Stilwell Sarah M. (Orcid ID: 0000-0003-0537-9876)
Zimmerman Marc A (Orcid ID: 0000-0001-5064-4259)

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Positive Youth Development Approach to School Safety:

A Comprehensive Conceptual Framework

Sarah M. Stilwell, Ph.D.[1, 2], Justin Heinze, Ph.D.[1-3], Hsing-Fang Hsieh, Ph.D.[1, 3], Emily Torres, M.P.H.,[1, 3], Alison Grodzinski, M.L.I.S.,[1, 3] & Marc Zimmerman, Ph.D.[1-3]

[1] University of Michigan School of Public Health, Department of Health Behavior and Health Education, Ann Arbor, Michigan, USA

[2] University of Michigan, Combined Program in Education and Psychology, Ann Arbor, Michigan, USA

[3] University of Michigan, Institute for Firearm Injury Prevention, Ann Arbor, Michigan, USA

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The corresponding author for this manuscript is: Sarah M. Stilwell, PhD, (734)-355-2131, [stilwell@umich.edu], ORCID iD: 0000-0003-0537-9876

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Abstract

Background: Youth violence, victimization, and bullying are pervasive in schools across the U.S. and are detrimental for learning and healthy development. K-12 school safety is an increasingly urgent issue to research and understand from multiple perspectives. Physical and

psychological safety in school is linked to better student and school outcomes and is fundamental to fostering well-being and prosocial behavior.

Contributions to Theory: Despite research demonstrating positive outcomes associated with school safety, there is no comprehensive conceptual model in the literature that considers precursors, strategies, mechanisms, and outcomes of school safety together. The current paper presents an equity-centered comprehensive model of school safety, which is intended as a holistic representation of the multiple factors and pathways that contribute to school safety and positive youth development.

Implications for School Health Policy, Practice, and Equity: This model can guide research and practice through an equity-centered and comprehensive approach. This model can enable practitioners, researchers, and policymakers to make informed decisions and reach consensus regarding planning and decisions related to reducing violence and establishing supportive school environments.

Conclusion: Our model suggests that a comprehensive approach can ensure the safety and well-being of students and staff. By thinking ecologically, schools, communities, and stakeholders can ensure that all aspects of the school context are included in school safety.

Keywords: school safety, school safety framework, positive youth development, conceptual model

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Youth violence, victimization, and bullying are pervasive in schools across the U.S. and are detrimental for learning and healthy development. K-12 school safety is an increasingly

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urgent issue to research and understand from multiple perspectives. Research demonstrates that physical and psychological safety in school is linked to better student and school outcomes, and school safety is fundamental to fostering well-being and prosocial behavior. Despite the wealth of research that demonstrates positive outcomes associated with school safety, there is no comprehensive conceptual model in the literature that considers precursors, strategies, mechanisms, and outcomes of school safety together. A comprehensive model of school safety that considers the pathways through which inputs, programmatic activities or policies, and related outcomes, is needed to inform school safety research initiatives and violence prevention efforts. The current paper presents an equity-centered comprehensive model of school safety, which is intended as a holistic representation of the multiple aspects and pathways that contribute to school safety and positive youth development.

Context of the Problem

Youth violence is a significant social problem in the United States.[1,2] Violent and aggressive behaviors (e.g., bullying, fighting, weapon carriage) cause emotional and physical harm to young people, and may lead to serious injury or death. In 2019, over 20% of youth reported being in a fight at school, 7.4% of high school students were threatened or injured with a weapon at school, and 8.7% of high school students did not go to school at least once in the past month due to safety concerns.[2] As many as 1 in 4 teachers report experiencing violence from a student, colleague, or parent.[3,4] School violence affects both physical and mental health, and has negative influences on educational outcomes.[5, 6]

Safe schools are fundamental to addressing and preventing youth violence and fostering academic achievement, well-being, and prosocial behavior because youth spend substantial time in school and interacting with other youth.[7-11] We define a safe school as one that promotes

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student mental health, fosters a positive social climate among students and staff, and is a place where psychological and physical violence and aggressive behavior is minimized. Researchers and practitioners working on creating safe schools have studied and implemented a wide range of strategies including deterrence measures (e.g., metal detectors, door locks), early detection systems (e.g., threat assessment, anonymous reporting systems), primary prevention (e.g., climate, social emotional learning), and secondary and tertiary measures (e.g., crisis intervention strategies, coordination with law enforcement, trauma informed response and recovery). With an increase in attention to school safety research, we propose a comprehensive model of school safety that provides a framework for how various approaches to school safety and violence prevention may operate to influence school safety with the goal of promoting positive youth development.

