



## Executive Summary

### I. Description & Definition

Absenteeism and truancy have been associated with poor academic performance, an increased risk of dropping out, and it has deleterious impacts on student's future career prospects and socioeconomic status (Eklund et al., 2020; Maynard et al., 2012). Additionally, research indicates that excessive absences and/or truancy is usually a symptom of the problem as opposed to the problem itself. The underlying reasons for student absences stems from a poor social support system, both inside and outside of the classroom, substance abuse, behavioral problems, transportation issues, and a lack of connectedness and sense of belonging within the school (Daily et al., 2020; Gubbels et al, 2019). Attendance and absenteeism rates are often indicators of the overall health of a school, which impacts students' academic and career outcomes (Kearney et al., 2023).

Especially during the COVID-19 pandemic and afterwards, chronic absenteeism has become a more pressing problem, especially for disadvantaged students (Jordan, 2021). The definition of truancy varies but usually refers to when a student willfully misses school, and the absence is "unexcused", which will be used as the definition in this report (Allison et al., 2023). While absenteeism is more of an individual's behavior and not fully in control of educators, there are policies and interventions that can lead to decreased absenteeism and truancy including interventions to incite behavioral change, better supports for students in school and outside of school, and changes in systems and school culture.

### II. Methodology

The literature included in this report was carefully sourced and vetted for relevance and accuracy. Through carefully defined keyword specifications in trusted databases, we sourced relevant literature surrounding the topics of absenteeism, attendance, and truancy. We narrowed our included studies to those with specific and replicable interventions, peer-reviewed, recent, and written in English.

### III. Summary of Barriers to Algebra I Enrollment, Completion, and Passing

**Behavioral Issues:** Behavioral issues contribute to absenteeism and prevent students from engaging in the classroom whether through suspensions that pull students out of class—or even school—resulting in lost learning time and disengagement from the class and peers or through risky behaviors that prevent them from showing up to school and class.

**Health and Environment of Student and School:** The healthy functioning of a school can vastly impact student attendance and absenteeism. A student's individual health and environment also impacts absenteeism, whether due to lack of school supports or simply requiring more care and rest for medical circumstances.

**School Refusal:** There are many reasons why students may refuse to attend school/class, whether warranted or not. Assessing these reasons can give educators an insight into what the issue is so that effective solutions can be implemented.

#### Guiding Questions

1. What are barriers to school attendance and issues that increase absenteeism?
2. What evidence-based interventions have been effective at reducing absenteeism/truancy and improving attendance for middle and high school students?
3. What are critical elements of absenteeism reduction and attendance improvement interventions?

## IV. Summary of Identified Interventions:

**Communication Nudges:** Communications and “nudges”, or communications meant to incite a particular action or change in behavior, can be utilized to improve student attendance. Whether sent to parents/guardians or students themselves, nudges can provide information and reminders, as well as supports that have the ability to change behaviors and reduce absenteeism.

**Early Alert/Warning Systems:** Early alert systems and early warning indicators are warning/intervention systems that rely on data points, in this case employed to identify and support chronically absent students or cultures of chronic absenteeism in schools. These can be used to direct services to students who need them most and identify supports needed.

**Incentives:** Incentives can be used to increase attendance, particularly if student engagement or truancy is the issue behind absences. Incentive-based interventions include rewards or recognition for improved, perfect, or superb attendance. These systems tend to work best in conjunction with other interventions as there is little evidence of their independent effectiveness.

**Mentoring:** Mentoring can be utilized to increase attendance, whether through volunteers, staff, or community partners. Building a supportive and intensive mentoring program significantly decreases chronic absenteeism, often contributing to other positive outcomes such as sense of belonging and academic achievement to reinforce students’ engagement and motivation in school.

**Restorative Practices:** Restorative practices are an alternative to punitive measures. Utilizing restorative practices is another way of improving attendance for students who are choosing not to attend school, especially around school climate factors of student behavior and discipline and its effects on further absenteeism. It also works to build family-school, student-school, and student-teacher relationships.

**School Climate and Culture Development:** School climate and culture development is critical to creating a safe, supportive, and engaging environment for students, while also building trust among students, families, educators, and the community. School climate can be cultivated to increase student attendance, especially in the long-term by establishing safety and trust.

## V. Critical Elements of Algebra I Enrollment, Completion, and Passing

**Behavior Based:** Interventions should focus on the behavioral characteristics of the student. A change in behavior ultimately results in a decrease in absences.

**Multimodal:** Interventions should be multifaceted involving several truancy reduction programs and methodologies if possible.

**Interorganizational:** Cooperation between educators, schools, students’ households, the community, court systems, and after school park & recreation programs can increase the efficacy of interventions and provide more resources for students.

### Trustworthiness Score:

Using Barends, Rousseau, and Briner’s (2017) framework, the trustworthiness scores are computed from the research articles used in this evidence assessment and are an assessment of the extent to which the intervention examined is both relevant and can impact the outcome. Articles are examined and rated for methodological appropriateness and quality, with characteristics such as relation to research question, effect size, sample size, proof of causation, and moderation/mediation effects taken into consideration during the scoring process. Articles are scored on a scale from 0 – 100 points. The scores presented in the table below are the minimum, maximum, and average score, aggregated across all the research articles that were used in this evidence assessment. Appendix 4 contains details of the trustworthiness scoring rubric used by the consultants.

Descriptives of Trustworthiness Scores Presented in this Report		
Average Trustworthiness Score	Minimum Trustworthiness Score	Maximum Trustworthiness Score
62.97	54.17	80.00

# Evidence Assessment Brief

1

What are barriers to school attendance and issues that increase absenteeism?

## Behavioral Issues

**Population: Public school students (PreK-12th),  
Secondary school children (7th-9th)**

**Trustworthiness:  
54.17**

Behavioral issues contribute to absenteeism and prevent students from engaging in the classroom whether through suspensions that pull students out of class—or even school—resulting in lost learning time and disengagement from the class and peers or through risky behaviors that prevent them from showing up to school and class. Disruptive behavior—whether from developmental differences such as ADHD or from other causes and circumstances—is associated with absences, in part due to school-administered exclusionary discipline practices (Kearney et al., 2023; Augustine et al., 2018a).

One study of students in the juvenile court system found that school attendance was already a problem and then exasperated by attempts at behavioral corrections. Students felt stigmatized by their teachers and peers when probation officers visited them while at school resulting and court hearings were often scheduled during school hours that require youth to miss school (and parents to miss work) in order to attend (Weber & Cohen, 2020). Youth are barred from attending in-person classes before they have been proved guilty of a crime and adjudicated as such by the juvenile court, often in addition to attending an alternative school for “troubled” or “special needs” students for undefined periods of time with unclear criteria for returning to their home schools (Weber & Cohen, 2020). In fact, truancy court often leads to worsened attendance; youth who were disposed to probation attended, on average, 16 fewer school days (approximately 3 school weeks) than youth who were diverted, which is problematic considering these students often need more academic support and other support (Weber & Cohen, 2020). Students with behavioral issues are more likely to have more absences and then are also pulled out of class or school for such issues, as opposed to receiving much of the support and learning time they need.

Some behavioral issues also impact overall absenteeism for the school through impacts on other students. For example, the presence of bullying was found to increase anxiety in other students and impact their absence rates, especially those who were victims of bullying (Schlesier et al., 2023). Bullying, in this case, is defined as “a type of interpersonal behavior identified by negative physical and/or verbal actions that are typically classified by three main attributes: hostile intent, repetition, and power imbalance” or “the systematic abuse of power that is characterized by repeated psychological or physical aggression with the intention to cause distress to another person” (Schlesier et al., 2023). High values on the bullying victim scale are accompanied by significantly higher school displeasure (anxiety) (Schlesier et al., 2023). In this particular study, boys were more impacted (although gender differences tend to be inconsistent across studies) and greater levels of anxiety from bullying were present in younger students/grades (consistent with other studies). Absenteeism increases for both bullies and bullying victims which then impacts overall school climate and can spiral into creating more anxiety and absenteeism.

## Health and Environment of Student and School

**Population:  
Adolescents and students PreK-12**

**Trustworthiness:  
55.83**

The healthy functioning of a school can vastly impact student attendance and absenteeism. A student’s individual health and environment also impacts absenteeism, whether due to lack of school supports or simply requiring more care and rest for medical circumstances. Many students with emotion disorders—including anxiety, obsessive-compulsive disorder, panic attacks, selective mutism, somatic complaints, specific fears, depression, and other mood disorders—have been associated with increased absenteeism (Kearney et al., 2023). Sometimes, this is due to anxiety over school climate or feeling unsafe, as is the case when experiencing bullying (Schlesier et al., 2023). Other times, the anxiety or mood disorder is a chronic health condition; chronic health conditions or special healthcare needs, whether mental or physical, contribute to increased absences and chronic absenteeism (Schlecht et al., 2023).

A literature review by Allison et al. (2019) found that health significantly impacts student attendance. Students on the autism spectrum or otherwise neurodiverse may feel excluded and therefore miss more days of school. Home environments also matter. Students from low-income families are more likely to miss more school, as are students who switch schools (such as foster students) (Allison et al., 2019). Parental illness can often demand that a student stay home from school as well, indicating the interconnectedness and systemic issues of chronic or severe health issues. Stress on the body, mental or physically, can decrease health and increase absences; risk factors that exacerbate stress on the immune system include smoking, substance abuse, and being from low-income households. Identifying as LGBTQ+ in an environment that feels unsafe or feeling unsafe in school can lead to such students displaying truancy, similar to neurodivergence or speaking a primary language other than English which can contribute to feeling “other” (Allison et al., 2019). Any health issue or minority identity that perceives exclusion will often result in a lack of student engagement and decrease in attendance.

