Results The simulator received favorable realism scores for all domains with ‘appearance’ receiving the highest average realism score (4.58, SD = 1.03) and ‘sound’ receiving the lowest (3.86, SD = 1.57). The most suggested improvements were to tighten the steering wheel (27%), make the front tires visible (19%), and that no improvements were needed (18%). FEOs 65+ responded 5.00 [95% CI= -1.23, 11.24] seconds slower than younger FEOs when adjusted for medical diagnoses, labeled medication use, tractor generation, and tractor horsepower.

Conclusion The realism scores and suggestions from the FEOs demonstrated that the tractor miniSim is a viable approach to studying tractor driving. When examining the association between age and driving performance, it demonstrated that older FEOs have slower perception response times and therefore greater crash risk than younger FEOs.

Significance Farm equipment crashes represent the nation’s leading cause of work-related death within the deadliest occupation. As farmers continue to grow older, the need to understand their age specific risk factors for injury will continue to rise. Trends demonstrated in this study have the potential to become more significant as tractors increase size and velocity thereby increasing stopping distances.

Domestic & intimate partner violence

SOCIAL SUPPORT, MARGINALIZATION, AND TEEN DATING VIOLENCE AMONG NEW MEXICO YOUTH
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10.1136/injuryprev-2021-SAVIR.40

Statement of purpose This study uses data from the 2015 New Mexico Youth Risk Behavior Survey to determine whether perceived support is associated with lower prevalence of teen dating violence among marginalized youths.

Methods/Approach I conducted hierarchical linear regression to predict the effect of social support in three domains (at home, at school, and in community) on teen dating violence when controlling for the effects of marginalized identity, including sexual orientation, race/ethnicity, parent education, physical disability, nativity and homelessness.

Results Marginalized identities predicted higher prevalence of dating violence, with girls, homeless students, students with disabilities or long-term health problems, students born outside the U.S.A. and LGB students and those unsure of their sexual orientation experiencing more dating violence than their peers. When evaluated independently, social support at home, at school, and in the community each significantly predicted lower prevalence of teen dating violence. In multi-variable modeling, however, only home support and community support remained significantly predictive of less dating violence when controlling for marginalized identities.

Conclusion Social support in this study accounted for a small amount of the total variability in teen dating violence, while marginalization explained much more. Even so, these findings suggest that positive relationships with adults at home and in the community may help to protect marginalized young people from dating violence victimization.

Youth violence

BARRIERS AND FACILITATORS TO SUCCESSFUL RECRUITMENT AND ENGAGEMENT OF BLACK AND LATINX YOUTH IN HOSPITAL-BASED VIOLENCE INTERVENTION PROGRAMS
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10.1136/injuryprev-2021-SAVIR.41

Statement of purpose Black and Latinx youth bear an unequal burden of adversity and trauma with an overrepresentation in violent injury and gunshot wound hospital admissions. To address the long- reaching developmental impacts on health and wellbeing, hospital-based violence intervention programs (HVIPs) have emerged to provide case management services after discharge. Recruitment and engagement of youth are primary barriers to program success, yet little research exists on best practices. By convening a sample of representatives from established HVIPs, this study illuminates barriers and facilitators to successful recruitment and engagement of youth.

Methods/Approach Drawing from four HVIPs based in Midwest and Northeast cities of similar demographics in the United States, a purposive sample of representatives (n = 7) participated in a focus group (90 minutes). Content analysis was conducted in three phases. First, two researchers separately completed open and focused coding resulting in preliminary categories. Second, a researcher reviewed these codes for accuracy, and revisions were made after consensus was reached. Third, preliminary themes were vetted and finalized by the full research team using consensus. A code book was created documenting all changes.

Results Two themes emerged related to barriers and facilitators: ‘Individual/Relational’ with categories such as Patient and Parent-Specific Characteristics, Building Rapport, Enhancing the Teachable Moment, and Building Relational Health; and ‘Structural/Systemic’ with categories including Hospital Investment, Structural Racism, Workflow, Training and Preparedness of Staff, and Trauma Informed Procedures.

Conclusions The findings illuminate barriers and facilitators relevant to structural, programmatic, familial, and youth-focused aspects of HVIPs. Strategies to address these barriers are discussed.

