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FY24 Integrated Prevention Research Agenda

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This research agenda summarizes DoD's research gaps and priorities. This document is not intended to serve as a broad agency announcement for proposals or for a request for proposals.

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Executive Summary¹

The Fiscal Year (FY) 2024 Integrated Prevention Research Agenda defines key research priorities to synchronize Department of Defense (DoD) research on integrated primary prevention and accelerate the Department's key prevention initiatives, such as implementation of the approved recommendations from the Independent Review Commission (IRC) on Sexual Assault in the Military (2021).² This agenda reflects the requirement for an annual research agenda in the National Defense Authorization Act (NDAA) for FY22, Section 549A, focused on the primary prevention of harmful behaviors, such as sexual assault, harassment, domestic abuse, child abuse and neglect, and suicide. The agenda also addresses specific priorities required by NDAA FY23, Section 547. As defined in the December 20, 2022, DoD Instruction (DoDI) 6400.11,³ "DoD Integrated Primary Prevention Policy for Prevention Workforce and Leaders" (pg. 42), the research agenda "strengthens the DoD's primary prevention research portfolio by prioritizing research topics, ensuring collaboration across sectors and organizations, and reducing duplication of effort."

As a result, the Department identified the following research priorities, subject to availability of funds, for FY24:

- Define risk and protective factors at interpersonal and organizational levels
- Assess whether and to what extent sub-populations of the military community are targeted by harmful behaviors more than others (research priority is specifically directed by NDAA FY23, Section 547)
- Seek to improve the collection and dissemination of data on hazing and bullying associated with interpersonal and self-directed harm (research priority is specifically directed by NDAA FY23, Section 547)

Define Risk and Protective Factors at Interpersonal and Organizational Level

A priority for FY24 is to identify risk and protective factors beyond the individual level that contribute to and defend against harmful behaviors in military settings. Examples of such protective and risk factors include collective efficacy (i.e., a group's perception that they can successfully work together to accomplish mutually valued goals) and gender stereotypes (e.g., the belief that men lead by predominantly using logic while women lead with a predominantly emotional style). The Agenda reflects the Department's focus on identifying and measuring risk and protective factors at the interpersonal and organizational levels in a military context.

Assess Whether and to What Extent Sub-Populations of the Military Community are Targeted by Harmful Behaviors More than Others

A second priority for FY24 is to identify sub-populations at increased risk of being targeted by harmful behaviors. For example, a review of previous research found gender (e.g., women who experience and report more instances of sexual abuse and intimate partner violence (IPV) as compared to men) and sexual orientation (e.g., those with lesbian, gay, and bisexual identities)

¹ This research agenda summarizes DoD's research gaps and priorities. This document is not intended to serve as a broad agency announcement for proposals or for a request for proposals.

² Independent Review Commission on Sexual Assault in the Military. "Hard Truths and the Duty to Change

⁻ Recommendations from the Independent Review Commission on Sexual Assault in the Military," 2021

³ DoDI 6400.11, "DoD Integrated Primary Prevention Policy for Prevention Workforce and Leaders," December 20, 2022, as amended

sub-populations at increased risk (e.g., Beckman, Shipherd, & Simpson, 2018; Hourani, Williams, & Bray, 2015).

As a related focus, given the importance of understanding characteristics and pathways that create vulnerabilities, the Department will explore command climate issues and mechanisms for perpetration (consistent with recommendations from the DoD Sexual Assault and Prevention Office's (SAPRO's) FY21-25 research agenda) that may help further identify specific subpopulations disproportionately impacted by harmful behaviors.

Seek to Improve the Collection and Dissemination of Data on Hazing and Bullying Related to Interpersonal and Self-Directed Harm

The third research priority for FY24 is to develop processes to address barriers and advance facilitators related to collecting, disseminating, and acting on data related to hazing and bullying. Development of processes on the collection and dissemination of data will ensure the quality of the data on bullying and hazing within a military context is actionable and appropriate for installations at different levels (e.g., synthesizing relevant data in one place, such as into a dashboard, and helping to make the data understandable). Dissemination should be accompanied by support, as applicable, to address barriers related to capacities in the Military Departments, Services, and National Guard Bureau (NGB) to provide actionable feedback to reduce hazing and bullying.

Introduction

The Department is dedicated to cultivating safe and healthy climates for all members of the military community. Multiple investments support this dedication, including ongoing prevention research across DoD that provides actionable information to commanders, policy offices, and other prevention collaborators. Research priorities will contribute to the development and implementation of primary prevention strategies for DoD.

As defined in DoDI 6400.11 (G.2.), and in response to NDAA FY22, Section 549A, the research agenda "strengthens the DoD's primary prevention research portfolio by prioritizing research topics, ensuring collaboration across sectors and organizations, and reducing duplication of effort." To fulfill these requirements, this document:

- 1) Identifies specific focus areas and research priorities for FY24, and
- 2) Identifies methods for dissemination of research findings to the primary prevention workforce.

DoD developed the FY24 research priorities in collaboration with federal departments and agencies (e.g., Centers for Disease Control and Prevention [CDC] and the Psychological Health Center of Excellence) and with researchers from civilian institutions who were assigned to the Department of Defense pursuant to Intergovernmental Personnel Agreements.⁴ Research priorities were identified based on their potential impact on prevention practice within the Department and alignment with NDAA FY23, Section 547, which states that:

⁴ The CDC completed this work through an Interagency Agreement. Collaboration with civilian institutions was facilitated through Intergovernmental Personnel Agreements.

"The Secretary of Defense shall ensure that the findings and conclusions from the primary prevention research agenda[...] are regularly incorporated, as appropriate within the primary prevention workforce [...]"

The Research Agenda Framework

In FY22, the Department developed the research agenda framework that was subsequently approved by Under Secretary of Defense for Personnel and Readiness (USD(P&R)) as part of the FY23 Integrated Primary Prevention Research Agenda (see Appendix A and Table 1). The framework collaboratively develops a unity of effort across DoD and maximizes benefit from research by focusing on efforts to establish primary prevention activities that have the potential to address multiple harmful behaviors at once.

The framework structure represents a crosswalk of the human resource elements in Prevention Plan of Action (PPoA) 2.0 and each step of the prevention process. Specifically, the framework reflects the immediate and enduring prevention needs for: 1) leadership, 2) Integrated Primary Prevention Personnel, and 3) the military community through the different stages of the prevention process.

In FY22, DoD conducted a summary literature review for the entirety of the framework (i.e., all cells of Table 1). Focus areas shown in Table 1 reflect findings and gap analyses categorized into immediate needs versus enduring needs for DoD. Gaps and themes in italics align with ongoing research being conducted as part of the implementation of the DoD-approved IRC recommendation. From the many focus areas outlined in Table 1, DoD selected one for FY24 development (shown in bold and underlined). DoD also aligned the two additional FY24 focus areas that were directed by NDAA FY23, Section 547, with the framework (shown in bold).