Especially since the COVID-19 pandemic, absenteeism due to impaired health has increased. Anxiety has kept students from showing up to school, likely due to a shift in mindset around the necessity of in-person attendance after school shutdowns and virtual learning (Mervosh & Paris, 2024). Long COVID also has impacted the health of some students, increasing rates of chronic illness, and impacting attendance even more as outlined in *Long COVID for Public Schools: Chronic Absenteeism Before and After the Pandemic* (Malkus, 2024).

## School Refusal

**Population: Schoolchildren age 8-11, youth, students PreK-12, middle and high school students and their parents**

**Trustworthiness:  
59.38**

School refusal (SR) is defined as "(a) a youth's reluctance or refusal to attend school, often leading to prolonged absence; (b) the youth is usually at home when not at school, and the parents are usually aware of this; (c) the youth experiences emotional distress about going to school (e.g., somatic complaints, anxiety, depressed mood); (d) there is an absence of severe antisocial behavior, although the youth may show resistive behavior when parents try to get them to school; and (e) parents have tried to secure the youth's attendance at school" (Ingul et al., 2019). There are many reasons why students may refuse to attend school/class, whether warranted or not. Assessing these reasons can give educators an insight into what the issue is so that effective solutions can be implemented. This is likely the most critical aspect of tackling absenteeism, as it can delve into the choice not to attend, as opposed to unavoidable circumstances such as parental factors and health.

Kearney et al. (2023) outline many of the evidence-based reasons for absenteeism as determined by an array of studies including deficits in numeracy and literacy achievement, lack of grade retention, lack of student engagement and interest, lack of social-emotional functioning including executive functioning, self-regulation, and perseverance, social competence, academic self-efficacy, mental health issues, physical health issues, developmental disorders, disabilities, interpersonal relationships with peers and teachers, family dysfunction, unsafe/unhealthy school climate, and unsafe surrounding community. Various factors impact absenteeism which then inform what interventions are needed. Individual schools/districts can assess reasons for school refusal to better understand absenteeism in their locale. A decrease in positive perceptions of school climate at the previous time point predicted more self-reported truancy at the following time point, indicating that school climate impacts school refusal (Virtanen et al., 2022).

The School Refusal Assessment Scale (SRAS) is a survey that identifies four main reasons for excessive absenteeism exhibited by a student: 1. Avoidance of negative effects at school (riding the bus, uncomfortable rooms, tests etc.), 2. Escape from aversive social or evaluative situations (peer/teacher relations), 3. Attention getting behavior (throwing tantrums), 4. Positive tangible reinforcement (skipping school to watch t.v., play with friends) (Kearney & Silverman, 1993). The questionnaire is given to both the pupil and their parents, and scores are then averaged together. The area (1-4 above) with the highest score is said to be the main contributor of truancy for the youth. This survey can additionally shed light on environmental cues within the school that may be contributing to absenteeism across a multitude of students. This intervention is a great starting point for diagnosing the root cause of absenteeism and custom tailoring truancy programs to target absences at their origins. In one study, the SRAS administered indicated correlations between the four conditions of school refusal behavior and the school related sources (Teacher Interactions, Academic Stress, Peer Interactions, and Academic Self-Concept) and manifestations of stress (Emotional, Behavioral, and Physiological) which were statistically significant (González et al., 2021). Teachers and peers' interactions and the emotional manifestation of school stress were especially correlated within the population of students most vulnerable to school refusal, those in the Mixed School Refusal Behavior Profile (González et al., 2021).

### Communication Nudges

**Population:**  
Students in grades K-12

**Trustworthiness:**  
80.00

Communications and “nudges”, or communications meant to incite a particular action or change in behavior, can be utilized to improve student attendance. Whether sent to parents/guardians or students themselves, nudges can provide information and reminders, as well as supports that have the ability to change behaviors and reduce absenteeism.

One communication effort includes sending mail to parents/guardians with reminders of attendance policies. Rogers and Feller and Rogers et al. conducted studies where schools sent postcards to parents informing them of attendance policies, encouraging them to improve their child’s attendance, and/or information about their child’s attendance record compared to the average attendance record. Decreased absences by 2.4% (2017), 5.3% (2016), and 10% (2018) compared to control group. There were no differences in impact between elementary/middle school and high school, nor did including the specific student attendance records have impact compared to the postcard with only the attendance policies and encouragement to improve attendance. Sending communications to parents, in this case as a postcard through the mail, shows significant impact on reducing student absences. The intervention not only reduced student absences comparably across grade levels, but also reduced absences among untreated cohabiting students in treated households, in part due to challenging parents’ bias in believing their student was attending more than they were (Rogers & Feller, 2018). Other communications/nudges have also been found to be effective, including digital nudges in today’s digital age.

Digital nudges, typically through automatic texts or emails, can improve student absenteeism with a variety of options ranging from low cost to high cost and low effort to high effort, integrating various supports into the system. One study by Heppen et al. examined the impacts of various text messaging on student absenteeism, including differences between students overall and students with a prior history of high absences. Families were assigned to benefits-framed basic messaging, consequences-framed basic messaging, or a no-messaging group. All received some form of text message about attendance in fall, while chronic absence students received additional messages in spring. All four combinations of basic and intensified messages reduced chronic absence by 12.0%-18.0% compared to the control (no treatment) group whereas students with a history of high absences reduced chronic absence by 7.0%-15.0% (Heppen et al., 2020). There were no differences among the four versions of adaptive text messaging. Another study found that alerting parents of absences—alongside grades and missed assignments in courses—by text resulted in a 12.0% increase in attendance and 27.0% decrease in course failure, with larger effects for below-median GPA students and high school students (Bergman & Chan, 2021). In this study, an absence alert was sent weekly detailing the number of classes a child missed for each course in the previous week and was particularly significant for high school students and below-median GPA students.

Interventions such as this that involve parents can pair well with more intensive interventions. Utilizing any sort of texting system is helpful and can be implemented at a low cost. Nudges to parents likely work the best for involved parents, which are more likely to be parents of younger students, yet these studies did not show significant difference between differing grade levels.

### Early Alert/Warning Systems

**Population:** High school students in 9th through 12th grade, middle school students in 6th through 8th grade

**Trustworthiness:**  
60.42

Early alert systems and early warning indicators are warning/intervention systems that rely on data points, in this case employed to identify and support chronically absent students or cultures of chronic absenteeism in schools. About half of schools in the US had early alert systems in place during the 2014-2015 school year, with larger schools more likely to have them in place (U.S. Department of Education, 2016a). Most early warning systems use the “ABCs” as measures: attendance, behavior, and course performance, though some schools and districts collect information beyond these including outside-of-school indicators such as homelessness or involvement with the

juvenile justice system, especially in high-poverty and low-graduation-rate schools where this may be more prevalent (U.S. Department of Education, 2016a). Most often, technology is implemented to flag at-risk students. Soland et al. (2020) discuss implications of using machine learning to identify effective flags alerts that identify students. If students who are not identified as at risk are becoming chronically absent or dropping out, the warning indicators may need tweaking.

One type of early alert system is a preemptive screening, similar to health screenings, used as predictive models. For example, a study examined seven factors of risk—as determined from Patterson’s developmental cascades model—as predictors of student attendance and behavior (Thompson et al., 2020). The risk categories were Externalizing Behavior, Internalizing Behavior, Peer Relationship Problems, School Disengagement, Emotional Dysregulation, Attention and Academic Issues, and Relational Aggression and assessed using the Early Identification System - Student Response (EIS-SR). EIS-SR subscale scores were found to predict spring office disciplinary referrals, in-school suspensions, out-of-school suspensions, and attendance (Thompson et al., 2020). While this is a more manual and preemptive intervention, having students fill out this form at the beginning of a year/semester could help identify students who need specific supports and better prepare for attendance issues. This can be used to prioritize needs and plan for universal prevention and/or targeted intervention strategies.

Another early warning intervention (EWI) includes dedicating a person and/or team to monitor early warning indicators and provide timely interventions. This was the case in one study where a half-time staff was assigned to implement the Early Warning Intervention (EWI) Team model (Mac Iver et al., 2019). An EWI Team composed of teachers, counselors, student support services personnel and others in each school meets bi-weekly to set common academic and behavioral expectations and policies supportive of high school graduation. An on-site graduation facilitator that serves as the mediator between the school/district leadership and the EWI team, providing regularly updated EWI data (from routinely collected student data on attendance, behavior, course grades) on each student to the EWI team, discussing students with warning indicators, planning interventions, and following up on implemented interventions. Coaching and professional development was provided to the on-site graduation facilitators and EWI Team. Results indicated that students in treatment schools were significantly less likely than control school students to be chronically absent (Mac Iver et al., 2019). Similarly, a study utilized teachers to identify students with absences to connect them with an incentives program and also follow up with home factors (Young et al., 2020).

An early warning system (EWS) is most effective when paired with interventions to do something about the flagged issue. Consider one study that developed an EWS that utilized five relational factors: I. Student-School, II. Student-School Professionals, III. Student-Family, IV. Student-Community, and V. Student-Student. Understanding additional layers to the situation allow for more targeted supports to prevent absences (de Vasconcelos et al., 2023). Utilizing this intervention requires planning and tact. This can be expensive to implement and requires good security on student data, although in the case of absences this is already being tracked and protected (Sparks, 2024).

## Incentives

**Population:**  
Students in 6th-8th grades, K-12

**Trustworthiness:**  
63.89

Incentives can be used to increase absenteeism, particularly if student engagement or truancy is the issue behind absences. Incentive-based interventions include monetary rewards for perfect or superb attendance including actual money, gift cards, or mock monies to be spent at a school gift shop. Incentives also include praise from teachers, homework passes, certificates, recognition during school announcements, pizza parties, etc. These systems tend to work best in conjunction with other interventions thus, there is little evidence of their independent effectiveness.

