. curriculum alignment and the nature of academic demands). The authors underscore how their research has shown relational trust is the "glue" or the essential element that coordinates and supports these four processes, which are essential to effective school climate improvement (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010).

Summary

School climate—by definition—reflects students' school

personnel's, and parents' experiences of school life socially, emotionally, civically, and ethically as well as academically. Over the past two decades, research studies from a range of historically disparate fields (e.g., risk prevention, health promotion, moral education, character education, mental health, and social-emotional learning) have identified research-based school improvement guidelines that converge predictably to promote safe, caring, responsive and participatory schools (Brown, Corrigan, & Higgins-D'Alessandro, in press; Centers for Disease Control and Prevention, 2009; Benninga et al., 2003; Berkowitz & Bier, 2006; Greenberg et al., 2003; Cohen, in press). School climate matters. Positive and sustained school climate is associated with and/or predictive of positive child and youth development, effective risk prevention and health promotion efforts, student learning and academic achievement, increased student graduation rates, and teacher retention. These research findings have contributed to the U.S. Department of Education in examining ways to use school climate and culture as an organizing data-driven concept that recognizes the range of pro-social efforts (e.g. character and moral education, social emotional learning, developmental assets, community schools) and risk prevention/ mental health promotion efforts that protect children and promote essential social, emotional, ethical and civic learning (Jennings, 2009).

Despite the contribution and the growing interest in school climate improvement, the field lacks consensus about definitions, measurements, improvement models, and delineated implementation strategies. Clearly, the field is evolving and calls for rigorous and empirically sound research that focuses on relating specific aspects and activities of interventions to changes in specific components of school climate and how both interventions and climate affect specific socio-moral emotional, civic, and cognitive development and the teaching and learning of students and teachers. Understanding the interactions of these processes in the contexts of interventions will enable schools to successfully adapt interventions that have been shown to promote these positive outcomes. The keys to great schools include smarter educational policies as well as changes at the school and district levels; however, educators have the power to create schools that substantially better the quality of the future lives of our students in this and future generations.

Suggested citation: Thapa, A., Cohen, J., Higgins-D'Alessandro, A., & Guffey, S. (2012). School Climate Research Summary: August 2012. *School Climate Brief*, No. 3. National School Climate Center, New York, NY. (www.schoolclimate.org/climate/research.php).

Notes:
1. If you would like to receive abstracts for the citations noted below or care to share other empirical school climate research studies that have been published in peer-reviewed journals, please write to info@schoolclimate.org
2. Photocopying for nonprofit educational purposes is permitted.

National School Climate Center
Educating Minds and Hearts...Because the Three Rs are Not Enough

References

Anderson, C. (1982). The search for school climate: a review of the research. *Review of Educational Research*, *52*(3), 368-420.

Astor, R.A., Benbenisty, R., & Estrada, J.N. (2009). School violence and theoretically atypical schools: The principal's centrality in orchestrating safe schools. *American Educational Research Journal*, *46*(2), 423-461.

Astor, R.A, Guerra, N., & Van Acker, R. (2010). How can we improve school safety research? *Educational Researcher*, 39 (1), 69-78.

Attar-Schwartz, S. (2009). Peer sexual harassment victimization at school: The roles of student characteristics, cultural affiliation, and school factors. *American Journal of Orthopsychiatry*, *79*(3), 407–420.

Bandyopadhyay, S., Cornell, D., Fan, X., & Gregory, A. (in press). Bullying Climate and School Engagement in Ninth Grade Students. *Journal of School Health*.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52,* 1-26.

Battistich, V., Schaps, E., & Wilson, N. (2004). Effects of an elementary school intervention on students' "connectedness" to school and social adjustment during middle school. *The Journal of Primary Prevention, 24*(3), 243-262.

Blaya, C. (2006). *Harcèlement et maltraitance en milieu scolaire*. Paris : Armand Colin.

Beets, M.W., Flay, B.R., Vuchinich, S., Acock, A.C., Li, K., & Allred, C. (2008). School climate and teachers' beliefs and attitudes associated with implementation of the positive action program: A diffusion of innovations model. *Prevention Science, 9*(4), 264-275.

Benbenisty, R. & Astor, R.A. (2005). *School violence in context: Culture, neighborhood, family, school, and gender*. New York: Oxford University Press.

Benninga, J.S., Berkowitz, M.W., Kuehn, P., & Smith, K. (2003). The relationship of character education implementation and academic achievement in elementary schools. *Journal of Research in Character Education*, *1*(1), 19-31.

Berkowitz, M.W., & Bier, M.C. (2006). *What works in character education: A report for policy makers and opinion leaders* (Research report). Retrieved from the Center for Character and Citizenship website: http://www.characterandcitizenship.org/research/WW-CEforpolicymakers.pdf

Birkett, M., Espelage, D.L., & Koenig, B.W. (2009). LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. *Journal of Youth and Adolescence, 38*(7), 989-1000.