Table 1. Research Agenda Framework: Prevention Focus Areas

	Leadership Focus Areas		Prevention Workforce Focus Areas		Military Community Focus Areas	
	Immediate	Enduring	Immediate	Enduring	Immediate	Enduring
Understand the Problem	 Define leadership competencies, style, and/or type to support prevention (IRC Rec 2.1a) Identify optimal type and phase of leadership development to maximize effectiveness of prevention activities 	 Understand how leadership actions impact Service members' perceived opportunities at work Understand how minimum service obligations influence leadership development, climate, and harmful behaviors 	 Define prevention workforce competencies (IRC Rec 2.2a) Understand and develop pathway for effective integration of civilians into prevention roles, military culture, and nature of interaction with other functional communities 	 Assess impact of background (e.g., veteran status, spouse, educational background) on employee fit and personnel work satisfaction Assess impact of background (veteran status, spouse, educational background) on prevention process and job performance 	 Assess prevalence of harmful behaviors at local level (IRC Rec 3.7c) Define risk and protective factors at interpersonal and organizational levels Assess prevalence of pre-military risk or protective factors Understand risk and protective factors for harmful behaviors in the cyber environment 	Assess co- occurrence and/or interaction of harmful behaviors or shared risk and protective factors, developmental trajectories (e.g., adverse childhood experiences influence on subsequent behaviors) Determine long term effects of family abuse and harm on the military family
Comprehensive Approach	 Develop practical and applicable organizational change tools for leaders to support implementation of comprehensive prevention solutions Identify which leader relationships and networks produce buy-in and enthusiasm for integrated prevention approaches 	Incorporate applicable change management theories into development and implementation of integrated prevention approaches	Define training necessary for each role within the prevention workforce (IRC Rec 2.2b)	Identify evidence-based and/or evidence informed prevention activities that reduce multiple forms of harm or abuse Assess the intersection of harmful behaviors, inequalities, and other factors to equip workforce with research-based tools that can be tailored for each military community	Identify and develop multi-pronged and multi-level integrated prevention approaches for the military community Develop standardized methods for evaluating multi-pronged and multi-level integrated approaches	Develop military- specific community and organizational level prevention approaches (IRC Rec 2.3b) Develop and evaluate how online platform(s) can contribute to an integrated approach and increase prevention effectiveness

Quality Implementation

- Develop metrics to measure organizational resistance to prevention
- Define implementation challenges unique to the military environment (e.g., deployments, frequent reassignments, Service, and occupation specific cultures)
- Assess impact of organizational characteristics (unit climate, bureaucracy, power dynamics) on leadership development and prevention

effectiveness

- Assess utilization and define enhancements to maximize community of practice (SPARX Connection)
- Identify interpersonal characteristics of prevention personnel that enhance performance
- Identify implementation science principles that support local prevention practice
- Identify capacity/needs assessments, evaluation/continuous quality improvement (CQI) tools and data that fit needs of the workforce

- Assess impact of organizational characteristics on prevention workforce performance
- Assess long term effects and comparative effectiveness of specific prevention tools
- Adapt civilian approaches for military environment and demographic
- Identify essential elements of effective prevention approaches for military community
- Identify considerations for health equity and social determinants of health in implementation of prevention activities
- Identify barriers and facilitators of prevention effectiveness in military community and develop countermeasures

- Identify effective methods for scale up and dissemination of prevention activities
- Identify factors influencing effective implementation of comprehensive approaches

Continuous Evaluation

- Develop tools and metrics to assess leader performance in prevention and impact on healthy command climate (IRC Rec 3.7)
- Identify which metrics are appropriate for evaluating leadership action (i.e., which behaviors leaders can causally influence through organizational climate and leadership action)
- Assess
 effectiveness of
 leadership actions
 on command
 climate & harmful
 behaviors;
 including
 organizational
 characteristics that
 enhance or
 constrain leaders'
 efforts to support
 prevention
- Assess effectiveness of training and continuing education on prevention workforce performance
- Develop metrics to assess competence of workforce in advanced skillsets (e.g., evaluation)
- Develop and validate tools to assess performance; including measures of competence and proficiency.
- Develop standardized metrics and methods for assessing behavior change, climate, and community change in transient community
- Develop data collection and access plans to enable valid cost benefit analyses to be completed prospectively
- Assess
 effectiveness of
 community and
 organization level
 approaches (IRC
 Rec 2.3b)
- Assess
 effectiveness of
 comprehensive
 approaches that
 address multiple
 harmful behaviors
 - Conduct cost benefit analyses of prevention activities

Note: Gaps and themes in italics align with ongoing research being conducted as part of the implementation of the DoD-approved IRC recommendations. Underlined and bolded is the one DoD selected focus area for FY24 development. DoD also aligned additional FY24 focus areas in bold that were directed by the NDAA FY23, Section 547.

FY23 Research Agenda Progress

Priorities from the FY23 Research Agenda, and efforts underway in addressing these priorities, are as follows:⁵

- Understand Service members' activities and prevention needs within the cyber environment: Through an interagency agreement with Library of Congress Federal Research Division (FRD), DoD is exploring Service members' activities in the cyber environment (i.e., social media, internet sites including blogs and social networking sites, apps [e.g., dating apps, Jodel], and video games) to assess prevention needs. DoD is also exploring how to leverage the cyber environment to enhance prevention activities.
- Understand how the cyber environment shapes Service member attitudes and behaviors in ways that increase or decrease harmful behaviors: Through the agreement with the FRD, DoD is also assessing how activities in the cyber environment can increase or decrease risk and protective factors associated with various harmful behaviors. For example, FRD is reviewing published academic literature and government studies to identify how the cyber environment shapes Service member attitudes and behaviors, including information cocooning among Service members.
- Define elements and the essential conditions necessary for the implementation and evaluation of multi-pronged, multi-level, integrated approaches in military communities: Through an interagency agreement with the CDC's Division of Violence Prevention (DVP), DoD is conducting a review of the literature to create a comprehensive menu of approaches applicable to the military environment that would constitute a multi-level prevention approach with mutually reinforcing prevention activities at each level of the social ecology. The envisioned end-products will complement the recently developed "Community and Organizational Level Prevention of Harmful Behaviors in the Military: Leveraging the Best Available Evidence."
 (Downloadable from: https://www.sapr.mil/prevention-tools-and-resources).
- Develop and evaluate online bystander intervention tools to mitigate risk for harmful behaviors in the cyber environment: Through the agreement with the CDC DVP, DoD will explore the best available evidence for bystander interventions and adapting bystander intervention approaches for the cyber environment. For example, the CDC DVP delivered a webinar on strategies for countering technology-facilitated abuse and harassment and gathered feedback from attendees on this topic as it relates to the military context. This data will be used for future development and evaluation of online bystander intervention tools.

