



Defense Research, Surveys, and Statistics Center (RSSC)

Current Research Implications for Sexual Assault Prevention Programming:

Best Practices Applications and Opportunities for Future Research

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**CURRENT RESEARCH IMPLICATIONS FOR
SEXUAL ASSAULT PREVENTION
PROGRAMMING: BEST PRACTICES,
APPLICATIONS, AND OPPORTUNITIES FOR
FUTURE RESEARCH**

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CURRENT RESEARCH IMPLICATIONS FOR SEXUAL ASSAULT PREVENTION PROGRAMMING: BEST PRACTICES, APPLICATIONS, AND OPPORTUNITIES FOR FUTURE RESEARCH

Executive Summary

This report supports the Department of Defense 2014-2016 Sexual Assault Prevention Strategy Prevention Line of Effort. Review of the recent academic research literature on sexual assault was conducted to identify areas of promise for application to the U.S. military's sexual assault prevention programs.

The report discusses:

- Current best practices in prevention and the broad implications for military sexual assault prevention program selection, development, and evaluation.
- Three types of sexual assault prevention programs that show great promise for military applications: risk reduction programs that focus on self-defense strategies, bystander intervention, and social norms approaches to prevention.
- Best practices implications for application of these programs to a military setting, including identification of military-specific issues to be addressed in program development.
- Recommendations for future research to support tailored, effective application of the three types of programs to military environments.
- Retaliation against sexual assault victims who report: issues fostering retaliation behavior and suggestions for remediation.
- Recommendations for future research to support training efforts to address retaliation against sexual assault victims who report.

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CHAPTER 1: INTRODUCTION

Background

The Department of Defense (DoD) has declared eliminating sexual assault from the military as one of its highest priorities (DoD, 2014a). The DoD in general, and the Sexual Assault Prevention and Response Office (SAPRO) in particular, have made considerable progress toward this goal. SAPRO's 2014-2016 Sexual Assault Prevention Strategy represents a comprehensive evidence-based approach to combatting sexual assault through its five lines of effort: prevention, investigation, accountability, advocacy/victim assistance, and assessment. As evidence of possible success from these efforts, rates of unwanted sexual contact (USC) which includes unwanted sexual touching, attempted rape, or completed rape, are moving downward across the military, from 6.1% for women in 2012 to 4.3% in 2014. The rate for men is statistically unchanged (1.2% in 2012 and 0.9% in 2014). Importantly, the estimated percentage of Service members experiencing USC who report the incident (restricted or unrestricted) increased from about 11% to about 24% from 2012 to 2014, which can be seen as a positive indicator of the growing trust and confidence in the system (DoD, 2014b).

The goal of this report is to support and enhance military efforts to prevent sexual assault by examining best practices based on civilian research and to make recommendations for how these findings can be adapted and applied in a military setting, along with the research necessary to accomplish this. The DoD has already outlined a comprehensive set of sexual assault prevention goals consistent with best practices (2014a). This report is provided by the Defense Research, Surveys, and Statistics Center (RSSC) within the Defense Manpower Data Center (DMDC) as guidance on how this can be accomplished based on existing knowledge and best practices, while making recommendations for additional research to support prevention efforts.

The U.S. military is not alone in facing issues of sexual assault. It is but one institution within a larger society that shares this problem. The National Intimate Partner and Sexual Violence Survey (NISVS) conducted by the Centers for Disease Control and Prevention (CDC) in 2010 found that an estimated 27.3% of women and 10.8% of men experienced USC during their lifetime, and an estimated 2.2% of women and 1.6% of men reported USC in the past 12 months (Breiding et al., 2014).¹ According to an NISVS report, when adjusted for age and marital status, USC rates for women in the general population mirror the military rates. Specifically, weighted lifetime and 12-month rates of USC for civilian women were 40.3% and 5.2%; for active duty women, those rates were 36.3% and 5.6% (Black & Merrick, 2013).

Addressing sexual assault in the military presents unique challenges. For example, in a military context, survivors of sexual assault often continue to work in close contact with their assailants, magnifying the negative effects of an attack (Bell & Reardon, 2011). As well, sexual assault affects the victim and the entire unit, undermining operational readiness, unit cohesion, morale,

¹ The CDC uses the term "contact sexual violence;" the behaviors measured are substantially the same as the DoD's measure of USC. Specifically, contact sexual violence measured in NISVS includes completed or attempted rape, completed alcohol- or drug-facilitated penetration, sexual coercion, being made to penetrate someone else, and other unwanted sexual contact experiences.

teamwork (DoD, 2014b), and trust between Service members in mission critical situations (Sexual Assault in the Military–Part II, 110 Cong., Sept. 10, 2008).

The costs of continued sexual assault are all too clear and real. The negative outcomes for survivors of sexual violence are well documented in military populations and are similar to the experiences of civilians (Martin, Rosen, Durand, Knudson, & Stretch, 2000). Martin et al. (2000) found higher reports of global psychological distress and negative physical health symptoms in both male and female active duty soldiers who had experienced sexual trauma when compared to soldiers who had not experienced sexual trauma. Murdoch, Pryor, Polusny, and Gackstetter (2007) found that both male and female active duty soldiers who had experienced sexual assault or sexual harassment experienced higher levels of psychiatric symptoms compared to non-victim Service members. Female veteran survivors of sexual assault have been found to experience higher rates of depression, alcohol use, post-traumatic stress (PTS) symptoms, and homelessness compared to non-victims (Lehavot & Simpson, 2014; Surís, Lind, Kashner, Borman, & Petty, 2004). Female veteran survivors of sexual assault are also at a higher risk for eating disorders, which increases their risk of premature death, functional impairment, and serious medical conditions (Forman-Hoffman, Mengeling, Booth, Torner, & Sadler, 2012). Male veterans who experienced sexual assault have been found to be more likely to experience PTS, abuse alcohol, and to have dissociative disorders compared to male veterans who had not experienced a sexual assault (Kimerling, Gima, Smith, Street, & Frayne, 2007). Finally, sexual assault is likely to contribute to absenteeism, productivity, and turnover costs, in the same manner as those costs are a consequence of sexual harassment in the military (see Faley et al., 2006). In a 2012 survey of active duty members, 27% of members (32% of female members) who had experienced USC indicated that as a result, they thought about getting out of the Service to a “large extent” or a “very large extent” (DMDC, 2012).

Areas of Promise in Sexual Assault Research

The evidence of the detrimental effects of sexual assault is clear and compelling. Appropriately, the Prevention Line of Effort (LOE) is a clear priority in the DoD’s 2014-2016 Prevention Strategy. This LOE emphasizes the need to deliver effective prevention programs across the DoD. In order to do this effectively, the Department and specifically SAPRO, have invested in a comprehensive prevention strategy that applies principles of prevention science to policies and programs targeting sexual assault (DoD, 2014a). Within the Prevention LOE, one of SAPRO’s prevention tasks is ongoing review of U.S. civilian sexual assault prevention programs to identify best practices and lessons learned.² This report supports that task by reviewing recent literature in the sexual assault prevention field and identifying several areas of research considered to be of great promise and particular value to the military; including three types of prevention programs, as well as issues addressing victim retaliation.

Programs showing great promise are risk reduction programs, specifically those focusing on self-defense strategies for women, bystander intervention, and social norms approaches. Additional research suggests these programs can be combined in a synergistic manner to increase positive outcomes. Some of these programs are already in use by the U.S. military. We focus the

² See Figure 8, DoD (2014a).

discussion on lessons learned, best practices application to a military setting, and recommendations for research to support implementation of these efforts. Each of the topics is introduced briefly here, to be discussed in greater detail in the subsequent chapters of this report.³

Risk reduction self-defense programs are targeted to potential victims and aim to increase a potential victim's ability to avoid or thwart a potential attack. Empirical evidence indicates promising effects in both behavioral (self-protective behavior, verbal and physical resistance, relational assertiveness, lower severity of assault, reduced risk of rape) and attitudinal (self-blame vs. offender blame, psychological distress and PTS symptoms, self-efficacy beliefs) outcomes. Although risk-reduction/self-defense programs cannot be considered by themselves a comprehensive prevention strategy, they are an important and recommended component of a comprehensive program and part of the military's obligation to ensure safety for all its members.

Bystander intervention training aims to increase the likelihood a bystander will intervene to help prevent an act of sexual assault. This training encourages participants to think of themselves as part of a community, and emphasize the difference an individual can make in preventing sexual assault and its precursors, such as sexual harassment. Bystander intervention training has been shown to have positive effects on attitudes (e.g., willingness to intervene) and behaviors (bystander intervening and reduced sexual aggression).

The social norms approach aims to identify pre-existing attitudes and behaviors that are positive and consistent with sexual assault prevention efforts, and to correct underestimations of them so they may be strengthened. This approach targets the peer level by correcting their misperceptions to promote broader social change in attitudes and behaviors related to sexual assault. These programs can be targeted to influence the behavior of potential perpetrators (to inhibit sexual assault perpetration) and potential bystanders (to increase prosocial bystander behaviors). Social norms approaches are considered a demonstrated best practice to decrease many health-risk behaviors including alcohol and tobacco use, and have shown positive results for violence prevention by strengthening healthy norms, increasing bystander intervening behaviors, and reducing sexually aggressive behaviors.

In a number of studies, programs combining the social norms approach with bystander intervention have shown positive outcomes, reinforcing one of the primary recommendations of this report: the need to combine different interventions in a mutually reinforcing synergistic manner that increases impact and helps to build a comprehensive environment of prevention.

Addressing victim retaliation is the final topic of the report. In 2014, the DoD began conducting the Survivor Experience Survey (SES) in response to a Secretary of Defense Directive requiring the development of a standardized and voluntary survey to examine the effectiveness of services that military survivors of sexual assault receive. The first wave of results from the survey, which was completed anonymously by 151 survivors, indicated that of the 80% of respondents who made an unrestricted report, 59% indicated that they perceived social retaliation (e.g., blame),

³ In the interest of clarity and brevity, no citations are provided for the brief overviews. All statements made in brief here are addressed again and appropriately cited, in later chapters.

and 40% indicated they perceived professional retaliation (e.g., loss of privileges) to some extent since reporting (Van Winkle, Rock, Coffey, & Hurley, 2014). These findings are not generalizable to all military survivors due to the nature of the survey sampling and the small number of returns though they are consistent, however, with generalizable results from the 2014 RAND Military Workplace Study (RMWS). Among women who reported a sexual assault, 52% perceived they had experienced some form of social or professional retaliation (Morral, Gore, & Schell, 2015). In its 2014 report to the President, the DoD indicated that ending retaliation is a high priority of the military (DoD, 2014b). Toward this end, we provide perspective on the underlying issues contributing to retaliation, and make recommendations both for addressing the issue within the context of prevention training and for further research to support ongoing efforts.

Organization of the Report

This report, conducted on behalf of SAPRO, incorporates findings from recent literature on best practices in prevention to aid in guiding military programs to prevent sexual assault. The report is organized into six chapters. Chapter 1 provides an overview of the problem of sexual assault, its broader implications, and sets the stage for the report. Chapter 2 highlights best practices within the prevention science literature and provides an overview of the principles of effective prevention programs. This chapter provides a framework for analysis of prevention programming and, thus, supplies valuable tools for programming selection, ongoing improvements, and evaluation of effectiveness. Chapters 3, 4, and 5 review the most promising recent work in sexual assault prevention programming in three areas: risk reduction self-defense programming, bystander intervention training, and the social norms approach. In each chapter, the relevant literature is reviewed, military-specific issues for application are detailed, and recommendations are made for military research programs to support best practices applications of programming to the military environment. In Chapter 6, special attention is paid to the issue of preventing retaliation against sexual assault victims who report. Retaliation is discussed as a function of a complex interactions among beliefs in false accusations, lack of understanding of trauma's effects on behavior, rape myths/victim-blaming attitudes, and perpetrators' behavior patterns known as their *modi operandi*. Training and research recommendations are provided. This report is designed as a resource for SAPRO to use in the development of a research agenda that will support sexual assault prevention and to consider the "how-to" of applying best practices in prevention to military programs holding the most promise in preventing sexual assault in the military. The goal is to support the U.S. military's strong resolve to address this issue consistent with good science and best practices.

CHAPTER 2: PREVENTION BEST PRACTICES

Introduction

The prevention field has articulated a set of principles of effective prevention programs applicable to all health-risk behaviors, including violence and sexual assault. These principles set a standard for science-based best practices that should be followed in all DoD sexual assault related programs.

In a seminal article on this subject, Nation and his colleagues (Nation et al., 2003) conducted a comprehensive review of prevention programming for selected critical behavioral public health issues, including violence. The review identified nine principles of effective prevention programs categorized within three broad areas: 1) program characteristics, 2) matching programs to target populations, and 3) implementing and evaluating prevention programs. These three broad areas are used to organize a discussion on how to apply these guiding principles to military populations. Recommendations for future research are provided at the end of the chapter.

Effective Prevention Programming Principles Related to Program Characteristics

Comprehensive

Comprehensiveness is the most common principle in successful programming (Nation et al., 2003). Comprehensiveness is defined as providing a multitude of linked interventions to address the precursors (i.e., antecedents) and processes (i.e., mediators) contributing to the targeted behavior. Two dimensions are identified as important for consideration: multiple interventions, and multiple settings or levels. The multiple interventions dimension refers to having more than one intervention to address the behavior; while the multiple settings dimension refers to addressing the issue across multiple levels of the social ecology (e.g., community, peer).

Effective prevention programming employs not only multiple interventions at multiple levels, but also employs programs offering a coherent package of compatible elements. An important criterion articulated throughout the prevention literature is that different programs offered within an organization, community, or system need to have a compatible theoretical base and theory of change, be designed to be mutually reinforcing and synergistic, and be linked together in a cohesive way (Banyard, 2013; Langford, 2012). Thus, programs of any kind (media, communications, workshops, etc.) should not be designed in isolation from each other as “stand-alone” elements, but as components of a cohesive, comprehensive offering. Casey and Lindhorst (2009) also use the term “comprehensiveness” and define it as implementing compatible change strategies at multiple levels of the environment simultaneously. Of the three programs evaluated as successful in a Center for Disease Control and Prevention (CDC) literature review (i.e., *Safe Dates*, *Shifting Boundaries*, and *Violence Against Women Act Funding*), all had these characteristics (DeGue et al., 2014).