In one study, an incentive program, Perfect Attendance Wins Stuff (PAWS), was a multimodal intervention whereby students could win prizes each week for perfect attendance, attend parties each week/month for perfect attendance, and purchase items from the PAWS store using monies earned thru the program (Young et al., 2020). Students with low attendance were invited to participate. If students missed class, a group of teachers would intervene/check in.

If this first stage of intervention failed to improve attendance an individualized approach was implemented whereby the students' parents were called, home check ins occurred, parent-teacher meetings, and recommending community services if necessary. PAWS participant attendance increased from baseline by an average of 12.2 percent (p after one month in the program and continued steady at month 2 (Young et al., 2020). One consideration is the fact that students with already good attendance could not participate, so may lapse in attendance just to be able to participate if they see the rewards other students are receiving, though it is more cost-effective to target services.

A task force initiative to reduce chronic absenteeism in NYC utilized incentives in schools as part of the overall program. Schools were encouraged to hold award ceremonies or other public recognitions of good or improved attendance, staff were given postcards signed by the mayor to send home celebrating small successes, and schools received free tickets and perks from local sports teams (NY Yankees), Starbucks, and Macy's to use as incentives, either through earning or raffles (Balfanz & Byrnes, 2013). The overall task force significantly decreased chronic absenteeism in all three cohorts compared to control group schools and while the incentives aspect was not analyzed statistically, survey results indicated that principals and mentors believed these incentives did in fact impact student behavior and contribute to increased attendance (Balfanz & Byrnes, 2013).

Another example of incentivization to increase attendance was the case of using coupons to inspire college students to attend optional study groups. In Potacco et al. (2013), students who attended the study group received a coupon that could be turned into the professor for extra credit points on the exam; generally, they had to attend three study groups for one coupon. The points were minimal, especially compared to the likely increase in scores based just on additional studying, yet encouraged students to show up when they otherwise might not. Students who failed the first exam of the semester were more likely to participate in study groups before the second and third exams; those who did increased their scores. That in and of itself is motivating, but the extra incentive was found to be helpful also, indicating an appropriate level of reward which is critical to the success of incentive programs (Potacco et al., 2013). When applying this to school/class attendance, there could be a variety of rewards available and for certain measures; a coupon for a homework pass, prize from a box, or class pizza party could be earned by individual or group attendance streaks, almost like a game.

## Mentoring

**Population:**  
**Students in grades 1-8, 6-10**

**Trustworthiness:**  
**70.83**

Mentoring is an intervention that has many positive outcomes, including increasing attendance. A mentor is "someone with whom you may establish a long-term connection focused on the mentee's growth and development" which in education involves a mentor providing a supportive and advisory role to a student. This pursues academic achievement/goals, to include career goals, with a focus on assisting with academic, emotional, personal, and professional issues (Team Leverage Edu, 2021).

In one study, a school-based mentoring program was implemented and evaluated for impacts based on participation during middle school only (grades 8-9), students who participated in high school only (grades 10-12), and students who participated in mentoring during both middle and high school (grades 8-12) (May et al., 2021). The mentoring program served economically disadvantaged students and were invited to participate based on scoring below grade level in reading and math during the previous year. Four linkage coordinator mentors who were current school volunteers were hired following a meeting with the district Director of Academic Initiatives. Mentors received a half-day of instruction with central office personnel, met with students 2-5 days per week, and had the primary responsibility was to "provide students with behavioral and emotional support" through individual and small-group tutoring. Mentor activities were up to mentors but often dealt with academic and behavioral skill improvement. Students enrolled in the mentoring program in both middle school and high school showed a statistically significant lower median number of absences than students enrolled in the program during middle school only with GPA increasing with attendance (May et al., 2021).

Another mentoring program, Check and Connect, targets students at risk of disengagement or dropping out of school and assigns them to an in-school staff mentor who develop a relationship with the student and serve as a case manager to monitor students' attendance and academic performance and connect students to resources.

Personalized interventions are provided to students. In a study of this program implemented in Chicago, students in grades 1-4 did not see any reduction in absences but students in grades 5-7, there was a reduction in absences by about 50% in both cohort groups (Guryan et al., 2020).

Mentoring was also found to be a particularly successful intervention in NYC. Success Mentors were the most effective component of the mayor's task force effort across all school types with previously chronically absent students (Balfanz & Byrnes, 2013). Success Mentors were assigned to 10-15 students who were chronically absent the prior year or in danger of becoming so to meet with individually three times per week. These mentors come into schools at a leadership level, have direct access to school resources and community-based organizations, have access to student data, and are part of a centralized infrastructure that supports their work in real time. Support provided includes greeting students in the morning, calling home every day a child is absent, and connecting students and families to services that help them overcome barriers to success. Students with mentors gained almost two weeks (9 days) of increased attendance per student per year, with this increasing to over a month of additional attendance in the 25% of schools with the greatest impacts (Balfanz & Byrnes, 2013).

## Restorative Practices

**Population:**  
**Public school students (K-12) and their teachers**

**Trustworthiness:**  
**63.88**

Utilizing restorative practices is another way of improving attendance for students who are choosing not to attend school, especially around school climate factors of student behavior and discipline and its effects on further absenteeism. It also works to build family-school, student-school, and student-teacher relationships. "The approach focuses on fostering a sense of community within classrooms to prevent conflict and on reacting to misconduct by encouraging students to accept responsibility and rebuild relationships" (Jordan, 2023).

It has been well documented that exclusionary punishments, such as suspensions, have negative impacts (Holt et al., 2022). There is evidence that punitive disciplinary measures, or punishment, do not aid in productive classroom management and that such measures negatively impact student academic outcomes including attendance and achievement. In a longitudinal study, Holt et al. (2022) finds that these measures, as opposed to restorative practices, harm students. There was found to be a great deal of bias present which influenced teachers' referrals and unevenly impact varying groups of students; teachers were more likely to refer Black students and male students for punishment and of the students referred, Black students' academic outcomes (attendance and achievement) were negatively affected whereas white students' outcomes were not (Holt et al., 2022). The effects of racial bias were more prevalent among below-average achievers than above-average achievers, regardless of referral (Holt et al., 2022). While the authors noted the need for referrals for some behavior (such as endangerment in the classroom), other behaviors (such as tardiness or talking over the teacher) are more subjective. About half of referrals in this study were for subjective (non-mandatory) referral, indicating room to grow and implement more restorative practices within the classroom. The "average probation officer does not have—nor is it reasonable to expect them to have—the expertise or experience to accurately identify the complex set of individualized reasons that particular youth do not attend school, assess their specialized learning needs, and connect them (and their families) with appropriate services and supports" (Weber & Cohen, 2020).

Teachers' punitiveness was measured, and it was found that a one-unit increase in teacher punitiveness represents one additional reported disciplinary referral for the average student, conditional on prior behavior; these teachers had less productive classrooms and data indicates a negative correlation with family engagement with the school (Holt et al., 2022). Since attendance in earlier grades often relies on parents, "the attendance effects of teachers bias or harshness in referral usage may operate through parents' opportunities to observe this signal" (Holt et al., 2022). This not only impacts the referred students, but other students through classroom environment and the teacher-student relationship. Students taught by a more punitive teacher have more absences and lower achievement in both math and reading in general, regardless of having been referred or not and even after accounting for teacher effectiveness (Holt et al., 2022). There is also room to improve restorative practices after having been referred to the principal, as some offenses may require more correction or different types of correction than others. For example, tardiness does not necessarily need to result in a suspension.



Restorative practices to implement include initiatives that help build a trusting relationship and provide support to those who act out or exhibit behaviors in need of correction. In one study, a school system implemented IIRP's Safer-SanerSchools™ Whole-School Change program grounded in 11 elements that all staff had to learn to enact in an initiative, "Pursuing Equitable and Restorative Communities" (PERC) (Augustine et al., 2018a). School staff received training, support, professional development, books, and materials. Principals established restorative leadership teams and received support and check-ins from coaches from the Institute for Restorative Practices. The rationale is that "by using restorative practices, students and staff were to learn more about how their actions affect others... in turn, should help students recognize why a particular behavior is inappropriate or hurtful, and why they are being held accountable for their behavior" with an emphasis on developing empathy as they learned about how their behaviors affect those around them and improving relationships (especially as students in these schools had low trust levels with adults and did not want to attend school). PERC was found to decrease suspensions and also decrease elementary student absences partially due to lower suspensions but also related to other attendance factors, with better student-staff relationships also present, in line with results from previous studies (Augustine et al., 2018a). Weber and Cohen (2020) found, similarly, that students diverted before probationary supervision attended more days of school and reducing repeat offenses. There are positive outcomes of restorative practices in schools related to student discipline, school climate, and attendance.

## School Climate and Culture Development

**Population:**  
Students in grades 6-12

**Trustworthiness:**  
58.33

School climate and culture development is critical to creating a safe, supportive, and engaging environment for students, while also building trust among students, families, educators, and the community. School climate can be cultivated to increase student attendance, especially in the long-term by establishing safety and trust. A variety of factors and interventions play into school climate, so an assessment is usually helpful to understand where to improve and focus resources.

In a study, the relationship between four measures of perceived school climate (school safety, relational environment, personal connectedness, and academic engagement) and total absence and chronic absences was investigated (Hamlin, 2020). Results indicated small associations among the four measures of perceived school climate and student attendance. Results included small negative associations between absences and individual student perceptions of school safety; students' perception of the relational environment and their personal connectedness correlate with absences. School-level changes in perceived school climate between middle and high school were only marginally associated with student attendance, with increases in academic, relational, and personal factors not having an impact on reducing absences (Hamlin, 2020).

