

PAL's Theory of Change



YOUTH PARTICIPATE IN ...AND BENEFIT FROM ...LIVES ARE CHANGED

Drop-in centers

Sports programs

Educational programs

Character development programs

Time in a safe haven

- Youth off streets during peak crime hours
- Police ensure center safety

Quality relationships with police & adults

- Max 1:20 adult-youth ratio
- Adults with best-in-class training

Evidence-based programs

- Homework club incorporates national best practices
- Evidence-based character development curricula

Enriching experiences tied to outcomes

- Unique trips & events
- Reinforce & reward participation & development

Opportunities to contribute

- Paid positions for youth
- In-house career tracks

Reduced juvenile crime in the community

Youth develop critical character traits

Youth improve academic achievements

PAL's Targeted Outcomes



Crime Reduction

- **Juvenile Crime** within 6-8 block radius of PAL Centers
- Is juvenile crime in the immediate areas surrounding PAL Centers better/worse than citywide averages?

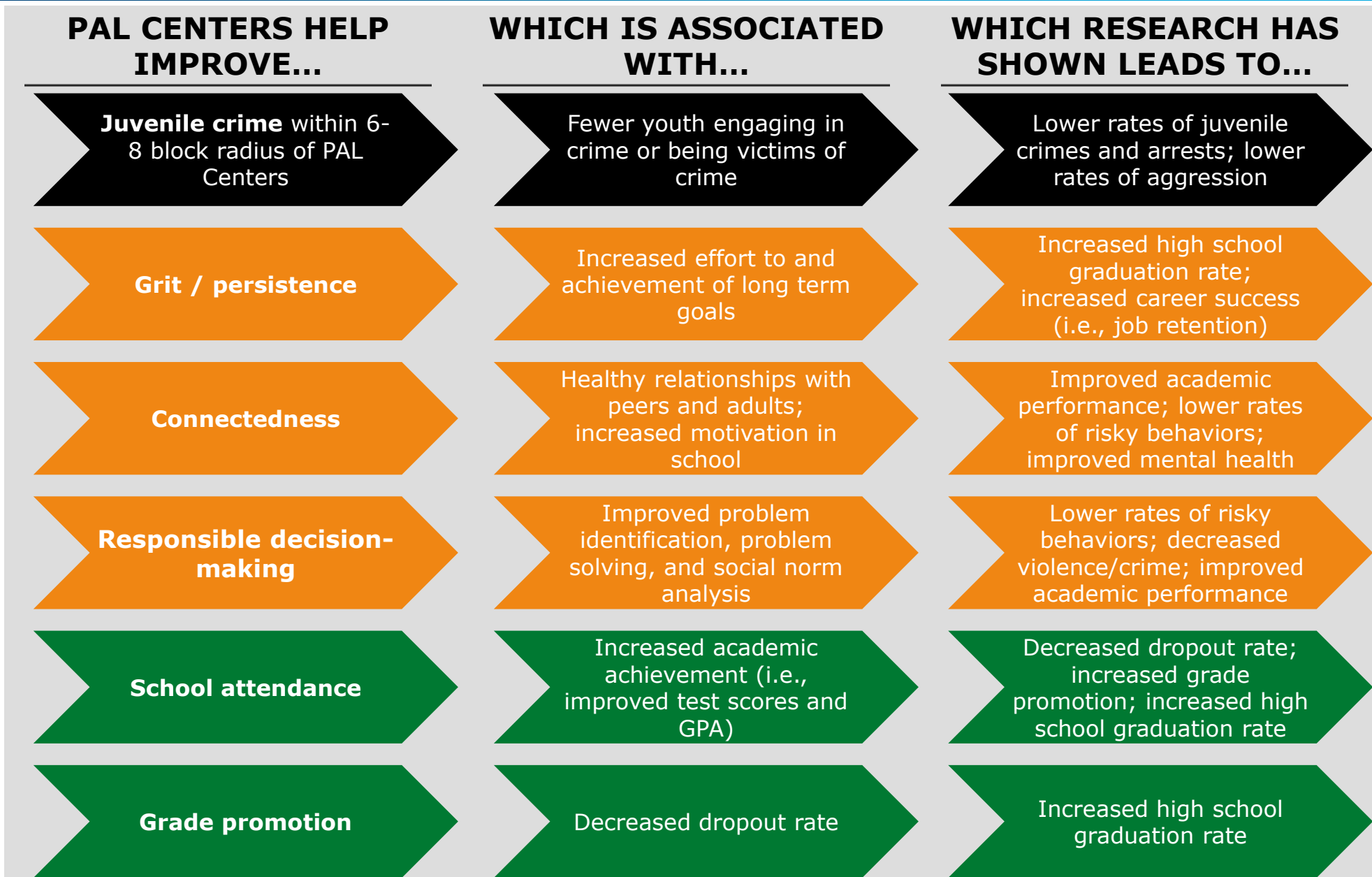
Character Development

- **Grit / persistence**
 - Does the youth sustain effort toward very long-term goals?
- **Connectedness**
 - Does the youth establish and maintain healthy relationships with adults and peers?
- **Responsible decision making**
 - Does the youth make good choices at home, at school, and in the community?

Educational Success

- **School attendance**
 - Are PAL youth attending school more frequently than Philadelphia School District students as a whole?
- **Grade promotion**
 - Are PAL youth advancing to the next grade at better rates than Philadelphia School District students as a whole?

PAL's Theory of Change Research Overview



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References & Other Sources



Juvenile crime

Guerra, N., Huesmann, R., and Spindler, A. (2003)

Community Violence Exposure, Social Cognition, and Aggression Among Urban Elementary School Children

The effects of witnessing community violence on aggressive cognitions and behavior were investigated in an ethnically diverse sample of 4,458 children living in urban neighborhoods. Prior violence exposure had a significant effect in increasing aggression, normative beliefs about aggression, and aggressive fantasy. Although exposure to violence predicted aggressive behavior both in Grades 1 through 3 (ages 5 – 8) and Grades 4 through 6 (ages 9 – 12), the effects on social