Blum, R.W., McNeely, C.A., & Rinehart, P.M. (2002). *Improving the odds: The untapped power of schools to improve the health of teens* (Research report). Retrieved from the University of Minnesota Center for Adolescent Health and Development website: http://www.med.umn.edu/peds/ahm/prod/groups/med/@pub/@med/documents/asset/med_21771.pdf

Bradshaw, C., Koth, C., Thornton, L., & Leaf, P. (2009). Altering school climate through school-wide positive behavioral interventions and supports: Findings from a group-randomized effectiveness trial. *Prevention Science, 10*(2), 100-115.

Brand, S., Felner, R., Shim, M., Seitsinger, A., & Dumas, T. (2003). Middle school improvement and reform: Development of validation of a school-level assessment of climate, cultural pluralism and school safety. *Journal of Educational Psychology, 95*(3), 570-588.

Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, *34*(10), 844-850.

Brookmeyer, K.A., Fanti, K.A., & Henrich, C.C. (2006). Schools, parents, and youth violence: A multilevel, ecological analysis. *Journal of Clinical Child and Adolescent Psychology,* *35*(4), 504-514.

Brookover, W.B., Schweitzer, J.H., Schneider, J.M., Beady, C.H., Flood, P.K., Wisenbaker, J. M. (1978). Elementary school social climate and school achievement. *American Educational Research Journal, 15*(2), 301-318.

Brookover, W., Beady, C., Flood, P., Schweitzer, J., & Wisenbaker,

J. (1977). *Schools can make a difference*. Washington, DC: National Institute of Education. (ERIC Document Reproduction Service No ED 145 034).

Brookover, W.B., & Lezotte, L.W. (1979). *Changes in school characteristics coincident with changes in student achievement* (Occasional Paper No 17). East Lansing: Michigan State University, East Lansing Institute for Research in Teaching. (ERIC Document Reproduction Service No ED 181 005).

Brown, P., Corrigan, M.W., & Higgins-D'Alessandro, A. (in press). *Handbook of Prosocial Education.* Rowman and Littlefield Publishing Group.

Brown, J.L., Jones, S.M., LaRusso, M.D., & Aber, J. L. (2010). Improving classroom quality: Teacher influences and experimental impacts of the 4rs program. *Journal of Educational Psychology*, *102*(1), 153-167. doi: 10.1037/a0018160

Bryk, A.S. & Schneider, B.L. (2002). *Trust in schools: A core resource for improvement*. New York: Russell Sage Foundation Publications.

Bryk, A.S., Sebring, P.B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago: University of Chicago Press.

Bulach, C., & Malone, B. (1994). The relationship of school climate to implementation of school reform. *ERS Spectrum*, *12*(4), 3-8.

Cairns, L.G. (1987). Behavior problems. In M. J. Dunkin (Ed.), *International encyclopedia* of teaching and teacher education (pp. 446-452). New York: Pergamon.

Campbell, M.A. (2005). Cyber bullying: An old problem in a new guise? *Australian Journal of Guidance and Counselling*, *15*(1), 68-76.

Carnegie Corporation of New York and Center for Information and Research on Civic Learning and Education. (2003). *The civic mission of schools*. New York: Carnegie Corporation of New York.

Catalano, R.F., Berglund, M.L., Ryan, J.A. M., Lonczak, H.S., & Hawkins, J.D. (2002). Positive youth development in the United States. *Prevention & Treatment, 5*(1), 1-111.

Catalano, R.F., Haggerty, K.P., Oesterie, S., Fleming, C.B., & Hawkins, J.D. (2004). The importance of bonding to schools for healthy development: Findings from the social development research group. *The Journal of School Health*, *74* (7), 252-262.

Centers for Disease Control and Prevention. (2009). *School connectedness: Strategies for increasing protective factors among youth*. Atlanta: U.S. Department of Health and Human Services. (http://www.cdc.gov/HealthyYouth/AdolescentHealth/pdf/connectedness.pdf).

Clifford, M., Menon, R. Condon, C & Hornung (2012). *Measuring School Climate for Gauging Principal Performance: A Review of the Validity and Reliability of Publicly Accessible Measures.* American Institute for Research (www.air.org/focus-area/education/index.cfm?fa=viewContent&content_id=1869).

Cohen, J. (2001). Social and emotional education: Core principles and practices. In J. Cohen (Ed.). *Caring classrooms/intelligent schools: The social emotional education of young children*. New York: Teachers College Press. [Online]. Available URL: www.csee.net/resources/selbook/.

Cohen, J. (2006). Social, emotional, ethical and academic education: Creating a climate for learning, participation in democracy and well-being. *Harvard Educational Review*, *76*(2), Summer, 201-237.

Cohen, J. (2012). Personal communication (based on consultations to these countries).

Cohen, J. (in press). School Climate and Culture Improvement: A Prosocial Strategy that Recognizes, Educates, and Supports the Whole Child and the Whole School Community. In Brown, Corrigan & Higgins-D'Alessandro (Eds.). *The Handbook of Prosocial Education.* Rowman and Littlefield Publishing Group.

Cohen, J. & Geier, V.K. (2010). School Climate Research Summary: January 2010. New York, N.Y. (www.schoolclimate.org/climate/research.php).