Creating positive school environments and preventing school violence is vital for learning, healthy development, and mental health (i.e., emotional, physical, and social wellbeing).[12] Mental health issues that go untreated are associated with future problems for youth, including increased likelihood of academic failure, dropout, substance use, relationship conflicts, violent behavior, and suicide.[13, 14] A review of 113 papers on school climate and youth mental health outcomes demonstrated a deep, interconnected relationship between school climate, relationships at school, and overall well-being and mental health outcomes.[13] Research demonstrates that supportive relationships with peers and teachers, and positive school environments, are among the most important ways to support well-being in youth.[13]

School safety requires a comprehensive, evidence-based approach taking multiple aspects into consideration.[15] Most researchers agree that school safety cannot be achieved with a singular approach where one strategy will achieve the goals necessary to create a safe learning

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environment for youth. Yet, a conceptual framework integrating multiple perspectives across different strategies for school safety is lacking to guide research, practice, and policy initiatives.[15] Rather, currently, school safety researchers may adopt an educational perspective and focus on social emotional learning or climate issues, while a law enforcement perspective might focus on training for school safety officers or other deterrence approaches. Similarly, mental health researchers might focus on threat assessment and early detection, trauma informed approaches, and mental health first aid, while public health perspectives might focus on an ecological approach involving multi-sectoral teams guiding school strategies and policy that involve parents and families, local community organizations, and students. Current frameworks of school safety often integrate only the physical and temporal aspects of school safety (e.g., the school building and instructors)[16], but are limited as they do not adequately capture different strategies for school safety and violence prevention that have some level of evidence to support their use.

Addressing school safety requires a comprehensive, multi-faceted, and multidisciplinary approach. The need for integrating criminal justice, education, and public health approaches to school safety and violence prevention is widely recognized[17], but without a clear conceptual framework for understanding how various strategies operate together, these approaches remain siloed and lack the connections necessary for successful prevention. Strategies for school violence prevention require evidence-based strategies, analysis of the contextual components including the associated or contributing aspects and potentially root causes, attention to school climate and learning context, early detection, and law enforcement involvement in all phases of school safety. Comprehensive school safety requires that policies and systems support all students, caregivers, staff, and administration, and others within schools[15]. Strategies also require

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an understanding of and engagement with the communities where the school is embedded. A conceptual model that integrates multiple stakeholder perspectives and strategies may help schools develop comprehensive and locally tailored plans that address the complex nature of creating safe learning environments for our students.

With these considerations in mind, and building on the evidence base for school safety, we propose a comprehensive model of school safety to guide research and practice in the field. This model encompasses multiple disciplines (e.g., education, mental health, law enforcement, public health), considers multiple strategies (e.g., deterrence, early detection, primary prevention), and provides an ecological approach (e.g., schools, family, community) to understand and promote school safety. Our model fills a gap in school safety by creating a cohesive and comprehensive framework for integrating the many approaches to school safety and positive youth development. Our goal is to offer a conceptual model that helps practitioners, researchers, and policy makers make informed decisions and reach consensus regarding planning and decisions for reducing violence, establishing supportive environments, and contributing to positive youth development. This model may help reduce the research-practice gap by mapping how various strategies operate to influence school safety and elucidate where gaps exist when a comprehensive approach is not implemented.

Proposed Model

Our proposed model of comprehensive school safety (Figure 1) attends to different school environmental contexts that are the focus of school safety strategies, and recognizes that both school policy and capacity, as well as parents, guardians, and caregivers and community stakeholders, play a vital role in what is possible for developing successful school safety strategies. Our model includes four key components: 1) Contextual Factors; 2) School

Environment; 3) Equitable Response; and 4) Outcomes. Our ultimate outcome is positive youth development, reflecting our underlying perspective that safety is a proximal outcome designed to create school climates whereby youth can develop to become healthy and productive adults.

Contextual Factors

The model begins with the contextual considerations influencing strategies any school or district chooses to address school safety. These are a necessary condition for schools to develop a comprehensive approach to school safety[18]. We denote these as school policies and capacity, and the community where it is located.

Policy. This accounts for local, regional, and national legislations, policies, and regulations that can affect the implementation of school safety strategies. Local and state laws and political considerations may govern the focus or limitations of the enactment of school safety strategies in different schools. This is particularly important because we have no universal policies for school safety, paving the way for understanding how considerations beyond a school's locus of control influence strategies selected and implemented for school safety. As one example, several states require all schools to use an Anonymous Reporting System (ARS), confidential tip lines students can use to report safety concerns, but such policies often do not include the necessary components to implement them successfully, including stakeholder training for them to be most effective.[19] Recent research found that schools receiving ARS training were more effective in reducing school violence and improving students' confidence in reporting and feelings of safety at school than schools that only implemented an ARS as required by state law.[20] Similarly, several states require school safety officers (i.e., law enforcement presence in schools), while others have explicit legislation that does not allow law enforcement

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in the schools outside of crisis management. These different policy standards may define or drive the strategies schools implement.

Yet, local school policy and school district policies are vital components of the policy context for school safety planning and implementation. These policies can be helpful for individual schools to implement evidence-based, comprehensive approaches or can hinder best practices by requiring no tolerance directives, ignore disproportionate effects of different strategies (e.g., school to prison pipeline), or allow just a single action so schools can check a box that some effort was made to ensure school safety.[21] Policies under the control of local schools include support for development violence prevention teams, allowing staff time and training in safety-related strategies including skill building, supporting school staff to work on school climate issues, promoting policies of referral for help versus punishment-oriented approaches, and early detection teams. Local school policy could also include efforts engaging local community services and resources to be part of a referral system to reflect ecologically driven efforts for school safety.