cognition were only evident in the later grades. Furthermore, the effect of violence exposure on aggression in the later grades was partially mediated by its effect on social cognition. These findings suggest that witnessing community violence has an effect on children's aggressive behavior through both imitation of violence and the development of associated cognitions as children get older.

Lord, H. and Mahoney, JL (2007)

Neighborhood crime and self-care: risks for aggression and lower academic performance

This longitudinal study evaluated associations among official rates of neighborhood crime, academic performance, and aggression in a sample of 581 children in 1st-3rd grade (6.3-10.6 years old). It was hypothesized that the influence of crime depends on children's unsupervised exposure to the neighborhood context through self-care. Average weekly hours in self-care were trichotomized into low (0-3), moderate (4-9), and high (10-15). Moderate and high amounts of self-care were linked to increased aggression and decreased academic performance for children from high-crime areas (11,230 crimes per 100,000 persons) but not average-crime areas, when the authors controlled for neighborhood, family, and child covariates. In high-crime areas, academic outcomes were more favorable when self-care occurred in combination with after-school program participation.

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Juvenile crime (continued)

Chung, A. (2000)

After-School Programs: Keeping Children Safe and Smart

This guide provides information on the benefits of afterschool programs and the qualities of good after school programs. Afterschool programs reduce the risk of juvenile delinquency, substance use, and violent crime victimization. Children involved in quality programs decrease their chances of dropping out, earn higher grades, and develop better social skills. The qualities that comprise a good after school program include: clear goals; strong management; committed staff; strong community support; and attention to safety and health issues. Five programs that exemplify many of these traits include: (1) Community Collaboration for Education Enrichment (CCEE), San Antonio, Texas; (2) Lake County Teen Connection, Upper Lake, California; (3) Boys Harbor: The Harbor for Boys and Girls, East Harlem, New York; (4) Proyecto Sano y Salvo (Project Safe and Sound), Tucson, Arizona; and (5) Summer Transition, Little Rock, Arkansas. (SWM)