Theory Driven

A common criticism of preventive interventions is that many are based on logic and past experiences rather than driven by careful application of theory (Casey & Lindhorst, 2009; Nation et al., 2003). Appropriate use of theory requires attention to development of activities from two fundamental perspectives, the first of which is more commonly addressed than the second. First, activities must be theoretically connected to the causes of the problem. An example is programming that recognizes the connection between rape supportive norms and sexual assaults, and consequently seeks to reduce participants' acceptance of such norms and/or correct unhealthy misperceptions of them (Berkowitz, 2010). Second, and less consistently addressed in sexual assault programming, is development of activities driven by theory regarding mechanisms of change. Some examples of this type of theory application include interventions incorporating the Elaboration Likelihood Model (ELM), which posits a number of factors affecting the ability of persuasive messages to result in changes in behavior as well as stable attitude change; social learning theory, which stresses the importance of modeling in behavior change (Gidycz, Rich, & Marioni, 2002); and the social norms model of change, which attempts to foster healthy behavior by correcting misperceived norms (Berkowitz, 2005a, 2007).

Varied Teaching Methods

Another principle identified by Nation and colleagues as integral to program characteristics (2003) is the importance of a variety of teaching methods, in particular the necessity to include active, skills-based teaching. This principle is underscored by the finding in the sexual assault literature that programs which engage participants in a variety of ways and with higher levels of participation are more effective (Paul & Gray, 2011). Concomitantly, programs only emphasizing knowledge acquisition or awareness (i.e., not skills-based) do not result in long-term or significant changes in measured outcome variables (Gibbons, 2013). Skill-oriented approaches, such as bystander intervention and self-defense risk reduction training for women, have been found to be effective for sexual assault prevention, whereas others, such as empathy-induction and knowledge acquisition, have not been supported by research (Gibbons, 2013; Lonsway et al., 2010).

Positive Relationships/Health and Strengths Promotion

This principle of effective prevention programming stresses the importance of fostering the positive to effect and support change. Nation and colleagues (2003) call this principle "positive relationships" in preventing problem behavior. Casey and Lindhorst (2009) propose a similar, but broader, principle. They assert the importance of social support, opportunities for meaningful participation in prosocial activities and goals, and positive role modeling for effective prevention programming. As an example of this principle in practice, the social norms approach to sexual assault prevention (Berkowitz, 2005a, 2007) documents and reinforces healthy behaviors and norms. Thus, individuals are encouraged to focus on what they *can* do, not just on what they should *not* do.

Sufficient Dosage

This principle refers to the importance of participants receiving enough of an intervention to produce an effect. Dosage can be thought of in terms of quality and quantity of contact hours, and the presence or absence of booster sessions. Reviews of the sexual assault literature strongly support this principle (Anderson & Whitson, 2005; DeGue et al., 2014; Paul & Gray, 2011). DeGue and colleagues (2014) noted interventions with consistently positive effects were, on average, two to three times longer than programs with null, mixed, or negative effects. This point is further supported by an apparent dosage effect for self-defense risk reduction training. A seven-hour training under development by Gidycz and colleagues has exhibited mixed, but generally positive increases in a variety of sexual assault related outcomes such as self-protective behaviors, assertive communication, and self-efficacy in responding to risky situations, with some support for reductions in rates of sexual assault. Comparatively, a 30-hour self-defense program evaluated by Hollander (2014) indicated a strong positive effect on an attitudinal outcome and a decrease in the likelihood of sexual assault.

A phenomenon well known in the sexual assault prevention literature is called “rebound” in which positive effects dissipate over time. A case in point is one of the most successful outcomes in the literature—a reduction of 75% in sexual assaults after four months which rebounded at the seven-month follow-up (Gidycz, Orchowski, & Berkowitz, 2011). This points to the importance of dosage and of providing reinforcers for program elements over time to achieve and sustain successful outcomes.

Application to Military Programming of Principles Related to Program Characteristics

Are Military Programs Comprehensive and Theoretically Linked?

This constitutes a challenge for DoD considering both the number of trainings and products offered as well as the fact that contracts for individual program elements are often awarded to different providers who work independently of each other. Thus, a communications campaign may be developed by one provider, video scenarios by another, and individual training courses by a third. As a result, different providers might develop program elements incompatible with each other. Even within one of these domains—such as individual training courses—it would be a tremendous challenge to ensure that the courses were developmentally timed, based on common theory and learning outcomes, and linked in a coherent fashion. Now that the different military Services have developed a range of program elements to address multiple levels of the ecological model, the challenge will be to design them in such a way that is synergistic and mutually reinforcing, and to ensure all the relevant parties are in communication with each other during the design process. Three programs recently evaluated as having positive outcomes (i.e., an actual reduction in violence) demonstrate the effectiveness of combining theory-based interventions in an intentional, synergistic manner. All three employed bystander intervention and the social norms approach together, one in a web-based online course (Salazar et al., 2014), the second in a small-group interactive setting (Gidycz et al., 2011), and a third in a public high school in which bystander intervention training was combined with a social norms media campaign (Wasco, 2015). SAPRO’s continued coordination among the Services, being mindful

of these research findings, might enhance the training programs within each to help them complement each other to produce successful outcomes.

All services have regular training requirements aimed at sexual assault prevention. Although training products currently utilized may vary, most Service members receive some form of training on a regular (e.g., quarterly, yearly) basis. What is unknown, however, is if these trainings are sufficiently dosed and spaced effectively to achieve desired outcomes. Many sexual assault prevention trainings may be limited to an hour or two at a time and Service members often get to choose when and how they fulfill the sexual assault prevention training requirement. This variable approach to programming dosage may need to be reevaluated to determine if Service members are receiving enough intervention at the appropriate intervals to achieve and maintain positive outcomes.

Are Military Programs Only Information-Awareness Based or Do They Teach Skills?

The amount of material a Service member is responsible for knowing—such as reporting options and definitions of sexual harassment and sexual assault—might result in DoD training courses serving primarily an information-dissemination function. Yet, the prevention literature is clear that information-awareness programs alone are not successful in producing behavior change. The amount of information an officer, for instance, might be required to know can be so great that an officer sexual assault training course does not have time to teach skills such as how to respond as a bystander to command-level infractions. Therefore, it is important to evaluate the content of DoD trainings to ensure they are in line with best practices, which requires they be designed with experiential learning and skill-development in mind rather than primarily an information-delivery focus. Alternatives need to be developed to convey the necessary information, but not make this the primary focus.

Are Positive Messages Emphasized in Military Programs?

Most health communications experts have concluded from the body of available research that fear-based campaigns, despite their intuitive appeal, are extremely difficult to execute, rarely succeed, and may be counter-productive (DeJong & Winsten 1998; Hale & Dillard, 1995). Interventions emphasizing the positive or desired outcomes, as opposed to what should be avoided, have more support in the research literature. Yet, current military practices (ranging from the language used by commanders and leaders in speaking with their subordinates, to the content of training programs and media-communication messages) may tend to focus on the negative (i.e., what not to do and the consequences if you do it). Therefore, a review should be conducted to evaluate and identify fear-based negative approaches and redesign them to have a greater emphasis on defining healthy, desired behaviors. A case in point is the social norms approach, where positive healthy behaviors are identified and shared with the community and misperceptions about them are corrected (Berkowitz, 2005a, 2007, 2010).

A related issue is that new metrics developed for the military by the RAND Corporation to determine crime victimization rates via survey results have the explicit goal of identifying behaviors meeting the definitions of Uniform Code of Military Justice (UCMJ) violations (RAND Corporation, 2014). It is undeniably important to have accurate data about the

prevalence of violations meeting legal definitions of misconduct. From a prevention perspective, however, data focusing on positive behaviors and norms that can be strengthened would be consistent with best practices. An approach emphasizing the unrecognized positives within the military could also serve to correct and balance the pervasive over-emphasis of media outlets on negative events, as well as provide actual empirical evidence to address assertions of pervasive unhealthy culture and attitudes in the military (see Turchik & Wilson, 2010).

Effective Programming Principles Related to Matching Prevention Programs to Target Populations

Appropriately Timed

This principle refers to the necessity to time interventions to occur at a developmental point of maximum impact. Timing may take into consideration socio-emotional, intellectual, and cognitive development (Nation et al., 2003). For example, because sexual aggression often emerges in adolescence, prevention interventions for this group might be particularly valuable (Casey & Lindhorst, 2009). More relevant to adult populations are stages of change theories that develop materials targeted to individuals in different phases of awareness of a problem; for example, unaware of the problem of sexual violence, or concerned and looking for guidance on how to help (Casey & Lindhorst, 2009).

Existing military sexual assault prevention programs at pre- and early-entry points (recruiting and basic training) appropriately address timing in terms of attempting to prevent problem behavior before it becomes an in-Service pattern. Such training sets the expectation early in the military relationship and is timed to occur before the opportunity for perpetrating sexual assault while in the military.

The range of socio-emotional development of military members, however, is broad, from the youngest members, essentially still adolescents, to adult and mature adult members. Neurologically, the brain does not become fully developed until about age 25 (Steinberg, 2008). Compared to adults, young adults are less capable of inhibiting impulses, organizing and planning behavior, are more sensitive to peer pressure, and are more likely to engage in risky behavior (Albert & Steinberg, 2011). Programming aimed at military members across age groups should take into consideration these important differences in development.

The developmental differences between young adults and adults highlights an important unexplored research issue in sexual assault prevention, one the military is uniquely situated to address. Sexual assault prevention research has been almost exclusively conducted using college and adolescent participants. Given developmental differences among adolescents, young adults, and adults, effective prevention programming for adult audiences might have substantial differences. As an example, given that young adults are more sensitive to peer pressure, research might explore whether a peer based approach, such as the social norms approach, is more successful for young adults as compared to adults. In general, prevention programming for adult audiences should explicitly consider the impact of developmental differences, and address these theoretically in mechanisms of change.

Socioculturally Relevant/Contextualized Programming

Sociocultural relevance (Nation et al., 2003), also called contextualized programming (Casey & Lindhorst, 2009), is an effective prevention principle emphasizing the importance of adapting programming to the social context in which it is given in order to foster its relevance. Issues of local community norms, cultural beliefs and practices, community framing of the issue, language and idioms used in the community, and structural barriers to behavior should be explicitly considered and accommodated (Casey & Lindhorst, 2009; Nation et al., 2003).

In addition to larger community contextual issues, the military environment presents the challenge of contextual issues at the individual level. Best practices suggest contextualized prevention at this level as well. Individuals of a different age, rank, and posting work and perform their military service in different environments. Best practices suggest DoD programs be tailored to the individuals participating. The personal relevance of messages is associated with more stable and long-term attitude change (Orchowski, Gidycz, & Murphy, 2010), and thus more likely to affect behavior. A case in point is bystander intervention, where intervention scenarios should be tailored to the rank and posting of participants.

Gender Sensitivity

While not advanced by the general prevention literature as a best practice, one of the more consistent findings of the sexual assault prevention evaluation literature in particular is that programs are more effective when they are separated by gender (Gibbons, 2013; Lonsway et al., 2009; Vladutiu, Martin, & Macy, 2014). However, programs with an explicit and primary focus on bystander intervention have been found to be effective with both mixed-gender and separate gender audiences (Gibbons, 2013), although no research has been conducted to determine if one of these formats (separate versus mixed gender) is more effective than the other. Additionally, there is some evidence that participant-presenter gender parity improves outcomes as well (refer the upcoming section on program staff). Thus, the best practice recommendation for gender sensitivity is, with the possible exception of bystander intervention programs, most prevention programs should be provided to single gender audiences with same-gender presenters unless otherwise specified. However, additional research is needed with more diverse populations to determine whether this finding holds true across age groups, program outcomes (e.g., gender-based attitudes), and situational contexts.

Application to Military Programming of Principles Related to Matching Prevention Programs to Target Populations

Are Programs Relevant and Tailored to the Military Audience?

As discussed above, best practices suggest programs be timed appropriately and tailored to contextual factors at the community and individual level.

At the community level, Military Service branches, installations, and units are likely to have unique norms, attitudes, beliefs, language, and structural barriers to behavior as well. Best practices programming requires engaging members in identifying community contextual differences and then tailoring interventions to maximize relevance.

In addition to potential community normative differences, the military environment presents the challenge of contextual issues at the individual level. Best practices suggest contextualized prevention at this level as well. Individuals of a different age, rank, and posting work and perform their military service in different environments. The personal relevance of messages is associated with more stable and long-term attitude change (Orchowski, Gidycz, & Murphy, 2010), and thus more likely to affect behavior. A case in point is bystander intervention, where intervention scenarios should be tailored to the rank and posting of participants. Examples of key questions might include: Are images and messages targeted primarily to reach members of a specific rank? Are the contents of programs relevant for single members, married members, and higher ranking members? In the case of bystander intervention, are the situations relevant and appropriate to different ranks and postings? Are leaders placed in the position of being bystanders themselves to leadership misconduct, or do courses only focus on the bystander issue from the perspective of younger Service members? A recent Service-wide bystander intervention poster is a case in point: the well-designed and appealing poster, displaying an appropriately positive message, featured a large crowd of junior enlisted Service members, giving the impression that bystander intervention is only for this rank. In fact, all Service members are likely to be bystanders to the behavior of subordinates, peers and superiors, and different scenarios and skills should be taught for each of these situations.

While current and past data indicate that overall the majority of assaults are perpetrated by fellow Service members of equal or lower rank, a substantial proportion of assaults are perpetrated by leaders and/or individuals of higher rank than the victim. Analysis of the 2012 Workplace and Gender Relations Survey of Active Duty Members (2012 WGRA) survey found 38% of women and 17% of men indicated the offender(s) was another military person(s) of higher rank/grade not in their chain of command; additionally, 25% of women and 27% of men indicated the offender(s) was someone in their chain of command (DMDC, 2012). Similarly, data from the 2014 RMWS indicated when an offender was someone in the military, 54% were of a higher rank than the victim (Morrall et al., 2015). Thus, while a majority of victims are younger Service members (paygrade E1-E4), the occurrence and negative impact of leader misconduct cannot be ignored. A review of existing Service prevention efforts is suggested to ensure the efforts of the DoD and of the individual Services are not overly focused on the prevention of assault of younger Service members by other young Service members, as this would unintentionally exclude from prevention efforts the issue of leader misconduct. Similarly, such a focus would overlook the fact that 35% of victims and 59% of perpetrators are over the age of 24 (DoD, 2014b).

These data strongly suggest the military might develop a focus on sexual assault prevention at all ranks based on the understanding that anyone in the military, of any rank or grade, can be either a victim or perpetrator. It is therefore recommended that training for leaders, including training for individuals who are being promoted. That it also provides enhanced content that focuses on these individuals in their role as bystanders, that identifies how sexual harassment and assault might be perpetrated by same or higher rank individuals, and that offers rank-appropriate intervention skills and scenarios in addition to the current emphasis on leader responsibility for case management and providing effective prevention programs to their command.