Capacity. The *capacity* of schools and districts to implement school safety strategies is a multidimensional construct comprising both tangible and intangible assets,[22] and is a vital underlying condition that may drive the kind of school safety strategies implemented. Tangible assets include the number of school staff and relevant skills/experience, funding, and availability of time/space to plan and implement school safety strategies.[22] Intangible assets refer to facets such as community and family support, social capital, opportunities for community and family members to engage with the school, and the infrastructure and leadership to maximize school-community partnerships.[23] Effective capacity requires staff with skills for intersectoral collaborations among stakeholders, and resources (e.g., time, space, leadership) to establish

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comprehensive school safety teams, develop and maintain partnerships with community agencies, engage with communities and families, provide opportunities for parent/community involvement, mobilize and manage external resources (e.g., funding), critically analyze and understand the evidence base for choosing a particular strategy, and access to enough staff time to organize, coordinate, and lead school safety efforts.

Effective school safety may require schools to intentionally build capacity dedicated to the successful implementation of strategies with fidelity that may be beyond the typical skills of many school personnel whose training was focused on education, classroom management, learning, and motivation. Researchers suggest that school safety implementation efforts should focus on the main mission and purpose of schools, including by designated staff who are responsible for overseeing the implementation of school safety policies and programs, emergency management, and training within the site.[16] Yet not all schools and districts have such capacity within their system, which may require initial training and ongoing strong and consistent leadership to support and maintain capacity building. Thus, a necessary condition for successful school safety implementation requires staff with the skills and supportive proactive leadership to implement comprehensive strategies. A qualitative study demonstrated that miscommunication between staff members and administrators was perceived as one of the greatest challenges to effective school safety implementation.[24] Researchers described the importance of establishing a clear school safety philosophy and ensuring that the approach is tailored to all stakeholders who will work together to implement and sustain that strategy.[24]

An additional component of school capacity is funding. School budgets vary widely,[25] and the amount that schools and administrators can allocate towards school safety implementation and violence prevention can influence what is possible for employing a

comprehensive approach.[25] Not all schools or districts have the capacity for securing funding dedicated to school safety efforts through grants or other means, or to develop the best budgets necessary to carry out all the plans described in their proposals.

Capacity also refers to the students, as they are a key asset in building school safety. Involving students at various stages of planning and implementation capitalizes the assets of youth by influencing school culture and their peers and as being the foci of specific strategies. Through student empowerment and student-oriented strategies (e.g., bystander interventions), students can make a difference in their schools and communities by actively leveraging their voices, perspectives, and experiences.[26]

Communities and Caregivers

Community and Caregivers, including parents, guardians, and members within the larger school community also play an important role in the choices of school safety strategies and any one school or district's ability to implement effective and sustainable school safety strategies. The capacity and opportunities within the community is an important precursor that often determines how school safety is established and implemented. Agencies in the community work collaboratively with school officials to improve school safety and prevent violence. This might involve participating in school safety committees or attending school board meetings to provide input and feedback. Caregivers and communities support the mental health of students by providing a source for referral for mental health services for youth in distress and their families, partnering with schools to provide mental health services in the school, or playing a role in early detection strategies (e.g., mental health first aid or triaging ARS instances). Developing sustainable partnerships within the community also provides advocacy opportunities for school safety concerns by establishing a reliable feedback loop. This requires intentionally building

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cultural competence between the schools and the larger community to develop effective referral systems, open communications, and collaborative relationships. Understanding the norms and values of the community provides the opportunity for effective capacity building and alignment of the school safety strategies that are implemented within various contexts. It is vital that schools and law enforcement have positive and open communication for instances when there is an active violent event (e.g., shooting, group fight) that requires law enforcement intervention so the emergency response can be swift, appropriate, and coordinated.

These three underlying components—school capacity, policies, and community engagement—set the stage for the kinds of school safety strategies that are selected for implementation and their potential for effectiveness. Thus, our model suggests that a critical first step in any approach to school safety befits from assessment of and attention to setting up the infrastructure necessary for developing a comprehensive evidence-based strategy for school safety and violence prevention. Researchers recommend applying readiness assessments to help support the implementation of comprehensive school safety,[27] which helps define the kind of programs or approaches a school or district may choose to implement. We have conceptualized these programs and approaches as being focused on the social, attentive, and physical environment of the school.

School Safety Environment and Strategies

The *social* environment refers to the interactions between students, staff, caregivers, and the community at large. An *attentive* environment refers to what people are paying attention to, and how they become aware of threats within the school environment. The *physical* environment refers to the characteristics of the building access points and physical structures of the school building itself. We suggest that a comprehensive strategy to school safety requires attention to

these three these types of environments and that lacking some attention to any one of these may reduce the comprehensive nature of strategies for preventing violence and promoting safety. Additional information, including examples of strategies that fit within each of the environments, are provided in Table 1.

Social Environment. *Social* environmental approaches include programs designed to create supportive school climates (e.g., restorative justice, social emotional learning). These programs and activities are implemented to improve the quality of social and emotional life for students and staff. A positive and supportive social environment helps to establish norms for behavior, expectations for handling conflicts, and values for behaviors that are (un)acceptable for students, teachers, and other stakeholders.[28] When students and staff have access to social support systems, including counseling and mentoring programs, they are more likely to feel supported and connected within the school community,[10] which reduces the risk of problem behavior, as individuals are more likely to cope with stress and adversity in healthy ways. An additional component that is necessary in the social environment is developing a positive culture that promotes respect, inclusion, and a sense of belonging, and both a sense of responsibility to each other and an understanding of the consequences for breaking that code.