This indicates that initial perceptions of school climate are established when students are younger and carried forward in their experience for the most part, unless they enter a high school with lower safety and a poorer relational environment than their middle school, in which case attendance decreases and chronic absenteeism increases (Hamlin, 2020). Another study found more significant associations between school climate and self-reported truancy, indicating that students miss school more, often out of their own choice, when school climate is negative (Virtanen et al., 2022). "Improving the supportiveness of school climate can reduce the risk of a student's subsequent truant behavior, and effectively addressing truancy may help a student view school climate as positive and supportive while pursuing their studies" (Virtanen et al., 2022).

One study of changing school climate included implementing a restorative practices framework. A public school system utilized the 11 Elements of the Safer-SanerSchools™ Whole-School Change Program: affective statements, restorative questions, small impromptu conferences, proactive circles, responsive circles, restorative conferences, fair process, reintegrative management of shame, restorative staff community, restorative approach with families, and fundamental hypothesis understandings (Augustine et al., 2018a; Augustine et al., 2018b). School staff received training, support, professional development, books, and materials. Principals established restorative leadership teams and received support and check-ins from coaches from the Institute for Restorative Practices. The idea was to utilize practices that create empathy between students and staff during behavioral correction. This was done to "improve relationships and the classroom and school climate [which] should lessen misbehavior toward [peers and teachers]. Less misbehavior would mean fewer suspensions and absences and a safer school environment.

Fewer suspensions and absences should increase instructional time for all students, which might lead to improved academic outcomes and attainment” such as attendance (Augustine et al., 2018a). The program reduced suspensions, reduced other types of absences, and increased school climate and culture, strengthening student-school, and family-school relationships, as well as contributed to banning suspensions for nonviolent offenses in younger grades (Augustine et al., 2018a). Staff did not report seeing an impact of restorative practices on the school climate but did see an improvement in many related factors. Student outcome data indicates that there may have been an increase in school climate perception by students and their families.

**3** What are critical elements of absenteeism reduction and attendance improvement interventions?

### Behavior-Based

Interventions should focus on the behavioral characteristics of the student. A change in behavior ultimately results in a decrease in absences. Providing support where it is most needed is most likely to influence behavioral changes and hopefully mitigate confounding variables such as family/parent behaviors.

Critical Element	Number of Interventions Using Critical Element	Interventions with Critical Element
Behavior-Based	5	<ul style="list-style-type: none"> <li>• Communication Nudges</li> <li>• Early Alert/Warning Systems</li> <li>• Incentives</li> <li>• Mentoring</li> <li>• Restorative Practices</li> </ul>

### Multimodal

Interventions should be multifaceted involving several truancy reduction programs and methodologies if possible. Selecting several interventions that work in tandem, targeting various aspects of absenteeism will provide students with the most breadth of support. Selecting even one intervention that diversifies current efforts will aid in underrepresented absenteeism and truancy issues, increasing overall efforts and successful outcomes.

Critical Element	Number of Interventions Using Critical Element	Interventions with Critical Element
Multimodal	5	<ul style="list-style-type: none"> <li>• School Climate and Culture Development</li> <li>• Communication Nudges</li> <li>• Early Alert/Warning Systems</li> <li>• Restorative Practices</li> <li>• School Climate and Culture Development</li> </ul>

## Interorganizational

Cooperation between educators, schools, students' households, the community, court systems, and after school park & recreation programs can increase the efficacy of interventions and provide more resources for students. When considering and designing interventions, it is critical to consider crosswalks of support and resources available in the community so efforts can be utilized effectively effort- and cost-wise. This contributes to the breadth of absenteeism interventions, optimistically touching on many of the various impacts on attendance.

Critical Element	Number of Interventions Using Critical Element	Interventions with Critical Element
Interorganizational	4	<ul style="list-style-type: none"> <li>• Incentives</li> <li>• Mentoring</li> <li>• Restorative Practices</li> <li>• School Climate and Culture Development</li> </ul>

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## Behavioral Issues

**Population: Public school students (PreK-12th), Secondary school children (7th-9th)**

**Trustworthiness: 54.17**

Behavioral issues contribute to absenteeism and prevent students from engaging in the classroom whether through suspensions that pull students out of class—or even school—resulting in lost learning time and disengagement from the class and peers or through risky behaviors that prevent them from showing up to school and class. Disruptive behavior—whether from developmental differences such as ADHD or from other causes and circumstances—is associated with absences, in part due to school-administered exclusionary discipline practices (Kearney et al., 2023; Augustine et al., 2018a).

One study of students in the juvenile court system found that school attendance was already a problem and then exasperated by attempts at behavioral corrections. Students felt stigmatized by their teachers and peers when probation officers visited them while at school resulting and court hearings were often scheduled during school hours that require youth to miss school (and parents to miss work) in order to attend (Weber & Cohen, 2020). Youth are barred from attending in-person classes before they have been proved guilty of a crime and adjudicated as such by the juvenile court, often in addition to attending an alternative school for “troubled” or “special needs” students for undefined periods of time with unclear criteria for returning to their home schools (Weber & Cohen, 2020). In fact, truancy court often leads to worsened attendance; youth who were disposed to probation attended, on average, 16 fewer school days (approximately 3 school weeks) than youth who were diverted, which is problematic considering these students often need more academic support and other support (Weber & Cohen, 2020). Students with behavioral issues are more likely to have more absences and then are also pulled out of class or school for such issues, as opposed to receiving much of the support and learning time they need.

Some behavioral issues also impact overall absenteeism for the school through impacts on other students. For example, the presence of bullying was found to increase anxiety in other students and impact their absence rates, especially those who were victims of bullying (Schlesier et al., 2023). Bullying, in this case, is defined as “a type of interpersonal behavior identified by negative physical and/or verbal actions that are typically classified by three main attributes: hostile intent, repetition, and power imbalance” or “the systematic abuse of power that is characterized by repeated psychological or physical aggression with the intention to cause distress to another person” (Schlesier et al., 2023). High values on the bullying victim scale are accompanied by significantly higher school displeasure (anxiety) (Schlesier et al., 2023). In this particular study, boys were more impacted (although gender differences tend to be inconsistent across studies) and greater levels of anxiety from bullying were present in younger students/grades (consistent with other studies). Absenteeism increases for both bullies and bullying victims which then impacts overall school climate and can spiral into creating more anxiety and absenteeism.

PICOC	Kearney et al.	Schlesier et al.	Weber & Cohen
<b>Population (Who?)</b>	Students grades PreK-12	Secondary school children in 7th-9th grades (N=195)	All youth enrolled in public schools in South Carolina (PreK-12)
<b>Intervention (What/How?)</b>	Review of associations between absenteeism and functioning at analytic/systemic levels	Self-report questionnaires	Supervision on attendance for youth who became involved with the juvenile justice system
<b>Comparison (Compared to What?)</b>	Cross-sectional studies	Structural equation modelling (SEM) approach utilizing questionnaire results and school records	A series of difference-in-difference (DiD) models between treatment and control groups: probation vs. diversion, truancy order vs. non truancy order, White vs. non-White, and older vs. younger youth
<b>Outcome (What is the Purpose?)</b>	Determine causes of absenteeism and propose solutions for increased attendance	Determine interconnectedness of bullying, anxiety, and absenteeism	Determine impact of supervision of attendance for youth who became involved with the juvenile justice system.
<b>Context (Where/When?)</b>	Global, 1998-2023	Northern Germany	South Carolina public schools, 2016-2017

### Critical Analysis & Implications

- Punishment for behavioral issues often begets more absences and less support for students, building on top of already truant behavior
- Behavioral issues often impact other students and school climate, as is the case with bullying, showing the need for whole-school solutions.
- *For alternatives to suspensions and ways to implement restorative practices, see Can Restorative Practices Improve School Climate and Curb Suspensions?*<sup>1</sup> (Augustine et al., 2018a) which is also discussed later in this report.

<sup>1</sup>Augustine, C.H., Engberg, J., Grimm, G.E., Lee, E., Wang, E.L., Christianson, K., and Joseph, A.A. (2018). *Can Restorative Practices Improve School Climate and Curb Suspensions? An Evaluation of the Impact of Restorative Practices in a Mid-Sized Urban School District*. Santa Monica, CA: RAND Corporation. [https://www.rand.org/pubs/research\\_reports/RR2840.html](https://www.rand.org/pubs/research_reports/RR2840.html).

## Health and Environment of Student and School

**Population:**  
**Adolescents and students PreK-12**

**Trustworthiness:**  
**55.83**

The healthy functioning of a school can vastly impact student attendance and absenteeism. A student's individual health and environment also impacts absenteeism, whether due to lack of school supports or simply requiring more care and rest for medical circumstances. Many students with emotion disorders—including anxiety, obsessive-compulsive disorder, panic attacks, selective mutism, somatic complaints, specific fears, depression, and other mood disorders—have been associated with increased absenteeism (Kearney et al., 2023). Sometimes, this is due to anxiety over school climate or feeling unsafe, as is the case when experiencing bullying (Schlesier et al., 2023). Other times, the anxiety or mood disorder is a chronic health condition; chronic health conditions or special healthcare needs, whether mental or physical, contribute to increased absences and chronic absenteeism (Schlecht et al., 2023).

A literature review by Allison et al. (2019) found that health significantly impacts student attendance. Students on the autism spectrum or otherwise neurodiverse may feel excluded and therefore miss more days of school. Home environments also matter. Students from low-income families are more likely to miss more school, as are students who switch schools (such as foster students) (Allison et al., 2019). Parental illness can often demand that a student stay home from school as well, indicating the interconnectedness and systemic issues of chronic or severe health issues. Stress on the body, mental or physically, can decrease health and increase absences; risk factors that exacerbate stress on the immune system include smoking, substance abuse, and being from low-income households. Identifying as LGBTQ+ in an environment that feels unsafe or feeling unsafe in school can lead to such students displaying truancy, similar to neurodivergence or speaking a primary language other than English which can contribute to feeling “other” (Allison et al., 2019). Any health issue or minority identity that perceives exclusion will often result in a lack of student engagement and decrease in attendance.