⁵ In addition, while not part of the FY23 Research Agenda, an additional requirement in NDAA FY22, Section 549A was to improve dissemination of prevention research. To meet this requirement, DoDI 6400.11, establishes a DoD Clearinghouse for Primary Prevention Research to catalog and disseminate information on DoD-sponsored prevention research and evaluation findings (including integrated primary

FY24 Research Agenda Focus Areas

DoD identified one focus area for deeper analysis to inform the FY24 research agenda. In addition, DoD conducted an analysis of research areas directed by NDAA FY23, Section 547. For FY24, DoD prioritized focus areas to meet a current need (e.g., support implementation of the DoD approved prevention-related IRC approved recommendations). The Department identified the following focus areas (see bolded items in Table 1 for corresponding framework items).

- Define risk and protective factors at interpersonal and organizational levels
- Assess whether and to what extent sub-populations of the military community are targeted by harmful behaviors more than others (research priority is specifically directed by NDAA FY23, Section 547)
- Improve the collection and dissemination of data on hazing and bullying related to interpersonal and self-directed harm (research priority is specifically directed by NDAA FY23 Section 547)

FY24 Research Priorities

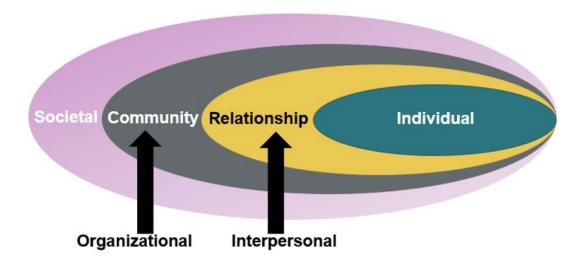
Based on the analyses within each focus area, DoD identified the priorities that were in alignment with NDAA FY23, Section 547 (and which could provide greatest potential to impact prevention practice within the Department. More detailed references to published literature aligned with these priorities are included in Appendix B.

Focus Area 1: Define Risk and Protective Factors at Interpersonal and Organizational Levels

Research Priority: Conduct research to identify risk and protective factors beyond the individual level contributing to harmful behaviors in military settings.

Risk and protective factors for harmful behaviors at the interpersonal and organizational level of the social-ecological model (SEM, see Figure 1) need to be further understood in a military context; most research to date has been contextualized at the individual level. An example of a protective factor at the organizational or community level is collective efficacy. In communities with collective efficacy – in which a group perceives an ability to work together to agree on shared, mutually valued goals – adults are less likely to perpetrate child maltreatment and perpetrate IPV (e.g., Capaldi, Knoble, Shortt, & Kim, 2012). In addition, some examples of community-level factors such as alcohol outlet density, neighborhood disorder, and firearm availability and accessibility increase risk for harmful behaviors. Examples of societal level risk factors include gender stereotypes and institutionalized racism (e.g., Armstead, Wilkins, & Doreson, 2018; Lippy & DeGue, 2016; Sanchez, Jaguan, Shaikh, McKenney, & Elkbuli, 2020).

Figure 1. Social-Ecological Model—Military



Defining risk and protective factors beyond the individual level that align with a military setting and with approved recommendation 2.3a of the IRC on Sexual Assault in the Military will set the stage for longitudinal studies to identify change over time and program evaluation efforts (focused on modifying those factors) to decrease harmful behaviors. Additionally, the published report of the Suicide Prevention and Response Independent Review Committee also endorsed program evaluation for suicide and well-being efforts. Important emphasis should be given to understanding protective factors (which are under-researched in both military and civilian contexts) and risk factors that are shared across multiple forms of harmful behaviors.

Focus Area 2: Assess Whether, and to What Extent, Sub-Populations of the Military Community are Targeted by Harmful Behaviors More than Others

Research Priority: Identify subpopulations at increased risk of being targeted for harmful behaviors.

This priority is in response to NDAA FY23, Section 547 (c.2), which focuses on whether and to what extent sub-populations of the military community are targeted by harmful behaviors more than others. Research evidence shows that sub-populations at increased risk for experiencing interpersonal harmful behaviors include specific gender (e.g., women) and lesbian, gay, bisexual, and transgender (LGBT) identities (e.g., Beckman, Shipherd, & Simpson, 2018; Hourani, Williams, & Bray, 2015). For example, studies have shown women are more likely to report sexual abuse and IPV compared to men (Hourani et al., 2015; Cowlishaw et al., 2022). Similarly, harassment (verbal or physical) disproportionately affects female Service members (Breslin et al., 2022). Almost one in five transgender Service members report experiencing sexual assault, which is nearly twice as high in transgender men compared to transgender women (Rubenstein, Lu, MacFarlane, & Stark, 2020).

This research priority relates to approved recommendations 2.5a and 2.5b of the IRC on Sexual Assault in the Military, and DoDI 6400.11 (Section 3.3.e.3.a), which describe the need to identify solutions for populations disproportionately impacted by harmful behaviors and to address the climate issues contributing to the problem. This priority also relates to DoDI 6400.09 (Section

4.7),⁶ "DoD Policy on Integrated Primary Prevention of Self-Directed Harm and Prohibited Abuse or Harm," which requires programs and policies focused on selected primary prevention that reduce risk and increase protective factors. Gaps in the research may inform solutions by exploring subpopulations at increased risk for interpersonal harm, the extent to which military culture might increase the likelihood of experiencing harm, and how stigma experienced by alleged victims of abuse and harm relate to barriers in reporting abuse.

Focus Area 3: Seek to Improve the Collection and Dissemination of Data on Hazing and Bullying Related to Interpersonal and Self-Directed Harm

Research Priority: Develop processes to address barriers and advance facilitators related to collecting, disseminating, and using data on hazing and bullying.

Processes need to be implemented to communicate and disseminate research findings on bullying and hazing in a military context. These findings could prove useful for installations at different levels. Goals for dissemination of hazing and bullying data by the integrated primary prevention workforce include increasing awareness, understanding, and action to decrease harmful behaviors.

Conclusion

Three research priorities are outlined for FY24 – two were directed by the NDAA FY23 and one identified by DoD. First, risk and protective factors at the outer levels of the SEM need to be more fully understood within a military context as a step towards determining how those factors could be modified to reduce harmful behaviors. Second, examining whether and to what extent sub-populations of the military community are targeted by harmful behaviors more than others may serve as a step towards understanding the problem. Finally, addressing facilitators and barriers to disseminating, using, and applying bullying and hazing data may advance a data-informed approach to addressing multiple harmful behaviors.