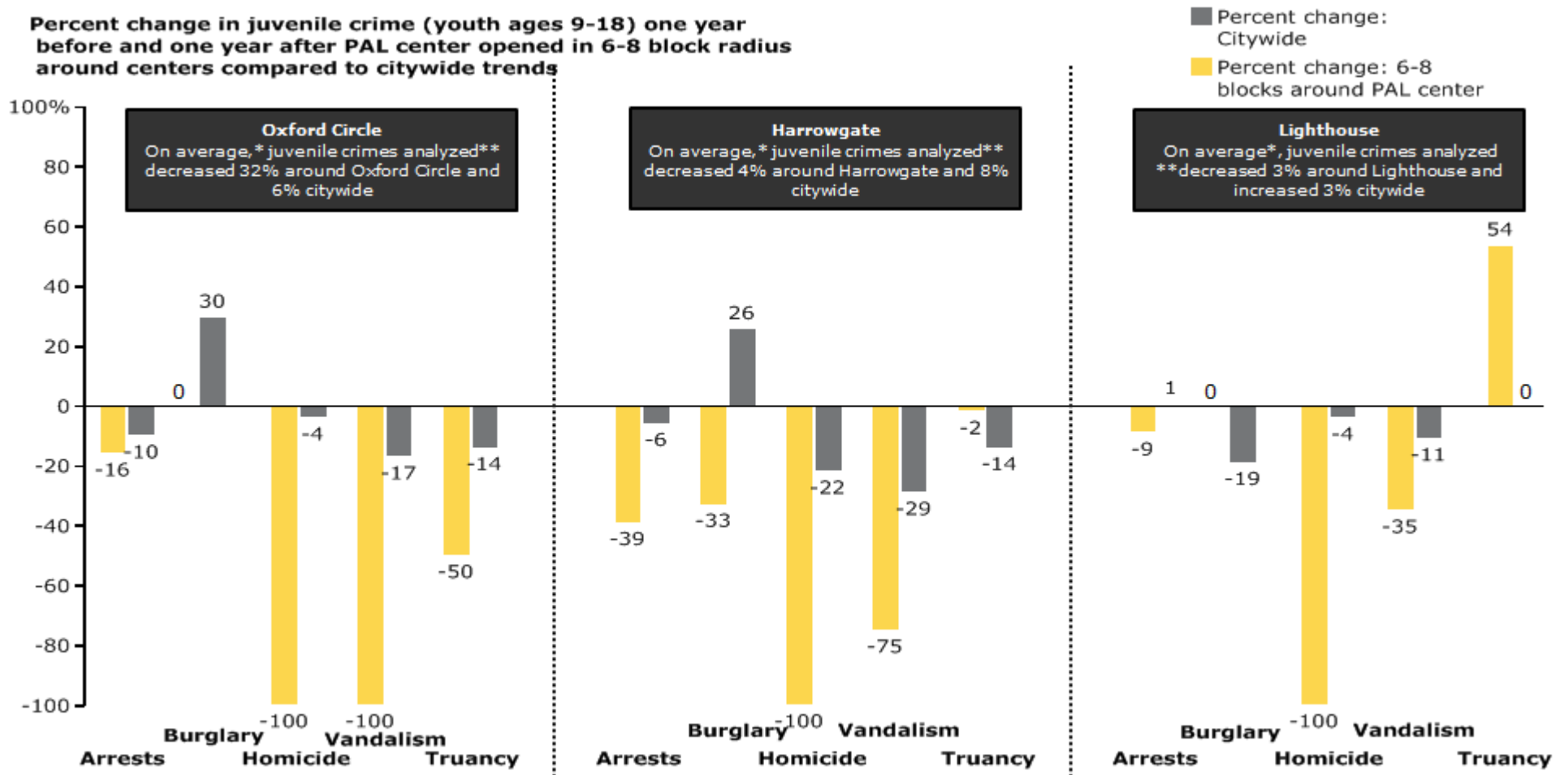
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Juvenile crime (continued)

PAL crime data

Percent change in juvenile crime (youth ages 9-18) one year before and one year after PAL center opened in 6-8 block radius around centers compared to citywide trends



Note: *Weighted average was taken for the indicators by weighting the percent change by the total number of youth who committed the crime over the two years; **additional crime indicators included in analysis were shooting victims, robbery, aggravated assaults, and curfew violation; all crimes shown were committed by youth ages 9-18; crime reports without ages were excluded from the analysis; all aspects of the data are susceptible to a degree of error due to the complexities of the processes involved in compiling the data; changes not observed for juvenile crimes at Audenried

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Grit / Persistence

Duckworth, A. and Peterson, C. (2007)

Grit: Perseverance and Passion Towards Long Term Goals

The importance of intellectual talent to achievement in all professional domains is well established, but less is known about other individual differences that predict success. The authors tested the importance of 1 noncognitive trait: grit. Defined as perseverance and passion for long-term goals, grit accounted for an average of 4% of the variance in success outcomes, including educational attainment among 2 samples of adults (N = 1,545 and N = 690), grade point average among Ivy League undergraduates (N = 138), retention in 2 classes of United States Military Academy, West Point, cadets (N = 1,218 and N = 1,308), and ranking in the National Spelling Bee (N = 175). Grit did not relate positively to IQ but was highly correlated with Big Five Conscientiousness. Grit nonetheless demonstrated incremental predictive validity of success measures over and beyond IQ and conscientiousness. Collectively, these findings suggest that the achievement of difficult goals entails not only talent but also the sustained and focused application of talent over time.