Especially since the COVID-19 pandemic, absenteeism due to impaired health has increased. Anxiety has kept students from showing up to school, likely due to a shift in mindset around the necessity of in-person attendance after school shutdowns and virtual learning (Mervosh & Paris, 2024). Long COVID also has impacted the health of some students, increasing rates of chronic illness, and impacting attendance even more as outlined in *Long COVID for Public Schools: Chronic Absenteeism Before and After the Pandemic* (Malkus, 2024).

PICOC	Allison et al.	Kearney et al.	Schlecht et al.	Schlesier et al.	Virtanen et al.
<b>Population (Who?)</b>	Adolescents	Students grades PreK-12	Children who were eventually enrolled in an elementary school in 2015 (children with mental disabilities or a recommendation for a special needs school were excluded) (n=1,921)	Secondary school children in 7th-9th grades (N=195)	Students grade 6-9 (n=1,066)
<b>Intervention (What/How?)</b>	N/A; Literature Review	Review of associations between absenteeism and functioning at analytic/systemic levels	N/A	Self-report questionnaires	Survey on school climate and self-reported truancy
<b>Comparison (Compared to What?)</b>	Multiple studies	Cross-sectional studies	Negative binomial regression models and causal framework	Structural equation modelling (SEM) approach utilizing questionnaire results and school records	Random intercept cross-lagged panel model
<b>Outcome (What is the Purpose?)</b>	Determine root causes of absenteeism across a variety of studies	Determine causes of absenteeism and propose solutions for increased attendance	Determine impact of special health care needs on absenteeism	Determine interconnectedness of bullying, anxiety, and absenteeism	Determine relationships between changes in perceived supportive school climate and changes in self-reported truancy from the last year of primary school (Grade 6) to the last year of lower secondary school (Grade 9)
<b>Context (Where/When?)</b>	United States	Global, 1998-2023	Germany	Northern Germany	Finland, 2 semi-rural areas with smaller schools (n=30)

### Critical Analysis & Implications

- Absenteeism has been an increased issue since the COVID-19 pandemic, in part due to lasting health impacts whether from long COVID or mental health issues.
- Systemic issues contribute to poor health or disparities in school safety and engagement.
- Improving the health of the school and supports it can offer students through school climate and attentiveness to unique needs of students, chronic absenteeism can be reduced or mitigated.

## School Refusal

**Population: Schoolchildren age 8-11, youth, students PreK-12, middle and high school students and their parents**

**Trustworthiness:  
59.38**

School refusal (SR) is defined as "(a) a youth's reluctance or refusal to attend school, often leading to prolonged absence; (b) the youth is usually at home when not at school, and the parents are usually aware of this; (c) the youth experiences emotional distress about going to school (e.g., somatic complaints, anxiety, depressed mood); (d) there is an absence of severe antisocial behavior, although the youth may show resistive behavior when parents try to get them to school; and (e) parents have tried to secure the youth's attendance at school" (Ingul et al., 2019). There are many reasons why students may refuse to attend school/class, whether warranted or not. Assessing these reasons can give educators an insight into what the issue is so that effective solutions can be implemented. This is likely the most critical aspect of tackling absenteeism, as it can delve into the choice not to attend, as opposed to unavoidable circumstances such as parental factors and health.

Kearney et al. (2023) outline many of the evidence-based reasons for absenteeism as determined by an array of studies including deficits in numeracy and literacy achievement, lack of grade retention, lack of student engagement and interest, lack of social-emotional functioning including executive functioning, self-regulation, and perseverance, social competence, academic self-efficacy, mental health issues, physical health issues, developmental disorders, disabilities, interpersonal relationships with peers and teachers, family dysfunction, unsafe/unhealthy school climate, and unsafe surrounding community. Various factors impact absenteeism which then inform what interventions are needed. Individual schools/districts can assess reasons for school refusal to better understand absenteeism in their locale. A decrease in positive perceptions of school climate at the previous time point predicted more self-reported truancy at the following time point, indicating that school climate impacts school refusal (Virtanen et al., 2022).

The School Refusal Assessment Scale (SRAS) is a survey that identifies four main reasons for excessive absenteeism exhibited by a student: 1. Avoidance of negative effects at school (riding the bus, uncomfortable rooms, tests etc.), 2. Escape from aversive social or evaluative situations (peer/teacher relations), 3. Attention getting behavior (throwing tantrums), 4. Positive tangible reinforcement (skipping school to watch t.v., play with friends) (Kearney & Silverman, 1993). The questionnaire is given to both the pupil and their parents, and scores are then averaged together. The area (1-4 above) with the highest score is said to be the main contributor of truancy for the youth. This survey can additionally shed light on environmental cues within the school that may be contributing to absenteeism across a multitude of students. This intervention is a great starting point for diagnosing the root cause of absenteeism and custom tailoring truancy programs to target absences at their origins. In one study, the SRAS administered indicated correlations between the four conditions of school refusal behavior and the school related sources (Teacher Interactions, Academic Stress, Peer Interactions, and Academic Self-Concept) and manifestations of stress (Emotional, Behavioral, and Physiological) which were statistically significant (González et al., 2021). Teachers and peers' interactions and the emotional manifestation of school stress were especially correlated within the population of students most vulnerable to school refusal, those in the Mixed School Refusal Behavior Profile (González et al., 2021).



PICOC	González et al.	Ingul et al.	Kearney et al.	Kearney & Silverman
<b>Population (Who?)</b>	Schoolchildren age 8-11 (n=755)	Youth	Students grades PreK-12	Middle and high school students and their parents (n=42)
<b>Intervention (What/How?)</b>	School Refusal Assessment Scale-Revised (SRAS-R) and the School Situation Survey (SSS)	Literature review of community-based studies of youth who show early signs of SR	Review of associations between absenteeism and functioning at analytic/systemic levels	School Refusal Assessment Scale (SRAS)
<b>Comparison (Compared to What?)</b>	Between-group differences	Cross-sectional studies	Cross-sectional studies	Validation performed on kids w/ average age of 10-11
<b>Outcome (What is the Purpose?)</b>	Identify school refusers groups of children through latent profile analysis and to test their associations with school-related sources and manifestation of stress	Determine likely signs and risks for emerging SR	Determine causes of absenteeism and propose solutions for increased attendance	Identify main reasons for truancy and subsequently, reduce absences
<b>Context (Where/When?)</b>	Schools in urban areas in Spain (n=11)	Global, 1969-2019	Global, 1998-2023	Albany, New York and Jackson, Mississippi

### Critical Analysis & Implications

- School refusal (SR), or a youth's choice not to attend school often validated by parents, is a unique type of absence that requires targeted interventions
- Utilize the SRAS to identify the most common reasons of absenteeism amongst those students who are chronically truant. Also identify the most common reasons amongst students without an attendance problem to compare. Then, customize interventions to unique circumstances of schools/students.
- Targeted intervention for those identified as at-risk or showing emerging SR can ward off the more serious and sometimes treatment-resistant problem of established SR (Ingul et al., 2019).

## Communication Nudges

**Population:**  
Students in grades K-12

**Trustworthiness:**  
80.00

Communications and “nudges”, or communications meant to incite a particular action or change in behavior, can be utilized to improve student attendance. Whether sent to parents/guardians or students themselves, nudges can provide information and reminders, as well as supports that have the ability to change behaviors and reduce absenteeism.

One communication effort includes sending mail to parents/guardians with reminders of attendance policies. Rogers and Feller and Rogers et al. conducted studies where schools sent postcards to parents informing them of attendance policies, encouraging them to improve their child’s attendance, and/or information about their child’s attendance record compared to the average attendance record. Decreased absences by 2.4% (2017), 5.3% (2016), and 10% (2018) compared to control group. There were no differences in impact between elementary/middle school and high school, nor did including the specific student attendance records have impact compared to the postcard with only the attendance policies and encouragement to improve attendance. Sending communications to parents, in this case as a postcard through the mail, shows significant impact on reducing student absences. The intervention not only reduced student absences comparably across grade levels, but also reduced absences among untreated cohabiting students in treated households, in part due to challenging parents’ bias in believing their student was attending more than they were (Rogers & Feller, 2018). Other communications/nudges have also been found to be effective, including digital nudges in today’s digital age.

Digital nudges, typically through automatic texts or emails, can improve student absenteeism with a variety of options ranging from low cost to high cost and low effort to high effort, integrating various supports into the system. One study by Heppen et al. examined the impacts of various text messaging on student absenteeism, including differences between students overall and students with a prior history of high absences. Families were assigned to benefits-framed basic messaging, consequences-framed basic messaging, or a no-messaging group. All received some form of text message about attendance in fall, while chronic absence students received additional messages in spring. All four combinations of basic and intensified messages reduced chronic absence by 12.0%-18.0% compared to the control (no treatment) group whereas students with a history of high absences reduced chronic absence by 7.0%-15.0% (Heppen et al., 2020). There were no differences among the four versions of adaptive text messaging. Another study found that alerting parents of absences—alongside grades and missed assignments in courses—by text resulted in a 12.0% increase in attendance and 27.0% decrease in course failure, with larger effects for below-median GPA students and high school students (Bergman & Chan, 2021). In this study, an absence alert was sent weekly detailing the number of classes a child missed for each course in the previous week and was particularly significant for high school students and below-median GPA students.

Interventions such as this that involve parents can pair well with more intensive interventions. Utilizing any sort of texting system is helpful and can be implemented at a low cost. Nudges to parents likely work the best for involved parents, which are more likely to be parents of younger students, yet these studies did not show significant difference between differing grade levels.