Cohen, J., McCabe, E.M., Michelli, N.M., & Pickeral, T. (2009). School climate: Research, policy, teacher education and practice.

Teachers College Record, 111(1), 180-213. (Available on: http://www.tcrecord.org/Content.asp?ContentId=15220).

Conroy, M.A., & Fox, J.J. (1994). Setting events and challenging behaviors in the classroom: Incorporating contextual factors into effective intervention plans. *Preventing School Failure, 38*, 29-34.

Cook, T.D., Murphy, R.F., & Hunt, H.D. (2000).Comer's school development program in Chicago: A theory-based evaluation. *American Educational Research Journal*, 37(2), 535-597.

Cornell, D., & Sheras, P. (2006). Guidelines for responding to student threats of violence. Longmont, CO: Sopris West.

Cornell, D., Sheras, P., Gregory, A., & Fan, X. (2009). A retrospective study of school safety conditions in high schools using the Virginia Threat Assessment Guidelines versus alternative approaches. *School Psychology Quarterly*, 24: 119-129.

Cornell, D., Gregory, A., Huang, F., & Fan, X. (in press). Perceived Prevalence of Teasing and Bullying Predicts High School Dropout Rates. *Journal of Educational Psychology*.

Cotton, K. (2001). *New small learning communities: Findings from recent literature.* Northwest Regional Education Laboratory.

Debarbieux, E. (1996). *La violence en milieu scolaire: 1 : Etat des lieux,* Paris, ESF.

deJung, J. & Duckworth, K. (1986). *High school teachers and their students' attendance: Final report*. Eugene: University of Oregon Center for Education Policy and Management,   College of Education. (ERIC Document Reproduction Service No. ED 266 557).

Del Rey, R., Ortega, R., & Feria, I. (2009). Convivencia escolar: Fortaleza de la communidad educative y proteccion ante la conflictividad escolar. *Revisita Interuniversitaria de Formacion del Profesorado, 66* (23, 3), 159-180.

Dellar, G.B. (1998). School climate, school improvement and site-based management. *Learning Environments Research, 1*, 353-367.

Devine, J. & Cohen, J. (2007). *Making your school safe: Strategies to protect children and promote learnin*g. New York: Teachers College Press.

Dewey, J. (1916). *Democracy and Education. An introduction to the philosophy of education* (1966 edn.). New York: Free Press.

Durkheim, E. (1961) *Moral education: A study in the theory and application of the sociology of education.* New York: Free Press.

Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D, & Schellinger, K.B. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child Development, 82*(1), 405-432.

Dworkin, A.G., Haney, C.A., & Telschow, R.L. (1998). Fear, victimization, and stress among urban public school teachers. *Journal of Organizational Behavior, 9*(2), 159-171.

Dynarski, M., Clarke, L., Cobb, B., Finn, J., Rumberger, R., & Smink, J. (2008). *Dropout Prevention: A Practice Guide* (NCEE 2008–4025). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc.

Eccles, J.S., Wigfield, A., Midgley, C., Reuman, D., MacIver, D., & Feldlaufer, H. (1993). Negative effects of traditional middle schools on students' motivation. *Elementary School Journal, 93*, 553–574.

Elias, M.J. & Haynes, N.M. (2008). Social competence, social support, and academic achievement in minority, low-income, urban elementary school children. *School Psychology Quarterly, 23*(4), 474-495.

Eliot, M., Cornell, D., Gregory, A., Fan, X. (2010). Supportive school climate and student willingness to seek help for bullying and threats of violence. *Journal of School Psychology, 48(6),* 533-553.

Fan, W., Williams, C.M., & Corkin, D.M. (2011). A multilevel analysis of student perceptions of school climate: The effect of social and academic risk factors. *Psychology in the Schools, 48*(6), 632-647.

Felner, R.D., Favazza, A., Shim, M., Brand, S., Gu, K., & Noonan, N. (2001). Whole school improvement and restructuring as preven-

tion and promotion: Lessons from STEP and the project on high-performance learning communities. *Journal of School Psychology, 39,* 177–202.

Finnan, C., Schnepel, K., & Anderson, L. (2003). Powerful learning environments: the critical link between school and classroom cultures. *Journal of Education for Students Placed At Risk*, 8(4), 391-418.

Fleming, C.B., Haggerty, K.P., Catalano, R.F., Harachi, T.W., Mazza, J.J., & Gruman, D.H. (2005). Do social and behavioral characteristics targeted by preventive interventions predict standardized test scores and grades? *Journal of School Health, 75,* 342–349.

Fonagy, P., Twemlow, S.W., Vernberg, E.M., Nelson, J.M., Dill, E.J., Little, T.D., & Sargent, J.A. (2009). A cluster randomized controlled trial of child-focused psychiatric consultation and a school systems-focused intervention to reduce aggression. *Journal of Child Psychology and Psychiatry 50*(5), 607–616.

Fonagy, P., Twemlow, S.W., Vernberg, E.M., Sacco, F.C., & Little, T.D. (2005). Creating a peaceful school learning environment: The impact of an antibullying program on educational attainment in elementary schools. *Medical Science Monitor, 11,* CR317–325.