Tough, P. (2013)

How Children Succeed

Why do some children succeed while others fail? The story we usually tell about childhood and success is the one about intelligence: success comes to those who score highest on tests, from preschool admissions to SATs. But in *How Children Succeed*, Paul Tough argues that the qualities that matter more have to do with character: skills like perseverance, curiosity, optimism, and self-control.

How Children Succeed introduces us to a new generation of researchers and educators, who, for the first time, are using the tools of science to peel back the mysteries of character. Through their stories—and the stories of the children they are trying to help—Tough reveals how this new knowledge can transform young people's lives. He uncovers the surprising ways in which parents do—and do not—prepare their children for adulthood. And he provides us with new insights into how to improve the lives of children growing up in poverty. This provocative and profoundly hopeful book will not only inspire and engage readers, it will also change our understanding of childhood itself.

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Grit / Persistence (continued)

U.S. Department of Education (2013)

Promoting Grit, Tenacity, and Perseverance: Critical Factors for Success in the 21st Century

How can we best prepare children and adolescents to thrive in the 21st century—an era of achievement gaps that must be closed for the benefit of everyone in society, rapidly evolving technology, demanding and collaborative STEM knowledge work, changing workforce needs, and economic volatility? The test score accountability movement and conventional educational approaches tend to focus on intellectual aspects of success, such as content knowledge. However, this is not sufficient. If students are to achieve their full potential, they must have opportunities to engage and develop a much richer set of skills. There is a growing movement to explore the potential of the “noncognitive” factors—attributes, dispositions, social skills, attitudes, and intrapersonal resources, independent of intellectual ability—that high-achieving individuals draw upon to accomplish success.

Eskreis-Winkler, L., Shulman, P., Beal, S., and Duckworth, A. (2014)

The grit effect: predicting retention in the military, the workplace, school and marriage

Remaining committed to goals is necessary (albeit not sufficient) to attaining them, but very little is known about domain-general individual differences that contribute to sustained goal commitment. The current investigation examines the association between grit, defined as passion and perseverance for long-term goals, other individual difference variables, and retention in four different contexts: the military, workplace sales, high school, and marriage. Grit predicted retention over and beyond established context-specific predictors of retention (e.g., intelligence, physical aptitude, Big Five personality traits, job tenure) and demographic variables in each setting. Grittier soldiers were more likely to complete an Army Special Operations Forces (ARSOF) selection course, grittier sales employees were more likely to keep their jobs, grittier students were more likely to graduate from high school, and grittier men were more likely to stay married. The relative predictive validity of grit compared to other traditional predictors of retention is examined in each of the four studies. These findings suggest that in addition to domain-specific influences, there may be domain-general individual differences which influence commitment to diverse life goals over time.

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References & Other Sources



Connectedness

Dweck, C., Walton, G., and Cohen, G. (Bill & Melinda Gates Foundation (2014) Academic Tenacity: Mindsets and Skills that Promote Long-Term Learning

Research shows that a sense of social belonging allows students to rise above the concerns of the moment and is linked to long-term student motivation and school success. Specifically, adolescents who feel they have better relationships with teachers and peers experience a greater sense of belonging in school. As a result, they are more motivated and engaged in class and earn better grades, effects that hold in spite of what their prior levels of motivation and performance might have been. Although it did not measure students' sense of belonging directly, a study of Italian schoolchildren found that 3rd graders' pro-social behavior—behaviors that lead to positive social relationships in school—predicted their grades in 8th grade even better than did their academic performance in 3rd grade.

Fraser-Thomas, J.L., Cote, J., and Deakin, J. (2005) Youth Sport Programs: An Avenue to Foster Positive Youth Development

Concern about the growth in adolescent problem behaviors (e.g. delinquency, drug use) has led to increased interest in positive youth development, and a surge in funding for "after school programs." We evaluate the potential of youth sport programs to foster positive development, while decreasing the risk of problem behaviors. Literature on the positive and importance of sport programs built on developmental assets (Benson, 1997) and appropriate setting features (National Research Council and Institute of Medicine, 2002) in bringing about the five "C"s of positive development (competence, confidence, character, connections, and caring) negative outcomes of youth sport is presented. We propose that youth sport programs actively work to assure positive outcomes through developmentally appropriate designs and supportive child-adult (parent/coach) relationships. We also highlight the and compassion/caring: Lerner et al., 2000). An applied sport-programming model, which highlights the important roles of policy-makers, sport organizations, coaches and parents in fostering positive youth development is presented as a starting point for further applied and theoretical research.