In accordance with the NDAA FY23, Section 547, the Department will ensure that research and findings from the research agenda are regularly incorporated, as appropriate, within the activities of the integrated primary prevention workforce. Moreover, DoD is taking additional steps to institutionalize the dissemination of research results where appropriate to ensure cohesion, and increase the visibility of research across the Department to eliminate redundant research and promote unity of effort.

⁶ DoD Instruction 6400.09, "DoD Policy on Integrated Primary Prevention of Self-Directed Harm and Prohibited Abuse or Harm," September 11, 2020, as amended

Glossary

G.1. Acronyms.

Acronym Meaning

DoD Department of Defense

DoDI Department of Defense Instruction

NDAA National Defense Authorization Act

FY Fiscal Year

VPC Violence Prevention Cell

CDC Center for Disease Control and Prevention

DVP Division of Violence Prevention

USD(P&R) Under Secretary of Defense for Personnel and Readiness

IPV Intimate partner violence

IRC Independent Review Commission

DoD SAPRO Department of Defense Sexual Assault Prevention and Response Office

LGBT Lesbian, gay, bisexual, and transgender

NGB National Guard Bureau
SEM Social Ecological Model

G.2. Definitions

Bullying: Defined in DoDI 1020.03.

Child Abuse: Defined in DoDI 6400.01.

Continuous Evaluation: Routinely analyzing information and data to determine if prevention activities are changing the factors they were designed to address. This includes evaluation of activities and program outputs as well as evaluation of program outcomes.

Domestic Abuse: Defined in DoDI 6400.06.

Evaluation: The use of systematic methods to collect, analyze and use information to inform implementation of a policy, program, practice, or processes.

Evidence-Based: Effective policies, programs, practices, or processes that are evidence-based are found to be effective based on research evidence, reflecting significant expertise and investment.

Harassment (Service member): Defined in DoDI 1020.03.

Harassment (Civilian): Defined in DoDI 1020.04.

Harmful Behaviors: Self-directed harm and prohibited abuse and harm, including suicide and sexual assault, harassment, retaliation, domestic abuse, and child abuse and neglect.

Hazing: Defined in DoDI 1020.03

Integrated Primary Prevention: Defined in DoDI 6400.09.

Military Community: Defined in DoDI 6400.09.

Practice: Discrete behavior or action contributing to prevention.

Prevalence: Defined in DoDI 6400.09.

Prevention Activities: Defined in DoDI 6400.09.

Primary Prevention: Defined in DoDI 6400.09.

Prevention Process: Empirically validated procedures that promote effective planning,

implementation, and evaluation of prevention activities.

Protective Factors: Defined in DoDI 6400.09.

Research-based Prevention Activities: Defined in DoDI 6400.09.

Risk Factors: Defined in DoDI 6400.09.

Selected Primary Prevention: Primary prevention efforts will be selected in order to reduce harm by addressing the needs of groups identified to be of high risk.

Sexual Assault: Defined in DoDI 6495.02, Volume 1.

Social Determinants of Health: Conditions in the environments in which people are born, live, learn, work, play, and worship that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

Social Ecological Model: Describes the interplay between individual, relationship, community, and societal level factors that increase risk or protect people against harmful behaviors.

Suicide: Defined in DoDI 6490.16.

Appendix A: Framework Summary Literature Review Introduction

In order to develop the Research Agenda Framework, DoD conducted a summary literature review of current research pertaining to the military community, the prevention workforce, and military leadership. This wide sweep of the literature highlighted ongoing military and civilian research pertinent to the Department's goals and identified gaps where additional research may be necessary.

Military Community

The DoD focused their initial literature review and gap analysis on the military community and integrated prevention. They included recent (i.e., since 2012), peer-reviewed prevention articles that spanned more than one harmful behavior, initially narrowing their focus to the active-duty military population. After this initial scan, they complemented the military literature with civilian research, including technical packages, funded research agendas, and recent meta-analyses on integrated prevention.⁷

A large number of the articles focused solely on suicide, solely on veteran populations, or did not address shared risk or protective factors. Of the articles that did mention shared risk or protective factors, few examined how factors impacted more than one form of harmful behavior. This focus on a single harmful behavior was reflected not only in the peer reviewed literature, but also in formal military reports. Generally, few articles intentionally looked at multiple forms of harmful behaviors as a purposeful outcome of prevention. Instead, there is rich literature on suicide prevention in the military, with little to no discussion of how risk and protective factors for suicide intersect with risk and protective factors for other harmful behaviors

Prevention Workforce

Implementation of effective integrated primary prevention requires a trained and resourced prevention workforce, including dedicated professional staff equipped with a public health skillset. The prevention workforce should have an adept knowledge of prevention and the ability to implement strategic guidance at the individual, interpersonal, organizational, and community levels. Research involving a prevention workforce was focused on the characteristics and competencies of prevention professionals, training and development that advances prevention professionals' capabilities, the tools such professionals need to implement prevention activities with fidelity, and contextual or organizational factors that enhance the effectiveness of prevention (e.g., supportive climate). DoD focused their prevention workforce literature review on public health core competencies, workplace culture, and organization change and innovation. Much of the literature examined prevention professionals in a health care or medical setting.

Findings from the summary literature review suggest that a successful prevention workforce must be able to: 1) describe violence as a significant social and health problem; 2) analyze and interpret incident data; 3) design prevention activities and evaluate these activities; 4) disseminate findings to partners; 5) understand mechanisms for change; 6) and remain vigilant to the evolving evidence-based literature surrounding harmful behavior prevention. Most

⁷ The military community literature review contained recent literature, examining the past five years from 2017 to 2022. .

prevention personnel develop expertise in one or two forms of violence; however harmful behaviors are often interconnected, and a successful violence prevention workforce will need expertise in multiple forms of violence and demonstrate the competencies previously defined.

For prevention personnel to succeed, they need to work within a positive workplace culture that fosters the acceptance, integration, and implementation of prevention interventions. In civilian contexts, success of prevention personnel has been measured by behavior changes in individuals' receiving services or interventions or the increasing ability for individuals to disclose experiences of harm or abuse (Gibbs et al., 2015). Key gaps and themes are identified in Table 1.

Military Leadership

Leadership support is crucial for the successful implementation of prevention efforts. Leader buy-in and support is particularly important in a hierarchical organization like the military. Research on leadership and prevention focused on the attributes and competencies that equip a leader to support prevention efforts, organizational factors that facilitate leaders' ability to prevent harmful behaviors in their units, tools that leaders can use to foster healthy climates, and leaders' influence on the members of their organization.⁸

DoD focused its leadership literature review on traditional theories of leadership in organizations, leadership development processes in both the military and civilian settings, and leaders' role in public health and prevention efforts. Additionally, it conducted an in-depth review of effective leadership styles in law enforcement, higher education, healthcare, and the military setting.