Freiberg, H.J. (Ed.). (1999). *School climate: Measuring, improving and sustaining healthy learning environments*. Philadelphia, PA: Falmer Press.

Fulton, I.K., Yoon, I., & Lee, C. (2005). *Induction into learning communities*. Washington: National Commission on Teaching and America's Future.

Gangi, T.A. (2010). *School climate and faculty relationships: Choosing an effective assessment measure*. St. John's University, New York. (Available on: http://gradworks.umi.com/33/88/3388261.html).

Ghaith, G. (2003). The relationship between forms of instruction, achievement and perceptions of classroom climate. *Educational Research, 45,* 83-93.

Gittelsohn, J., Merkle, S., Story, M., Stone, E.J., Steckler, A., Noel, J., ...Ethelbah, B. (2003). School climate and implementation of the pathways study. *Preventive Medicine, 37*(Supplement 1), S97-S106.

Goldstein, S.E., Young, A., & Boyd, C. (2008). Relational aggression at school: Associations with school safety and social climate. *Journal of Youth & Adolescence, 37*(6), 641-654.

Good, T.L. & Weinstein, R. S. (1986). Schools make a difference: Evidence, criticism and new directions. *American Psychologist*, *41*(10), 1090-1097.

Goodenow, C., & Grady, K.E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education, 62*(1), 60-71.

Gottfredson, G.D., & Gottfredson, D.C. (1989). School climate, academic performance, attendance, and dropout. Charleston County School District SC; Effective Schools Battery; Teacher Surveys.

Gottfredson, G.D., Gottfredson, D.C., Payne, A., & Gottfredson, N.C. (2005). School climate predictors of school disorder: Results from national delinquency prevention in school. *Journal of Research in Crime and Delinquency, 42*(4), 421-444.

Grayson, J. L., & Alvarez, H.K. (2008). School climate factors relating to teacher burnout: A mediator model. *Teaching & Teacher Education, 24*(5), 1349-1363.

Greenberg, M.T., Weissberg, R.P., O'Brien, M.U., Zins, J.E., Fredericks, L., Resnik, H., & Elias, M.J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, 58(6/7), 466-474.

Gregory, A., & Cornell, D. (2009). "Tolerating" adolescent needs: Moving beyond zero tolerance policies in high school. *Theory into Practice*, 48, 106-113.

Gregory, A., Cornell, D., & Fan, X. (2011). The relationship of school structure and support to suspension rates for Black and White high school students. *American Educational Research Journal*, 48 (4), 904-934.

Gregory, A., Cornell, D., Fan, X., Sheras, P., Shih, T., & Huang, F. (2010). Authoritative school discipline: High school practices associated with lower student bullying and victimization. *Journal of*

Educational Psychology, *102*, 483-496.

Gregory, A., Cornell, D., & Fan, X. (2012). Teacher safety and authoritative school climate in high schools. *American Journal of Education*, 118 (4), 401-425.

Gregory, A., Henry, D.B., & Schoeny, M.E. (2007). School climate and implementation of a preventive intervention. *American Journal of Community Psychology, 40*(3), 250-260.

Griffith, J. (1995). An empirical examination of a model of social climate in elementary schools. *Basic and Applied Social Psychology*, *17*(1-2), 97-117.

Guo, P. (2012). School culture: A validation study and exploration of its relationship with teachers' work environment, Dissertation, Fordham University, New York, NY.

Guo, P. & Higgins-D'Alessandro, A. (2011). The place of teachers' views of teaching in promoting positive school culture and student prosocial and academic outcomes. Paper presented at the Association for Moral Education annual conference, October 10, 2011, Nanjing, China.

Haahr, J.H., Nielsen, T.K., Hansen, M.E., & Jakobsen, S.T. (2005). Explaining student performance. Evidence from the international PISA, TIMSS and PIRLS surveys. Danish Technological Institute, Denkmark.

Hamre, B.K., & Pianta, R.C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth-grade. *Child Development, 72*(2), 625-638.

[Digested in *Clinician's Research: Briefings in Behavioral Science, 20*(2), 3.]

Haggerty, K., Elgin, J. & Woodley, A. (2010). *Social emotional learning assessment measures for middle school youth*. Social Development Research Group, University of Washington and the Raikes Foundation.

Heal, K. H. (1978). Misbehavior among school children: the role of the school in strategies for prevention. *Policy and Politics*, *6*, 321-333.

Higgins-D'Alessandro, A. (2002). The necessity of teacher development. In Ann Higgins-D'Alessandro and Kathleen Jankowski (Eds.) *Science for society: Informing policy and practice through research in developmental psychology.* New Directions for Child and Adolescent Development Series, Chicago, IL: Jossey- Bass.

Higgins-D'Alessandro, A. (2011).The structures of a liberal education, *Ethos*, *10* (4), 4-9.

Higgins-D'Alessandro, A. (in press). The Second Side of the Educational Coin: Prosocial Development, (chapter 1). In Brown, P., Corrigan, M., and Higgins-D'Alessandro, A. (Eds.). *The Handbook of Prosocial Education*. Rowman and Littlefield Publishing Group.