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Connectedness (continued)

Resnick, M., Bearman, P., Blum, R., Bauman, K., Harris, K., Jones, J. and others (1997)

Protecting Adolescents From Harm: Findings From the National Longitudinal Study on Adolescent Health

Context: The main threats to adolescents' health are the risk behaviors they choose. How their social context shapes their behaviors is poorly understood.

Objective: To identify risk and protective factors at the family, school, and individual levels as they relate to 4 domains of adolescent health and morbidity: emotional health, violence, substance use, and sexuality.

Design: Cross-sectional analysis of interview data from the National Longitudinal Study of Adolescent Health.

Participants: A total of 12118 adolescents in grades 7 through 12 drawn from an initial national school survey of 90118 adolescents from 80 high schools plus their feeder middle schools.

Setting: The interview was completed in the subject's home.

Main Outcome Measures: Eight areas were assessed: emotional distress; suicidal thoughts and behaviors; violence; use of 3 substances (cigarettes, alcohol, marijuana); and 2 types of sexual behaviors (age of sexual debut and pregnancy history). Independent variables included measures of family context, school context, and individual characteristics.

Results: Parent-family connectedness and perceived school connectedness were protective against every health risk behavior measure except history of pregnancy. Conversely, ease of access to guns at home was associated with suicidality (grades 9-12: $P < .001$) and violence (grades 7-8: $P < .001$; grades 9-12: $P < .001$). Access to substances in the home was associated with use of cigarettes ($P < .001$), alcohol ($P < .001$), and marijuana ($P < .001$) among all students. Working 20 or more hours a week was associated with emotional distress of high school students ($P < .01$), cigarette use ($P < .001$), alcohol use ($P < .001$), and marijuana use ($P < .001$). Appearing "older than most" in class was associated with emotional distress and suicidal thoughts and behaviors among high school students ($P < .001$); it was also associated with substance use and an earlier age of sexual debut among both junior and senior high students. Repeating a grade in school was associated with emotional distress among students in junior high ($P < .001$) and high school ($P < .01$) and with tobacco use among junior high students ($P < .001$). On the other hand, parental expectations regarding school achievement were associated with lower levels of health risk behaviors; parental disapproval of early sexual debut was associated with a later age of onset of intercourse ($P < .001$).

Conclusions: Family and school contexts as well as individual characteristics are associated with health and risky behaviors in adolescents. The results should assist health and social service providers, educators, and others in taking the first steps to diminish risk factors and enhance protective factors for our young people.

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References & Other Sources



Connectedness (continued)

Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., and Patton, G. (2007)

Social and School Connectedness in Early Secondary School as Predictors of Late Teenage Substance Use, Mental Health, and Academic Outcomes

Purpose: To examine associations between social relationships and school engagement in early secondary school and mental health, substance use, and educational achievement 2–4 years later.

Methods: School-based longitudinal study of secondary school students, surveyed at school in Year 8 (13–14-years-old) and Year 10 (16-years-old), and 1-year post-secondary school. A total of 2678 Year 8 students (74%) participated in the first wave of data collection. For the school-based surveys, attrition was <10%. Seventy-one percent of the participating Year 8 students completed the post-secondary school survey.

Results: Having both good school and social connectedness in Year 8 was associated with the best outcomes in later years. In contrast, participants with low school connectedness but good social connectedness were at elevated risk of anxiety/depressive symptoms (odds ratio [OR]: 1.3; 95% confidence interval [CI]: 1.0, 1.76), regular smoking (OR: 2.0; 95% CI: 1.4, 2.9), drinking (OR: 1.7; 95% CI: 1.3, 2.2), and using marijuana (OR: 2.0; 95% CI: 1.6, 2.5) in later years. The likelihood of completing school was reduced for those with either poor social connectedness, low school connectedness, or both.