Findings from various civilian and military research studies clearly highlighted that leaders must be at the forefront of any change initiative within an organization. Particularly when culture change is needed (e.g., promoting a more inclusive work culture), leaders must personally champion the cause and legitimize it to internal and external stakeholders. In communities with active violence prevention initiatives, community leaders must have an adept knowledge of public health, as well as the ability to understand local needs to create tailored prevention and communication strategies. An effective prevention leader must be willing and able to be a team builder, continually weaving together several, sometimes uncommon, partners to advance prevention goals. Ideal prevention leaders are charismatic, empathetic, and insightful – able to find creative solutions to their community's most pressing problems. Effective leaders empower others and find methods of sustaining prevention efforts over time. Key gaps and themes are identified in Table 1.

Appendix B: Summary of Gap Analyses and Literature Review for Focus Areas

Introduction

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⁸ Military leader is defined as a Service member or DoD civilian personnel in a professional position of leadership. The rank and role of military leaders varies by Military Service and National Guard Bureau (NGB); but includes, at a minimum, supervisors, managers, and the command triad. See DoDI 6400.09 for additional information.

DoD completed an in-depth literature review and gap analysis on the FY24 research agenda focus areas including: 1) defining risk and protective factors at the community and organizational levels, and 2) assessing whether and to what extent sub-populations of the military community are targeted by harmful behaviors more than others. This literature review was conducted from October 26, 2022, to May 15, 2023. The goal of this in-depth review was to identify trends and gaps in current literature to increase existing prevention knowledge and accelerate progress towards the Department's prevention goals. DoD is leveraging this research for the military community to promote successful prevention strategies. However, there are limitations to research conducted on civilian populations being inferred to a military context and population.

Personnel from the University of Iowa Injury Prevention Research Center (UI IPRC), assigned to DoD pursuant to an Intergovernmental Personnel Agreement, conducted a scoping review of the literature on risk and protective factors for multiple forms of harmful behavior at the community and organizational levels. The review was limited to English-language peer-reviewed manuscripts published between 2010 and 2022. The data was analyzed to define themes and identify community-level risk and protective factors with the strongest supporting evidence base.

Results

Several community-level social factors have been associated with an increase in multiple forms of harmful behaviors. Lack of community social support or loss of previous community support has been associated with an increased risk of IPV victimization among women (Rubenstein et al., 2020; Medzhitova et al., 2022). The strongest evidence for community-level risk factors is in collective efficacy. Collective efficacy is "the perception of a group that they can successfully work together to accomplish valued goals" (Gallagher, 2012). Evidence suggests that neighborhood and community collective efficacy may provide a buffer to individuals in stressful events (Zend & Wu, 2022). In longitudinal studies, adults in communities with high collective efficacy have been found to be less likely to perpetrate child maltreatment (Sanders et al., 2017), and less likely to perpetrate IPV (Capaldi et al., 2012). In contrast, a community's lack of collective efficacy has been shown to be associated with increased individual risk of perpetrating harmful behaviors (Devenish et al., 2017 & Kondo et al., 2018), particularly teen dating (Devenish et al., 2017), and sexual abuse and harm (Lippy & DeGue, 2016).

Various cultural factors are emerging areas of study for their role in harmful behaviors. Stigma, both perceived and experienced, plays a role in a range of harmful behaviors such as suicide (Abraham & Sher, 2017), IPV (Messing, 2021), child maltreatment (West et al., 2020), and intergroup abuse and harm (Jonas & Fritsche, 2013). This stigma may center on victim-blaming those who have been harmed or fear of judgment among those who are thinking of harming themselves or others. Further, cultural factors such as strong or aggressive male norms have been studied through qualitative, case-control, and cross-sectional designs and have the potential to be compelling risk factors. There is some evidence for the role of gender inequality (Medzhitova et al., 2022; Stewart et al., 2017), societal values supportive of gender stereotypes (Gerino et al., 2028; Armstead et al., 2018), and institutionalized racism (Armstead et al., 2018) as risk factors for harmful behavior; however, the data is mostly correlational. This emerging evidence around cultural factors is insufficient to determine causality in the civilian population. Because the military serves as a separate subculture in the United States, it would be important to first define and identify the existence of any cultural characteristics of military culture

associated with harmful behaviors to determine the potential impact of interventions and research aimed at changing cultural risk factors.

Two community-level risk factors related to socioeconomic status, specifically low education attainment, and poverty, are consistently associated with an increased risk of violent victimization and perpetration. Low educational attainment is associated with IPV (Rubenstein et al., 2020; Stewart et al., 2017; Yakubovich et al., 2018), child maltreatment (McCarroll et al., 2017), firearm violence (Sanchez et al., 2020), domestic homicide (Truong et al., 2020), and sexual assault and harassment (Tharp et al., 2013). This relationship is consistently found across different study designs, data sources, and populations studied. Community poverty is associated with IPV (Rubenstein et al., 2020; Devenish et al., 2017; Stewart et al., 2017; Claussen et al., 2022; Cunradi et al., 2010) and child maltreatment (Sanders et al., 2017; Millet, 2016). Evidence is beginning to accumulate for the effects of community-level unemployment and income inequality on overall harmful behaviors (Armstead et al., 2018), IPV (Stewart et al., 2017; Cunradi et al., 2010) and suicide (Mohatt et al., 2021). More specifically, the results for these two risk factors are more consistent as individual-level risk factors than community-level factors.

Various aspects of the built environment are associated as factors of harmful behaviors. High alcohol outlet density, measured as "a high concentration of retail alcohol outlets in a small area" (Centers for Disease Control and Prevention, 2017), has been studied through longitudinal, cross-sectional, and qualitative designs as a risk factor for IPV (Cunradi et al., 2010), sexual assault and harassment (Lippy & DeGue, 2016), adolescent abuse and harm (Claussen et al., 2022; Massetti et al., 2011), and general neighborhood violence (Kondo et al., 2018). Neighborhood disadvantages, specifically physical disorder, show some evidence as a risk factor for harmful behavior; however, these findings are mixed, and causality has yet to be demonstrated (Kondo et al., 2018; Armstead et al., 2018; Cunradi, 2010). There are emerging results on the effects of population density on harmful behavior with some studies finding that high population density is a risk factor for general neighborhood violence (Kondo et al., 2018) and other studies finding that low population density in the form of rurality is correlated with IPV and suicide (Medzhitova et al., 2022; Messing et al., 2021; Stacy et al., 2022). Lastly, firearm availability and accessibility at the community-level are associated with increased risk of perpetration (Sanchez et al., 2020; Truong et al., 2022), specifically domestic homicide (Truong et al., 2022), mass causality events involving firearms (Sanchez et al., 2020), and suicide completion (Mohatt et al., 2021). Additionally, policies enforcing open-carry restrictions and reducing firearm availability have been shown to serve as a protective factor for firearm-related harmful behavior (Sanchez et al., 2020). In the built environment, high alcohol outlet density has the strongest influence on harmful behavior in the civilian literature. This relationship has the potential to be utilized for the prevention of harmful behaviors in the military context by examining the number and distance to alcohol outlets from military housing as well as the volume of alcohol served by these outlets to Service members and their families.

