METAL DETECTORS

"Security Theater, Not Safer Schools"

Overview

Policymakers, in response to calls for increased safety and security, have long implemented a wide range of reactionary measures, and our public school systems are no exception. In response to school shootings and reports of other acts of school violence, a number of these measures have manifested into potentially dangerous practices. One such practice is the use of **metal detectors in public schools**. Research proves that this approach is not as effective as perceived at preventing school violence and suggests a lack of support for the use of metal detectors in schools not only from students, but from parents, administrators and other key stakeholders. Equally concerning are potential unintended negative consequences associated with the use of metal detectors. Students in schools with metal detectors, which typically are schools with greater proportions of students of color, are more likely to perceive violence and disorder and less likely to feel safe than students in schools without metal detectors.[1]

The facts reveal significant concerns with placing metal detectors in schools: (1) their actual impact on safety is unproven; and their impact on perception of safety can be negative, (2) school administrators and teachers have found the use of metal detectors overly time-consuming, expensive, and an overall disruption to the learning environment, (3) there are negative social, psychological, and developmental impacts on students, (4) there are racial disparities and discriminatory practices associated with their use (5) proper implementation of metal detectors creates significant costs to districts.

Metal Detectors Fail to Make Schools Safer – Or Increase Perceptions of School Safety

Research shows a lack of evidence establishing that metal detectors increase school safety or decrease school violence. The Journal of School Health released an analysis of 15 years' worth of research on metal detectors, which

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1   Hertz, Hankim, and Simon, "Impacts of metal detector use in schools: insights from 15 years of research" (2011) https://pubmed.ncbi.nlm.nih.gov/21223277/

found there was 'insufficient evidence' that their use decreased crime or violence in schools, but which did find evidence that their presence made students feel less safe.[2] Another study notes that "while anecdotal evidence suggests that metal detectors are effective at screening out weapons at schools, there is a lack of accurate statistics to support the claims."[3] Yet, another study challenged the notion that metal detectors increase school safety, or even students perception of safety, finding that "There is insufficient data in the literature to determine whether the presence of metal detectors in schools reduces the risk of violent behavior among students, and some research suggests that the presence of metal detectors may detrimentally impact student perceptions of safety."[4]

Students do not feel safer in the presence of metal detectors, and, in fact, many studies have found that students perceive disorder, violence, and unsafe conditions with the use of such devices.[5] A 2019 study found that students at schools with metal detectors either did not feel safer or felt *less* safe than students at schools without them. "Findings suggest that many of the most common safety actions taken by schools have either a negative or no effect on students' perceptions of safety within the school environment. For example, metal detectors, security cameras, and the number of visible physical security measures tend to negatively affect perceptions of safety."[6] Aside from the failure of the presence of metal detectors to increase feelings of safety, some research has even suggested these security measures increase crime, disruption, and higher levels of disorder.[7] This negative perception of safety created by

2 https://www.edweek.org/leadership/study-finds-metal-detectors-more-common-in-high-minority-schools/2011/08

3 Schildkraut and Grogan, "Are Metal Detectors Effective at Making Schools Safer?" (2016). https://files.eric.ed.gov/fulltext/ED595716.pdf

4 Hertz, Hankim, and Simon, "Impacts of metal detector use in schools: insights from 15 years of research" (2011) https://pubmed.ncbi.nlm.nih.gov/21223277/

5 Schildkraut, J., & Grogan, K. "Are metal detectors effective at making schools safer?" (2019). https://www.wested.org/resources/

6 Mowen, Thomas and Freng, Adrienne"Is More Necessarily Better? School Security and Perceptions of Safety among Students and Parents in the United States". https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7205221/

7 Nickerson, A. B., & Martens, M. R. (2008). School violence: Associations with control, security/enforcement, educational/therapeutic approaches, and demographic factors. School Psychology Review, 37, 228–243.

metal detector implementation is especially damaging to student outcomes, as research shows that students who feel safe at school tend to report higher levels of academic success, among other positive social outcomes.[8]

The negative viewpoints on metal detectors don't stop with students. A 2019 study found that parents mirrored student's negative perceptions of school safety brought on by increased security measures, including the use of metal detectors.[9] Other research and anecdotal evidence suggest school administrators, teachers, and even school security officials have expressed concern about the overall effectiveness of this technology and how its costs, both financial and social, outweigh its intended benefit. Following the recent shooting at a Virginia elementary school, one school security expert describes measures such as metal detectors as **"security theater***,"* stating that they **"provide an emotional security blanket but not really making a significant difference."**[10] A senior analyst for the campus safety group Safe Havens International shared a similar opinion, stating: **"metal detectors are costly – proper use requires an armed guard – and tend to jam up entrances. They can also create a prison-like feeling among students, have been linked to diminished academic performance, and, worst of all, and don't work well in school settings."**[11]