PICOC	Bergman & Chan	Heppen et al.	Rogers & Feller (2016)	Rogers & Feller (2018)	Rogers et al.
<b>Population (Who?)</b>	Students grades 5-11 (N=14,000) in 10,400 households	Students in grades K-5, (N= 26,843, n= 23,133)	Students with 2+ absences previous school year in grades 1-12 (N=30,000)	High-risk Kindergarten through 12th grade students (n=28,080)	Students in grades 1-12, (n=~51,000)
<b>Intervention (What/How?)</b>	Low-cost technology that synchronizes with student information systems and teacher gradebooks to push high-frequency information to parents about their child's absences, missed assignments, and low grades via automated text messages	Families were assigned to benefits-framed basic messaging, consequences-framed basic messaging, or a no-messaging group.	Mailed letter to guardians encouraging improvement in student attendance	Parents received one of three personalized information treatments repeatedly throughout the school year or received no additional communication (control)	Mailed postcard to guardians encouraging improvement in student attendance
<b>Comparison (Compared to What?)</b>	A treatment and control group that are similar in terms of observable variables	Control group and between group comparisons	4 levels of treatment, 1 was control	Between group and control group comparison	Multiple Treatment groups compared to a no treatment cohort
<b>Outcome (What is the Purpose?)</b>	Determine impact of weekly text nudges to parents on student attendance/absences and course failures	Determine impact of text nudges on attendance and test school achievement (as measured by state assessment scores in math and reading)	Determine impact of absence reduction as a result of communication to guardians	Determine impact of attendance record communication to parents on student absence reduction and parental beliefs about their student's absence rate	Determine impact of absence reduction as a result of communication to guardians, and if there were differences between elementary/middle and high school, as well as inclusion of specifics of student attendance
<b>Context (Where/When?)</b>	22 middle and high schools in Kanawha County Schools (KCS), West Virginia, 2015-2016	108 Elementary Schools with chronic absence rates of 20 percent in 4 Urban Districts, 2017-2018	200 in Metropolitan areas, 2014-2015	School District of Philadelphia, 2014-2015	Metropolitan area in Philadelphia, 2014-2015

### Critical Analysis & Implications

- Mailing postcards to parents/guardians in the language primarily spoken within the household containing information regarding their child's absences and the attendance policy could decrease absences. This is most beneficial when follow-up reminders are sent at regular intervals during the year.
- The Institute for Education Sciences (IES) published an implementation plan of text nudges to reduce absenteeism in *How to Text Message Parents to Reduce Chronic Absence Using an Evidence-Based Approach*.<sup>2</sup>
- Email can also be used to nudge parents and students to increase attendance, especially if lacking a school phone / text system or knowledge of parent phone numbers. Some parents may not have cell phones or the means to pay for message rates.

<sup>2</sup>Kurki, A., Heppen, J., & Brown, S. (2021). How to text message parents to reduce chronic absence using an evidence based approach (NCEE 2022-001). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from <https://ies.ed.gov/ncee/pubs/2022001/>

## Early Alert/Warning Systems

**Population: High school students in 9th through 12th grade, middle school students in 6th through 8th grade**

**Trustworthiness: 60.42**

Early alert systems and early warning indicators are warning/intervention systems that rely on data points, in this case employed to identify and support chronically absent students or cultures of chronic absenteeism in schools. About half of schools in the US had early alert systems in place during the 2014-2015 school year, with larger schools more likely to have them in place (U.S. Department of Education, 2016a). Most early warning systems use the “ABCs” as measures: attendance, behavior, and course performance, though some schools and districts collect information beyond these including outside-of-school indicators such as homelessness or involvement with the juvenile justice system, especially in high-poverty and low-graduation-rate schools where this may be more prevalent (U.S. Department of Education, 2016a). Most often, technology is implemented to flag at-risk students. Soland et al. (2020) discuss implications of using machine learning to identify effective flags alerts that identify students. If students who are not identified as at risk are becoming chronically absent or dropping out, the warning indicators may need tweaking.

One type of early alert system is a preemptive screening, similar to health screenings, used as predictive models. For example, a study examined seven factors of risk—as determined from Patterson’s developmental cascades model—as predictors of student attendance and behavior (Thompson et al., 2020). The risk categories were Externalizing Behavior, Internalizing Behavior, Peer Relationship Problems, School Disengagement, Emotional Dysregulation, Attention and Academic Issues, and Relational Aggression and assessed using the Early Identification System - Student Response (EIS-SR). EIS-SR subscale scores were found to predict spring office disciplinary referrals, in-school suspensions, out-of-school suspensions, and attendance (Thompson et al., 2020). While this is a more manual and preemptive intervention, having students fill out this form at the beginning of a year/semester could help identify students who need specific supports and better prepare for attendance issues. This can be used to prioritize needs and plan for universal prevention and/or targeted intervention strategies.

Another early warning intervention (EWI) includes dedicating a person and/or team to monitor early warning indicators and provide timely interventions. This was the case in one study where a half-time staff was assigned to implement the Early Warning Intervention (EWI) Team model (Mac Iver et al., 2019). An EWI Team composed of teachers, counselors, student support services personnel and others in each school meets bi-weekly to set common academic and behavioral expectations and policies supportive of high school graduation. An on-site graduation facilitator that serves as the mediator between the school/district leadership and the EWI team, providing regularly updated EWI data (from routinely collected student data on attendance, behavior, course grades) on each student to the EWI team, discussing students with warning indicators, planning interventions, and following up on implemented interventions. Coaching and professional development was provided to the on-site graduation facilitators and EWI Team. Results indicated that students in treatment schools were significantly less likely than control school students to be chronically absent (Mac Iver et al., 2019). Similarly, a study utilized teachers to identify students with absences to connect them with an incentives program and also follow up with home factors (Young et al., 2020). An early warning system (EWS) is most effective when paired with interventions to do something about the flagged issue. Consider one study that developed an EWS that utilized five relational factors: I. Student-School, II. Student-School Professionals, III. Student-Family, IV. Student-Community, and V. Student-Student. Understanding additional layers to the situation allow for more targeted supports to prevent absences (de Vasconcelos et al., 2023). Utilizing this intervention requires planning and tact. This can be expensive to implement and requires good security on student data, although in the case of absences this is already being tracked and protected (Sparks, 2024).

PICOC	de Vasconcelos et al.	Mac Iver et al.	Thompson et al.	Young et al.
<b>Population (Who?)</b>	Students in high school and middle school (N = 15,924)	Students in 9th grade	Students in grades 9-12 (n=5,262) who completed the Early Identification System - Student Response (EIS-SR)	Students in 6th-8th grades with less than 90% YTD attendance and prior month attendance (n=41)
<b>Intervention (What/How?)</b>	36-item measure: Relational Factors for the Risk of School Dropout Scale (IAFREE) delivered by web-based questionnaire	Early Warning Intervention (EWI) Team model	Used the fall EIS-SR subscales to predict whether a student would be bullied or receive an ODR, ISS, or OSS in the spring of the school year or predict attendance	PAWS reward-based intervention; invited to counseling during homeroom once per month and given rewards for perfect weekly and monthly attendance
<b>Comparison (Compared to What?)</b>	Statistical analysis: Confirmatory Factor Analysis (CFA), Chi-square, Comparative Fit Index (CFI) and Tucker-Lewis index (TLI), Item Response Theory analysis	Treatment and control group cohorts across two academic school years	Logistic regression models, linear regression models, tests for measurement invariance	Pre/Post of student's attendance along with comparison group receiving no intervention
<b>Outcome (What is the Purpose?)</b>	Determine whether a five-factor relational model of risk for school dropout can flag students at risk and match to supports	Determine impact of EWI Teams model on attendance, grade retention/promotion, course credits earned, grades, disciplinary infractions, and "on-track" status	Determine the predictive validity of the EIS-SR on student outcomes	Determine impact of early alert rewards-based intervention on attendance
<b>Context (Where/When?)</b>	Brazil	40 Alabama high schools (both rural and urban) with graduation rates lower than 80 percent, 2012-2015	Public high schools (n=8) in a Midwestern state	Middle school in urban Connecticut with 50% free/reduced price lunch rate

### Critical Analysis & Implications

- There are varying indicators that can be used to predict attendance/absence of students which can be tailored to schools or districts, aligning with supports to mitigate the predictors.
- Preemptive screenings can be used to predict student behavior/attendance and identify supports needed early in order to target services to certain students and ensure capacity for meeting needs.
- Technology systems or manual checks can flag students at risk of chronic absenteeism. Early alert systems include indicators and a follow-up action plan.
- Design and implementation of early warning systems are outlined in *A practitioner's guide to implementing early warning systems*<sup>3</sup> and *Early Warning Intervention and Monitoring System Implementation Guide*<sup>4</sup>.

<sup>3</sup>Frazelle, S. & Nagel, A. (2015). *A practitioner's guide to implementing early warning systems* (REL 2015–056). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northwest. Retrieved from <http://ies.ed.gov/ncee/edlabs>.

<sup>4</sup>Marken, A. Scala, J., Husby-Slater, M., and Davis, G. (2020). *Early Warning Intervention and Monitoring System Implementation Guide*. American Institutes for Research. Retrieved from <https://www.michigan.gov/mde/services/school-performance-supports/early-warning>.

## Incentives

**Population:**  
**Students in 6th-8th grades, K-12**

**Trustworthiness:**  
**63.89**

Incentives can be used to increase absenteeism, particularly if student engagement or truancy is the issue behind absences. Incentive-based interventions include monetary rewards for perfect or superb attendance including actual money, gift cards, or mock monies to be spent at a school gift shop. Incentives also include praise from teachers, homework passes, certificates, recognition during school announcements, pizza parties, etc. These systems tend to work best in conjunction with other interventions thus, there is little evidence of their independent effectiveness.