Community and organizational prevalence of harmful behaviors functions in a positive feedback loop, which in turn creates more abuse and harm. In neighborhoods with high crime rates, the perpetration and victimization of harmful behavior in adolescent populations are increased compared to neighborhoods with low crime rates (Claussen et al., 2022; Massetti et al., 2011; Murray & Farrington, 2010). Similarly, harmful behaviors within a community have been shown through cross-sectional studies to serve as a risk factor in general populations (Truong et al.,

2022). Intergenerational trauma is an emerging area of study, which has shown through longitudinal and cross-sectional studies that parents who have experienced abuse and harm are more likely to mistreat their children (Sanders et al., 2017; Gerino et al., 2018; Langevin et al., 2021). These studies have primarily investigated the mother-child relationship and show evidence of a cyclic nature of harmful behaviors. Research gaps exist in understanding whether there is a cycle of harmful behaviors within a military context, including in the transition from wartime duties to home and family life.

Community and organizational-level risk and protective factors are backed by a lower-quality of evidence than research involving individual-level factors. Very few longitudinal or experimental studies have been conducted to support the temporality of community and organizational factors.

Assess Whether, and to What Extent, Sub-Populations of the Military Community are Targeted by Harmful Behaviors More than Others

Gap Analysis Method

A scoping review of the literature on harmful behaviors in sub-populations (minority groups) in the military community was also done. The review was limited to English-language peer-reviewed manuscripts published between 2010 and 2022. The search strategy was created using keywords grouped by military involvement, interpersonal violence, and subgroups. The data was analyzed to condense themes and identify minority identities most at risk of harm, groups most likely to cause harm, and gaps in the scientific evidence.

Results

Like civilian populations, marginalized groups in minority populations in the military are more often victims of harmful behaviors than their majority (e.g., white male) colleagues. Minority populations in the military include Service members who are female; transgender, lesbian, gay, or bisexual; Black; and Indigenous. While these identities are related to higher rates of harmful behaviors, they do not, in and of themselves, confer risk.

LGBT (Lesbian, Gay, Bisexual, Transgender) Identities

Almost one in five (17.2%) transgender Service members report sexual assault. This statistic is almost twice as high in transgender men (30%) compared to transgender women (15.2%) (Beckman et al., 2018). The prevalence of alleged sexual assault experienced within the transgender population does not differ across military branches. LGBT women report experiencing more IPV and sexual abuse and harm than heterosexual women. Reported experiences of physical abuse and harm (e.g., hitting, slapping) during military service is common in both heterosexual and LGBT women, with an estimated prevalence rate of 52% and 60% (Lehavot & Simpson, 2014) respectively; however, the combination of minority populations (e.g., LGBT and women) place these Service members at increased risk. LGBT women are also more likely to report experiencing unwanted sexual invitations compared to heterosexual women (60% vs 49%), as well as threats of sexual contact/forced sexual contact (31% versus 13%) (Mattocks et al., 2013).

Gender Identity

Women in the military are one of the primary subgroups in which harmful behaviors have been studied. A 2015 study found that 7.2% of female Service members report experiencing sexual abuse during active duty (Hourani et al., 2015). A 2022 study of female active Service members and veterans found that 24.2% report experiencing IPV (Cowlishaw et al., 2022). In addition, female Service members are more likely to report experiencing re-victimization (report being a victim of abuse and harm more than once) compared to male Service members (Cowlishaw et al., 2022). A study among active Air Force Service members found that 21% of members, of which 62% were male, allegedly perpetrated multiple incidents of IPV (Scoglio et al., 2022). Service members whose alleged initial incidents of causing harm were of moderate/severe intensity are at nearly three times greater risk of an alleged subsequent incident being severe compared to members whose first alleged violent incident was of mild intensity (Coley et al., 2016). Due to the increased risk of harm, preventing the re-perpetration of abuse and harm against subgroups related to gender and sexual minorities within the U.S. military is critical.

Discrimination is a form of mental and emotional abuse that may serve as a precursor to physical harm. Discrimination can include being passed up for promotions, unfair work distribution, undue scrutiny from commanding officers, exclusion from social settings, etc. Women are more likely to report experiencing both race-based and gender-based discrimination than men, and people of color are more likely than white people to report experiencing both gender- and race-based forms of discrimination (Foynes et al., 2013). Data suggests men of color may experience the highest levels of race-based discrimination while women of color may experience the highest levels of gender-based discrimination (Foynes et al., 2013). Similarly, data suggests harassment (verbal or physical) may disproportionately affects female Service members. Females, regardless of combat exposure, were 43% more likely to report experiencing sexual harassment than male Service members without combat exposure (Barth et al., 2016). Male Service members with combat exposure were 48% more likely to report experiencing harassment than men without such exposure (Barth et al., 2016).

Approximately 1%-3.9% of male veterans reported sexual assault experiences while serving in the U.S. military (Hourani et al., 2015). This proportion is much smaller than in female and transgender Service members; however, given that there are a significantly greater number of men in the military, the number of male Service members who report experiencing sexual assault is substantial. Males more often report that the individual causing the alleged harm is a stranger while women are more likely to report an alleged perpetrator who is known to them (Portnoy et al., 2018; Kwan et al., 2018). Men who have combat exposure are more likely to report experiencing sexual harassment and sexual assault than men without combat exposure (Barth et al., 2016).