Data also indicate while many sexual assaults involve alcohol, a substantial proportion do not. Results from the 2014 (RMWS) reported 56% of female victims and 68% of male victims had

not been drinking alcohol at the time of the “unwanted event;” and of the perpetrators, 46% had not been drinking, 37% had been drinking, and 16% may or may not have been (victim reported “do not know;” Morral et al., 2015). Similarly, the 2012 WGRA reported less than half of assaults involved alcohol. Specifically, 33% of victims (47% of women and 19% of men) indicated either they “or the offender(s) had been drinking alcohol before the incident” (DMDC, 2012). These data suggest that while a focus on the inter-relationship of alcohol and sexual assault is important, prevention efforts should take into account that the offenses may not involve consumption of alcohol by the offender and/or victim. Moreover, close analysis of the data on alcohol related assaults by rank show a large differential relationship between alcohol use and assaults across ranks (for example, 59% of O1-O3 members, and only 20% of E5-E6 members experiencing USC indicated alcohol was involved; DMDC, 2012).

Are Military Programs Sensitive to Gender Differences?

Best practices suggest, with the possible exception of bystander interventions, sexual assault prevention programs should be offered to single gender audiences. However, outside of the Military Service Academies, most DoD programs are provided to mixed gender audiences. Therefore, the DoD should evaluate if it is possible to offer some or all sexual assault programs to separate gender audiences, which is the recommended evidence-based practice. Given that many programs within the DoD are designed to be presented to mixed-gender audiences, this would be a challenge.⁴

Effective Prevention Programming Principles Related to Implementation and Evaluation of Prevention Programs

Outcome Evaluation

The importance of outcome evaluation cannot be overstated. The empirical evaluation of a prevention program is necessary to determine whether the program is effective. Anecdotal evidence, measures of satisfaction with programming, and knowledge increase are not sufficient to determine effectiveness. A cautionary tale can be taken from the drug prevention literature, finding some of the most utilized programs are not as effective as programs grounded in research (Nation et al., 2003). Careful evaluation of programs is admittedly costly and time consuming. However, in the long term it is much more cost effective to collect appropriate outcome feedback, leading to continuous quality improvement or to discarding ineffective or even harmful programs. In fact, there are popular sexual assault prevention programs (e.g., NOMORE Men’s Program; Foubert, 2000; Stephens & George, 2009) that have in some studies demonstrated increases in sexually violent behavior post-intervention (DeGue et al., 2014).

A recent review of sexual assault prevention strategies (DeGue et al., 2014) strongly criticizes the state of evaluation in the literature and emphasizes the need to address two critical issues: 1) interpretable research designs, and 2) measures of key behavioral outcomes of interest, inclusive of perpetration behavior. Without appropriate attention to both of these issues, it is difficult to

⁴ The U.S. Air Force’s bystander training is given in three formats, two of which are gender specific: male, female, and leader.

conclude whether prevention programs are actually working. The U.S. Office of Management and Budget (2012) addresses this concern, directing federal agencies to make rigorous research evidence a priority in order to reduce costs and improve effectiveness.

Interpretable Research Designs. The ability to provide rigorous evidence is predicated upon interpretable research designs, defined as designs allowing researchers to conclude with confidence that any changes in outcome variables (e.g., attitudes and behaviors) are attributable to the program itself and not some other influence. Differences in outcome variables could be due to the intervention itself or to factors unrelated to the treatment, including but not limited to outside events, maturation of participants, sensitization from pretesting of variables, and systematic differences in participants across intervention and non-intervention groups (Cook & Campbell, 1979). To conclude confidently that differences in outcome variables are attributable to the intervention itself, research must utilize either randomized controlled trials (RCTs) or interpretable quasi-experimental designs such as interrupted time series, regression-discontinuity, or repeated treatment designs (Cook & Campbell, 1979).

Measures of Key Behavioral Outcomes of Interest. The second key concern in evaluation is the choice of outcome variables. In any research study, the research team can choose from a variety of types of outcome variables: knowledge, perceptions, attitudes, behavioral intentions, and behavior. There is some debate as to the appropriate emphasis on each of these types of variables in the sexual assault prevention evaluation literature. For example, several researchers have expressed concern over the field's focus on knowledge and attitudinal change. There is an over-reliance in the evaluation literature on measurement of outcome variables that are distant from the key variable of interest, which is incidence of sexual assault. In a meta-analytic review of evaluation studies representing 102 treatment interventions, almost three-quarters assessed outcomes related to rape attitudes, whereas only 10% assessed outcomes related to behavioral intentions, and just 5% assessed outcomes related to rape awareness behaviors or incidence of sexual assault, respectively (Anderson & Whiston, 2005).

Although it is necessary to assess intermediary variables, such as changes in knowledge, attitudes, skills and behavioral intentions, to assess whether the program is working as theoretically intended, the best way to determine whether prevention interventions are effective is to measure changes in violence perpetration and victimization. The relationships among attitudes, behavioral intentions, and behavior are not perfect (Ajzen, 1991). As a case in point, there are some documented instances in the literature of behavior change occurring without attitude change (see for example, Gidycz et al., 2011). Thus, for example, if a program seeks to affect perpetration rates by changing perceptions of rape-related norms, then the research program would need to measure both changes in perception of rape-related norms and changes in perpetration behavior. In sum, pre- and post-intervention measures of perpetration and victimization, as well as robust mediating variables, must be more consistently included in prevention evaluations to allow for confident conclusions of program effectiveness.

Finally, the least useful evaluations of programs are reaction measures, such as satisfaction with content or participant assessments of usefulness of the program. Such measures are susceptible to measurement bias (e.g., social desirability bias) and most importantly, provide no information about program impacts on relevant training effectiveness criteria (Goldstein, 1986), such as antecedents to perpetration and victimization or subsequent rates of victimization or perpetration.

Unfortunately, reaction measures are used all too commonly as the only indicator of program success. Such an evaluation strategy is inconsistent with best practices.

Program Staff

Even the most theoretically sound, well-developed prevention programs will not be successful without appropriately prepared facilitators. Reviews of prevention programs stress the importance of appropriately trained, supported, and supervised staff who are sensitive, competent, capable of connecting with participants, and committed to the program (DeGue et al., 2014; Nation et al., 2003). This principle applies not only to those who are delivering the program, but to those who are responsible for overall prevention efforts within an organization, (e.g., program supervisors, organization leaders, and the Sexual Assault Response Coordinator (SARC). Therefore, SARCs and leaders would benefit from enhanced training in best prevention practices to ensure programs and speakers offered to Service members are best practices and theory-based.

Relatedly, gender of instructors might have an impact on results. Kidder, Boell, and Moyer (1983) evaluated a sexual assault self-defense program for women. Participants with female and male co-instructors reported decreased fear, decreased feelings of helplessness, increased perceptions of right to resist, and increased likelihood to resist an assault. In the same program, participants with only a male instructor experienced none of the positive effects, and a decline in perceived right to resist an assault.

As noted above, there is a consistent finding in the literature that separation of participants by gender has a significant impact on program effectiveness. It might be that some of the factors contributing to this gender effect also contribute to a relationship between instructor gender and efficacy. For example, participants of women only self-defense courses have noted the “importance of the group environment for encouragement, emotional support, bonding, and sisterhood” (Kidder et al., 1983, p. 62). A male instructor might inhibit these group processes. Similarly, for men fears of embarrassment and negative judgments might make it difficult to have open discussions in a mixed-gender environment (Berkowitz, 2002; Orchowski et al., 2010). Thus, a female instructor presenting to men might cause these same discomforts and inhibit results. In sum, there is some evidence to suggest instructor gender can affect program effectiveness. However, gender of presenters is not a typically studied variable; and, therefore, more research needs to be conducted before conclusions can be generalized to military settings.

Finally, we suggest the military consider the lessons learned by Cook-Craig et al. (2014) in their reporting of the CDC funded Kentucky state-wide implementation of the *Green Dot* program. Due to the high capacity need for program evaluations, the decision was made to train educators and center directors as data collectors. The authors noted that not only did this strategy result in creating the capacity needed for data collection, but also it helped those front-line team members develop a deeper understanding of the program. As a consequence, team members were able to suggest workable solutions to research challenges, and offer new research questions and types of analyses. Thus, we suggest in addition to the training of installation level Sexual Assault Prevention and Response (SAPR) personnel and program staff in best prevention practices, enhanced training of these personnel as data collectors for prevention programs would be desirable as well to achieve these same ends.

Application to Military Programming of Principles Related to Implementation and Evaluation of Prevention Programs

Are Military Programs Appropriately Evaluated to Provide Evidence of Their Effectiveness?

Best practices suggest programs be evaluated for effectiveness through the use of interpretable research designs and measures of key outcome variables of interest. In addition to problems with information-based, fear-based, and legally-focused programs, there are popular sexual assault prevention programs that have not been evaluated or have been shown to have negative outcomes (DeGue et al., 2014). Therefore, efforts need to be made so that all prevention programs, including workshops, speakers, posters, etc., are periodically refreshed based on the most recent science-based best practices.

While RCTs are seen as the gold standard within prevention research (Flay et al., 2005), implementation of this research strategy within the military presents significant logistical challenges, as it would most likely require coordination of effort across installations and Services to execute properly. There are, however, a number of interpretable quasi-experimental designs, as mentioned, reducing the need to coordinate effort across installations and Services.

Similarly, all Service members tasked with sexual assault prevention within a command need to be held responsible for the outcomes, including training program facilitators, the Sexual Assault Response Coordinators (SARC) and the leaders. Therefore, SARCs and leaders would benefit from enhanced training in best prevention practices to ensure programs and speakers offered to Service members conform to best practices and are theory-based. In light of successful outcomes from Green Dot programming described previously, we suggest in addition to the training of installation level Sexual Assault Prevention and Response (SAPR) personnel and program staff in best prevention practices, enhanced training of these personnel as data collectors for prevention programs would be desirable as well to achieve these same ends. Finally, utilizing same gender training facilitators may impact program outcomes as well.

Future Research Opportunities

Prevention best practices identified in the literature suggest some research opportunities for the DoD, in three broad areas:

- *Do developmental differences between young adults and older adults affect programming effectiveness?* As outlined earlier, sexual assault prevention research has been conducted primarily with adolescent and college age participants. The military population is heavily, but not exclusively, composed of young adults. Programming for older adult populations might need to incorporate different mechanisms of change to effectively reach its target audience. For example, the social norms approach uses peer influence to encourage healthy norms and behaviors. Young adults are more susceptible to peer influence than older adults, therefore it is not known if the social norms approach may be less successful at modifying behavior of older adults. Conversely, it might be that the social norms approach could also be effective if appropriate peer-norms were provided to an older adult audience.

- *Does instructor gender affect intervention results?* There is some evidence reviewed above, to suggest instructor gender can affect program effectiveness. Anecdotally, women find programmatic value in female only settings for some types of training; and men are more capable of open and honest dialogue in male only settings. Empirically, there are some results suggesting an instructor-participant gender parity effect. However, this is an area of research relatively untouched, and represents an opportunity for military attention.
- *What is the good news in military norms and behaviors related to sexual assault?* This is an opportunity for the military to develop measures to assess positive, desired behaviors and healthy norms, rather than focus solely on negative, legal-based definitions of sexual assault. The prevention field has established that identifying and publicizing healthy behavior serves to foster it while inhibiting negative behavior. Thus, a positive norms approach could be of benefit in a military environment.
- *What is the best way to evaluate military sexual assault prevention programs?* While RCT and longitudinal studies are often difficult to implement, the military has unique capacities that may be amenable to these evaluation tools. Specifically, personnel records of military members allow for the opportunity to generate random samples within a population and track the same individuals over time. While perpetration is not a focus of assessment in military surveys, there are other variables that can be assessed to evaluate the impact of training in specific Service members and pair these results with sexual assault rates that are already generated in military surveys. Thus, there may be ways to randomly assign Service members to participate in specific trainings and follow them over time to see how training impacts attitudes, behavior intentions, and bystander intervention. Then these data can be paired with other survey data to see the impact on sexual assault rates.

CHAPTER 3: SELF-DEFENSE RISK REDUCTION PROGRAMS FOR WOMEN

Introduction

A growing body of sexual assault research focuses on reducing women's risk for assault (i.e., "risk reduction"), through a variety of techniques including self-defense programs.⁵ It has been demonstrated that when adapted to the nature of acquaintance rape, education about risky situations and how to avoid them, identification of perpetrator behaviors, reducing victim self-blame, and providing self-defense skills, can reduce both the number of assaults and the degree of harm (Gidycz, et al., 2015; Hollander, 2009; Orchowski, Gidycz, & Raffle, 2008). It is important to emphasize that self-defense programs should be tailored to the type of assaults commonly experienced (i.e., acquaintance as opposed to stranger rape), and that self-defense techniques are not intended as a cure-all to solve the problem of sexual assault. Research indicates comprehensive programming should include self-defense risk reduction programs for women as one essential component of a larger, comprehensive effort whose larger focus is addressing the context and environment where assault might occur. Such an approach may be welcomed by Service members.

For example, some female midshipmen participants in the 2013 Service Academies Gender Relation Focus Group study (2013 SAGR; Cook, Van Winkle, & Namrow, 2013) expressed interest and felt value for this type of programming. One midshipman commented,

Maybe this is crazy, but we have to take three semesters of martial arts here. There are all these very technical moves and arm bars and very impressive, very good for the future female Marines. But I think honestly we should learn more self-defense techniques ...putting somebody in this complicated arm lock I don't remember a year later does me no good for defending myself. (p. 127)

In this chapter, we first briefly describe the theory, content, and common criticisms of self-defense risk reduction programs. Next we present the state of the research on risk reduction programs from both an empirical and a best practices perspective. We also point out research needs and opportunities for military research. The discussion focuses mainly on the work of Gidycz and colleagues as this research is the most prolific, sustained, and promising in its application of best practices.

Self-Defense Risk Reduction Program Theory and Components

The underlying premise of sexual assault self-defense risk reduction programs is that women can reduce their risk for sexual violence by employing the AAA framework proposed by Rozee and Koss (2001): Assess dating and social situations for risk; Acknowledge when situations are

⁵ While data supports sexual assault as a problem for both men and women, this line of research has focused exclusively on reducing risk for women. The underlying theory is specific to the feminine experience, and the data collected have come from female-only study groups. We focus, therefore, on application of the research to risk reduction for female military members.

risky; and Act quickly and forcefully if risk is detected (Orchowski et al., 2010; Hollander, 2014). Within the AAA framework, self-defense training is one component in a larger program of risk reduction, and is of particular importance to teaching participants the “Act” part of the framework (Brecklin & Ullman, 2004; Gidycz et al., 2015). In more narrowly defined programming, the mastery of sexual assault self-defense skills is the primary focus (e.g., Brecklin, 2008; Ozer & Bandura, 1990).