Examples of different strategies that can be implemented to support the social environment include social emotional learning,[29] mentorship programs,[30] relationship building,[31] and trauma-informed strategies.[32] When students, teachers, and other staff members have strong, positive relationships, they are more likely to feel a sense of connection and support within the school as and greater community.[33] This can help create a sense of safety and belonging, which can reduce the risk of violence and other forms of problem behavior. Restorative justice practices may also be part of the social environment, holding stakeholders accountable for engaging in

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behaviors that break the code of respect and supporting and providing a means for retribution that respects everyone involved.[34] Overall, the social environment plays a crucial role in shaping comprehensive school safety.

Attentive Environment. An *attentive* school environment is one in which students, teachers, and other staff members are aware of their surroundings, recognize when a friend or colleague is in distress, and are able to refer the person to appropriate help before the distress grows into a more serious issue.[35] An attentive environment, therefore, is one in which early detection approaches are implemented to help ensure students and staff receive the help they need to overcome their distress whatever the source.

Constructing an attentive environment involves early detection aspects including recognizing signs of distress, encouraging ARS, enhancing response time, and fostering effective communication between stakeholders. Examples of strategies include universal screening, implementing ARS, mental health support, and data mining/searching technologies to monitor online activities of students. When students and staff are aware of their surroundings and are alert to potential threats or hazards, they are better able to take actions, such as reporting to responsible parties and referral to appropriate services.

When students and staff feel comfortable reporting incidents or concerns to school officials, potential safety issues can be addressed more quickly. This can help prevent smaller incidents and early signs of distress from escalating into more serious self-harm or interpersonal violence and can improve the overall safety of the school. Early detection approaches require effective response time to ensure that potential threats or hazards are addressed quickly and appropriately to prevent escalation and demonstrate that such an early warning system can work effectively. This can be particularly important in emergency situations, where quick action can

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save lives. Finally, effective communication between students, staff, and other stakeholders helps to facilitate seamless and coordinated response to potential safety issues.

Attentive social environments require appropriate teams in place to handle referrals of early detection of distress. The triage system for these referrals is best when the teams include representatives with different perspectives (e.g., law enforcement, mental health, parents, teachers) to ensure the situation is diffused with the appropriate professionals involved. These teams should help ensure that threats or early reporting of distress are equitably implemented and avoid prejudice that may criminalize or exacerbate unconscious bias of youth based on race, sex, ability, or sexual orientation. When considering threat assessment, effective assessment and prevention approaches can be intentionally implemented in specific contexts to prevent violent incidents.[36] As one specific example, youth who have experienced a brain injury may have difficulty controlling their behavior.[37] Thus, sending them to detention may be the wrong approach for that child and suggests that universal screening for brain injury may be a useful strategy for early detection and helping youth suffering from the behavioral sequela (e.g., limited behavioral skills to avoid conflict) of a brain injury can get the psychological attention they need.

Physical Environment. The *physical* environment of a school refers to building characteristics, including measures that schools may employ to keep a school free from violence. Factors of the physical environment that are taken into consideration of the implementation of school safety include deterrent measures such as building design, security measures (e.g., metal detectors, cameras, door locks), drills, and panic buttons. This may also include narrow applications of law enforcement presence (i.e., their only role is policing) and limiting access to the schools with rules for drop-off locations, fencing, and strict parking regulations. A well-designed and maintained physical environment can help reduce the risk of violence and other

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forms of problem behavior.[38] We consider the building design, security measures, school resource officers with narrow law enforcement roles, and the physical safety of the school as aspects of the physical environment in our model.

The layout and design of a physical school building and design may include having classrooms located away from entrances and exits to make access more difficult for intruders, and also includes clearly marked exits in case of an emergency and plans in the case of an active incident.[39] Additional security measures and strategies, such as locks, metal detectors, cameras, and alarms can help prevent or deter potential threats, or help provide quick response by law enforcement during an active incident. A comprehensive approach to school safety requires maintaining the physical safety of the school and ensuring controlled access to the school building and having appropriate safety measures in place for an active situation.[40,41]

Equitable Strategies and Reponse

We include equitable response in our model to indicate that equity needs to be considered and continually evaluated throughout school safety implementation to prevent differential effects across different groups. We consider the implementation of responses to include secondary and tertiary measures, ensuring equitable response toward school safety. This might include the use of trauma informed practices, restorative practices, crisis intervention strategies, and coordination with law enforcement. This is vital to ensure that strategies for school safety do not have unintended and disproportionate effects on students based various characteristics (e.g., race, LGBTQIA+, gender, disability, etc.). Our model suggests that school safety must consider how different groups of students may be affected by different policies and practices and take steps to address potential inequities in implementation. Failure to attend to equity issues may exacerbate school violence, as those differently affected by such approaches may feel victimized,

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which may make them withdraw further from the school community, feel alienated from teachers and peers, and contribute to stigma, distress, and isolation.

One way to ensure equity in school safety approaches is for comprehensive strategies to involve students, teachers, and other stakeholders in the development and implementation of school safety policies and practices. Further, equity should include multi-sectoral violence prevention teams so multiple perspectives are represented in selecting approaches and creating attentive environments that treat everyone with respect and mitigate unconscious bias (i.e., preexisting bias or expectations of students from different backgrounds and experiences).

If school safety strategies and respective response are not implemented fairly, it undermines efforts to create safe school environments for all students and individuals who are potentially impacted by the efforts. To implement them in less equitable ways may be less subtle and therefore more obviously observed by the many actors in a school setting, and perhaps less likely to occur. Yet, we can imagine some scenarios where it is important not to single out youth at the individual or group level as these approaches are implemented. With appropriate training, these kinds of overt behaviors by the adults implementing them may be more easily addressed than the more subtle factors that may come into play with social and attentive environmental strategies, so equity is central in these approaches.