Higgins-D'Alessandro, A. & Sakwarawich, A. (2011). Congruency and determinants of teacher and student views of school culture. Paper presented at the Association for Moral Education annual conference, October 10, 2011, Nanjing, China.

Hoge, D.R., Smit, E.K., & Hanson, S.L. (1990). School experiences predicting changes in self-esteem of sixth and seventh-grade students. *Journal of Educational Psychology*, *82*, 117-127.

Horan, J.M., Higgins-D'Alessandro, A., Vozzola, E.C. & Rosen, J. (2010). A qualitative analysis of student alumni reflective adult perceptions of the impact of a just community school (1972-2008). Poster presentation to the 22nd Annual Convention of the Association for Psychological Science (APS), May 27, Boston, MA.

Hoy, W.K., Hannum, J., & Tschannen-Moran, M. (1998). Organizational climate and student achievement: A parsimonious and longitudinal view. *Journal of School Leadership, 8*, 336-359.

Hoy, W.K., & Woolfolk, A.E. (1993). Teachers' sense of efficacy and the organizational health of schools. *The Elementary School Journal*, *93*, 355-372.

Janosz, M., Georges, P., Parent, S. (1998). L'environnement socio-éducatif à l'école secondaire : un modèle théorique pour guider l'évaluation du milieu. *Revue canadienne de psycho-*éducation, *27* (2), 285-306.

Jennings, K. (2009). *Federal Education Priorities and Creating Safe Schools*. U.S. Department of Education, Washington, D.C.

Jia, Y., Way, N., Ling, G., Yoshikawa, H., Chen, X., Hughes, D., Ke, X. and Lu, Z. (2009), The Influence of Student perceptions of school climate on socio-emotional and academic adjustment: A comparison of Chinese and American adolescents. *Child Development*, *80*, 1514–1530.

Johnson, B. & Stevens, J.J. (2006). Student achievement and elementary teachers' perceptions of school climate. *Learning Enviornments Research*, *9*, 111-122.

Karcher, M. J. (2002a) Connectedness and school violence: A framework for developmental interventions. In E. Gerler (Ed.), *Handbook of school violence* (7-40). Binghamton, NY: Haworth.

Karcher, M.J. (2002b). The cycle of violence and disconnection among rural middle school students: Teacher disconnectedness as a consequence of violence. *Journal of School Violence*, *1*(1), 35-51.

Kasen, S.N., Johnson, P.N., & Cohen, P.N. (1990). The impact of social emotional climate on   student psychopathology. *Journal of Abnormal Child Psychology*, *18* (2), 165-177.

Kerr, D., Ireland, E., Lopes, J., Craig, R., & Cleaver, E. (2004). Citizenship education longitudinal study: Second annual report: First longitudinal study. *National Foundation for Educational Research*, 1-154. Retrieved June 12, 2007 from http://www.dfes.gov.uk/research/data/uploadfiles/RR531.pdf.

Kirby, D. (2001). Understanding what works and what doesn't in reducing adolescent risk taking. *Family Planning Perspectives*, *33*(6), 276-281.

Klein, J., & Cornell, D. (2010). Is the link between large high schools and student victimization an illusion? *Journal of Educational Psychology*. *102*(4), 933-946.

Klein, J., Cornell, D., & Konold, T. (in press). Relationships between Bullying School Climate and Student Risk Behaviors. School Psychology Quarterly.

Kosciw, J.G., & Elizabeth M.D. (2006). *The 2005 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools.* New York: GLSEN.

Kosciw, J.G., Diaz, E.M., & Greytak, E.A. (2008). *2007 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools.* New York: GLSEN (available on: www.glsen.org/cgi-bin/iowa/all/research/index.html).

Kreft, L.G.G. (1993). Using multilevel analyses to assess school effectiveness: A study of Dutch secondary schools. *Sociology of Education*, *66*, 104-129.

Kuperminic, G.P., Leadbeater, B.J., & Blatt, S.J. (2001). School social climate and individual differences in vulnerability to psychopathology among middle school students. *Journal of School Psychology, 39*, 141-159.

Kuperminic, G.P., Leadbeater, B.J., Emmons, C., & Blatt, S.J. (1997). Perceived school climate and difficulties in the social adjustment of middle school students. *Applied Developmental Science, 1*, 76-88.

Ladd, G.W., Birch, S.H., & Buhs, E.S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development, 70*(6), 1373–1400.

LaRusso, M., Romer, D., & Selman, R. (2008). Teachers as builders of respectful school climates: Implications for adolescent drug use norms and depressive symptoms in high school. *Journal of Youth & Adolescence, 37*(4), 386-398.

Lee, V.E., & Bryk, A.S. (1989).A multilevel model of the social distribution of high school achievement. *Sociology of Education*, *62*, 172-192.

Lee, T., Cornell, D., Gregory, A., Fan, X (2011). High suspension schools and dropout rates for black and white students. *Education and Treatment of Children*, *34*(2), 167–192.