Self-defense risk reduction programs seek to reduce women’s vulnerability to sexual assault by changing the way women assess and respond to risk. Program content includes teaching women to (1) identify risk, (2) diagnose risky dating situations, (3) decrease psychological barriers to resistance, (4) increase verbal and physical resistance, and (5) decrease self-blame and re-victimization (Orchowski et al., 2010). These program components are briefly summarized below. Implications for military settings are introduced, with more in-depth discussion in following sections.

Identify Risk. Identifying risk is the first major content area. One common rape myth asserts a women’s greatest risk for sexual assault is from a stranger, when in reality a woman is much more likely to be assaulted by an acquaintance or intimate partner (Deming, Covan, Swan, & Billings, 2013; Gidycz et al., 2002). Data from the 2012 Workplace and Gender Relations Survey of Active Duty Members (2012 WGRA) indicate that only 12% of victims of unwanted sexual contact identified the perpetrator as an unknown person (DMDC, 2012).⁶ Belief in this myth puts women at greater risk because they may fail to notice warning signs of a potential sexual assault; therefore, risk reduction programs stress to participants how this belief increases their vulnerability (Orchowski et al., 2010). We have previously noted there are also military-specific risks that need to be acknowledged, including that the role of alcohol in sexual assault may be overemphasized and differences in rank between perpetrator and victim may be minimized.

Diagnose Risky Dating Situations. The second common content area of risk reduction and self-defense programming is teaching respondents to diagnose risky social situations. Programs emphasize the difficulty in detecting risky social situations, discuss how social/dating situations can subtly evolve from normal to threatening, and help women become more attuned to their intuition (Orchowski et al., 2010). As with identifying risk, military specific-risk factors need to be identified and incorporated into the assessment of risky situations.

Decrease Psychological Barriers to Resistance. Identifying and diagnosing risky social situations are critical, but not sufficient for an effective response to risky situations. Women must also make the decision to react assertively; civilian research finds this decision is often hampered by a number of psychological barriers, including fear of rejection, injury or embarrassment; wanting to make a good impression; and putting others’ needs before oneself (Orchowski et al., 2010). Programs to develop women’s strengths in recognizing and overcoming these and/or other military-specific barriers to resistance can be adapted to the specific circumstances of military assault.

⁶ Respondents who indicated one or more incidences of unwanted sexual contact were asked a series of follow up questions about the “one situation” that had the greatest impact. Therefore, 12% of perpetrators from the “one situation” were identified as an unknown person.

Increase Verbal and Physical Resistance. The fourth common content area is increasing verbal and physical resistance. As discussed previously, review of the literature shows physical and verbal resistance decrease a woman's risk of completed rape and do not increase risk for injury (Ullman, 2007). The self-defense portion of risk reduction programming uses practice to teach a variety of verbal and physical resistance skills and to increase women's feelings of self-efficacy in their abilities to resist an attack (Orchowski et al., 2010). Consistent with best practices, this component focuses on using positive role modeling to build strengths. Programming with female military Service members could employ these experiential techniques with minimal adaptation.

Decrease Self-Blame and Revictimization. The fifth common component focuses on decreasing self-blame and re-victimization. Some participants might have already experienced victimization and some participants may be victimized in the future. In consideration of this fact, programs work to decrease self-blame by discussing stages of healing, providing narratives from victims, discussing resources available, and stressing that perpetrators are always responsible for their acts of sexual aggression (Orchowski et al., 2010). This approach is also amenable to programming with female Service members.

Criticisms of Self-Defense Risk Reduction Programs

One of the early criticisms of self-defense programming was that teaching women to fight back might do more harm than good because women are not strong enough to defend themselves against a male assailant and attempts to physically fight off an attacker might serve only to anger the perpetrator, leading to an escalation of violence (Hollander, 2009). However, research on rape avoidance strongly rebuts this assertion. A review by Ullman (2007) concluded that forceful physical resistance strategies (e.g., biting, hitting, using a weapon, martial arts or other physical self-defense techniques) and non-forceful physical resistance techniques (e.g., struggling, guarding one's body with own arms, running away) are both related to avoiding rape. Evidence suggests this effect is far from small. Guerette and Santana (2010) found a 91% decrease in the odds of completed rape when victims resisted with a weapon and an 85% decrease associated with other physical resistance. Moreover, the review by Ullman (2007) concluded that women who used physical resistance did not increase or decrease their likelihood of injury. Similarly, forceful verbal resistance (e.g., screaming, yelling, swearing) is effective at rape avoidance in situations where offenders use verbal threats (Ullman, 2007). Finally, not resisting the perpetrator is related to greater odds of experiencing completed rape, but is unrelated to physical injury (Ullman, 2007).

Self-defense programming has also been criticized for not being indicative of a universal primary prevention effort because it does not address the underlying motivations to engage in sexual violence (Hollander, 2009). Critics of self-defense training argue it is not true prevention because it assumes the responsibility for stopping assaults lies with the victims (i.e., it can be a form of victim blaming) and is likely to simply transfer the assault from a less vulnerable to a more vulnerable victim, rather than reduce rates of sexual assault against women overall (Hollander, 2009). However, to some extent these criticisms might be based on a misunderstanding of self-defense efforts or a response to poor implementation. Effective risk reduction, when implemented properly, is in no way "victim blaming" and may increase victim perception of perpetrator blame (e.g., Gidycz et al., 2015). Specifically, Hollander (2009) notes

well-designed risk reduction programs emphasize that women are never responsible for assaults, that responsibility lies only with the perpetrator; and makes clear that while women can resist, not all women should resist all kinds of violence in all circumstances, and that choosing not to resist or being unsuccessful does not mean the woman should be blamed. Similarly, even though risk-reduction might result in a perpetrator seeking out a different, more vulnerable victim, this is not a reason to cease teaching risk-reduction; rather it is a reason to disseminate it more universally.

Supporters of risk-reduction training agree it is not women's responsibility to stop sexual assaults. Rather, the focus on prevention should be mostly on the root causes of sexual assault, but argue in the current environment (in which men⁷ commit the vast majority of sexual assaults⁸) women should be given the information and skills to improve the quality and safety of their lives (Brecklin, 2008; Gidycz & Dardis, 2014; Hollander, 2009; Ullman, 2007). In addition, many programs have shown broader positive effects related to promoting protective factors against sexual assault, such as increased self-esteem and decreased anxiety (Brecklin, 2008). Thus, while risk-reduction and self-defense are not considered as true "prevention," they form an essential component of a comprehensive approach to reduce and prevent violence, and are part of the U.S. military's ethical obligation to provide effective tools to all Service members.

Discussion of Self-Defense Risk Reduction Programming from an Empirical and Best Practices Perspective

Overall, the empirical support for self-defense risk reduction programming is mixed, but generally supportive with multiple positive outcomes. The results appear to be trending more positive as researchers continually improve programs based on application of theory and lessons learned from prior empirical testing of outcomes. Furthermore, the body of research in self-defense risk reduction programming exhibits many of the best practices detailed in Chapter 2. We apply the principles related to each of the three broad areas of prevention programming (program characteristics, matching programs to target populations, and implementing and evaluating prevention programs) to point out strengths, as well as to make suggestions for military specific applications. Empirical findings are included in the discussion.

Self-Defense Risk Reduction Programming and Principles Related to Effective Prevention Program Characteristics

In this section, the discussion addresses self-defense risk reduction programming from a best practices perspective relative to program characteristics. Since the program characteristics are generally applicable to military and civilian women, no additional recommendations are made within this section on adaptations necessary for female Service members.

⁷ We recognize that men can be victims and women can be perpetrators of sexual assault; however, the dynamic of male perpetrators and female victims is most relevant to the research discussed in this review and accounts for the overwhelming majority of cases. Therefore, in this report, primarily we refer to men when discussing perpetrators and women when discussing victims. Additional research will be necessary in order for the DoD to develop and implement knowledge about other sexual assault scenarios (i.e., same-sex or female on male).

⁸ While the prevalence of Unwanted Sexual Contact (USC) in the military is down significantly from FY2012 to FY2014 (6.1 percent to 4.3 percent; DoD, 2014b), USC still exists.

Comprehensive. Comprehensive programming provides a multitude of interventions across multiple settings or levels of the social ecology. As mentioned, the major criticism of self-defense risk reduction programming centers on the fact that these programs are not comprehensive because they do not address multiple levels of the social ecology. Thus, the recommendation would be to offer this risk-reduction programming within the context of comprehensive prevention programming emphasizing men's responsibility for prevention and not as an isolated, stand-alone effort. As an example of such a strategy, a recent research trial offered risk-reduction workshops for women in concert with a concurrent sexual assault prevention program for men grounded in social norms and bystander intervention approaches (Gidycz et al., 2011).

Theory Driven. Best practices related to theory recommend "both connecting prevention activities to theory about the causes or origins of the problem and to theory regarding interventions, or mechanisms of behavior or community change" (Casey & Lindhorst, 2009, p.101). Self-defense risk reduction programming meets both requirements.

In support of the first requirement, programming is grounded in theory about the way women are socially programmed to assess and respond to risk. The AAA framework proposed by Rozee and Koss (2001) is based on the premise that traditional gender role socialization makes women vulnerable to attack by teaching them to be unassertive even when they feel uncomfortable; to put others' needs ahead of their own; to fear embarrassment, giving offense or drawing attention to oneself; and to underestimate the ability to physically defend oneself (Gidycz & Dardis, 2014; Rozee & Koss, 2001). Programming seeks to address this by directly confronting traditional gender role socialization and teaching skills needed to overcome it.

In support of the second requirement, teaching in each content area is theoretically grounded in models of attitude and behavior change, including the health belief model, the elaboration likelihood model, social learning theory, and the theory of planned behavior (Gidycz et al., 2015).

In sum, the theory in self-defense risk reduction programming is well-developed. In addition, the underlying theory is equally applicable to military audiences and civilians..

Varied Teaching Techniques. Consistent with the best practices principle related to teaching techniques, the program uses a variety of methods including active, skills-based training. The components are taught using didactic presentations, video tapes, group discussion, and modeling and practice of self-defense techniques (Orchowski, et al., 2008).

Strengths Promotion. Consistent with the best practices of promoting strengths, the entire program focuses not just on reducing risks, but also on enhancing strengths. Women are taught to listen to their intuition, overcome barriers to resistance, employ skills learned in physical and verbal resistance, and are given tools for healing if an assault happens (Orchowski et al., 2010).

Sufficient Dosage. The sufficient dosage required for self-defense programs to be effective in preventing sexual assault is unclear at this time. The most recent evaluation of the Gidycz and colleagues program describes the program as seven hours total: three hours of risk reduction, two hours of self-defense, and a two-hour booster session after four months (Gidycz et al., 2015).

The inclusion of a booster session is consistent with best practices for dosage. Results from the program have improved over time as the length has increased; however, increases in dosage have also come with added and refined content. Thus, improvement cannot be attributed to a simple dosage effect. Interestingly, results from a much longer thirty-hour self-defense program showed women in the comparison control group were 1.6 times more likely than women in the treatment group to report a sexual assault in the one year follow up period (Hollander, 2014). The finding that the Gidycz and colleagues seven-hour program including self-defense has had less success in reducing victimization rates as compared to the thirty-hour course which is entirely self-defense, suggests a possible dosage effect. Regardless, the findings for this line of research are consistent with best practice research showing that interventions with consistently positive effects had an average length of six hours (DeGue et al., 2014).

Self-Defense Risk Reduction Programming and Principles Related to Matching Prevention Programs to Populations

In Chapter 2, principles related to matching prevention programs to target populations were described. This section addresses the principles of gender sensitivity and contextualizing the program to both community-level and individual-level factors relevant to the military population. The final principle, appropriately timed to development, is not seen as applicable.

Gender Sensitivity. Consistent with best practices, self-defense risk reduction programming is offered to female-only groups. Not only is homogenous gender programming supported by empirical research on sexual assault prevention programming, but there is also strong logical reasoning for separation of genders in the case of this particular programming. Offering this programming to a mixed-gender audience may result in sharing women's protective strategies with potential perpetrators, thereby reducing effectiveness (Brecklin, 2008; Orchowski et al., 2010; Gidycz et al., 2015). Based on the findings, self-defense risk reduction programming for the military should follow the example of current research and provide this programming in single gender audiences where possible.

A comment from a 2013 SAGR participant at the U.S. Naval Academy provides anecdotal evidence of the importance of instructor gender considerations (Cook et al., 2013).

... If we could get a female instructor in there then I think the females would take it more on board. And because a lot of time the male instructors somewhat dismiss the females. They try to help them and everything, but there's always a very different dynamic between the female midshipmen in the class who are like, I have to get through this, some of them, and the guys are showing me this is stuff that I've grown up doing, I can handle this. If we could get female instructors I think they might be helpful. (p.127)

Relatedly, there is currently no risk-reduction literature for men to draw upon for the military. At this time, the only conclusion to be drawn here is that military sexual assault prevention programs offered to men should address issues of male victimization and victim-blaming, and publicize the resources for seeking help.

Socioculturally Relevant/Contextualized Programming. Contextualization of programming seeks to make adjustments related to community level factors, such as norms, experiences, and

idioms used. As well, in Chapter 2 the argument was made that the military environment presents contextual challenges at the individual level; such as age, rank, and posting environment. There are a number of military specific community-level and individual-level factors to be considered in contextualization of self-defense risk reduction programming to military audiences, including an individual's prior history of sexual assault, pre-existing posttraumatic stress, military structural and psychological barriers to resistance, self-blame, and sexual assault perpetration history.

Prior History of Sexual Assault. The military may attract a greater percentage of previous sexual assault victims, including childhood sexual assault (CSA), than in the general population (Martin, Rosen, Durand, Stretch, & Knudson, 1998). Moreover, previous adult sexual assault and CSA are proven risk factors for further sexual assault (e.g., Merrill et al., 1999). One explanation for this relationship is that while women with prior victimization histories detect risk as well or better than women without prior histories, they tend to respond to sexual assault situations less assertively (Gidycz, McNamara, & Edwards, 2006). CSA survivors might be at particular risk for freezing out of fear and/or dissociative reactions when attacked, a response known as tonic immobility (Ullman, 2014).

Results of self-defense risk reduction programming have, in some studies, been less positive for previous victims (Hanson & Gidycz, 1993; Orchowski et al., 2008). As an example, Orchowski et al. (2008) found that women in the program group with a history of adolescent victimization were significantly more likely to be victimized at the 2-month follow up, relative to women in the program group without such a history. In another study, women with a history of adolescent sexual victimization in the program group were significantly more likely to drop out of the study as compared to women with a victimization history in the control group (Gidycz et al., 2015). However, programs specially tailored to women with histories of sexual assault (as opposed to the programs described above) have been found successful in reducing re-victimization (Marx, Calhoun, Wilson, & Meyerson, 2001). Overall, findings for previous sexual assault victims suggest content might need to be contextualized for this audience (Gidycz et al., 2015), or the dosage might need to be increased.