References

Abraham, Z.K., & Sher, L. (2017). Adolescent suicide as a global public health issue. *International Journal of Adolescient Medicine Health*, 31(4). https://doi/10.1515/ijamh-2017-0036

Armstead, T.L., Wilkins, N., & Doreson, A. (2018). Indicators for evaluating communityand societal-level risk and protective factors for violence prevention: Findings from a review of the literature. *Journal Public Health Managment Practice*, *24*, S42-S50. https://doi/10.1097/phh.00000000000000681

Barth, S.K., Kimerling, R.E., Pavao, J., McCutcheon, S.J., Batten, S.J., Dursa, E., Peterson, M.R., & Schneiderman, A.I. (2016). Military sexual trauma among recent veterans: Correlates of sexual assault and sexual harassment. *American Journal of Preventive Medicine*, *50*(1), 77-86. https://doi.org/10.1016/j.amepre.2015.06.012

Beckman, K., Shipherd, J., Simpson, T., & Lehavot, K. (2018). Military sexual assault in transgender veterans: Results from a nationwide survey. *Journal of Traumatic Stress*, 31(2),181-190. http://doi.org/10.1002/jts.22280

Breslin, R. A., Klahr, A., Hylton, K., White, A., Petusky, M., & Sampath, S.(2021). 2021 workplace and gender relations survey of military members: Overview report. *Office of People Analytics*. https://apps.dtic.mil/sti/citations/AD1178339

Capaldi, D.M., Knoble, N.B., Shortt, J.W., & Kim, H.K. (2012). A systematic review of risk factors for intimate partner violence. *Partner Abuse*, 3(2), 231-280. https://doi/10.1891/1946-6560.3.2.231

Centers for Disease Control and Prevention. (2017). Guide for Measuring Alcohol Outlet Density. https://www.cdc.gov/alcohol/pdfs/cdc-guide-for-measuring-alcohol-outlet-density.pdf

Claussen, C., Matejko, E., & Exner-Cortens, D. (2022). Exploring risk and protective factors for adolescent dating violence across the social-ecological model: A systematic scoping review of reviews. *Front Psychiatry*, *13*, 933433. https://doi/10.3389/fpsyt.2022.933433

Coley, S.L., McCarthy, R.J., Milner, J.S., Ormsby, L., & Travis, W.J. (2016). Intimate partner maltreatment recidivism in U.S. Air Force families. *Military Medicine*, *181*(8), 926-30. https://doi.org/10.7205/MILMED-D-15-00333

Cowlishaw, S., Freijah, I., Kartal, D., Sbisa, A., Mulligan, A., Notarianni, M.A., Couineau, A.L, Forbes, D., O'Donnell, M., Phelps, A., Iverson, K.M., Heber, A., O'Dwyer, C., Smith, P., & Hosseiny, F. (2022). Intimate partner violence (IPV) in military and veteran populations: A systematic review of population-based surveys and population screening studies. *International Journal of Environmental Research and Public Health*, *19*(14), 8853. https://doi.org/10.3390/ijerph19148853

Cunradi, C.B. (2010). Neighborhoods, alcohol outlets and intimate partner violence: Addressing research gaps in explanatory mechanisms. *International Journal Environmental Resource Public Health*, 7(3), 799-813. https://doi/10.3390/ijerph7030799

Department of Defense. (2022). DoD Announces Immediate and Long-Term Actions to Help Strengthen the Economic Security and Stability of Service Members and Their Families. https://www.defense.gov/News/Releases/Releases/Article/3167769/dod-announces-immediate-and-long-term-actions-to-help-strengthen-the-economic-s/

Devenish, B., Hooley, M., & Mellor, D. (2017). The pathways between socioeconomic status and adolescent outcomes: A systematic review. *American Journal Community Psychology*, *59*(1), 219-238. https://doi/10.1002/ajcp.12115

Department of Defense. (2018). DoD Instruction 1020.03, Harassment prevention and response in the armed forces.

Department of Defense. (2022). DoD Instruction 6400.09, DoD policy on integrated primary prevention of self-directed harm and prohibited abuse or harm.

Department of Defense. (2022). DoD Instruction 6400.11, DoD integrated primary prevention policy for prevention workforce and leaders.

Department of Defense. (2022). FY23 Integrated Prevention Research Agenda.

Foynes, M.M., Shipherd, J.C., & Harrington, E.F. (2013). Race and gender discrimination in the Marines. *Cultural Diversity & Ethnic Minority Psychology*, 19(1), 111-119. https://doi.org/10.1037/a0030567

Gallagher, M.W. (2012). Collective efficacy. In: Ramachandran VS, ed. *Encyclopedia of Human Behavior (Second Edition*). Academic Press, 314-320.

Gerino, E., Caldarera, A.M., Curti, L., Brustia, P., & Rollè, L. (2018). Intimate partner violence in the golden age: Systematic review of risk and protective factors. *Front Psychology*, *9*, 1595. https://doi/10.3389/fpsyg.2018.01595

Gibbs, A., Willan S, Jama-Shai, N., Washington, L., & Jewkes, R. (2015). 'Eh! I felt I was sabotaged!': Facilitators' understandings of success in a participatory HIV and IPV prevention intervention in urban South Africa. *Health Education Research*, *30*(6), 985-95. https://doi/10.1093/her/cyv059

Hay, M. S., & Elig, T. W. (1999). The 1995 Department of Defense sexual harassment survey: Overview and methodology. *Military Psychology*, *11*(3), 233-242. https://doi.org/10.1207/s15327876mp1103 2

Hourani, L., Williams, J., Bray, R., & Kandel, D. (2015). Gender differences in the expression of PTSD symptoms among active-duty military personnel. *Journal of Anxiety Disorders*, 29,101-108. https://doi.org/10.1016/j.janxdis.2014.11.007