Conclusions: Overall, young people's experiences of early secondary school and their relationships with others may continue to affect their moods, their substance use in later years, and their likelihood of completing secondary school. Having both good school connectedness and good social connectedness is associated with the best outcomes. The challenge is how to promote both school and social connectedness to best achieve these health and learning outcomes.

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References & Other Sources



Responsible decision-making

Payton, J., Wardlaw, D., Graczyk, P., Bloodworth, M., Tompsett, R., and Weissberg, R. (CASEL, 2000)
Social and Emotional Learning: A Framework for Promoting Mental Health and Reducing Risk Behaviors in Children and Youth

Many programs have been developed to help schools enhance their students' health and reduce the prevalence of problem behaviors such as drug use, violence, and high-risk sex. How should educators make selections among these? This article describes criteria based on theory, research, and best educational practice that identify key social and emotional learning (SEL) competencies and program features that educators who adopt these programs should consider. The SEL competencies include 17 skills and attitudes organized into four groups: awareness of self and others, positive attitudes and values, responsible decision making, and social interaction skills. The eleven program features critical to the success of school-based SEL programs emphasize curriculum design, coordination with larger systems, educator preparation and support, and program evaluation. Developed by the Collaborative to Advance Social and Emotional Learning (CASEL), this SEL framework may be used to guide selection of research-based prevention programs that address health substance abuse, violence prevention, sexuality, character, and social skills.

Oman, R., Vesely, S., Aspy, C., McLeroy, K., Rodine, S., and LaDonna, M. (2004)
The Potential Protective Effect of Youth Assets on Adolescent Alcohol and Drug Use

Objectives: We examined the association between adolescent alcohol and drug use and 9 youth assets in a low-income, inner-city population.

Methods: An in-person survey of 1350 adolescents and parents assessed youth assets and risk behaviors. We analyzed data with χ^2 tests and logistic regression analyses.

Results: When we controlled for appropriate variables, there were significant positive relationships between several youth assets (*including responsible choices*) and nonuse of alcohol and drugs. Furthermore, youths who possessed all of the statistically significant youth assets were 4.44 times more likely to report nonuse of alcohol and 5.41 times more likely to report nonuse of drugs compared with youths who possessed fewer youth assets.

Conclusions: Our study supports the view that specific youth assets may protect youths from alcohol and drug use.

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Responsible decision-making (continued)

**Heller, S., Pollack, H., Ander, R., and Ludwig, J. (National Bureau of Economic Research, 2013)
Preventing Youth Violence and Dropout: A Randomized Field Experiment**

Improving the long-term life outcomes of disadvantaged youth remains a top policy priority in the United States, although identifying successful interventions for adolescents – particularly males – has proven challenging. This paper reports results from a large randomized controlled trial of an intervention for disadvantaged male youth grades 7-10 from high-crime Chicago neighborhoods. The intervention was delivered by two local non-profits and included regular interactions with a pro-social adult, after-school programming, and – perhaps the most novel ingredient – in-school programming designed to reduce common judgment and decision-making problems related to automatic behavior and biased beliefs, or what psychologists call cognitive behavioral therapy (CBT). We randomly assigned 2,740 youth to programming or to a control group; about half those offered programming participated, with the average participant attending 13 sessions. Program participation reduced violent-crime arrests during the program year by 8.1 per 100 youth (a 44 percent reduction). It also generated sustained gains in schooling outcomes equal to 0.14 standard deviations during the program year and 0.19 standard deviations during the follow-up year, which we estimate could lead to higher graduation rates of 3-10 percentage points (7-22 percent). Depending on how one monetizes the social costs of crime, the benefit-cost ratio may be as high as 30:1 from reductions in criminal activity alone.

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School attendance

Balfanz, R. and Byrnes, V. (2012)

The Importance of Being in School: A Report on Absenteeism in the Nation's Public Schools

Missing School Matters:

- In a nationally representative data set, chronic absence in kindergarten was associated with lower academic performance in first grade. The impact is twice as great for students from low-income families.
- A Baltimore study found a strong relationship between sixth-grade attendance and the percentage of students graduating on time or within a year of their expected high school graduation.
- Chronic absenteeism increases achievement gaps at the elementary, middle, and high school levels.
- Because students reared in poverty benefit the most from being in school, one of the most effective strategies for providing pathways out of poverty is to do what it takes to get these students in school every day. This alone, even without improvements in the American education system, will drive up achievement, high school graduation, and college attainment rates

Gottfried, M. (2010)