Given the relatively large number of adult and CSA victims in the military, we suggest a research program that attempts to identify necessary modifications to current programs to be maximally effective for this audience. A crucial first step is developing an ethical and sensitive method for identifying survivors and gaining agreement to participate in programming. One possible model would be to offer risk-reduction to all women recruits and then to offer a specialized follow-up for victims, who could volunteer to participate. The Secretary of Defense (2015) initiative to provide at the Military Service Academies “an anonymous, self-guided education program” to cadets and midshipmen who were victims of sexual assault or abuse prior to entering military service is a good example of a potential implementation of such a model. Careful design and evaluation of the program is likely to benefit the academies as well as provide valuable information towards Service wide implementation of similar programs.

Post-Traumatic Stress Reactions. Related to the relationship between previous assault experiences and tonic immobility, it would also be useful to explore whether a relationship exists between combat-related post-traumatic stress (PTS) and reactions to assault. In other words, does PTS make one more vulnerable to tonic immobility in the face of stress from a sexual

assault? There is significant empirical evidence linking PTS to sexual assault (e.g., Campbell & Raja, 2005); the typical assumption being that the sexual assault led to the PTS. As this evidence is mostly cross-sectional, it does not answer the question of which came first, the PTS or the sexual assault. Mostly likely, both affect each other, wherein sexual assault increases risk for sexual assault-related PTS, and both sexual assault-related and combat-related PTS lead to less assertive responding to sexual assault situations. If PTS does affect ability to respond assertively, consideration of this should be included in self-defense programming contextualized for military populations.

Risk Assessment and Psychological Barriers to Resistance. Another area of contextualizing programming to the military environment relates to risk assessment and psychological barriers to resistance. Issues related to rank differentials, feelings of duty, and unit dynamics likely affect both risk assessments and barriers to resistance. For example, is rank negatively related to perceived risk? Much as women underestimate their risk for assault from acquaintances, do military members underestimate their risk from higher ranking members? The value placed on respect for the chain of command contradicts an expectation of risk from higher ranking members. Perception of risk is an important piece to being prepared to respond; women are more vulnerable and less likely to take action when they do not perceive the risk (Orchowski et al., 2010). Therefore, it is important for the military to consider whether prevention programming is adequately elucidating the risk of assault from superiors, given that approximately half of assaults are perpetrated by individuals of senior rank: 54% of assaults perpetrated by other service members in 2014 (Morrall et al., 2015), and 53% of all assaults in 2012 (DMDC, 2012).

Military-specific psychological barriers to resistance are also likely. Barriers identified in the civilian literature include fears of rejection, sustaining injury and potential embarrassment; wanting to be liked; and a socialized tendency for women to put others' needs before their own (Orchowski et al., 2010). Military-specific barriers might include issues related to standing up to a higher ranking member, wanting to be liked and accepted by the unit, difficulty accepting that a unit member does not "have your back," and fear of being perceived as overreacting. More research is needed to understand the military-specific barriers to resistance so they may be included in military environment contextualized programming.

Self-Blame. One of the components of self-defense risk reduction programming is aimed at reducing self-blame. Military-specific factors suggest a potential need to contextualize this area of training. There are a number of theoretical reasons why self-defense programming could be successful in rape avoidance where a traditional self-defense program would not; including focus on areas of physical strength in the female body and program content designed to address specifically risk assessment and barriers to resistance (Gidycz & Dardis, 2014). This raises an interesting issue for military members. Given the degree of physical training provided to military members, does a completed sexual assault result in greater feelings of self-blame? That is, does physical training give victims the perception they "should have" been able to effectively resist and therefore are somehow more blame-worthy? It is well known that for male victims, this is a common form of self-blame as well as a source of victim-blaming from others. Research on this issue would assist in possible contextualization of programming to address

feelings of self-blame in military members, and might relate to retaliation and victim blaming as well.⁹

Sexual Assault Perpetration. A further issue to contextualizing self-defense risk reduction programming would be to gain a better understanding of the types of perpetrators committing assaults, possibly including information on the nature of the personal and the military-specific relationship. One of the underlying assumptions for civilian self-defense risk reduction programming is the greatest risk for assault comes from acquaintances; in order to contextualize programming appropriately, it is necessary to understand the relative risks of different types of potential perpetrators within the military environment. The 2014 RMWS Study revised the questions categorizing perpetrators to better capture both personal relationships and military relationships (RAND Corporation, 2014). They do not, however, match the coding scheme recommended by the Center for Disease Control and Prevention (CDC) for survey surveillance, including categories such as current or former legal spouse; current or former intimate partner; family member; person in a position of power or trust; friend/acquaintance; person briefly known; stranger; and unknown perpetrator (Basile, Smith, Breiding, Black, & Mahendra, 2014).

Self-Defense Risk Reduction Programming and Principles Related to Effective Prevention Program Implementation and Evaluation

Principles related to implementation and evaluation include outcome evaluation and program staff. Suggestions for application to the military population are offered.

Outcome Evaluation. Prevention best practices require interpretable research designs and measures of key behavioral outcomes of interest. Data collected should be used to drive continuous program improvement. This is an area of strength for the self-defense risk reduction research. Gidycz and colleagues have been developing, testing, and refining a sexual assault risk reduction program for more than a decade (e.g., Gidycz et al., 2001; Gidycz, Rich, Orchowski, King, & Miller, 2006; Gidycz et al., 2015; Mouilso, Calhoun, & Gidycz, 2011; Orchowski et al., 2008). Their program utilizes interpretable research designs, typically randomized controlled trials (RCT). It also includes key behavioral outcomes of interest: behaviors and behavioral intentions logically related to the theory guiding the program content, as well as the outcome of primary importance, victimization rates. As an example of outcome variables, the most recent study by Gidycz and colleagues (2015) included measures of self-protective behaviors, sexual assertiveness, paying attention to intuition, considering using physical non-forceful resistance techniques, avoidance of telegraphing emotions to potential perpetrators, paying attention to body language, consideration and use self-defense tactics, and post-training experience of sexual assault. All of these variables were theoretically driven and appropriate to validating whether the program was working as intended. Thus, this research program exemplifies best practices in outcome evaluation.

Empirical evidence has shown mixed, but overall promising effects in many of the theoretically specified outcome variables. Examples include greater self-protective behavior (Gidycz et al., 2015; Gidycz et al., 2006; Orchowski et al., 2008), decreasing self-blame and increasing offender

⁹ Retaliation and victim blaming are further explored in Chapter 6.

blame (Gidycz et al., 2006; Gidycz et al., 2015), less psychological distress and PTS symptoms following re-victimization (Mouilso et al., 2011), greater self-efficacy beliefs (Orchowski et al., 2008), more relational assertiveness (Gidycz et al., 2015; Orchowski et al., 2008), greater active verbal and physical self-defense strategies (Gidycz et al., 2015), reduced risk of rape (Hollander, 2014; Orchowski et al., 2008), and reduced severity of assault (Orchowski et al., 2008).

It is promising to note that while not all program evaluations demonstrated lower rates of sexual assault, there is a clear trend that programming reduces severity of assaults. For example, in the Orchowski and colleagues (2008) evaluation, while the overall number of sexual assaults was the same for both treatment (i.e., participants received risk reduction self-defense training) and control (participants received no training) groups, three times as many rapes were reported for control group members relative to the treatment group. In the Gidycz et al. (2015) evaluation, again, overall rates of sexual assault did not differ across treatment and control groups; however, participants in the treatment group experienced their most severe form of victimization fewer times than women in the control group. Likewise, Mouilso et al. (2011) reported statistically significant differences in severity, but not frequency of victimization between participants in the treatment and control groups. The Hollander (2014) evaluation evidenced *both* an effect on overall number of assaults between treatment and control groups, and a difference in severity; 2.8% of students in the control group reported rape in the follow up period, whereas no student in the treatment group reported rape

There is one important deficit in evaluation of outcomes for this body of research which presents a further research need and opportunity for military applications. There is a considerable lack of participant diversity in evaluated self-defense risk reduction programs. Participant groups have been overwhelmingly comprised of white, unmarried, college-age females. Thus, while the outcomes of programming have generally been positive, the external validity of the programming (i.e., generalizability to other demographic groups) is unknown. Because the military population is considerably more diverse, evaluations in military applications should attend to differences across demographic groups. This will advance military understanding of effectiveness, as well as provide a valuable contribution to the research field in general.

Finally, any self-defense risk reduction programming implemented should follow best practices for outcome evaluation. Results from the civilian literature are generally positive; but further validation of programming is required, especially for military applications. The military-specific contextualization issues summarized above present a number of challenges to the efficacy of the programs. The only way ensure programs are effective is to utilize interpretable research designs and reliable, valid measures of key outcome variables.

Program Staff. We reiterate the recommendations offered in Chapter 2 regarding program staff. Staff should continue to be appropriately trained, supported and supervised; and consist of members who are sensitive, competent, capable of connecting with participants and committed to the program. Some research suggests that self-defense programs should have female instructors, which was discussed in further detail in Chapter 2. In the absence of further research, this evidence, while preliminary, is compelling enough to suggest that military programs maximize use of well-trained, competent female instructors.

Future Research Opportunities

Self-defense risk reduction programming for women is recommended as one component of a comprehensive effort to reduce and prevent sexual assault. Research in this area follows best practices for prevention and has demonstrated encouraging empirical results in addressing attitudes and behaviors related to risk for sexual assault, as well as likelihood (i.e., rates) of sexual assault. This conclusion is, however, specific to the self-defense risk reduction programming reviewed here, and does not include other types of self-defense workshops that are not framed within a risk-reduction model (for example, the Rape Aggression Defense System of Self-Defense [RAD] at <http://rad-systems.com>). Therefore, care should be taken in selecting program and in adapting programs to military audiences.

We make a number of recommendations for future research to assist in successful adaptation of programming to military needs. Some are military-specific research recommendations, and some are unresolved research questions addressable by civilian researchers in either non-military or military settings.

The military-specific research recommendations include the following:

- *PTS and Sexual Assault Responses.* Research in the veteran population suggests a relationship between sexual assault risk and (combat-related) PTS. The cross-sectional study designs of this research do not allow for establishment of clear causal relationships. Future research in this area would benefit from designs that allow for understanding of the directional relationship between PTS and sexual assault risk. If PTS raises the risk of sexual assault, then members with PTS might benefit from more intense or targeted prevention programming, similar to survivors of prior sexual assault.
- *Assess Military-Specific Barriers to Resistance.* A number of military-specific issues related to rank differentials, feelings of duty, and unit dynamics as they impact risk assessment and barriers to resistance were suggested. Research is needed to assess these suggestions. Burn (2009) provides an example of an effective research strategy that could be used as a guide for a research program.

General research by the academic community which would be of particular benefit to the military in applications of risk reduction programming includes the following:

- *Interrelationship of Alcohol, Self-Blame, and Resistance Strategies.* Alcohol use as it affects risk reduction programming is an under-researched area, and one which would benefit the DoD. Use of alcohol is identified in risk reduction programming as it affects

barriers to resistance. Research suggests that women are less likely to recognize risk and effectively resist sexual assault when using alcohol (Testa, Livingston, VanZile-Tamsen, & Frone, 2003). Use of alcohol is a risk factor identified by the military and addressed in its current sexual assault prevention strategy, largely in policies to restrict alcohol usage (DoD, 2014b). While policies to restrict alcohol and its overuse are necessary and helpful, given many members will likely consume alcohol at some point, it is also useful to fully understand the link between alcohol and risk so the issue can be addressed from alternative viewpoints more consistent with a comprehensive approach to prevention.

Evidence from the literature also supports a relationship among alcohol use, self-blame, tonic immobility and less effective resistance (Ullman, 2007), although the direction of this relationship is unclear. It may be that alcohol use leads to less resistance, which is related to self-blame or it may be that alcohol use is related to self-blame, which leads to less effective resistance (Nurius, Norris, Macy, & Huang, 2004; Scott & Beaman, 2004; Ullman, 2007). In either case, given self-blame is related to poorer psychological outcomes for victims, and self-defense risk reduction programming specifically addresses reducing self-blame, the role of alcohol is an important research issue to address. To date, self-defense programming has not been adequately evaluated for assaults where women were drinking (Ullman, 2014). Further, understanding the relationship among these variables may lead to programmatic improvements to reduce the likelihood of assaults and improve psychological outcomes in cases of completed assaults.

- *Content and/or Dosage Modifications to Programming for Sexual Assault Survivors.* Research suggests self-defense risk reduction programming for individuals with a history of sexual assault might benefit from modifications to target that audience. Further research is necessary to determine if this audience requires different content or dosage, or both. Research is also needed to determine if individuals with a history of alcohol or other substance abuse are similarly at-risk.
- *Dosage.* The seven-hour Gidycz and colleagues' program has shown success in affecting intermediary processes related to sexual assault, with lesser success in reducing actual rates of sexual assault. The much longer thirty-hour program evaluated by Hollander showed a significant impact on both an intermediary variable and rates of sexual assault. This is, however, only one evaluation. Generally, research shows longer sessions spread out over time have greater effects; and booster sessions help maintain effects. Further research should be conducted to determine the dosage that best balances program effects with cost considerations.
- *Demographics' Effects on Programming.* Special attention should be paid to programming effects across demographic characteristics, as evaluations of previous programs have been implemented with overwhelmingly white, college-aged participant groups. The literature in general, and the DoD in particular, would benefit from this research.

CHAPTER 4: BYSTANDER INTERVENTION

Introduction

Bystander intervention is currently recommended as a best practice among most experts in the field of sexual assault prevention (DeGue et al., 2014; Gibbons, 2013; Lonsway et al., 2010; Vladutiu et al., 2014), is recommended by the DoD in its comprehensive prevention strategy (DoD, 2014), and is being implemented in the Services and Military Service Academies. The question, therefore, is not if bystander intervention should be incorporated into DoD violence prevention programs, but could it be enhanced to improve outcomes? Currently, there are a number of approaches to bystander intervention, including *Bringing in the Bystander*, the *Green Dot Campaign*, *Mentors in Violence Prevention*, and the *RESPONSE ABILITY* program (also referred to as “The Men’s Workshop”). Most or all of these programs have been used by the different military Services. A special issue of the journal *Violence Against Women*, entitled “Engaging Communities to End Sexual Violence: Current Research on Bystander Focused Prevention” (June 2011, Volume 17, Issue 6), featured this topic and included articles on all of these approaches. The programs report roughly similar outcomes in evaluation trials, finding support for greater bystander intervention or intention to intervene as common outcomes, and in some cases reported actual reductions in violence.

