

Improving Academic and Life Outcomes for America’s Youth

A Policy Brief

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I. Summary

Roughly 49.5 million students attend public elementary and secondary schools in the United States, 3 million teachers educate America’s students each year, and the U.S. spent \$682 billion on public elementary and secondary schools in the 2019–20 school year (National Center for Education Statistics, 2022). Despite spending more than other OECD nations, the United States performs no better in academic outcomes, suggesting that it’s not *how much* is spent, but how such resources *are allocated*. America’s youth struggle in mathematics, college enrollment is on the decline, youth violence affects too many American students, mental health assessment and treatment resources continue to be scarce for most, and our young workforce is less prepared compared to OECD nations to compete in an increasingly complex global economy.

This policy brief addresses these issues and offers an evidence-based plan to improve mental health, academic, and professional outcomes for America's youth, positioning America as a leader in education.

II. Education Issues in Context – United States

Student Performance

Findings from the NAEP's 2019 annual assessment show that American literacy scores in reading, mathematics, and science are either stagnate or in decline.ⁱ In the 2018 PISA assessmentⁱⁱ, U.S. students scored higher than the OECD average in reading and science literacy but landed 11 points lower in mathematics literacy (National Center for Education Statistics, 2019).

Globally, 30 countries outperform the United States in mathematics at the high school level, as of 2021, with several ahead in science as well (National Center for Education Statistics, 2022). The U.S. performs below the OECD average in percentage of science and engineering professionals, mean performance in reading (controlling for socioeconomic status), in the gender gap amongst top performers in mathematics and/or science, and in academic resiliencyⁱⁱⁱ (OECD, 2019).

While the United States spends more per student than several countries (10-30% more than Canada, Ireland, and New Zealand), the U.S. performs no better in academic outcomes. These results hold controlling for socioeconomic status (OECD, 2019). The researchers at PISA suggest that these findings indicate that academic performance is determined less by how much is invested, but how the resources are allocated once the minimum threshold for academic performance is met.^{iv}

Undergraduate and Postsecondary Enrollment

From 2009 to 2020, undergraduate enrollment in degree-granting postsecondary institutions in the U.S. dropped by 9 percent, according to the NCES (National Center for Education Statistics, 2022). In a 2022 NPR report, aside from economic conditions and the pandemic, Doug Shapiro from the National Student Clearinghouse cited concerns over student debt, a strong labor market for unskilled workers, and questions about college affordability, particularly at four-year colleges, as major factors keeping prospective students away from getting a degree (Nadworny, 2022).

Youth Violence Implications

While academic underperformance can translate into negative economic outcomes, poor academic outcomes are correlated with violence as well. A 2015 National Youth Risk Behavior Survey (YRBS) reports that students who achieve higher academic outcomes are less likely than their peers with poor academic outcomes to experience some form of violence (CDC, 2015). While this does not imply causation, more research should be conducted to determine any causal linkages between academic performance and violence.

While youth violence is a global problem^v, it is particularly prevalent in the United States, with about 1 in 5 high school students reported being bullied on school property in 2015. Youth violence is responsible for the deaths of a third of people aged 10-24 in the U.S., with approximately 12 young people falling victim to homicide each day. Youth violence is costly, with youth homicides and nonfatal physical assault-related injuries resulting in an estimated \$18.2 billion annually in combined medical and lost productivity costs alone (youth.gov, 2022).

Economic Implications

Expanding on economic implications, millennials in the U.S. workforce are tied for the lowest level of basic skills of all industrial countries tested (NCEE, 2022). As of 2021, the United States now has the worst-educated workforce in the industrialized world (Tucker, 2021). As the world moves further toward a more diverse, complex, service-oriented economy, underperformance in America's workforce will likely leave the nation vulnerable to global economic competitors.