Outcomes

Our model suggests both proximal and longer-term outcomes for the approaches employed. Proximally, comprehensive school safety strategies need to be designed to address psychological and physical safety of students and staff. It is vital that implementation ultimately helps schools create environments where students can thrive and develop into healthy and productive adults. Taken together, the overall outcome, supported by psychological and physical

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safety, is positive youth development, which strives to support and empower the emotional, physical, and mental well-being and growth of all students.

Psychological & Physical Safety. *Psychological* safety is the emotional and psychological well-being of students and other stakeholders in school, and is one in which students feel respected, supported, and valued, and where they feel comfortable expressing their thoughts, feelings, and concerns. This individual-level outcome can promote psychological safety by creating a supportive and inclusive school culture, and includes measures such as antibullying and harassment policies, providing mental health support services, and promoting diversity and inclusion. Our model also suggests, however, that psychological safety contributes to the physical health of a school.

Physical safety is a critical outcome of comprehensive school safety. While this is the obvious goal of school safety and one that most people might consider the ultimate goal, our model acknowledges the vital role that psychological safety plays in creating a physically safe school as most physical threats emerge from psychological factors of isolation, discrimination, bullying, and disrespect.

Positive Youth Development. We suggest that the overall intended outcome of all school safety approaches is positive youth development, which refers to various strategies and practices that support the growth and development of young people in a positive and healthy manner. This may involve providing students with opportunities to develop various skills and competencies, including social and emotional learning, leadership, and problem-solving, and promote a positive and inclusive school culture that values diversity and creates a sense of belonging and connectedness. Positive youth development in schools is associated with improved academic outcomes, enhanced social and emotional development, and a stronger sense of self-worth and

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self-esteem.[19,42,43] This can also help to prevent negative behaviors including bullying, substance abuse, and violence, and promote a positive and supportive school environment.[44]

A safe and supportive school environment is essential for promoting positive youth development, which allows students to feel secure and supported as they grow and learn. It is important for schools adopt a comprehensive approach to school safety that considers both psychological and physical safety and promotes positive youth development as the overall intended outcome.[45] Overall, a safe and supportive school environment is essential for promoting positive youth development and supporting the well-being and success of students.

Implications for School Health, Policy, Practice, and Equity

Our comprehensive model and approach to school safety considers multiple interconnected factors that affect the safety of a school community. Together, policy, capacity, caregivers, and communities affect what is possible and how we conceptualize our approach and ultimately implement a comprehensive strategy. This includes procedures, training, and other measures that can help prevent or mitigate potential threats and promote a safe and supportive learning environment for students. Our model is a tool to help direct practitioners and school and community leaders to consider multiple approaches and underscore how one single approach may not be enough to achieve the goal of school safety or positive youth development. We also maintain that efforts to improve school safety consider both physical and psychological safety. A comprehensive model of school safety must consider the needs and experiences of all students and requires attention to disproportionate effects of the approaches implemented as school safety also includes paying attention to diversity in all its manifestations.

We argue that school safety requires attention to the social, attentive, and physical environments in schools and that these environments are interconnected. School climate and

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assessment and response, and building security each affect physical safety, and need to be a part of a comprehensive school safety strategy. Also implicit in our model is that it is guided by an evidence-based comprehensive, multi-strategy approach. We offer this model with an understanding of the different capacity and contextual factors that may be present in any one school or district, and that this provides the opportunity to overcome barriers to implementing specific strategies that will suit the distinctive needs of each system, site, and school. Further, we understand that each school or district has a unique ecological system and set of nuanced needs, and offering a multiplicity of school safety strategies that can be implemented in a comprehensive manner will allow the site to have autonomy over their preferred application.

This model can help guide schools and districts to address the barriers and identify the opportunities available to them to develop comprehensive evidence-based school safety strategies for their students and staff. Schools might utilize a needs assessment to identify vulnerabilities in current school safety plans to identify opportunities for more comprehensive approaches. This can involve recognizing which of the school environments their current school safety strategies affect and refining school safety plans with additional strategies to more toward more holistic approaches. Our model considers research that has identified different correlates including school climate, mental health, and anonymous reporting systems. We intentionally distinguish this from a conceptual model of school safety that would be used in response to a violent event in a school, such as a mass shooting. Rather, the focus of this model and its implementation is intended as primary, secondary, and tertiary prevention.

As schools move upstream in school safety and violence prevention efforts, this model can serve as a useful and important tool to facilitate the process of moving toward comprehensive safety. Because school safety needs evolve quickly, it will be important to iterate

through future versions of this model to ensure it accurately reflects the current landscape of school safety. To understand how this model of comprehensive school safety captures the pathways represented, a future direction includes empirically testing the model across multiple school contexts to elucidate real-life understanding of how these theoretical constructs are enacted within diverse pedagogical settings.