Evaluating the Relationship Between Student Attendance and Achievement in Urban Elementary and Middle Schools An Instrumental Variables Approach

Researchers, policymakers, practitioners, and parents have assumed a positive relationship between school attendance and academic success. And yet, among the vast body of empirical research examining how input factors relate to academic outcomes, few investigations have honed in on the precision of the relationship between individual attendance and student achievement. The purpose of this article is to provide insight into this relationship. Specifically, this study has evaluated the hypothesis that the number of days a student was present in school positively affected learning outcomes. To assess this, a unique empirical approach was taken in order to evaluate a comprehensive dataset of elementary and middle school students in the Philadelphia School District. Employing a fixed effects framework and instrumental variables strategy, this study provides evidence from a quasi-experimental design geared at estimating the causal impact of attendance on multiple measures of achievement, including GPA and standardized reading and math test performance. The results consistently indicate positive and statistically significant relationships between student attendance and academic achievement for both elementary and middle school students.

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References & Other Sources



School attendance (continued)

Duran-Narucki, V. (2008)

School building condition, school attendance, and academic achievement in New York City public schools: A mediation model

Little is known about how the condition of school facilities affects academic outcomes. This study examines the role of school attendance as a mediator in the relationship between facilities in disrepair and student grades in city and state tests. Data on building condition and results from English Language Arts (ELA) and Mathematics (Math) standardized tests were analyzed using a sample of 95 elementary schools in New York City. Variables relevant to academic achievement such as ethnicity, socioeconomic status, teacher quality, and school size were used as covariates. In run-down school facilities students attended less days on average and therefore had lower grades in ELA and Math standardized tests. Attendance was found to be a full mediator for grades in ELA and a partial mediator for grades in Math. This study provides empirical evidence of the effects of building quality on academic outcomes and considers the social justice issues related to this phenomenon.

Roby, D. (2004)

Research On School Attendance And Student Achievement: A Study Of Ohio Schools

The research and analysis completed for this study focuses on one variable and its relationship to student achievement: school wide student attendance. It is a variable that is often overlooked or taken for granted as an interesting but meaningless statistic, however, the positive impact of good school attendance on academic achievement may be greater than historically thought (Johnston, 2000, Lamdin, 1996). Coutts (1998) suggests student attendance should be charted and monitored weekly, since high attendance rates are indicators of effective schools. The initial focus of this research study was to determine if there was a significant, positive relationship between student achievement in Ohio schools, as measured by the Ohio Proficiency Tests, and student attendance in grades 4,6,9, and 12. All data used for this study were taken directly from the ODE web site. The study is based on the most recent information available to the public (1999 data) for school building proficiency test and attendance averages. Table 1 displays results of the correlational study for each grade level taking the Ohio Proficiency Test. This overview study of school attendance and its relationship to student achievement provides an initial forum for discussion, debate, and further research. Continued studies may provide additional information that may lead to strategies for improving student attendance and academic achievement.

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Grade promotion

Dianda, M. (National Education Association, 2008) **Preventing Future High School Drop-Outs**

Each chapter of the Guide is written for NEA state and local affiliates.

Recognizing that leaders and staff are busy, the Guide:

1. Identifies areas and school districts with the highest dropout rates and discusses what affiliates can do about it;
2. Supports affiliates' advocacy efforts in addressing out-of-school factors that increase dropout rates;
3. Shares school practices and policies that increase high school graduation rates;
4. Identifies effective dropout prevention programs;
5. Documents the negative effects dropouts have on the nation's economy;
6. Demystifies graduation and dropout statistics

Excerpt: Research has consistently showed that retaining students in a grade, even in lower elementary grades, provides them with little or no academic advantage and increases the likelihood they will drop out. Retention in ninth grade—the transition year to high school—dramatically increases the likelihood of dropping out.

Stearns, E., Moller, S., Blau, J., and Potochnick; S. (2007)

Staying Back and Dropping Out: The Relationship between Grade Retention and School Dropout

Students who repeat a grade prior to high school have a higher risk of dropping out of high school than do students who are continuously promoted. This study tested whether standard theories of dropout—including the participation-identification model and the social capital model—explain this link. Although the presence of variables, including academic achievement and disciplinary problems, reduces the higher probability of retained students dropping out, existing models of dropping out do not adequately explain the markedly higher probability of dropping out for retained students. Regression decomposition reveals differences between promoted and retained students in the importance of resources and illustrates that various resources hold different levels of importance for white, black, and Latino students.