- Independent Review Commission on Sexual Assault in the Military (2021). Hard truths and the duty to change: Recommendations from the Independent Review Commission on Sexual Assault in the Military. Independent Review Commission on Sexual Assault in the Military. https://media.defense.gov/2021/Jul/02/2002755437/-1/-1/0/IRC-FULL-REPORT-FINAL-1923-7-1-21.PDF
- Jonas, E., & Fritsche, I. (2013). Destined to die but not to wage war: How existential threat can contribute to escalation or de-escalation of violent intergroup conflict. *American Psychology*, 68(7), 543-58. https://doi/10.1037/a0033052
- Kondo, M.C., Andreyeva, E., South, E.C., MacDonald, J.M., & Branas C.C. (2018). Neighborhood interventions to reduce violence. *Annual Review Public Health*, 39, 253-271. https://doi:10.1146/annurev-publhealth-040617-014600
- Kwan, J., Jones, M., Somaini, G., Hull, L., Wessely, S., Fear, N.T, & MacManus, D. (2018). Post-deployment family violence among UK military personnel. *Psychological Medicine*, *48*(13), 2202-2212. http://doi.org/10.1017/S0033291717003695
- Langevin, R., Marshall, C., & Kingsland, E. (2021). Intergenerational cycles of maltreatment: A scoping review of psychosocial risk and protective factors. *Trauma Violence Abuse*, 22(4), 672-688. https://doi/10.1177/1524838019870917
- Lehavot, K., & Simpson, T.L. (2014). Trauma, posttraumatic stress disorder, and depression among sexual minority and heterosexual women veterans. *Journal of Counseling Psychology*. 61(3), 392-403. http://doi.org/10.1037/cou00000019
- Lippy, C., & DeGue, S. (2016). Exploring alcohol policy approaches to prevent sexual violence perpetration. *Trauma Violence Abuse*, *17*(1), 26-42. https://doi/10.1177/1524838014557291
- Massetti, G. M., Vivolo, A. M., Brookmeyer, K., Degue, S., Holland, K. M., Holt, M. K., & Matjasko, J. L. (2011). Preventing youth violence perpetration among girls. *Journal of Womens Health (Larchmt)*, 20(10), 1415-28. https://doi/10.1089/jwh.2011.3057
- Mattocks, K.M., Sadler, A., Yano, E.M., Krebs, E.E., Zephyrin, L., Brandt, C., Kimerling, R., Sandfort, T., Dichter, M.E., Weiss, J.J., Allison, J., & Haskell, S. (2013). Sexual victimization, health status, and VA healthcare utilization among lesbian and bisexual OEF/OIF veterans. *Journal of General Internal Medicine*, *28*, 604-608. http://doi.org/10.1007/s11606-013-2357-9
- McCarroll, J.E., Fisher, J.E., Cozza, S.J., Robichaux, R.J., & Fullerton, C.S. (2017). Characteristics, classification, and prevention of child maltreatment fatalities. *Military Medicine*, *182*(1), e1551-e1557. https://doi/10.7205/milmed-d-16-00039
- Medzhitova, Y., Lai, B.S., Killenberg, P., Riobueno-Naylor, A. & Goodman, L.A. (2022). Risk factors for intimate partner violence in the context of disasters: A systematic review. *Trauma Violence Abuse*, 5-4. https://doi/10.1177/15248380221093688
- Messing, J.T., AbiNader, M.A., Pizarro, J.M., Campbell, J.C., Brown, M.L., & Pelletier, K.R. (2021). The arizona intimate partner homicide (AzIPH) study: A step toward

- updating and expanding Risk Factors for Intimate Partner Homicide. *Journal Family Violence*, *36*(5), 563-572. https://doi/10.1007/s10896-021-00254-9
- Millett, L.S. (2016). The healthy immigrant paradox and child maltreatment: A systematic review. *Journal of Immigrant and Minority Health, 18*(5), 1199-1215. https://doi/10.1007/s10903-016-0373-7
- Mohatt, N.V., Kreisel, C.J., Hoffberg, A.S., Mph, L.W., & Beehler, S.J. (2021). A systematic review of factors impacting suicide risk among rural adults in the united states. *Journal of Rural Health*, *37*(3), 565-575. https://doi/10.1111/jrh.12532
- Murray, J., & Farrington, D.P. (2010). Risk factors for conduct disorder and delinquency: Key findings from longitudinal studies. *Canadian Journal of Psychiatry*, 55(10), 633-42. https://doi/10.1177/070674371005501003
- Portnoy, G.A., Relyea, M.R., Decker, S., Shamaskin-Garroway, A., Driscoll, M., Brandt, C.A., & Haskell, S.G. (2018). Understanding gender differences in resilience among veterans: Trauma history and social ecology. *Journal of Traumatic Stress*, *31*(6), 845-855. https://doi.org/10.1002/jts.22341
- Rubenstein, B.L., Lu, L.Z.N., MacFarlane, M., & Stark, L. (2020). Predictors of interpersonal violence in the household in humanitarian settings: A systematic review. *Trauma Violence Abuse*, *21*(1), 31-44. https://doi/10.1177/1524838017738724
- Sanchez, C., Jaguan, D., Shaikh, S., McKenney, M., & Elkbuli, A. (2020). A systematic review of the causes and prevention strategies in reducing gun violence in the united states. *American Journal Emergency Medicine*, *38*(10), 2169-2178. https://doi/10.1016/j.ajem.2020.06.062
- Sanders, M.R., Burke, K., Prinz, R.J. & Morawska, A. (2017). Achieving population-level change through a system-contextual approach to supporting competent parenting. *Clinical Child Family Psychology Review, 20* (1), 36-44. https://doi/10.1007/s10567-017-0227-4
- Scoglio, A. A. J., Molnar, B.E., Lincoln, A.K., Griffith, J., Park, C., & Kraus, S.W. (2022). Sexual and physical revictimization in U.S. military veterans. *Journal of Traumatic Stress*, *35*(4), 1129-1141. https://doi.org/10.1002/jts.22816
- Stewart, D. E., Vigod, S. N., MacMillan, H. L., Chandra, P. S., Han, A., Rondon, M. B., MacGregor, J. C. D., & Riazantseva, E. (2017). Current reports on perinatal intimate partner violence. *Current Psychiatry Report*, *19*(5), 26. https://doi/10.1007/s11920-017-0778-6
- Suicide Prevention and Response Independent Review Committee (2023). Preventing suicide in the U.S. Military: Recommendations from the Suicide Prevention and Response Independent Review Committee. *Suicide Prevention and Response*

Independent Review Committee. https://media.defense.gov/2023/Feb/24/2003167430/-1/0/SPRIRC-FINAL-REPORT.PDF

Tharp, A.T., DeGue, S., Valle, L.A., Brookmeyer, K.A., Massetti, G.M., & Matjasko, J.L. (2013). A systematic qualitative review of risk and protective factors for sexual violence perpetration. *Trauma Violence Abuse*, *14*(2), 133-67. https://doi/10.1177/1524838012470031

Truong, M., Yeganeh, L., Cartwright, A., Ward, E., Ibrahim, J., Cuschieri, D., Dawson, M., & Bugeja, L. (2022). Domestic/family homicide: A systematic review of empirical evidence. *Trauma Violence Abuse*. https://doi/10.1177/15248380221082084

West, A.L., Dauber, S., Gagliardi, L., Correll, L., Lilli, A.C., & Daniels, J. (2020). Systematic review of community- and home-based interventions to support parenting and reduce risk of child maltreatment among families with substance-exposed newborns. *Child Maltreatment*, 25(2), 137-151. https://doi/10.1177/1077559519866272

Yakubovich, A. R., Stöckl, H., Murray, J., Melendez-Torres, G. J., Steinert, J. I., Glavin, C. E. Y., & Humphreys, D. K. (2018). Risk and protective factors for intimate partner violence against women: Systematic review and meta-analyses of prospective-longitudinal studies. *American Journal Public Health*, 108(7), e1-e11. https://doi/10.2105/ajph.2018.304428

Zeng, D., & Wu, X. (2022). Neighborhood collective efficacy in stressful events: The stress-buffering effect. *Social Science Medicine*, 306. https://doi/10.1016/j.socscimed.2022.115154