Conclusion

Overall, a comprehensive model and approach to school safety can help create a safer, more supportive, and more positive learning environment for students and school staff. Our comprehensive model of school safety considers a wide range of factors that may affect the safety and well-being of students and other stakeholders within and beyond school. This approach considers both psychological and physical safety and recognizes that these factors are interconnected. Our comprehensive model of school safety also involves engaging a range of stakeholders, including students, teachers, parents, and community members, in the development and implementation of policies and practices. This helps to ensure that the needs and concerns of all members of the school community are considered, and that strategies are developed that are responsive to the unique needs and circumstances of the school or district. Our model suggests that the implementation of multiple school safety strategies is vital to ensure a comprehensive approach to ensure the safety and well-being of students and staff. By thinking ecologically, schools, communities, and stakeholders can ensure that all aspects of the school context are included in the school safety strategies being implemented.

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References

1. Center for Homeland Defense and Security. (2019). *CHDS K-12 School Shooting Database*. https://www.chds.us/ssdb/resources/uploads/2019/04/K12-SSDB_Findings-Summary_032219.pdf

2. Centers for Disease Control and Prevention, & National Center for Injury Prevention. (2005). WISQARS (Web-based Injury Statistics Query and Reporting System). https://www.cdc.gov/injury/wisqars/index.html
3. Centers for Disease Control and Prevention (CDC). (2017, August). YRBSS | Youth Risk Behavior Surveillance System | Data | Adolescent and School Health.
4. McMahon, S. D., Peist, E., Davis, J. O., Bare, K., Martinez, A., Reddy, L. A., Espelage, D., & Anderman, E. M. (2020). Physical aggression toward teachers: Antecedents, behaviors, and consequences. *Aggressive Behavior, 46*(1), 116-126.
5. Nijs, M. M., Bun, C. J., Tempelaar, W. M., de Wit, N. J., Burger, H., Plevier, C. M., & Boks, M. P. (2014). Perceived school safety is strongly associated with adolescent mental health problems. *Community Mental Health Journal*, *50*, 127-134.
6. Welsh, M., Parke, R. D., Widaman, K., & O'Neil, R. (2001). Linkages between children's social and academic competence: A longitudinal analysis. *Journal of School Psychology*, *39*(6), 463-482.
7. Biglan, A., Flay, B. R., Embry, D. D., & Sandler, I. N. (2012). The critical role of nurturing environments for promoting human well-being. *American Psychologist*, *67*(4), 257.
8. Cohen, J., & Geier, V. K. (2010). School climate research summary: January 2010. *School Climate Brief*, *1*(1), 1-6.
9. Cohen, J., McCabe, E. M., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers college record*, *111*(1), 180-213.

Author Manuscript

10. Kutsyuruba, B., Klinger, D. A., & Hussain, A. (2015). Relationships among school climate, school safety, and student achievement and well-being: a review of the literature. *Review of Education*, *3*(2), 103-135.
11. Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, *83*(3), 357-385.
12. Bradshaw, C. P., Cohen, J., Espelage, D. L., & Nation, M. (2021). Addressing school safety through comprehensive school climate approaches. *School Psychology Review, 50*(2-3), 221-236.
13. McLaughlin, C., & Clarke, B. (2010). Relational matters: A review of the impact of school experience on mental health in early adolescence. *Educational and Child Psychology*, *27*(1), 91.
14. Snyder, M. (2015). Changing the tide: Stigma, school youth, and mental illness. *NASN School Nurse*, *30*(2), 130-132.
15. Astor, R. A., Guerra, N., & Van Acker, R. (2010). How can we improve school safety research?. *Educational Researcher*, *39*(1), 69-78.
16. Cowan, K. C., Vaillancourt, K., Rossen, E., & Pollitt, K. (2013). A framework for safe and successful schools [Brief]. Bethesda, MD: National Association of School Psychologists.
17. World Health Organization. (2014) Health in all policies. https://www.who.int/cardiovascular_diseases/140120HPRHiAPFramework.pdf
18. Madfis, E., Hirschfield, P., & Addington, L. A. (2021). School securitization and its alternatives: the social, political, and contextual drivers of school safety policy and practice. *School Psychology Review*, *50*(2-3), 191-205.

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19. Messman, E., Scott, B., Smith-Darden, J., Cortina, K., Thulin, E., Zimmerman, M., & Kernsmith, P. (2022). Psychological empowerment as a route for positive adjustment during adolescence. *Journal of Applied Developmental Psychology*, *83*, 101458.

20. Hsieh, H. F., Lee, D. B., Zimmerman, M. A., Pomerantz, N., Cunningham, M. C., Messman, E., Stoddard, S., Grodzinski, A., & Heinze, J. E. (2022). The effectiveness of the Say-Something anonymous reporting system in preventing school violence: a cluster randomized control trial in 19 middle schools. *Journal of School Violence*, *21*(4), 413-428.

21. Gregory, A., & Cornell, D. (2009). "Tolerating" adolescent needs: Moving beyond zero tolerance policies in high school. *Theory into Practice*, *48*(2), 106-113.

22. Osher, D., Dwyer, K. P., & Jackson, S. (2004). *Safe, supportive and successful schools step by step*. Longmont, CO: Sopris West Educational Services.

23. Radu, M. B. (2018). Do students' perceptions of unsafe schools and experiences with bullying hinder the effects of family and school social capital in deterring violence?. *American Behavioral Scientist*, *62*(11), 1505-1524.

24. Vagi, K. J., Stevens, M. R., Simon, T. R., Basile, K. C., Carter, S. P., & Carter, S. L. (2018). Crime Prevention Through Environmental Design (CPTED) characteristics associated with violence and safety in middle schools. *Journal of School Health*, *88*(4), 296-305.