Given these similar outcomes, there appears to be no one best bystander intervention program that should be adopted by the military, and the many common elements contained within these programs may suggest the military could develop/continue to develop its own programs rather than invest in the training for and incorporation of one of these particular approaches. Alternatively, it may be possible for the military to select one program to implement, assuming it can be adapted and tailored to military settings and flexible enough to be designed to complement other military sexual assault programs. Lessons learned from published evaluations of the various bystander programs and application of prevention principles provides substantive guidance for development of military programs.

In this chapter, we first provide a description of the theoretical underpinnings of bystander prevention programming, with some comments on military applications, to establish a basis for the remaining discussion. Next, we apply knowledge from the published bystander literature and prevention best practices principles to develop more in-depth suggestions for military programs and research.

Bystander Intervention Theory and Program Components

Military members overwhelmingly express a willingness to intervene in situations of actual or potential sexual assault. Data from the 2012 WGRA indicate that 93% of members expressed strong willingness¹⁰ to “step in and stop a situation that might lead to sexual assault;” moreover, in response to a potential acquaintance rape scenario, only 3% of members indicated they would

¹⁰ In response to the question, “To what extent are you willing to step in and stop a situation that might lead to a sexual assault,” 77% of members responded “Very large extent” and 16% responded “Large extent.”

take no action to assist the potential victim (DMDC, 2012).¹¹ However, expressed willingness to intervene in the abstract is not a perfect predictor of intervention behavior in a real world situation. Latane and Darley's (1970) situational model of bystander intervention recognizes the complexity of the path to action in a real world situation and is frequently used as the basis for bystander intervention programs (Brown, Banyard, & Moynihan, 2014; Burn, 2009). According to Burn's (2009) description, the model proposes five steps in the decision to intervene, along with a number of barriers along the path to action, all of which correlate with steps in the model.

Step 1. The bystander must notice the event. In the first step, the bystander must notice the event. A failure to notice barrier might result from self-focus or sensory distractions or lack of knowledge of risk situations and characteristics. As examples, at a party, bystanders may be engaged with their own social activities, there might be too much noise, alcohol can impair the bystander's ability to notice, or they might not be familiar enough with perpetrator behavior to notice danger. It would be important for DoD officials to identify the different types of "events" of sexual assault that occur in a military setting, as these might differ from a civilian context and vary within military subcultures, in order to be able to train bystanders to "notice the event" and intervene.

Step 2. The bystander must interpret the event as in urgent need of response. In this second step, the bystander must identify the situation as intervention-appropriate; that is, high in sexual assault risk. Ambiguity in the situation, as well as ignorance of sexual assault risk markers and what constitutes consent, are both barriers to this step, known as the failure to identify the situation as a high risk barrier. In the military, training to identify high risk situations would necessarily include perpetrator behaviors (perpetrator MO) specific to the military (this point is addressed further in Chapter 6).

Step 3. The bystander must take individual responsibility for intervening. In this third step, the bystander must take individual responsibility to intervene. The failure to take responsibility barrier is affected by the relationship of the bystander to the potential victim and the perpetrator, diffusion of responsibility, the presence of other people, and beliefs about victim worthiness. In a military situation this can be further complicated depending on whether the person in need of intervention is a subordinate, peer, or superior. The command structure may also unintentionally facilitate diffusion of responsibility, i.e., assuming someone else will do something. Finally, victim blaming issues, discussed in the victim retaliation section (Chapter 6), also reduce bystander response-ability. The adaptation of existing bystander intervention models or the development of new programs for the military should, therefore, take these challenges into account.

Step 4. The bystander must decide how to intervene. In the fourth step, the bystander decides how to help. The main barrier here is a failure to intervene due to a skills deficit. Once again, special challenges relating to power differentials in the military (intervening with a subordinate versus a superior) and context are noted. It is essential, therefore, to examine military bystander intervention programs to ensure they teach a variety of intervention skills appropriate to different

¹¹ In response to the scenario, 2% of members indicated they would "do nothing," and 1% said they would "leave to avoid any kind of trouble."

postings, ranks, and personality styles. For example, forms of indirect intervention (Berkowitz, 2009) might be more appropriate and realistic with a superior. This challenge becomes even more complex in overseas settings where many civilians working on a base may be foreign citizens, thus introducing a cross-cultural component to bystander skills training.

Step 5. The bystander must then choose to act. The fifth step is the act of intervening. Bystander fears of embarrassment, social concerns, and awkwardness may lead to a failure to intervene due to audience inhibition barrier. Military bystander intervention training, therefore, should offer a variety of options for a bystander to take action.

Extensions of this model include Banyard and colleagues' work (e.g., Banyard, Eckstein, & Moynihan, 2010; Banyard, Moynihan, Cares, & Warner, 2014), which pays particular attention to how stages of change affect the success of the program for participants. The basic idea is that individuals occupy different stages of readiness to change their behavior relative to sexual assault. Stages of change include no awareness of the problem (also called pre-contemplation), taking responsibility (or contemplation), preparation, and action. Moreover, programming will be more effective when it is designed to address each stage of change and move individuals through the stages (Banyard et al., 2010). Given the vast range of settings and ranks within the military, it is likely Service members will vary in terms of their readiness to change and programs will need to be designed accordingly.

The *Green Dot* program is also built on the basic premise of addressing factors that inhibit bystanders from intervening (e.g., Cook-Craig et al., 2014). *Green Dot* extends the model by including the identification and training of popular opinion leaders, particularly influential individuals in social networks, to diffuse messages to peer groups.

The *Men's Workshop*—later broadened to include men and women as the *Response Ability Bystander Intervention Model* (Berkowitz, 2009; Gidycz et al., 2011; Salazar et al., 2014)—teaches a range of intervention skills appropriate to different personalities and situations, and is unique in its incorporation of elements of the social norms approach (misperception reduction) to reduce barriers to intervention.

Mentors in Violence Prevention (MVP), another popular bystander intervention program, was originally developed for athletes as mentors and has its theoretical roots in social justice (Katz, Heisterkamp, & Fleming, 2011). The program seeks to help individuals be more aware of, and to challenge practices, norms, and gender ideologies contributing to mistreatment and violence; the role of complicit silence in dominant group members as it contributes to violence is emphasized, and prosocial behaviors to intervene are encouraged (Katz et al., 2011). The program utilizes a “play-book” of scenarios to teach participants intervention options. Compared to the other programs mentioned above, MVP has been evaluated less often and less rigorously, resulting in little published research to validate its effectiveness.

Discussion of Bystander Intervention Training From an Empirical and Best Practices Perspective

In sum, all of the bystander intervention programs are designed to address theoretically specified barriers to intervention. In this section, we apply theoretical and empirical knowledge from the

published bystander literature and prevention programming best practices principles to develop more in-depth suggestions for military programs and research.

Bystander Intervention and Principles Related to Effective Prevention Program Characteristics

As reviewed in Chapter 2, a number of principles should guide any prevention programming effort. Effective prevention programs are comprehensive, or in the case of bystander intervention, are one part of a comprehensive approach (Powell, 2011), theory-driven, include varied teaching methods with emphasis on skills-based training, emphasize strengths, and contain sufficient dosage. We use these principles as the framework for the discussion below.

Comprehensive. Bystander intervention programming by itself is not a comprehensive prevention strategy sufficient to address multiple levels of the ecological model. Rather, bystander intervention programming is most effective when it is a component of a comprehensive, multi-level approach (Powell, 2011). Care should be taken to ensure that as one component of a larger program, bystander interventions are designed to achieve synergy with other programs and policies (Langford, 2012). As an example, in a military application, care should be taken to ensure bystander intervention skills taught are consistent with participant adherence to military rules and regulations and that military specific norms and perceptions are addressed. Researchers also recommend combining bystander intervention efforts with other mutually reinforcing and synergistic components, such as parallel bystander intervention media campaigns (Potter, 2012; Potter, Moynihan, & Stapleton, 2011), parallel social norms media campaigns (Casey & Lindhorst, 2009), and incorporating normative feedback based on social norms theory either in small group workshops (Berkowitz, 2010, 2013) or in web-based training (Salazar, Vivolo-Kantor, Hardin, & Berkowitz, 2014). Bystander intervention programs integrated with social norms interventions to reduce misperceptions of willingness to intervene and strengthen healthy norms have shown actual reductions in violence in a number of studies (Gidycz et al., 2011; Salazar et al., 2014; Wasco, 2014), confirming the best-practice recommendation that different program elements should be combined in a compatible, mutually-reinforcing manner.

Theory Driven. Researchers in the bystander intervention literature have focused a great deal of attention on theory. In line with best practices, activities are both theoretically connected to the causes of the problem and driven by theory regarding mechanisms of change. Continued attention to the careful work of these researchers can provide the basis for the development and refinement of military-specific programs.

Varied Teaching Methods. This best practices principle stresses the necessity to use a variety of teaching methods, including skills-based training. Bystander intervention programming is built on a general model of addressing theoretical barriers to intervention behavior. Programming addresses barriers in a variety of ways, including didactic methods (e.g., Cook-Craig et al., 2014), discussion and role plays (e.g., Gidycz, et al., 2011), providing groups with normative feedback (e.g., Berkowitz, 2010; Gidycz et al., 2011), interactive web-based training (e.g., Salazar et al., 2014), and social marketing campaigns (e.g., Potter, 2012; Potter et al., 2011).

Military programming should consider these efforts in using a variety of methods to address barriers to intervention, as well as the stages of change shown to be important in program effectiveness (e.g., Banyard et al., 2010; Moynihan et al., 2015). For example, poster campaigns have been shown to be somewhat effective in increasing awareness of the problem, willingness to help, and intervention behavior (Potter, 2012; Potter et al., 2011). However, the practical impact on bystander behavior (the effect size) is small. Potter (2012) reported that only 4.5% of the change in behavior after their poster campaign could be attributed to exposure to the posters. This finding is not surprising given that one of the theoretically specified barriers to intervention is failure to intervene due to a skills deficit. Media campaigns are not an effective strategy for teaching new skills. Skills are best taught through interactive activities. For the military, such activities should be specifically designed to address bystander intervention challenges occurring in different postings, ranks, and settings. It is likely the small effect size of bystander-themed media campaigns could be augmented if the media campaign were combined with other compatible interventions. The literature stresses the importance of both utilization of a variety of methods, and the affirmation of synergy between new, existing, and modified programs.

The importance of intervention skills is underscored by a recent study focused on identifying barriers to and facilitators of intervention behavior. Only two of the five barriers to intervention specified by the situational model had statistically significant relationships to intervention behavior: skills deficit and failure to take responsibility (Bennett, Banyard, & Garnhart, 2014). Moreover, of the two barriers, skills deficit was more strongly related to bystander behavior. Therefore, it is important to teach concrete skills for how to intervene in a multitude of ways in a variety of situations. Rather than to be told merely that one should intervene, research and theory emphasize that one must be taught a variety of options for how to intervene in different situations (Berkowitz, 2009; McMahon & Banyard, 2012). Any military programming should consider participant development of appropriate, tailored intervention skills as an essential component.

Strengths Promotion. Casey and Lindhorst (2009) argue that important attributes of effective prevention programming include social support, opportunities for meaningful participation in prosocial activities and goals, and positive role modeling. The focus of bystander intervention training is in promoting strengths in these ways. Military programming should mirror the civilian programming emphasis on teaching skills to promote strengths. Effective programming does not simply say what not to do, it teaches what individuals should do and gives them the skills to be successful, in turn requiring an interactive training environment with a well-trained facilitator to accomplish.

Sufficient Dosage. This principle refers to the importance of participants receiving enough of an intervention to produce an effect. Table 1 presents results from some evaluated bystander programs published in the past few years.¹² Results from these applications have generally been positive, but often with small and decreasing effects over time. Further, evidence indicates programming is less effective for participants who begin the program with little to no awareness

¹² This table is not intended to be comprehensive, but is representative of the literature. If the interventions did not include either of the key outcome behaviors (bystander or sexual aggression behaviors), they are not included in the table.

of sexual assault as a problem (Banyard et al., 2010; Moynihan et al., 2015). Together this evidence points to a possible dosage deficiency that military programming should closely consider.

The prevention literature stresses multi-session interventions spread out over time are more effective than single-session interventions occurring in a short time frame (Anderson & Whiston, 2005; Gibbons, 2013). The stages of change or Transtheoretical Model (TTM) underlying much of bystander prevention training recognizes change is a process that unfolds over time as an individual progresses through a series of stages. The time individuals spend in each stage is variable. Bystander interventions might not allow enough time for participants, particularly those low in awareness, to pass through the stages resulting in long-term behavior change. For the military, this would suggest trainings need to be developmentally sequenced, tailored to the audience, and designed to build on each other rather than repeating the same information across trainings.

Comparison of bystander program findings to research from other areas of prevention utilizing the TTM supports this point. The TTM is widely used in other areas of health research, including smoking cessation, decreasing alcohol dependence, and weight management. A recent meta-analysis of TTM interventions for weight loss indicated the length of interventions ranged from six weeks to twenty-four months, with a median length of nine months, and showed positive effects on behavioral outcomes (Tuah et al., 2011). The difference in the dosage of interventions between weight loss interventions and the typical bystander training of a few hours is striking. Bystander prevention training typically includes multiple sessions, but over a short period of time. As examples, the current version of the *Bringing in the Bystander* program includes three 90-minute sessions spaced over a week, with a 30-minute booster session (Banyard, Moynihan, & Plante, 2007; Moynihan et al., 2015; Potter & Moynihan, 2011), and the “*Response Ability*” *Men’s Workshop* consists of a 90-minute session with a 1-hour booster (Gidycz et al., 2011). Perhaps the difficulty in achieving positive change in low-awareness bystander intervention participants is an issue of sufficient dosage over sufficient time, not simply appropriately constructed content.

As noted above, results of the studies presented in Table 1 indicate these applications have generally been positive, but often with small and decreasing effects over time. The largest long-term effects shown in Table 1 come from the web-based *RealConsent* program evaluated by Salazar et al. (2014). The authors reported a moderate effect on bystander behaviors and a large effect on sexual aggression; the odds of rape for program group participants were 73% lower than for the control group at a six-month follow up. This program consists of six 30-minute modules to be completed over three weeks, a much longer period of time for program content (not including booster sessions) than either *Bringing in the Bystander* or the “*Response Ability*” *Men’s Workshop*. However, we can speculate that the reason for the relatively larger effects, may be due to the content differences between the programs. *RealConsent* is offered online whereas other programs are offered in person. In addition, the evaluation did not publish the actual time to completion for program participants, only that participants had up to three weeks to complete the modules. A similar program, offered as an interactive workshop, also produced robust effects at four months which rebounded at seven months, illustrating the need for sustained, ongoing programming (Gidycz et al., 2011).