In 2018, the National Association of Secondary School Principals held a roundtable discussion with stakeholders who had dealt with active shooters at their schools and in their communities.[12] Among the participants were a school resource officer (SRO) at a Pennsylvania middle school and an assistant principal of an Oregon high school. When asked about their thoughts on installing metal detectors, both reported their schools do not have metal detectors and there are no future plans to install them, in part due to the massive impact this would have on the school's budget, staffing, and

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8   Am J Crim Justice. 2019 June ; 44(3): 376–394. doi:10.1007/s12103-018-9461-7.

9   Am J Crim Justice. 2019 June ; 44(3): 376–394. doi:10.1007/s12103-018-9461-7.

10 https://www.wavy.com/news/local-news/school-metal-detectors-are-no-cure-all-consultant-warns/

11 https://www.usatoday.com/story/news/nation/2019/11/21/school-shootings-metal-detectors-solution-experts/4255318002/

12 https://www.nassp.org/2018/10/01/school-safety-part-ii-stakeholders-weigh-in/

logistics. Similarly, school officials in Waco, Texas spoke about the many issues with the use of metal detectors, and why they have widely decided against implementing them. Aside from "[not wanting] students feeling like they're going into prison," officials echoed many similar concerns related to cost and logistic impacts, such as wait times. A report released by the U.S. Department of Justice[13] estimated wait times for a hypothetical school of 1,000 students, finding that if there were more than 500 students waiting to go through a metal detector when the school day starts, ten minutes into the school day more than 400 would still be waiting.

Impacts on Mental Health, Social Development, and Racial Inequality

The use of metal detectors and other surveillance technology has also been shown to have additional, negative psychological and social impacts on students. Education policy experts and researchers alike find that trust, positive relationships with staff, being treated with kindness and respect, and a sense of belonging is vital for optimal learning conditions.[14] An over-reliance on surveillance and security measures disrupts these important factors. Research on school security measures has shown that students suffer from mental health impacts ranging from anxiety to post-traumatic stress disorder (PTSD), and other forms of psychological distress.[15] This is especially true for Black, Latinè, and Native students. Another study, looking at school hardening and mental health, found that "the use of intense, coercive surveillance methods, especially when applied disproportionately to students of color, harms students' interests, delegitimizes the educational process, perpetuates racial inequalities, weakens trust in governmental institutions and processes, skews minorities' perceptions of their standing in our society, and sends harmful messages to members of all races that students attending majority-white schools enjoy greater privileges

13 National Institute of Justice, "The Appropriate and Effective Use of Security Technologies in US Schools. /https://www.ncjrs.gov/school/178265.pdf

14 Nance, Jason P., Student Surveillance, Racial Inequalities, and Implicit Racial Bias (August 27, 2016). 66 Emory Law Journal 765 (2017), University of Florida Levin College of Law Research Paper No. 16-30, Available at SSRN: https://ssrn.com/abstract=2830885

15 Bachman, R., Randolph, A., & Brown, B. (2011). Predicting Perceptions of Fear at School and Going to and From School for African American and White Students: The Effects of School Security Measures. Youth & Society, 43(2), 705-726.

have superior privacy rights."[16]

There is also research establishing that the implementation of measures like metal detectors can be a discriminatory practice that disproportionately harms students of color. This is due to the significantly greater likelihood that metal detectors will be installed in schools with greater proportions of students of color. Researchers at the University of Delaware and the University of California Irvine, based their findings on a study of nationally representative school data found that "high-poverty schools were disproportionately likely to use such security mechanisms, and that the racial makeup of the student enrollment was a powerful predictor of whether the school would use metal detectors."[17]Data supports this, as one study found "compared to White students, Black and Latino/a students were 4.8 and 2.7 times, respectively, more likely to pass through a metal detector at their schools."[18]A first-of-its kind empirical analysis —the School Survey on Crime and Safety—performed an exhaustive analysis of data from the U.S. Department of Education to examine school security methods, and after controlling for multiple variables found that **"the concentration of students of color [Black, Latina/o, and Native] was a predictor of whether or not schools decided to rely on more intense [security] measures".**[19]The same study found that schools with 50% or more students of color were over **18 times more likely** to use a combination of drastic security measures than schools with less than 20% of students of color. In other words, "the distinguishing factor of the schools that have metal detectors is not even the amount of crime in surrounding neighborhoods – instead, it is whether or not a large number of Black and Latino students attend."[20]As with other aspects of the school to prison pipeline, the policy decision to implement metal detectors and other school hardening approaches imposes disproportionate harm on students of color.