25. Heise, M., & Nance, J. P. (2022). Per Pupil and School Safety Spending: An Empirical Perspective. *Journal of Education Finance*, *47*(3), 225-249.

26. O'Malley, M., Voight, A., & Izu, J. A. (2014). Engaging students in school climate improvement. Handbook of positive psychology in schools, 329-346.

27. Kingston, B., Mattson, S. A., Dymnicki, A., Spier, E., Fitzgerald, M., Shipman, K., ... & Elliott, D. (2018). Building schools' readiness to implement a comprehensive approach to school safety. *Clinical Child and Family Psychology Review*, *21*(1), 433-449.

28. Cohen, J. (2013). Creating a positive school climate: A foundation for resilience. *Handbook of resilience in children*, 411-423.

29. Kuperminc, G. P., Leadbeater, B. J., & Blatt, S. J. (2001). School social climate and individual differences in vulnerability to psychopathology among middle school students. *Journal of School Psychology, 39*(2), 141-159.

30. Fernández-Rouco, N., Fernández-Fuertes, A. A., García-Lastra, M., & España-Chico, C. (2022). School-based mentoring in secondary education: its effect on school climate and aggression among peers. *Canadian Journal of School Psychology, 37*(4), 328-343.

31. Payne, A. A., Gottfredson, D. C., & Gottfredson, G. D. (2003). Schools as communities: The relationships among communal school organization, student bonding, and school disorder. *Criminology, 41*(3), 749-778.

32. Crosby, S. D. (2015). An ecological perspective on emerging trauma-informed teaching practices. *Children & Schools, 37*(4), 223-230.

33. Johnson, S. L. (2009). Improving the school environment to reduce school violence: A review of the literature. *Journal of School Health*, *79*(10), 451-465.

34. Morrison, B. E., & Vaandering, D. (2012). Restorative justice: Pedagogy, praxis, and discipline. *Journal of School Violence*, *11*(2), 138-155.

35. Rapti, D. (2013). School climate as an important component in school effectiveness. *Academicus International Scientific Journal*, *4*(8), 110-125.

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36. Reddy, M., Borum, R., Berglund, J., Vossekuil, B., Fein, R., & Modzeleski, W. (2001). Evaluating risk for targeted violence in schools: Comparing risk assessment, threat assessment, and other approaches. *Psychology in the Schools*, *38*(2), 157-172.

37. Ilmer, E. C., Lambregts, S. A., Berger, M. A., de Kloet, A. J., Hilberink, S. R., & Roebroeck, M. E. (2016). Health-related quality of life in children and youth with acquired brain injury: Two years after injury. *European Journal of Pediatric Neurology*, *20*(1), 131-139.

38. Bradshaw, C. P., Milam, A. J., Furr-Holden, C. D. M., & Lindstrom Johnson, S. (2015). The School Assessment for Environmental Typology (SAfETy): An observational measure of the school environment. *American Journal of Community Psychology*, *56*, 280-292.

39. Leyden, G. (2021). Reducing violence to teachers in the workplace: Learning to make schools safe. In *Work-related Violence* (pp. 145-165). Routledge.

40. Lamoreaux, D., & Sulkowski, M. L. (2020). An alternative to fortified schools: Using crime prevention through environmental design (CPTED) to balance student safety and psychological well-being. *Psychology in the Schools*, *57*(1), 152-165.

41. Vagi, K. J., Stevens, M. R., Simon, T. R., Basile, K. C., Carter, S. P., & Carter, S. L. (2018). Crime Prevention Through Environmental Design (CPTED) characteristics associated with violence and safety in middle schools. *Journal of School Health*, *88*(4), 296-305.

42. Curran, T., & Wexler, L. (2017). School-based positive youth development: A systematic review of the literature. *Journal of School Health*, *87*(1), 71-80.

Author Manuscript

43. Lerner, J. V., Phelps, E., Forman, Y., & Bowers, E. P. (2009). *Positive youth development*. John Wiley & Sons Inc.

44. Peterson, R. L., & Skiba, R. (2000). Creating school climates that prevent school violence. *Preventing School Failure: Alternative Education for Children and Youth*, *44*(3), 122-129.

45. Gomez, B. J., & Ang, P. M. M. (2007). Promoting positive youth development in schools. *Theory into Practice*, *46*(2), 97-104.

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Table 1

School Environments, Definitions, and Example School Safety Strategies

Environment	Strategy
Social Interactions between students, staff, caregivers, and the community at large	Social Emotional Learning
	Mentorship Programs
	Trauma-Informed Strategies
Attentive What people are paying attention to, and how they become aware of threats within the school environment	Universal screening
	Threat assessment teams
Physical Characteristics of building access points and physical structures of school building itself.	Door Locks
	Crime Prevention Through Environmental Design

