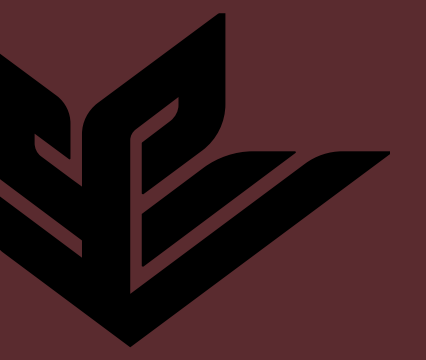


School Shootings and Preventative Strategies: An Examination



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ABSTRACT

Since the modern era began, humanity has seen a stark increase in mass shootings, where four or more people are killed. Furthermore, many of the shootings occur in vulnerable communities, like schools. With an increase in school shootings, schools have taken precautions to prepare children, using increased security, school police officers, lockdown drills, and restricting children’s clothing, which is intended to keep children safe but reinforces the fear of shootings and associated stress responses. Our research would examine the impact of surviving and preparing for school shootings on the anxiety, depression, and general functioning of children, adolescents, and young adults.

INTRODUCTION

- Since the shooting at Columbine High in April 1999, there have been over 249 shootings at primary and secondary schools, resulting in the loss of 147 lives (Slater et al., 2020)
 - Over recent years, almost one-third of states have weakened their gun laws, which has implications for adolescent health (Hodges et al., 2023).
 - Approximately 75% reported that fear of a mass shooting is a significant source of stress in their lives, compared to 62% of adults from all other generations (American Psychological Association [APA], 2018; Felix et al., 2022)
 - More than half of current youth feel stressed about the possibility that a school shooting can occur.
 - Traumatic experiences may activate posttraumatic stress responses that disturb sleep, concentration, and cognition and consequently undermine school functioning. Injuries and somatic symptoms, such as chronic pain and fatigue, might further impair concentration and lead to absence from school (Stene et al., 2018).
 - Following up on adolescents' mental health after exposure to school shootings is crucial, both for survivors' recovery and those impacted by anticipatory anxiety or depression.
 - Students and staff who regularly experience lockdown drills report higher levels of fear and lowered perceptions of safety (Schreck & Miller, 2003; Rygg, 2015). However, more research is needed to determine the long-term impacts on students’ mental health.
- Therefore, we are proposing a study that would measure the impacts of surviving, prepping for, and learning about school shootings on the anxiety, depression, or overall general functioning of children and adolescents.

PRIMARY AIM AND HYPOTHESES

1. RQ: What impact does surviving, prepping for, and learning about school shootings have on children and adolescents anxiety, depression, and overall general functioning?

1. HQ: Surviving, prepping, and learning about school shootings significantly and negatively impacts children and adolescents anxiety, depression, and overall general functioning.

METHODS

Participants

- 100 American students from ages 8-18 will be surveyed, including 50 that have survived a shooting and/or regularly participate in active shooter drills through their educational institution and/or have frequent visual reminders of shooting potential, and 50 that have never survived a school shooting, participate in active shooter drills or preparation for less than 3 hours per school year, and have little to no visual reminders of shooting potential.
- The sample will be taken from a pool of students surveyed in King and Pierce Counties, WA, from grade 3 of primary school through year 4 of secondary education. Participants will only be selected if they fall within the specified age range and if they meet the criteria for either the experimental or control group requirements. If eligible, caregiver permission will be required to participate for those under 18. Participants will be recruited through contacts with local schools, through an online eligibility screening sent to school officials, and directly to students where possible.

Procedures

- After the initial screening and selection process to determine eligibility, participants will complete all surveys online, meant to be taken with the assistance of a guardian for participants under 13.

MEASURES

Measures

Participants will take a 10-question survey on the nature of their experiences in surviving, preparing for, and learning about school shootings. Participants will then complete the Patient Health Questionnaire (PHQ-9), the Children’s Global Assessment Scale (CGAS), and the General Anxiety Disorder Survey (GAD-7). The language of each of these scales will be adjusted to match each grade level's competency, and participants under the age of 13 will have their caregivers informed about how to help their child through the survey process.

10-Question Survey

- This unique survey will gather information about each participant’s personal experiences with surviving, prepping, and learning about school shootings
- Questions in this survey will purely be focused on the content of the participants’ experiences rather than the impact these experiences had on their lives
- Results from this survey will determine which participants go into the experimental and which participants go into the control group.

Patient Health Questionnaire (PHQ-9)

- The PHQ-9 is a screening tool that measures depression
- It is a 10-item questionnaire
- Kids under the age of 13 would be given this tool, and with the help of a parent and/or guardian, they will be answering these questions
- Adolescents over the age of 13 will have a chance to take the questionnaire themselves
- Results from this screening tool will be summed, with higher sums representing higher levels of depression

Child Behavior Checklist (CBCL)

- The CBCL is a screening tool that measures general functioning in children and adolescents
- It is a 113-item questionnaire
- Kids under the age of 13 would be given this tool, and with the help of a parent and/or guardian, they will be answering these questions.
- Adolescents over the age of 13 will have a chance to take the questionnaire themselves.
- Results from this screening tool will be summed, with higher sums representing higher levels of behavioral dysfunction

General Anxiety Disorder Survey (GAD-7)

- The GAD-7 is a screening tool that measures general anxiety.
- It is an 8-item questionnaire
- Kids under the age of 13 would be given this tool, and with the help of a parent and/or guardian, they will be answering these questions
- Adolescents over the age of 13 will have a chance to take the questionnaire themselves.
- Results from this screening tool will be summed, with higher sums representing higher levels of anxiety

RESULTS

- The data from the PHQ-9 and the GAD-7 will be used to determine the effect on anxiety and depression among participants dealing with school shootings or evidence of them
- The data from the CBCL will be used to determine how a child's behavioral functioning is impacted when dealing with school shootings or evidence of them
- The summed scores from the participant's data will be analyzed to determine if there is a statistically significant relationship between participants’ levels of anxiety, depression, and behavioral dysfunction and their proximity to preparing for, surviving, and learning about school shootings
- A simple linear regression model will be used to analyze the data from the PHQ-9, GAD-7, and CBCL and their relationship to the participants’ proximity to school shootings and their evidence as reported in the unique 10-item questionnaire in distinct models for each measure

Discussion

- If we hypothesize that surviving, prepping for, and learning about school shootings have an impact, we will see negatively how children are doing in their social impact at school. The social impact includes; socializing with peers, school attendance, and school grades.
- This study investigates the relationship between anxiety, depression, and behavioral dysfunction in many ways schools choose to prepare their students for school shootings. It may indicate that these measures exacerbate the mental strain on their students.
- We believe that by better understanding the impact that the ongoing cultural phenomenon of school shootings and the way institutions have chosen to respond has on the actual children with their lives at stake, the better we as a collective will be able to act in the best interests of students’ physical and mental health.
- This study is meant to spark a conversation among clinicians to talk and discuss with their adolescent and young adult clients about school shootings and their impact on them since we are in a country of mass shootings. Suppose this study is efficacious in showing the negative impact on children's anxiety, depression, and behavioral functioning. In that case, future research should aim toward what other outcomes could help them and what interventions work.