Lee, V.E., Smith, J.B., Perry, T.E., & Smylie, M.A. (1999). Social support, academic press, and student achievement: A view from the middle grades in Chicago. Chicago Annenberg Research Project Report. Consortium on Chicago School Research.

Lleras, C. (2008). Hostile school climates: Explaining differential risk of student exposure to disruptive learning environments in high school. *Journal of School Violence, 7*(3), 105-135.

Loukas, A., Suzuki, R., & Horton, K.D. (2006). Examining school connectedness as a mediator of school climate effects. *Journal of Research on Adolescence*, *16*(3), 491-502.

Ma, X., & Klinger, D.A. (2000). Hierarchical linear modeling of student and school effects on academic achievement. *Canadian Journal of Education, 25*, 41-55.

Ma, L., Phelps, E., Lerner, J.V., & Lerner, R.M. (2009). The development of academic competence among adolescents who bully and who are bullied. *Journal of applied developmental psychology*, *30*, 628-644.

MacNeil, A.J., Prater, D.L., & Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of Leadership in Education, 12*(1), 73-84.

Madaus, G.F., Airasian, P.W., & Kellaghan, T. (1980). *School effectiveness: A reassessment of the evidence*. New York: McGraw-Hill.

Maslow, A.H. (1943). A theory of human motivation. *Psychological Review, 50*, 370-396.

Mattison, E., & Aber, M.S. (2007). Closing the achievement gap: The association of racial climate with achievement and behavioral outcomes. *American Journal of Community Psychology*, *40*, 1-12.

Mayer, M.J., & Furlong, M.J. (2010). How safe are our schools? *Educational Researcher, 39,* 16-26.

McGuire, J.K., Anderson, C.R., Toomey, R.B. & Russell, S.T. (2010). School climate for Transgender Youth. A mixed method investigation of student experiences and school responses. *Journal of Youth Adolescence*, *39*, 1125-1188.

McNeely, C.A., Nonnemaker, J.M., & Blum, R.W. (2002). Promoting student connectedness to school: Evidence from the national longitudinal study of adolescent health. *Journal of School Health*, *72*, 138-146.

Melton, G.B., Limber, S., Flerx, V., Cunningham, P., Osgood, D.W., Chambers, J., Henggler, S., & Nation, M. (1998). Violence among rural youth. Final report to the Office of Juvenile Justice and Delinquency Prevention. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Meraviglia, M.G., Becker, H., Rosenbluth, B., Sanchez, E., & Robertson, T. (2003). The expect respect project: Creating a positive elementary school climate. *Journal of Interpersonal Violence, 18*(11), 1347-1360.

Meyer-Adams, N., & Conner, B.T. (2008). School violence: Bullying behaviors and the psychosocial school environment in middle schools. *Children & Schools, 30*(4), 211-221.

Miller, D.M., Brownell, M.T., & Smith, S.W. (1999). Factors that predict teachers staying in, leaving, or transferring from the special education classroom. *Exceptional Children, 65*, 201-218.

Mitchell, M.M., Bradshaw, C.P. and Leaf, P.J. (2010), Student and Teacher Perceptions of School Climate: A Multilevel Exploration of Patterns of Discrepancy. *Journal of School Health*, *80*, 271–279.

Morgan, W., & Streb, M. (2001). Building citizenship: How student voice in service-learning develops civic values. *Social Science Quarterly, 82*(1), 155-169.

Najaka, S.S., Gottfredson, D.C., & Wilson, D.B. (2002). A meta-analytic inquiry into the relationship between selected risk factors and problem behavior. *Prevention Science, 2*, 257- 271.

Nansel, T., Overpeck, M., Pilla, R.S., Ruan, W.J., Simmons-Morton, B., & Schmidt, P. (2001). Bullying behaviors among US youth. *Journal of American Medical Association, 285*, 2094-2100.

National School Climate Council. (2007). *The School Climate Challenge: Narrowing the gap between school climate research and school climate policy, practice guidelines and teacher education policy*. Available at: http://www.schoolclimate.org/climate/documents/policy/school-climate-challenge-web.pdf

Nesdale, D. & Lawson, M.J. (2011). Social Groups and Children's Intergroup Attitudes: Can School Norms Moderate the Effects of Social Group Norms? *Child Development*, *82* (5), 1594-1606.

Novotney, A. (2009). Violence against teachers is a little-known but significant problem. An APA task force is working to change that.

American Psychological Association: *Monitor on Psychology*, *40*(9), 68. http://www.apa.org/monitor/2009/10/teacher-victim.aspx.

OECD (2009). *Creating effective teaching and learning environment: First results of Teching and Learning International Survey (TALIS)*. OECD.

Ortega, R., Sanchez, V., Ortega Rivera, J. y Viejo, C. (2011). La violencia sexual en las relaciones interpersonales de adolescentes en M. Lameiras e I., Iglesias. (Eds). *Violencia de Género. La violencia sexual a debate*. (pp. 99-126). Valencia: Tirant Lo Blanch.