Table 1.
Selected Recent Bystander Intervention Program Evaluations

AUTHORS	DOSAGE AND PROGRAM	BYSTANDER BEHAVIOR EFFECTS	SEXUAL AGGRESSION EFFECTS
Banyard, Moynihan, & Plante, 2007	Bringing in the Bystander: Three 90-minute sessions over one week, with 30-minute booster.	Statistically significant at two months. Effect decreased over time with the three session group non-significant at four months posttest.	Not evaluated
Coker et al., 2011	Green Dot: Motivational speech and 4 to 6-hour workshop.	Not evaluated.	No statistically significant effects.
Gidycz, Orchowski, & Berkowitz, 2011	The Men's Workshop (the "Response Ability" program)—combined bystander intervention with the social norms approach: 1.5-hour session, with 1-hour booster.	No statistically significant effects in bystander behavior.	Positive effect at four months: control group 4.5 times more likely to aggress; no significant effect at seven months posttest.
Moynihan et al., 2015	Bringing in the Bystander: Three 90-minute sessions over 1 week, with 30-minute booster.	Overall R^2 small (12% for helping friends, 3% for helping strangers). No significant effects of intervention for participants with high no-awareness scores at pretest.	Not evaluated.
Potter & Moynihan, 2011	Bringing in the Bystander: Three 90-minute sessions over 1 week, with 30-minute booster.	No effect for bystander behaviors for friends. Very small effect (partial $\eta^2=2.7\%$) for bystander behaviors towards acquaintances.	Not evaluated.
Salazar et al., 2014	RealConsent (online)—combined bystander intervention with the social norms approach: Six 30-minute modules, 3 weeks to complete.	Moderate effect; Cohen's $d = .37$.	Odds of rape were 73% lower for participants relative to the control group at six-month follow up.

In sum, bystander interventions have demonstrated statistically significant positive outcomes, but often with small effects that tend to fade with time. The program with the largest long-term effect sizes utilized a structure allowing individuals greater time to move from stage to stage. While we cannot be certain of the reason for greater relative efficacy, the example set by other areas of prevention literature on recommended length of interventions suggests extending bystander training over longer intervals and providing other reinforcing elements, such as media campaigns and command instructions.

Bystander Intervention and Principles Related to Matching Prevention Programs to Military Populations

Effective prevention programs should be matched to the target population, i.e., the military and its subcultures. This includes adhering to best practices regarding the timing and developmental appropriateness of the program as well as sociocultural relevance and contextualization of programming inclusive of gender sensitivity.

Timing/Developmentally Appropriate. Best practices in prevention require addressing developmental differences in participants, as these differences impact program content and timing of delivery. The bystander intervention literature explicitly addresses developmental issues in the work on stages of change. The stages of change approach recognizes that individuals are at different stages of readiness in terms of willingness and ability to intervene. This requires bystander intervention efforts be tailored to the characteristics of the audience (Banyard et al., 2010). For example, individuals in the no-awareness (pre-contemplation) stage benefit from more time spent on understanding the problem of sexual violence and invalidating rape myths. Further, development of intervention skills is best targeted towards those already in the action stage.

As mentioned previously, empirical evidence supports the impact of stages of change on the effectiveness of programming. Results from a recent study by Moynihan et al. (2015) showed the program was effective in increasing helping behavior directed toward strangers only for those participants who started the program with some awareness that sexual assault is a problem. Likewise, Banyard et al. (2010) found effectiveness and outcomes of a bystander intervention were correlated with the readiness or stages of change of the participants. The evidence indicates a “one size fits all” approach may not be effective.

We suggest military programs be designed to address where members are in the stages of change and adapt programs accordingly. The evidence suggests civilian programs have been less effective in generating positive change for individuals low in awareness. Therefore, an important step in military program development would be to improve upon program content for individuals low in awareness. Relatedly, programs might need to be delivered separately to Service members low and high in awareness to address the needs of each audience effectively. In developing programming targeted to stages of change, we suggest research on stages of change by broad categories of military standing. Specifically, given the youth and inexperience of recruits and members in basic training relative to other members, these groups are likely to evidence overall low awareness. If so, training at this level would be best targeted towards moving individuals from low to high awareness. Such training would prepare individuals to achieve better gains from subsequent skill-based trainings appropriately focused on the later

stages of change. In contrast, individuals with higher awareness, such as leaders, can receive training with a dual focus: teaching them intervention skills for a variety of situations, and focusing on their role in raising the awareness and engagement of their subordinates. While such a strategy is not intended to be comprehensive in addressing stages of change, it has potential to efficiently address a much larger portion of the population in a way that is relevant and more likely to be effective.

Socioculturally Relevant/Contextualized. Best practices in prevention require that programming be contextualized and socioculturally relevant to the audience. There are important considerations to be made in contextualizing bystander prevention programming to military audiences. An evaluated application of the *Bringing in the Bystander* program concludes bystander prevention programming can be successfully adapted to a military setting, but suggests more work needs to be done to reach the military audience. Results evaluating this program at a United States Army European (USAREUR) installation showed statistically significant effects of training on bystander behavior, however, the effect size of the program was very small, with only 2.7% of the change in behavior attributable to the program (Potter & Moynihan, 2011).¹³ In order to be effective in contextualizing to the military, military-specific barriers to intervention must be identified and sufficiently addressed, and materials, scenarios, and techniques adapted to create relevance for the military audience. This would suggest military bystander intervention training should be tailored to the rank, posting, and relevant scenarios for participants which in turn would require conducting appropriate research to identify the nature of these elements.

Research on barriers to intervention has been conducted almost exclusively with college age civilian respondents and with predominantly Caucasian samples. In a study that developed a comprehensive list of barriers to intervention from open-ended responses, the sample was not only predominantly Caucasian (92.6%), but also largely female (81.8%; Bennett et al., 2014). This research, therefore, cannot be generalized to military populations, which vary considerably in age, gender, race/ethnicity, and marital status; all potentially important factors in perceived barriers. As noted by others, more research is needed to determine whether barriers change with such factors as context and maturity (Bennett et al., 2014). There is some research to suggest that perceived barriers to intervention vary by gender (Burn, 2009).¹⁴ Other demographic variables might also affect perceived barriers.

While many of the identified barriers can be generalized and are based on extensive research, we suggest there might be military-specific barriers at each step in the situational model. Possible questions to consider when applying to a military situation include: Do combat conditions create unique barriers to noticing? Do situations with particularly high power differentials, like basic training, specialty trainings, and recruit/recruiter relationships present unique sexual assault risk markers of which bystanders are ignorant, leading to failure to identify the situation as high risk? Does fear of being charged with “collateral misconduct” or betraying one’s battle-buddies present military-unique barriers at the “decision to intervene” step?

¹³ Moreover, this effect was for helping behavior towards friends; there was no statistically significant effect for helping acquaintances.

¹⁴ There is also research which finds that program effects vary by race and gender (Brown et al., 2014; Moynihan et al., 2015). While variations in program effects could be due to many factors, differences in perceived barriers are one possibility.

Another consideration in contextualizing bystander intervention programming to the military audience is the development of program materials and scenarios tailored to the audience in a way that “social self-identification” occurs; that is, the audience members recognize themselves and their peer group in intervention materials (Potter et al., 2011). Research by Potter and colleagues (2011) demonstrates that bystander marketing materials carefully designed to look similar to situations and people the target audience typically encounters are more effective in engendering willingness to intervene in a potentially sexually violent situation. This suggests training materials for bystander intervention need to be uniquely tailored to the characteristics of the audience. In a military setting, tailoring would take into account the Service, the rank of the individual, and posting location. Therefore, materials, scenarios, and skills training for the military cannot be “one size fits all” and multiple sets would need to be developed to target subpopulations. For example, junior enlisted, senior enlisted, junior officer, and senior officer intervention materials and scenarios should look very different from each other. Further, Services and installations should work closely with leadership and target audiences to develop materials accurately reflecting the experiences of the target audiences within their commands (see Potter, 2012).

Finally, similar to the popular opinion leader strategy utilized in *Green Dot* programs (Cook-Craig et al., 2014), we recommend leaders themselves be trained to be agents of culture change who disseminate awareness, skills, information about unit health and strengths, and knowledge of potential risk situations. In this regard, the possibility of using of the command structure as a delivery system for prevention gives the military a significant advantage over civilian settings, which are typically absent a similar leadership structure. To accomplish this, specialized leadership training and data collection would need to be developed to enable leaders to act as mentors and instructors in the development of bystander intervention awareness and skills over time.

Gender Sensitivity. General bystander intervention training (as opposed to sexual assault-specific prevention training) appears to be effective in both mixed-gender and single-gender groups (Gibbons, 2013). Some researchers have suggested this training needs to be gender-sensitive and should be offered in same-sex groups in order to ensure the programs are targeted to the particular needs and experiences of each gender (Powell, 2011). Anecdotally, for men, the need to be “politically correct”, as well as fears of embarrassment and judgments, makes it hard to have open discussions in a mixed-sex environment, which could impair learning (Berkowitz, 2002; Orchowski et al., 2010). Other anecdotal evidence suggests men and women both benefit from exposure to each other’s perspectives (Pflieger, Callands, Strambler, & Ward, under review). In sum, the literature currently reveals no strong recommendation for audience gender mix. While the research affirms both formats can be effective, it is not known if one is more effective or would be more appropriate in a military setting.

Bystander Intervention and Principles Related to Effective Prevention Program Implementation and Evaluation

In line with best practices, effective prevention programs contain outcomes that are appropriately evaluated and have well-trained and supported program staff.

Outcome Evaluation. The evolution of this area of literature is toward greater inclusion of the primary outcome variables of bystander behaviors and sexual violence, while retaining measurement of theoretically important secondary outcome variables such as willingness to intervene, bystander efficacy, perceptions of barriers to intervention, and stages of change or readiness to help. Best practice principles require measurement of both primary and secondary outcomes, so military programs should include evaluation of both. As reviewed in the best practices chapter, the only way to be sure that programs are having the intended effect is through comprehensive evaluation efforts including both interpretable research designs and measures of key outcome variables.¹⁵

Measurement in bystander behavior is evolving; efforts to evaluate military programs should take advantage of the latest methodological research. The most robust and intense effort to measure and evaluate bystander interventions is currently taking place through the University of New Hampshire's *Bringing in the Bystander* program and it is recommended their scales and metrics be considered to evaluate any military efforts (Banyard et al., 2014).

Further, it is recommended that military evaluation strategies incorporate recent measurement development in understanding opportunities and missed opportunities as an appropriate metric for outcome evaluation (see Brown et al., 2014). This research recognizes that failure to engage in bystander behavior may be a result of lack of opportunities and/or it may reflect lack of action even when opportunities exist. Capturing missed opportunities is a better measure of the impact of interventions on participants than simply asking them if they have intervened.

Program Staff. We reiterate the recommendations offered in Chapter 2 regarding program staff. Staff (facilitators and those in a supervisory role) should be appropriately trained, supported, and supervised, and consist of members who are sensitive, competent, capable of connecting with participants, and committed to the program.

Future Research Opportunities

In summary, best practices for bystander intervention mirror the best practices for effective prevention, requiring a comprehensive, theory-driven, skills- and strengths-based, extended multiple-session approach that is developmentally and socioculturally relevant. An examination of current efforts within the DoD to incorporate bystander intervention as a sexual assault prevention strategy should address whether those efforts are following evidence-based best practices. Questions to ask of those programs include:

- Are individuals told how to intervene, not just that they should and are presentations skills-based, not information-based?
- Have bystander scenarios been tailored to the characteristics of the audience?

¹⁵ Interpretable research designs were discussed in Chapter 2. As a general point, to ensure confidence in findings, outcome measures should be collected from members immediately before and at one or more time periods after the training under investigation. DoD-wide surveys (such as the WGRA survey program) are not the appropriate tool to collect the necessary data.

- Are bystander approaches and leaders taking an educational or skill-based approach and avoiding a punitive approach to bystanders?
- Are bystander intervention efforts designed to incorporate parallel, synergistic elements, for example, normative feedback and/or social norms media campaigns?
- Are leaders trained to act as mentors in teaching bystander intervention skills and in debriefing successful and failed interventions?
- Have all bystander approaches currently in use by DoD been subjected to comprehensive evaluation?

Based on the literature findings, the answers to *all* these questions should be “yes.”

Within the chapter, we offered some research-based recommendations to support the DoD effort to adhere to the best practice recommendations. For clarity and ease of reference, we reiterate those recommendations here.

- *Stages of Change by Demographic Group.* We suggest consideration of research on stages of change by broad categories of military standing. In attempting to develop programming for the wide military audience, it may be effective to understand the most likely stage of change for members of targeted groups. For example, given the youth and inexperience of recruits and members in basic training relative to other members, these groups are likely to evidence overall low awareness. If so, training at this level would be best targeted towards moving individuals from low to high awareness. Such training would prepare individuals to achieve better gains from subsequent trainings appropriately focused on the later stages of change. In contrast, individuals with higher awareness, such as leaders, can receive training with a dual focus: teaching them intervention skills for a variety of situations and focusing on their role in raising the awareness and engagement of their subordinates. While such a strategy is not intended to be comprehensive in addressing stages of change, it has potential to efficiently address a much larger portion of the population in a way that is relevant and more likely to be effective.
- *Identification of Military-Specific Barriers to Intervention.* In order to develop bystander programs contextualized to the military, it is important to identify military-specific barriers to intervention. Research on barriers to intervention has been conducted almost exclusively with college-age civilian respondents and with predominantly Caucasian samples. This research cannot therefore be generalized to military populations, which vary considerably in age, race/ethnicity, and marital status which are potentially important factors in perceived barriers.
- *Measurement of Positive Behaviors.* We recommend considering modifications to the Gender Relations Surveys to better capture positive behaviors (see similar recommendations in the social norms chapter). Work by Banyard and colleagues (2014) developed a number of detailed measures on perceptions of peer helping, intent to help, and bystander behaviors. Several advantages are envisioned. First, the military can take

advantage of the considerable civilian measurement development work in this field. Second, the result will be an improved ability to capture the range and degree to which members are willing to and actually engage in prosocial bystander behaviors. Third, such measures will serve to improve the ability to track changes across time in bystander behavior. Fourth, these measures offer a better means to capture and publicize the good news about military member behavior. While attention to the negative (the rate of behaviors constituting sexual assault) is appropriate, counterbalancing with information about positive behaviors may help broaden the focus on military progress in combatting sexual assault and promulgate positive aspects of military culture.