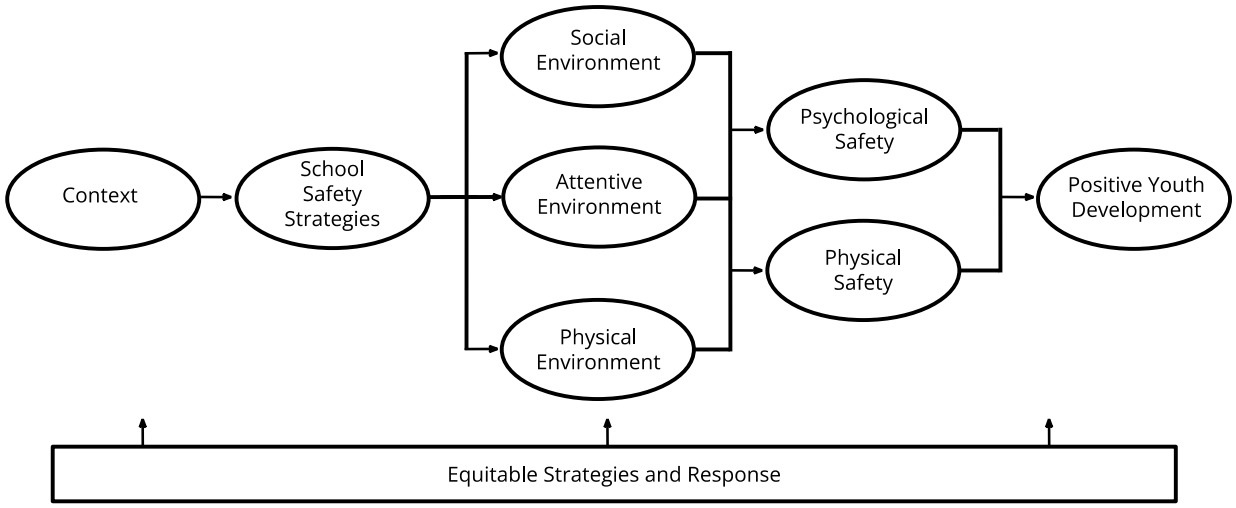
Note. This table represents the three different school safety environments, and examples of some associated school safety strategies. Strategies provided do not represent an exhaustive list of all school safety strategies representative of each environment.

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Figure 1

A Positive Youth Development Approach to School Safety

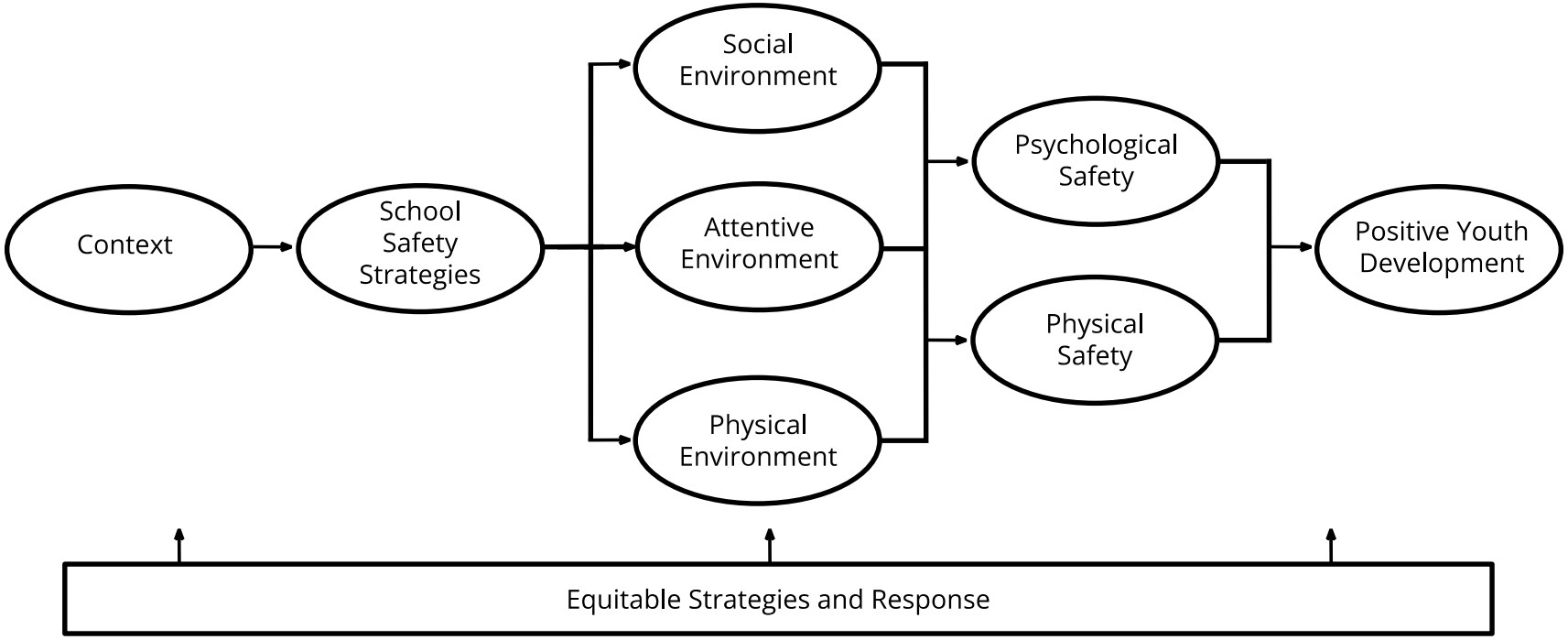


Note. This figure represents A Positive Youth Development Approach to School Safety, which reads from left to right, represents 1) Contextual Factors; 2) Environmental Factors and their associated strategies; 3) Equitable Response; and 4) Outcome. Taken together, the overall outcome is positive youth development, which strives to support and empower the emotional, physical, and mental well-being of all students.

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