Osher, D., Bear, G.B., Sprague, J.R. & Doyle, W. (2010). How can we improve school discipline? *Educational Researcher, 39* (1), 48-58.

Osterman, K.F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, *70*, 323-367.

Ostroff, C., Kinicky, A.J., & Tamkins, M.M. (2003). Organizational climate and culture. In W. C. Borman, D.R. Ilgen, & R.J. Klimoski (Eds.), *Comprehensive handbook of psychology*: *Industrial and organizational psychology (Vol. 12)*. Mahwah, NJ: Erlbaum.

Partnership for 21st Century Skills (2009). *The Intellectual and Policy Foundations of the 21st Century Skills Framework*. (Available on: www.21stcenturyskills.org).

Payton, J., Weissberg, R.P., Durlak, J.A., Dymnicki, A.B., Taylor, R.D., Schellinger, K.B., & Pachan, M. (2008). *The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews*. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning.

Perry, A. (1908). *The management of a city school*. New York: Macmillan.

Pianta, R.C., Steinberg, M., & Rollins, K. (1995). The first two years of school: teacher-child relationships and deflections in children's classroom adjustment. *Development and Psychopathology, 7*, 295-312.

Power, F.C., Higgins, A., & Kohlberg, L. (1989) *Lawrence Kohlberg's Approach to Moral Education,* NY,NY: Columbia University Press.

Purkey, S., & Smith, M. (1983). Effective schools: A review. *The Elementary School Journal*, *83*(4), 427-452.

Rand Corporation (2004). *Focus on the wonder years: Challenges facing the American middle school*. A report prepared for the Edna McConnell Clark Foundation (J. Juvonen, V-N Le, T. Kaganoff, C. Augustine, & L. Constant). Santa Monica, CA: RAND Corporation (Retrieved on January 6, 2005: www.rand.org).

Reid, K. (1982). Retrospection and persistent school absenteeism. *Educational Research*, *25*, 110-115.

Resnick, M.D., Bearman, P.S., Blum, R.W., Bauman, K.E., Harris, K.M., Jones, J., Tabor, J., Beuhring, T., Sieving, R.E., Shew, M., Ireland, M., Bearinger, L.H., & Udry, J.R. (1997). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. *Journal of the American Medical Association*, *278*, 823–832.

Reynolds, D., Jones, D., St. Leger, S., & Murgatroyd, S. (1980). School factors and truancy. In L. Hersove & I. Berg (Eds.), *Out of school: Modern perspectives in truancy and school refusal*. Chichester, England: Wiley.

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

Rumberger, R. (1987). High school dropouts: A review of issues and evidence. *Review of Education Research*, *57*, 1-29.

Rutter, M. (1983). School effects on pupil progress: Research findings and policy implications. *Child Development*, *54*, 1-29.

Rutter, M., Maughan, B., Mortimore, P., & Ouston, J. (1979). *Fifteen thousand hours: Secondary schools and their effects on children*. Cambridge, MA: Harvard University Press.

Ruus, V., Veisson, M., Leino, M., Ots, L., Pallas, L., Sarv, E., & Veisson, A. (2007). Students' well-being, coping, academic success, and school climate. *Social Behavior & Personality: An International Journal, 35*(7), 919-936.

Scales, C., & Roehlkepartain, E.C. (2003). Boosting student achievement: New research on the power of developmental assets. *Search Institute Insights & Evidence, 1*(1), 1-10. (Available on: http://www.search-institute.org/research/assets).

Schneider, S.H., & Duran, L. (2010). School climate in middle schools: A cultural perspective. *Journal of Research in Character Education*, *8*(2), 25-37.

Shaeffer, S. (1999). UN Children' Fund Child Friendly Schools. A UN Children's Fund initiative: www.unicef.org/lifeskills/index_7260.html

Sherblom, S.A., Marshall, J.C., & Sherblom, J.C. (2006).The relationship between school climate and math and reading achievement. *Journal of Research in Character Education*, *4* (1&2), 19-31.

Shipman, C.V. (1981). *Schools can and do make a difference: Finding from the ETS longitudinal study of young children and their first school experience*. Princeton, NJ: Educational Testing Service, Office for Minority Education. (ERIC Document Reproduction Service No ED 243 984).

Shochet, I.M., Dadds, M.R., Ham, D., & Montague, R. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results of a community prediction study. *Journal of Clinical Child & Adolescent Psychology, 35*, 170-179.

Singh, K., & Billingsley, B.S. (1998). Professional support and its effects on teachers' commitment. *The Journal of Educational Research, 91*(4), 229-239.

Skiba, R., Simmons, A.B., Peterson, R., McKelvey, J., Forde, S., & Gallini, S. (2004). Beyond guns, drugs and gangs: The structure of student perceptions of school safety. *Journal of School Violence, 3*(2/3), 149-171.

Skinner, E. & Belmont, M. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, *85*, 571-581.

Skinner, R., & Chapman, C. (1999). *Service-learning and community service in K-12 public schools.* Washington, D.C.: National Center for Education Statistics.

Sommer, B. (1985). What's different about truants? A comparison study of eighth graders. *Journal of Youth and adolescence*, *14*, 411-422.