In one study, an incentive program, Perfect Attendance Wins Stuff (PAWS), was a multimodal intervention whereby students could win prizes each week for perfect attendance, attend parties each week/month for perfect attendance, and purchase items from the PAWS store using monies earned thru the program (Young et al., 2020). Students with low attendance were invited to participate. If students missed class, a group of teachers would intervene/check in. If this first stage of intervention failed to improve attendance an individualized approach was implemented whereby the students' parents were called, home check ins occurred, parent-teacher meetings, and recommending community services if necessary. PAWS participant attendance increased from baseline by an average of 12.2 percent (p after one month in the program and continued steady at month 2 (Young et al., 2020). One consideration is the fact that students with already good attendance could not participate, so may lapse in attendance just to be able to participate if they see the rewards other students are receiving, though it is more cost-effective to target services.

A task force initiative to reduce chronic absenteeism in NYC utilized incentives in schools as part of the overall program. Schools were encouraged to hold award ceremonies or other public recognitions of good or improved attendance, staff were given post-cards signed by the mayor to send home celebrating small successes, and schools received free tickets and perks from local sports teams (NY Yankees), Starbucks, and Macy's to use as incentives, either through earning or raffles (Balfanz & Byrnes, 2013). The overall task force significantly decreased chronic absenteeism in all three cohorts compared to control group schools and while the incentives aspect was not analyzed statistically, survey results indicated that principals and mentors believed these incentives did in fact impact student behavior and contribute to increased attendance (Balfanz & Byrnes, 2013).

Another example of incentivization to increase attendance was the case of using coupons to inspire college students to attend optional study groups. In Potacco et al. (2013), students who attended the study group received a coupon that could be turned into the professor for extra credit points on the exam; generally, they had to attend three study groups for one coupon. The points were minimal, especially compared to the likely increase in scores based just on additional studying, yet encouraged students to show up when they otherwise might not. Students who failed the first exam of the semester were more likely to participate in study groups before the second and third exams; those who did increased their scores. That in and of itself is motivating, but the extra incentive was found to be helpful also, indicating an appropriate level of reward which is critical to the success of incentive programs (Potacco et al., 2013). When applying this to school/class attendance, there could be a variety of rewards available and for certain measures; a coupon for a homework pass, prize from a box, or class pizza party could be earned by individual or group attendance streaks, almost like a game.

PICOC	Balfanz & Byrnes	Potacco et al.	Young et al.
<b>Population (Who?)</b>	Students K-12 (N= 88,000)	College students (n=311)	Students in 6th-8th grades with less than 90% YTD attendance and prior month attendance (n=41)
<b>Intervention (What/How?)</b>	Success Mentor Corps with weekly principal-led meetings	Coupon incentive program for attending optional study groups	PAWS reward-based intervention; invited to counseling during homeroom once per month and given rewards for perfect weekly and monthly attendance
<b>Comparison (Compared to What?)</b>	Hierarchical linear regression models, previously chronically absent versus not, control and treatment schools	Pre/Post of students; self-selected "control" of students who did not participate	Pre/Post of student's attendance along with comparison group receiving no intervention
<b>Outcome (What is the Purpose?)</b>	Determine impact of task force on chronic absenteeism	Determine impact of exam points coupon on study group attendance	Determine impact of early alert rewards-based intervention on attendance
<b>Context (Where/When?)</b>	100 schools in New York City (plus 46 comparison), 2010-2013	A metropolitan, state university	Middle school in urban Connecticut with 50% free/reduced price lunch rate 2015-2016

### Critical Analysis & Implications

- Incentives can be implemented with a variety of budgets and effort, including written notes from teachers or community members or shoutouts for good attendance at assemblies and/or in daily announcements. Positive words of encouragement from a teacher, a homework pass, extra credit on an exam, off campus lunch pass, or even a positive letter home can all be implemented with little-to-no cost or effort.
- Incentives can include public recognition, entry to raffles, prizes, events, or anything special that students would like, pulling in community collaborators to assist in these efforts. If using tangible rewards, make sure they are custom tailored to your population. For example, giving high school students \$10 gift cards to the movies, bowling alley, or gas station would be beneficial.
- Incentives work best when all students have equal opportunity to attain the rewards, as opposed to providing incentives to only chronically absent students in order to avoid lapses in students with high attendance. The incentive policy must be clearly communicated to both faculty and students so perceived fairness remains high.

# Mentoring

**Population:**  
**Students in grades 1-8, 6-10**

**Trustworthiness:**  
**70.83**

Mentoring is an intervention that has many positive outcomes, including increasing attendance. A mentor is “someone with whom you may establish a long-term connection focused on the mentee’s growth and development” which in education involves a mentor providing a supportive and advisory role to a student. This pursues academic achievement/goals, to include career goals, with a focus on assisting with academic, emotional, personal, and professional issues (Team Leverage Edu, 2021).

In one study, a school-based mentoring program was implemented and evaluated for impacts based on participation during middle school only (grades 8–9), students who participated in high school only (grades 10–12), and students who participated in mentoring during both middle and high school (grades 8–12) (May et al., 2021). The mentoring program served economically disadvantaged students and were invited to participate based on scoring below grade level in reading and math during the previous year. Four linkage coordinator mentors who were current school volunteers were hired following a meeting with the district Director of Academic Initiatives. Mentors received a half-day of instruction with central office personnel, met with students 2-5 days per week, and had the primary responsibility was to “provide students with behavioral and emotional support” through individual and small-group tutoring. Mentor activities were up to mentors but often dealt with academic and behavioral skill improvement. Students enrolled in the mentoring program in both middle school and high school showed a statistically significant lower median number of absences than students enrolled in the program during middle school only with GPA increasing with attendance (May et al., 2021).

Another mentoring program, Check and Connect, targets students at risk of disengagement or dropping out of school and assigns them to an in-school staff mentor who develop a relationship with the student and serve as a case manager to monitor students’ attendance and academic performance and connect students to resources. Personalized interventions are provided to students. In a study of this program implemented in Chicago, students in grades 1-4 did not see any reduction in absences but students in grades 5-7, there was a reduction in absences by about 50% in both cohort groups (Guryan et al., 2020).

Mentoring was also found to be a particularly successful intervention in NYC. Success Mentors were the most effective component of the mayor’s task force effort across all school types with previously chronically absent students (Balfanz & Byrnes, 2013). Success Mentors were assigned to 10-15 students who were chronically absent the prior year or in danger of becoming so to meet with individually three times per week. These mentors come into schools at a leadership level, have direct access to school resources and community-based organizations, have access to student data, and are part of a centralized infrastructure that supports their work in real time. Support provided includes greeting students in the morning, calling home every day a child is absent, and connecting students and families to services that help them overcome barriers to success. Students with mentors gained almost two weeks (9 days) of increased attendance per student per year, with this increasing to over a month of additional attendance in the 25% of schools with the greatest impacts (Balfanz & Byrnes, 2013).



PICOC	Balfanz & Byrnes	Guryan et al.	May et al.
<b>Population (Who?)</b>	Students K-12 (N= 88,000)	Students in grades 1-8 (n=4,929)	Students in grades 6-10 (n=187)
<b>Intervention (What/How?)</b>	Success Mentor Corps with weekly principal-led meetings	Check and Connect - a structured student monitoring and mentoring program	Mentoring students
<b>Comparison (Compared to What?)</b>	Hierarchical linear regression models, previously chronically absent versus not, control and treatment schools	Control group and 2 Cohorts	Correlational, causal-comparative, Kruskal-Wallis Test, Mann-Whitney Test
<b>Outcome (What is the Purpose?)</b>	Determine impact of task force on chronic absenteeism	Determine impact of monitoring and mentoring on student absenteeism	Determine impact of mentoring on absenteeism and GPA
<b>Context (Where/When?)</b>	100 schools in New York City (plus 46 comparison), 2010-2013	Chicago Public Schools (n=69), 2011-2015	1 middle and 1 high school in an urban, Midwestern school district, 2010-2015

### Critical Analysis & Implications

- Mentoring can significantly improve attendance with better results correlated with frequency and consistency over long periods of time.
- Paid staff mentors are more expensive to implement but see a greater reduction in absences.
- For implementing a major mentoring program, consider the *Success Mentor Implementation Guide*<sup>5</sup> for schools and communities.

<sup>5</sup>U.S. Department of Education and My Brother's Keeper. (2016). Success Mentor Implementation Guide. Johns Hopkins University, School of Education. Retrieved from <https://new.every1graduates.org/national-success-mentors-initiative/national-success-mentors-initiative-tools/>

## Restorative Practices

**Population: Public school students (K-12) and their teachers**

**Trustworthiness: 63.88**

Utilizing restorative practices is another way of improving attendance for students who are choosing not to attend school, especially around school climate factors of student behavior and discipline and its effects on further absenteeism. It also works to build family-school, student-school, and student-teacher relationships. “The approach focuses on fostering a sense of community within classrooms to prevent conflict and on reacting to misconduct by encouraging students to accept responsibility and rebuild relationships” (Jordan, 2023).

It has been well documented that exclusionary punishments, such as suspensions, have negative impacts (Holt et al., 2022). There is evidence that punitive disciplinary measures, or punishment, do not aid in productive classroom management and that such measures negatively impact student academic outcomes including attendance and achievement. In a longitudinal study, Holt et al. (2022) finds that these measures, as opposed to restorative practices, harm students. There was found to be a great deal of bias present which influenced teachers’ referrals and unevenly impact varying groups of students; teachers were more likely to refer Black students and male students for punishment and of the students referred, Black students’ academic outcomes (attendance and achievement) were negatively affected whereas white students’ outcomes were not (Holt et al., 2022). The effects of racial bias were more prevalent among below-average achievers than above-average achievers, regardless of referral (Holt et al., 2022). While the authors noted the need for referrals for some behavior (such as endangerment in the classroom), other behaviors (such as tardiness or talking over the teacher) are more subjective. About half of referrals in this study were for subjective (non-mandatory) referral, indicating room to grow and implement more restorative practices within the classroom. The “average probation officer does not have—nor is it reasonable to expect them to have—the expertise or experience to accurately identify the complex set of individualized reasons that particular youth do not attend school, assess their specialized learning needs, and connect them (and their families) with appropriate services and supports” (Weber & Cohen, 2020).