Health Outcomes

While youth mental illness is a persistent global challenge^{vi}, the United States in particular has struggled to respond to the crisis. In an interview with NPR, Kathleen Ethier of the CDC stated that prior to the pandemic, the health agency was seeing increases in persistent feelings of sadness and hopelessness (Rascoe & Narro, 2022). The COVID-19 pandemic only made matters worse.^{vii} The implications are dire. Suicides and attempted suicides have increased, particularly for LGBT youth. According to the NCES, 35% of high school students in the United States with a mental health disorder drop out of school each year (National Center for Education Statistics, 2022).

Despite the gloomy state of youth mental health in the U.S., just over half of U.S. public schools (55%) provided students with diagnostic mental health assessments to evaluate them for mental health disorders during the 2019-20 school year, with even fewer schools providing treatment options (National Center for Education Statistics, 2022).^{viii}

The consequences of failing to address adolescent mental health conditions are bad enough for the nation's youth, but the World Health Organization suggests that these conditions often extend into adulthood, impairing both physical and mental health and limiting opportunities to lead fulfilling lives as adults (World Health Organization, 2021).

III. Evidence-Based Solutions

Increased funding and programming in mental health services, and training and education in psychology and behavioral methods, are proven tactics^{ix} to reduce the negative effects of mental illness, youth violence, and academic underperformance cited above.

The CDC recommends providing youths with better access to mental health care services, comprehensive approaches that promote help-seeking behaviors, establishing connections with trusted adults and supportive peers, and offering engagement in community activities, all of which are shown to have many benefits including improved feelings of connectedness, better

mental health, reduced risk for suicide, reduced prevalence of health risk behaviors, and better academic achievement (Jones, et al., 2022).^x

Evidence-based interventions utilizing Cognitive behavioral therapy (CBT)^{xi}, for example, have shown promise in the teaching of new skills to help students manage anger, anxiety, and depression symptoms, across various levels including prevention, early intervention, and intensive treatment (Smallwood, Christner, & Brill, 2007, p. 102). Socio-emotional learning interventions provide an opportunity to improve behavioral outcomes for America's youth.

Interventions to alleviate mental health risks in youth include:

- **Teletherapy in Public School Settings:** A pilot program in teletherapy that helps teachers and administrators deal with adolescents who are dealing with present or past difficult situations, or past trauma (Smith, Horn, McCollum, Christian, & Kennedy, 2020).
- **RAP Club:** Based on Structured Psychotherapy for Adolescents Responding to Chronic Stress, or SPARCS, RAP Club is a group treatment intervention for urban adolescents exposed to chronic stress and adversity. SPARCS uses psycho-education, cognitive behavioral therapy (CBT), and mindfulness strategies to promote self-regulation among young people (Mendelson, et al., 2020).

Interventions to guide better decision-making in youth include:

- **BAM ("Becoming a man") Program:** a group treatment program using a series of CBT elements and mindfulness techniques to teach disadvantaged youths how to "check-in," to pause and reflect, and to learn how to be less automatic in their response. Results from a recent randomized controlled trial show sizeable behavioral responses in positive school engagement and reduced arrests per youth per year. The interventions raise the possibility that automaticity might be an important explanation for elevated rates of dropout and crime in distressed urban areas (Heller, et al., 2015).
- **The Promoting Alternative Thinking Strategies (PATHS):** a classroom-based socio-emotional learning (SEL) program for elementary school students designed to foster self-awareness, self-management, social awareness, relationship skills, responsible and decision-making (Greenberg & Celene E. Domitrovich, 2017). In PATHS, treated children become less impulsive, less disruptive, and display less opposition to teachers and parents. In class, treated children become less likely to disturb lessons and more likely to focus on the teaching content (Sorrenti, Zölitz, Ribeaud, & Eisner, 2020).