Sterbinksky, A., Ross, S.M., & Redfield, D. (2006). Effects of comprehensive school reform on student achievement and school change: A longitudinal multi-site study. *School Effectiveness and School Improvement, 17*(3), 367-397.

Stevenson, K.R. (2006). *School size and its relationship to student outcomes and school climate: A review and analysis of eight South Carolina state-wide studies*. National Clearinghouse for Educational Facilities. (Available on*: www.edfacilities.org/pubs/size_outcomes.pdf)*.

Stewart, E.B. (2008). School structural characteristics, student effort, peer associations, and parental involvement: The influence of school- and individual-level factors on academic achievement. *Education & Urban Society, 40*(2), 179-204.

Swearer, S.M., Espelage, D.L., Vallancourt,T., & Hymel, S. (2010). What can be done about school bullying? Linking research to educational practice. *Educational Researcher, 39*(1), 38-47.

Torney-Purta, J. (2002). The school's role in developing civic engagement: A study of adolescents in twenty-eight countries. *Applied Developmental Science*, *6*(4), 203-212.

Torney-Purta, J., Lehmann, R., Oswald, H., & Schulz, W. (2001). *Citizenship and education in twenty-eight countries*. Amsterdam: International Association for the Evaluation of Education Achievement. [Available: http://www.wam.umd.edu/~iea.]

Twemlow, S.W., Fonagy, P., Gies, M.L., Evans, R., Ewbank, R. (2001). Creating a Peaceful School Learning Environment: A Controlled Study of an Elementary School Intervention to Reduce Violence. *The American Journal of Psychiatry*, *158* (5), 808-810.

Uline, C. & Tschannen-Moran, M. (2008). The walls speak: The interplay of quality facilities, school climate, and student achievement. *Journal of Educational Administration*, *46*(1), 55-73.

U.S. Department of Education (2007). Mobilizing for evidence-based character education. Office of Safe and Drug-Free Schools, Washington, DC: Retrieved August 30, 2011, from http://www2.ed.gov/programs/charactered/mobilizing.pdf

U.S. Department of Justice (2004). Toward safe and orderly schools –*The National study of delinquency prevention in schools*. Office of Justice Programs, National Institute of Justice, report # 205005 (www.ojp.usdoj.gove/nij).

Van Acker, R., Grant, S.H., & Henry, D. (1996). Teacher and student behavior as a function of risk for aggression. *Education and Treatment of Children*, *19*, 316-334.

Virtanen, M., Kivimaki, M., Luopa, P., Vahtera, J., Elovainio, M., Jokela, J., and Pietikainen, M. (2009). Staff reports of psychosocial climate at school and adolescents' health, truancy and health education in Finland. *European Journal of Public Health*, *19*(5), 554 - 560.

Voelkl, K.A. (1995). School warmth, student participation, and achievement. *Journal of Experiential Education, 63*, 127–138.

Wang, M.C., Haertel, G.D., & Walberg, H.J. (1993). Toward a knowledge base for school learning. *Review of Educational Research, 63*, 249-294.

Wang, M.T., Selman, R.L., Dishion, T.J. and Stormshak, E.A. (2010). A Tobit Regression analysis of the covariation between middle school students' perceived school climate and behavioral problems. *Journal of Research on Adolescence*, *20*, 274–286.

Way, N., Reddy, R., & Rhodes, J. (2007). Students' perceptions of school climate during the middle school years: Associations with trajectories of psychological and behavioral adjustment. *American Journal of Community Psychology, 40*(3), 194-213.

Wentzel, K. (1997). Student motivation in middle school: The role of perceived pedagogical caring. *Journal of Educational Psychology, 89*(3), 411-419.

Wentzel, K.R., & Watkins, D.E. (2002). Peer relationships and collaborative learning as contexts for academic enablers. *School Psychology Review, 31*(3), 366-367.

Whitlock, J.L. (2006). Youth perceptions of life in school: Contextual correlates of school connectedness in adolescence. *Applied Developmental Science*, *10*(1), 13-29.

Wilson, D. (2004). The interface of school climate and school connectedness and relationships with aggression and victimization. *Journal of School Health, 74*(7), 293-299.

Wolke, D., Woods, S., Bloomfield, L., & Karstadt, L. (2000). The Association between direct and relational bullying and behaviour problems among primary school children. *Journal of Child Psychology and Psychiatry*, *41*(8), 989 -1002.

Wu, S., Pink, W., Crain, R., & Moles, O. (1982). Student suspension: A critical reappraisal. *The Urban Review, 14*(4), 245-303.

Yoneyama, S., & Rigby, K. (2006). Bully/victim students & classroom climate. *Youth Studies Australia, 25*(3), 34-41.

Youniss, J., Bales, S., Christmas-Best, V., Diversi, M., McLaughlin, M., & Silbereisen, R. (2002). Youth civic engagement in the twenty-first century. *Journal of Research on Adolescence, 12*(1), 121-148.

Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2004). The scientific base linking social and emotional learning to school success. In Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 3-22). New York: Teachers College Press.