Teachers’ punitiveness was measured, and it was found that a one-unit increase in teacher punitiveness represents one additional reported disciplinary referral for the average student, conditional on prior behavior; these teachers had less productive classrooms and data indicates a negative correlation with family engagement with the school (Holt et al., 2022). Since attendance in earlier grades often relies on parents, “the attendance effects of teachers bias or harshness in referral usage may operate through parents’ opportunities to observe this signal” (Holt et al., 2022). This not only impacts the referred students, but other students through classroom environment and the teacher-student relationship. Students taught by a more punitive teacher have more absences and lower achievement in both math and reading in general, regardless of having been referred or not and even after accounting for teacher effectiveness (Holt et al., 2022). There is also room to improve restorative practices after having been referred to the principal, as some offenses may require more correction or different types of correction than others. For example, tardiness does not necessarily need to result in a suspension.

Restorative practices to implement include initiatives that help build a trusting relationship and provide support to those who act out or exhibit behaviors in need of correction. In one study, a school system implemented IIRP’s SaferSanerSchools™ Whole-School Change program grounded in 11 elements that all staff had to learn to enact in an initiative, “Pursuing Equitable and Restorative Communities” (PERC) (Augustine et al., 2018a). School staff received training, support, professional development, books, and materials. Principals established restorative leaderships teams and received support and check-ins from coaches from the Institute for Restorative Practices. The rationale is that “by using restorative practices, students and staff were to learn more about how their actions affect others... in turn, should help students recognize why a particular behavior is inappropriate or hurtful, and why they are being held accountable for their behavior” with an emphasis on developing empathy as they learned about how their behaviors affect those around them and improving relationships (especially as students in these schools had low trust levels with adults and did not want to attend school). PERC was found to decrease suspensions and also decrease elementary student absences partially due to lower suspensions but also related to other attendance factors, with better student-staff relationships also present, in line with results from previous studies (Augustine et al., 2018a). Weber and Cohen (2020) found, similarly, that students diverted before probationary supervision attended more days of school and reducing repeat offenses. There are positive outcomes of restorative practices in schools related to student discipline, school climate, and attendance.

PICOC	Augustine et al. (2018a)	Holt et al.	Weber & Cohen
<b>Population (Who?)</b>	Students K-12 (N=25,000)	Self-contained classrooms of students and teachers grades 3-5 (n=32,373 classrooms, 15,237 teachers, 330,417 students)	All youth enrolled in public schools in South Carolina (PreK-12)
<b>Intervention (What/How?)</b>	International Institute for Restorative Practices' SaferSaner-Schools™ Whole-School Change program through Pursuing Equitable and Restorative Communities (PERC) program	Referral as punishment for behavioral issues	Supervision on attendance for youth who became involved with the juvenile justice system
<b>Comparison (Compared to What?)</b>	Between group comparison; year to year comparison; Pre-/Post-intervention comparison	Between group comparison of data from North Carolina Education Research Data Center (NCERDC)	A series of difference-in-difference (DiD) models between treatment and control groups: probation vs. diversion, truancy order vs. non truancy order, White vs. non-White, and older vs. younger youth
<b>Outcome (What is the Purpose?)</b>	Determine impact of restorative practices on student outcomes, especially attendance	Determine impact of punitive measures on student outcomes, especially attendance	Determine impact of supervision of attendance for youth who became involved with the juvenile justice system.
<b>Context (Where/When?)</b>	Pittsburgh Public Schools (n=54), 2015-2017	North Carolina Public Schools (n=1,271 schools), 2008-2013	South Carolina public schools, 2016-2017

### Critical Analysis & Implications

- Punitive disciplinary measures tend to reduce attendance and may be necessary in some cases but unhelpful in others, requiring discernment and intervention surrounding the roots of misbehavior and its impact on other students.
- Replacing some exclusionary punishment (such as suspensions) with restorative practices improves the student-school relationship, perceived school climate, and attendance.
- Building in restorative practices can be aided by existing models and typically involve holistic measures. Some useful practices and elements come from a Whole School Change model outline in a research brief, *Restorative Practices Help Reduce Student Suspensions*<sup>6</sup> (Augustine et al., 2018b).

<sup>6</sup>Augustine, C.H., Engberg, J., Grimm, G.E., Lee, E., Wang, E.L., Christianson, K., & Joseph, A.A. (2018b). Restorative Practices Help Reduce Student Suspensions. Santa Monica, CA: RAND Corporation. Retrieved from [https://www.rand.org/pubs/research\\_briefs/RB10051.html](https://www.rand.org/pubs/research_briefs/RB10051.html).

# School Climate and Culture Development

**Population:**  
Students in grades 6-12

**Trustworthiness:**  
58.33

School climate and culture development is critical to creating a safe, supportive, and engaging environment for students, while also building trust among students, families, educators, and the community. School climate can be cultivated to increase student attendance, especially in the long-term by establishing safety and trust. A variety of factors and interventions play into school climate, so an assessment is usually helpful to understand where to improve and focus resources.

In a study, the relationship between four measures of perceived school climate (school safety, relational environment, personal connectedness, and academic engagement) and total absence and chronic absences was investigated (Hamlin, 2020). Results indicated small associations among the four measures of perceived school climate and student attendance. Results included small negative associations between absences and individual student perceptions of school safety; students' perception of the relational environment and their personal connectedness correlate with absences. School-level changes in perceived school climate between middle and high school were only marginally associated with student attendance, with increases in academic, relational, and personal factors not having an impact on reducing absences (Hamlin, 2020).

This indicates that initial perceptions of school climate are established when students are younger and carried forward in their experience for the most part, unless they enter a high school with lower safety and a poorer relational environment than their middle school, in which case attendance decreases and chronic absenteeism increases (Hamlin, 2020). Another study found more significant associations between school climate and self-reported truancy, indicating that students miss school more, often out of their own choice, when school climate is negative (Virtanen et al., 2022). "Improving the supportiveness of school climate can reduce the risk of a student's subsequent truant behavior, and effectively addressing truancy may help a student view school climate as positive and supportive while pursuing their studies" (Virtanen et al., 2022).

One study of changing school climate included implementing a restorative practices framework. A public school system utilized the 11 Elements of the SaferSanerSchools™ Whole-School Change Program: affective statements, restorative questions, small impromptu conferences, proactive circles, responsive circles, restorative conferences, fair process, reintegrative management of shame, restorative staff community, restorative approach with families, and fundamental hypothesis understandings (Augustine et al., 2018a; Augustine et al., 2018b). School staff received training, support, professional development, books, and materials. Principals established restorative leaderships teams and received support and check-ins from coaches from the Institute for Restorative Practices. The idea was to utilize practices that create empathy between students and staff during behavioral correction. This was done to "improve relationships and the classroom and school climate [which] should lessen misbehavior toward [peers and teachers]. Less misbehavior would mean fewer suspensions and absences and a safer school environment. Fewer suspensions and absences should increase instructional time for all students, which might lead to improved academic outcomes and attainment" such as attendance (Augustine et al., 2018a). The program reduced suspensions, reduced other types of absences, and increased school climate and culture, strengthening student-school, and family-school relationships, as well as contributed to banning suspensions for nonviolent offenses in younger grades (Augustine et al., 2018a). Staff did not report seeing an impact of restorative practices on the school climate but did see an improvement in many related factors. Student outcome data indicates that there may have been an increase in school climate perception by students and their families.

PICOC	Augustine et al. (2018a)	Hamlin	Virtanen et al.
<b>Population (Who?)</b>	Students K-12 (N=25,000)	Students in grades 6-12 (N=823,753)	Students grade 6-9 (n=1,066)
<b>Intervention (What/How?)</b>	International Institute for Restorative Practices' SaferSaner-Schools™ Whole-School Change program through Pursuing Equitable and Restorative Communities (PERC) program	School climate surveys	Survey on school climate and self-reported truancy
<b>Comparison (Compared to What?)</b>	Between group comparison; year to year comparison; Pre-/Post-intervention comparison	Student administrative data linked to NYC's environment survey in 2011 and 2012; logistic regression modeling	Random intercept cross-lagged panel model
<b>Outcome (What is the Purpose?)</b>	Determine impact of restorative practices on student outcomes, especially attendance	Investigate the relationship between four measures of perceived school climate and total absence and chronic absences	Determine relationships between changes in perceived supportive school climate and changes in self-reported truancy from the last year of primary school (Grade 6) to the last year of lower secondary school (Grade 9)
<b>Context (Where/When?)</b>	Pittsburgh Public Schools (n=54), 2015-2017	New York public schools, 2015-2016	Finland, 2 semi-rural areas with smaller schools (n=30)

### Critical Analysis & Implications

- Poor school climate can reduce attendance, especially when students move from a school with a better climate to a school with a worse climate.
- School climate improvements can increase attendance, especially through the strengthening of family-school, student-school, student-peer, and student-teacher relationships.
- For improving school climate, see *Quick Guide on Making School Climate Improvements*<sup>7</sup>.

<sup>7</sup>U.S. Department of Education, Office of Safe and Healthy Students. (2016b). *Quick guide on making school climate improvements*. Washington, DC. Retrieved from <http://safesupportivelearning.ed.gov/SCIRP/Quick-Guide>

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