Figure 1 The Gazette, Colorado Springs, CO.
Dec 15, 2022

IV. Our Moonshot Plan to Improving Outcomes for Students

With proper funding, we can increase academic performance, encourage college enrollment, reduce youth violence, improve economic outcomes and the nation's competitive edge with a

more educated workforce, and combat America's growing youth mental health crisis. To get started, we recommend the following steps:

- a) Obtain approval and funding to develop a Behavioral Education Committee within the U.S. Department of Education, supporting further research of behavioral interventions to impact education outcomes
- b) Trial mental health treatment interventions in designated public-school systems: Teletherapy, Psychotherapy
- c) Trial decision-making treatment interventions in designated public-school systems: CBT, SEL
- d) Analyze randomized controlled trials to determine any effect on health and academic outcomes
- e) Work with the U.S. Department of Education, the House Committee on Education and Labor, and the Senate Committee on Health, Education, Labor and Pensions to develop a bill to offer robust mental health and behavioral education resources to public schools at the federal level.

V. Concluding Remarks

The evidence is strongly in favor of psychiatric services, cognitive behavioral therapy, and socio-emotional interventions to provide our students with a better chance for success, and this evidence is growing. As the American workforce becomes more diverse, more service-oriented, and more globalized, skills like mindfulness, self-management, decision-making, and self-regulation will grow ever more crucial for success. The time is now to support our students and teachers, and to position ourselves as the global leader in education. We appreciate your consideration.

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ⁱ According to the NAEP 2019 assessment, 4th grade, and 8th grade reading scores have declined since 2017. In mathematics, while 4th grade-students realized a considerable increase from 2017 scores, mathematics scores had declined for 8th grade- and 12th grade-students since 2017 and 2013, respectively (National Center for Education Statistics, 2019).

ⁱⁱ The Pisa Assessment (Program for International Student Assessment) looks at international comparisons for 15-year-old students in the application of reading, mathematics, and science literacy to problems within a real-life context, across all OECD countries.

ⁱⁱⁱ Resilient students are disadvantaged students who score in the top quarter of performance in reading amongst students in their own country (OECD, 2019, Pg. 46).

^{iv} PISA results show that there is a positive relationship between investment in education and average performance – up to a threshold of USD 50 000 in cumulative expenditure per student from age 6 to 15 (OECD, 2019, Pg. 20).

^v Youth violence is the 4th leading cause of death in young people worldwide, according to the World Health Organization, and globally about 200,000 young people die each year due to violence (United Nations, 2022).

^{vi} Globally, one in seven 10-19-year-olds experiences a mental disorder, accounting for 13% of the global burden of disease in this age group. Depression, anxiety, and behavioral disorders are among the leading causes of illness and disability among adolescents. Suicide is the fourth leading cause of death among 15–29-year-olds (World Health Organization, 2021).

^{vii} In a survey conducted by the CDC, researchers found that one in three high school students experienced poor mental health (most of the time or always) during the COVID-19 pandemic (37.1%) and during the past 30 days (31.1%) (Jones, et al., 2022). Also realized through the survey were persistent feelings of sadness or hopelessness (44.2% of students), serious consideration of attempting suicide (19.9% of students), with 9% attempting suicide in the 12 months prior to the survey (Jones, et al., 2022).

^{viii} In a 2019-2020 survey conducted by the NCES, U.S. public schools cite 1) inadequate funding, 2) inadequate access to licensed mental health professionals, and 3) policies regarding school's requirement to pay for services as the three top limiting factors to providing mental health services for their students (National Center for Education Statistics, 2022).

^{ix} Early attention to mental health factors can prevent more serious disorders that may result in school failure or dropout. In fact, some researchers have noted that mental health concerns and stressors are a major barrier to learning (Smallwood, Christner, & Brill, 2007).

^x With school connectedness being so vital to student mental health, the CDC recommends promoting positive school climates by implementing schoolwide programs such as those emphasizing *social and emotional learning*, professional development for teachers and school administrators to improve classroom management, and strategies to nurture relationships between students, their families, and school staff (Jones, et al., 2022).

^{xi} A common type of talk therapy (psychotherapy)