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16 Jason P. Nance, Student Surveillance, Racial Inequalities, and Implicit Racial Bias, 66 Emory L.J. 765, 831 (https://scholarship.law.ufl.edu/cgi/viewcontent.cgi?article=1793&context=facultypub, 2017)

17   https://www.edweek.org/leadership/study-finds-metal-detectors-more-common-in-high-minority-schools/2011/08

18 Hertz, Hankim, and Simon, "Impacts of metal detector use in schools: insights from 15 years of research" (2011) https://pubmed.ncbi.nlm.nih.gov/21223277/

19 https://www.theatlantic.com/education/archive/2016/09/when-school-feels-like-prison/499556/

20 https://edtrust.org/the-equity-line/its-time-to-reconsider-removing-metal-detectors-from-schools-now/#:~:text=Part%20of%20the%20interest%20in,feel%20less%20safe%2C%20not%20more.

Metal Detectors Are Costly

Metal detectors come with significant cost and little return of school safety. One study found that an average metal detector would cost between $4,000 and $5,000 per machine.[21] In addition to considering the cost to purchase and maintain the equipment, schools must budget significant funding for the personnel to operate them, as each individual scanning station typically requires multiple people: One person acts as the screener on the initial check, another is responsible for performing backup screens, with a wand or pat-down if the first is failed, an additional individual conducts bag checks, while someone else — typically a security guard or armed officer — overseeing the entire process.[22] Moreover, in addition to covering the cost of employing these individuals to operate metal detection stations, schools must budget for ongoing training for both the security personnel and other members of the institution's staff to be able to properly use the technology.[23]

Conclusion

A substantial body of research establishes that the implementation of metal detectors in schools requires a significant financial cost, with little to no evidence of increased safety or decreases in school violence. Promoting metal detectors as a solution to make students "feel safe" is also contradicted by research showing that the presence of metal detectors and other surveillance technologies have a negative, rather than a positive, impact on student and staff perception of safety. These negative outcomes disproportionately impact students of color, as metal detectors are disproportionately installed in schools with higher populations of students of color.

The financial cost of metal detectors and staff to properly operate them are substantial. But in addition to this significant financial cost to districts, investment in the implementation of metal detectors and other school

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21 National Institute of Justice, "The Appropriate and Effective Use of Security Technologies in US Schools. /https://www.ncjrs.gov/school/178265.pdf

22 Hertz, Hankim, and Simon, "Impacts of metal detector use in schools: insights from 15 years of research" (2011) https://pubmed.ncbi.nlm.nih.gov/21223277/

23 https://www.tssbulletproof.com/blog/metal-detectors-schools

hardening approaches absorb funding that could be used to make long-term improvements in school safety by addressing the mental health and social-emotional needs of students. "Intense surveillance measures do not address the underlying problems associated with student crime and misbehavior; thus, those measures do not support long-term solutions to effectively prevent school violence".[24] For three years, the U.S. Department of Education and the U.S. Secret Service conducted a joint study to better understand how to more effectively prevent violent acts from occurring in schools. They concluded that school climates that cultivate respect, provide emotional support, and pay attention to students' academic, social, and emotional needs can reduce the possibility of targeted violence."[25]

Kenneth Trump, a school safety expert and consultant who has testified before Congress and the US Commission on Civil Rights, calls this phenomenon of spending on hardening over student supports "the triumph of the wow over the how" and warns that it comes with a cost beyond what is recorded on a district's bottom line. "A skewed focus on target hardening neglects the time and resources needed to spend on professional development training, planning, behavioral and mental health intervention supports for students, and other best practices." [26]

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24 Jason P. Nance, Student Surveillance, Racial Inequalities, and Implicit Racial Bias, 66 Emory L.J. 765, 785
    (https://scholarship.law.ufl.edu/cgi/viewcontent.cgi?article=1793&context=facultypub, 2017

25 Id.

26   School Hardening Not Making Students Safer, Says Experts, NEA News (2019)
     https://www.nea.org/advocating-for-change/new-from-nea/school-hardening-not-making-students-safer-
     say-experts