Significance This is the first study to examine facilitators and barriers to recruitment and engagement of clients in HVIPs. As the emerging standard of care for violent injury in hospitals, studies advancing the practices of HVIPs are critical to ending the cycle of violence experienced by youth of color.
Statement of purpose Due to cultural and psychosocial barriers, immigrant women prefer to exhaust informal resources, including religious leaders, before seeking professional help for intimate partner violence (IPV). Based on research and theory, we used Intervention Mapping to create a virtual simulation training (4 modules, 20 minutes each) for Korean American religious leaders on primary, secondary, and tertiary IPV prevention in their congregation. This presentation discusses the challenges that the COVID-19 pandemic presented to study participation and the evaluation of this intervention.

Methods/Approach During 2020, we evaluated the intervention in a randomized trial (n=100) using online surveys (baseline, 3-month, 6-month). When the first stay-at-home order was issued in mid-March, 95% of participants had finished the baseline survey. However, 53% of the intervention group was still completing the intervention with others at various study stages. The 6-month survey included questions about the impact of COVID-19.

Results The online survey and intervention facilitated participation in the study—47%, and some participants had extra time because church services were closed—27%. However, COVID-19 had numerous adverse effects on program participation and emotional functioning: difficulty answering application questions due to lack of interaction with parishioners—33%, being too busy to participate fully—11%, overwhelmed—23%, uncertain about their church’s future—51%, financial strain—30%, unable to invite community organizations to educate the congregation on family violence—60%, reduced opportunities to apply new skills learned from the intervention—45%.

Conclusions The virtual simulation and online data collection facilitated the trial’s completion, but the toll of the pandemic reduced opportunities to demonstrate new skills.

Significance Online interventions and evaluations are a safe way to deliver an intervention during a pandemic. The information gathered about the pandemic’s emotional and practical impact was fundamental to understanding the program’s impact.

Youth violence

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Statement of purpose Black, Hispanic/Latino, and Native American students are more likely than White students to face harsher disciplinary policies and practices in schools.1 Such institutional-level policies interact with micro-level forces of racism, increasing the likelihood of race-related traumatic stress.2 This study aimed to characterize the experiences of discipline disparities, based on the perspectives of parents/guardians, staff, and students of color. Findings informed the adaptation of a culturally-responsive school-based intervention to address race-related traumatic stress.

Methods/Approach Nine focus groups were conducted with parents/guardians (n=12), school staff (n=27), and students of color aged 11–14 years (n=24) from 12 schools to inform the adaptation of the intervention. Participants were asked open-ended questions about trauma, racism, school support, and intervention recommendations. For this study, transcripts were coded and thematically analyzed to identify factors related to racial disparities in discipline.

Results Racial disparities in disciplinary norms and policing in schools were the two primary themes identified. Parents discussed punitive disciplinary responses to typical behavior, and the resulting family mistrust. Students and staff identified and compared experiences in disciplinary action among students, noting that Black students were disciplined more harshly, relative to White students. Participants also recommended greater parental involvement in disciplinary decisions, conflict de-escalation in classrooms to prevent further disciplinary action, and mitigating interpersonal racism and stereotypes.

Conclusion Interventions aimed at reducing school violence among students of color should address race-based traumatic stress related to disparities in school disciplinary norms, expectations, and actions. Our findings suggest the need to prioritize cultural humility among teachers and staff, alongside stronger school and family relationships.

Significance Discipline disparities correlate with disparities in academic attrition, emotional/behavioral problems, violence victimization, delinquency, incarceration, and recidivism.3 Understanding stakeholder perspectives and experiences surrounding discipline disparities can inform targeted interventions designed to address the consequences of race-based traumatic stress, discrimination, and violence disparities in schools.

Firearms

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Statement of purpose Veterans are more likely to own firearms and have a higher risk of fatal firearm injury than non-Veterans. The patterns of Veterans’ fatal and nonfatal firearm injury may vary by region and by rural versus non-rural residence. Research is needed to inform the development of culturally-appropriate firearm risk reduction programs for Veterans who use Department of Veterans Affairs (VA) healthcare.

Methods/Approach Using VA administrative data, we examined firearm injury rates among VA healthcare- using Veterans from 2010–2019, comparing Veterans by state and by rural/non-rural residence (a single state, Oregon, is presented here). Firearm injuries were identified and categorized by intent using International Classification of Diseases diagnosis codes. We examined injury circumstances by conducting electronic health record chart reviews.

Results Among a national cohort of 9.8 million Veterans, 11,380 received care for firearm injuries, with 207 occurring among Veterans in Oregon. Rural Veterans had a higher rate of firearm injuries than non-rural Veterans in Oregon (30.2 versus 22.4 per 100,000 Veteran-years, respectively), but not nationally (24.0 versus 24.5). Unintentional firearm injuries