CHAPTER 5: SOCIAL NORMS

Introduction

The social norms approach is a novel prevention strategy for fostering a culture that can be implemented within the military to reduce and prevent violence. By providing information about healthy norms, the social norms approach serves to inhibit perpetration and to foster bystander intervention, which are two important goals within the overall DoD Prevention Strategy (DoD, 2014a). To date, there is extensive empirical evidence in favor of engaging men in the prevention of violence against women (see Berkowitz 2004; Flood, 2011; White Ribbon Campaign, 2011) and a focus on men's roles in deterring violence.

The social norms approach has received extensive support from research (Berkowitz, 2010) and in successful interventions (see Gidycz et al., 2011; Salazar et al., 2014; Wasco, 2014). Historically, the social norms approach has been associated with dramatic reductions in negative behaviors such as alcohol, marijuana, and cigarette use along with increases in positive behaviors such as seat belt use, recycling, prejudice reduction, and energy conservation (Berkowitz, 2005b). It is currently gaining traction as a violence prevention strategy. Social norms interventions deliver normative feedback to correct misperceptions of healthy norms (Berkowitz, 2013). As a culture change strategy, it is especially appropriate for the military because it can provide leaders tools to foster and amplify healthy behavior and inhibit perpetration of violence, and it can be combined synergistically with other interventions at multiple levels of the social ecology. Addressing norms of masculinity is an important violence prevention strategy because men's behavior is predominantly influenced by other men. Providing positive normative feedback to the "silent majority" of men (and/or women) can engage them to influence the behavior of the "problematic minority." The social norms approach has strong research support and is easily applicable to military settings. Currently DoD does not collect data on misperceptions nor does it utilize the social norms approach as a violence prevention strategy.

The Social Norms Approach Theory and Components

The social norms approach focuses on norms and how they are perceived. The military is a norms-based organization, with norms or standards for all aspects of a Service member's life. When these norms are clear, everyone is "on the same page" and acts accordingly. However, when these norms are not perceived correctly (as is the case for health-risk behaviors and healthy responses to them), then negative behaviors, which are more visible and receive more attention, are amplified and positive behaviors are diminished. The social norms approach reverses this pattern by providing attention to the positive, which in turn inhibits the negative.

Norms and Behavior. A norm can be defined as a "socially shared definition of the way people behave or should behave," thus constituting a category of beliefs and actions perceived as socially shared (Paluck, 2009). When speaking of norms regarding how men should behave, we can refer to "masculinity norms," i.e., what is true of most men in a group regarding attitudes (injunctive norms) and/or behaviors (descriptive norms) about what it means to be a man. Masculinity norms can be healthy and serve to inhibit violence, or can be unhealthy and serve to promote it. In addition to masculinity norms, there are Service norms and unit norms, as well as

norms for a particular environment, such as a combat environment or deployment in a specific cultural context. The goal of violence prevention should be to strengthen healthy norms that serve to inhibit violence and to weaken unhealthy norms that serve to encourage it. Social norms approaches can also be used to enhance specific Service and military values that may be underestimated.

The social norms approach is based on the well-documented assumption that individuals might not have correct information about what members of their group believe or do. This is in part due to the fact that how an individual behaves in public does not necessarily reflect how they feel in private. As a result, it is important to distinguish between a “perceived norm” (i.e., what an individual perceives is the norm for their group) and an “actual norm” (i.e., what group members actually believe or do based on empirical research). The term “misperceived norm” is used when the perceived norm differs from the actual norm. Thus, when speaking of the influence of norms, it is more accurate to speak of the influence of perceptions of norms.

Explanations for why people misperceive the norms for their group have been provided by various researchers (see Miller, Monin, & Prentice, 2010; Perkins, 2003a). Chief among the reasons for the misperception is that visible behavior is what is noticed, talked about, and reported in the media. For example, a man who brags about his sexual exploits or who speaks about acting abusively towards women is engaging in visible behavior. In contrast, passive bystanders to these behaviors who are uncomfortable but who do not express their discomfort are invisible. Behavior that is more extreme and visible is often thought to be normative, while private, healthier behavior is underestimated. Within a military context, providing leaders with accurate information about true healthy norms could be used to encourage, reinforce, and support healthy unit behavior and to let problem individuals know that their actions are not respected. Simply put, it advertises the “good news” in order to strengthen it and as a means of inhibiting behavior that produces “bad news.” This is also relevant to the public’s perception of the military both CONUS and abroad, as negative behavior and incidents tend to be amplified in the media, while the positives are overlooked.

With respect to violence prevention, it has been demonstrated that male (and female) norms about violence are for the most part healthy, i.e., they serve to inhibit violence, but that these healthy norms are misperceived by being underestimated. In other words, while most men hold anti-violence attitudes, these positive attitudes are thought to be uncommon because they are not expressed and visible to other men. Men’s perceptions of other men’s norms regarding attitudes and behaviors relating to violence against women are an important predictor of men’s actual violence as well as other men’s willingness to intervene against this violence (for reviews see Berkowitz, 2010, 2011, 2013). Thus, promoting these norms by correcting misperceptions about them could serve as an important military violence prevention strategy and provide an important tool for leaders who want to strengthen the health of their units and send appropriate messages to problem individuals. Because individuals care about and want to be accepted by their peers, a message about actual peer norms delivered to the healthy majority or a problematic individual is likely to be more effective than commonly used videos or in-person messages from leaders emphasizing that something is inappropriate and will not be tolerated.

The strategy of correcting misperceived norms related to violence has been recommended in a number of reviews of empirical research (Casey & Lindhurst, 2009; Kilmartin & Allison, 2007;

Lonsway et al., 2009; Paul & Gray, 2011) and has demonstrated effectiveness as a bullying (Perkins, Craig, & Perkins, 2011) and sexual assault prevention strategy (Berkowitz, 2010; Gidycz et al., 2011; Salazar et al., 2014; Wasco, 2014) that has also been recommended for domestic violence prevention (Neighbors et al., 2010). It has primarily been employed with college age students, but has also been successful with older adults (see literature reviews cited above) as well as with a high school audience (Perkins, 2003a; Perkins, Craig, & Perkins, 2011; Wasco, 2014).

Norms of Masculinity (What Men Think Other Men Think About “Being a Man”). Social psychologists have conducted research on the subject of how men in the United States define their masculinity, examining the nature of these norms and their strength in influencing men’s behavior. In summarizing this work, Kilmartin and Allison (2007) state “the traditional concept of U.S. masculinity has revolved around four themes: anti-femininity, status-achievement, inexpressiveness-independence, and adventurousness-aggressiveness” (p. 98). Additional research has determined most men do not actually agree with these norms, but incorrectly perceive most other men endorse them (see Berkowitz, 2010, 2011). In light of this research, it would be important to conduct similar assessments within the military to determine if unhealthy masculinity norms that foster or promote violence are overestimated.

Even in a military environment potentially emphasizing traditional norms of masculinity (Turchik & Wilson, 2010), research and theory predict these norms, while stronger, are still overestimated, especially by violence-prone men. This finding is well-established in the research and has been documented for other issues, with heavier drinkers still overestimating the amount of drinking in their heavy-drinking group, gangs overestimating the comfort level of gang members with violence in their more than normally violent groups, etc.

In this regard, Kilmartin (2010) concluded “the endorsement of traditional masculine values and attitudes is surprisingly weak” among men (p. 95). However, because men look to other men to decide how to act, the incorrect belief (i.e., misperception) that other men endorse these norms creates what has been called “normative pressure” for men to conform to perceived norms of masculinity, in turn facilitating violence against women. Thus, in societies where norms for violence against women are perceived to be permissive, there is more actual violence against women (see Linos, Slopen, Subramanian, Berkman, & Kawachi, 2013). In the case of the military, normative pressure to conform to military values and expectations is healthy, while normative pressure to violate them (as is the case with violence against women) is unhealthy. The social norms approach can be used to strengthen healthy values and behaviors consistent with a strong fighting force and to inhibit negative ones that weaken it.

Norm Misperceptions Among Rape-Prone Men. Research has demonstrated that men who commit violence: 1) endorse false male gender norms to a greater extent than other men, 2) incorrectly believe other men support norms of violence against women, and 3) rely on false norms to justify their own violence (see Bohner, Siebler, & Schmelcher, 2006; Eyssel, Bohner, & Seibler, 2006; Neighbors et al., 2010; Thompson, Koss, Kingree, Goree, & Rice, 2011; Witte & Mazheruddin, 2012 for examples of individual studies, and Berkowitz, 2010, 2011; Kilmartin & Allison, 2007 for literature reviews). In one study, White and Mazheruddin (2012) found male students overestimated other male students’ willingness to use violence against an unfaithful partner, and greater estimations of violent norms were associated with greater

likelihood of committing actual violence. The fact that violent men incorrectly perceive other men to be supportive of their behavior suggests if perpetrator overestimations of norms for male violence and other men's support for them are corrected, they will be less likely to commit actual violence.

Norm Misperceptions Among Non-Violent Men Who are Potential Bystanders. A similar pattern is found when examining men who do not engage in violence, but who are passive bystanders to other men's violence. Research has demonstrated that most men are uncomfortable with the violence of the minority and want to actively intervene, but refrain from doing so because they incorrectly assume that most other men are not bothered or would not respect someone who intervened (see Berkowitz 2010, 2011, 2013 for reviews). Fabiano, Perkins, Berkowitz, Linkenbach, & Stark (2003) found the strongest influence on a man's willingness to prevent violence against women was the extent to which he thought other men would support his doing so, with underestimations of other men's support associated with a lower likelihood of intervention. This suggests if non-violent men were aware of the true extent to which other men support intervening against violence, they themselves would be more likely to intervene to prevent the violence of other men.

Correcting Misperceived Norms as a Violence Prevention Strategy. The social norms approach corrects misperceptions related to health-risk behaviors. It is based on the following assumptions: 1) norms influence behavior, 2) norms are misperceived (such that negative behaviors are overestimated and positive behaviors are underestimated), 3) misperceptions function to foster negative behaviors and inhibit positive behaviors, and 4) correction of misperceptions can result in increases in positive behaviors and decreases in negative behaviors.

Misperceptions can be corrected through a variety of methods, all suited to a military application. The most common form of misperception correction is through media campaigns advertising the "true norm" in the form of positive messages, and less commonly in small group workshops and in personalized normative feedback to individuals. This is ideally suited to the military and can be provided in one-on-one interactions (leader-soldier), to groups either in formal trainings or by leader feedback, and through media campaigns. As a violence prevention strategy, it has historically been directed at men, as described below, but it can also be used to strengthen healthy norms and prevent negative behaviors among women. A potential intervention for women could combine positive norms about risk-reduction behaviors and non-victim blaming in combination with a risk-reduction self-defense program described in Chapter 3.

Providing Normative Feedback to Men in Small Groups as a Sexual Assault Prevention Strategy. Gidycz et al. (2011) reviewed results of a Center for Disease Control and Prevention (CDC) funded evaluation of a small-group norms intervention with college men who were provided normative feedback about men's attitudes and behaviors related to sexual assault along with bystander intervention strategies. In comparison with a control group, men in the intervention group reported 75% fewer sexual assaults at a 4-month follow-up, along with a variety of other positive behaviors, including less exposure to sexually explicit media, fewer associations with sexually aggressive peers, less reinforcement for engaging in sexually aggressive behavior, and more accurate perceptions that their peers would intervene when they encountered inappropriate behavior in others. Although the incidence of sexual assaults

rebounced at a 7-month follow-up, some other positive results were sustained. Successful small group norms violence prevention interventions have been reviewed by Berkowitz (2010).

Social Norms Media Campaigns to Reduce Violence. Social norms media campaigns have successfully addressed sexual violence and bystander intervention behavior in high school and college audiences. Wasco (2014) described a combined social norms and bystander intervention program in two high schools in which the experimental school reported reductions in violence and increased bystander intervention compared to the control school. Consistent with these results, Berkowitz (2013) reported on other successful high-school social norms media campaigns to foster healthy relationships and reduce violence and a successful university social norms effort combining small group workshops with a campus-wide media campaign to increase bystander intervention and prevent sexual assault.

Web-Based Delivery of Normative Feedback. The Internet has been successfully used to deliver individualized normative feedback to heavy drinkers (Lewis & Neighbors, 2006), and more recently, in a multi-session, interaction violence prevention course for men emphasizing normative feedback and bystander intervention (Salazar et al., 2014).

In summary, these studies provide strong support for the influence of misperceived norms on violent behaviors and the possibility of reducing these behaviors through norms correction strategies. Many of the successful social norms interventions have incorporated a bystander intervention component, suggesting these two approaches can be combined synergistically and offered together, as is consistent with best practices described in Chapter 2.

Criticisms of the Social Norms Approach

A variety of criticisms have been leveled against the social norms approach, including that research and evaluation demonstrates it is often ineffective. These criticisms have been addressed by Perkins (2003b) and Berkowitz (2002). In most cases, lack of reported change from a social norms intervention can be attributed to implementation failures due to the complexity and difficulty of conducting a successful social norms campaign. The theory of social norms has been robustly supported by empirical research and in all successful implementations of the model, misperception correction has been correlated with behavior change and predicts behavior change over time. Given the complexity of collecting data about norm misperceptions, creating effective message delivery systems, addressing push-back and believability issues, and challenges in evaluation, it is important any social norms efforts implemented by DoD be comprehensive and implemented according to well-established standards of best practice, with staff well-trained and supervised in the approach.

Discussion of the Social Norms Approach from an Empirical and Best Practices Perspective

In its totality, there is considerable empirical support for the social norms approach. Research on the social norms approach in some areas (for example, as a substance abuse prevention strategy and to foster “green” behaviors) is strong. The research for the social norms approach as a violence prevention strategy is less robust, but growing. The Salazar et al. (2014) intervention included a social norms component and found a 73% lower odds of rape for program group

participants than for the control group at a 6-month follow up. In terms of violence prevention, it is best to consider the social norms approach as a promising evidence-based best practice supported by research and evaluation studies. Thus, the social norms approach could be an important violence prevention strategy for implementation in the military.

Chapter 2 reviewed a number of guiding principles for violence prevention programming. Effective prevention programs are comprehensive, include varied teaching methods with an emphasis on skills-training, are theory-driven, are tailored to the audience, and contain sufficient dosage. The social norms approach is consistent with all of these best practices and is suited to application with different populations because it provides a mechanism for “telling the group about itself.”

The Social Norms Approach and Principles Related to Effective Prevention Program Characteristics

Comprehensive. The social norms approach can be considered as a comprehensive violence prevention strategy applied to multiple levels of the social ecology (individuals, groups, and communities) through a variety of methods (i.e., tailored individual normative feedback, group normative feedback, and community media campaigns) and delivery systems (one-on-one feedback, for example by leaders, via the Internet, etc.). Research reviewed above has demonstrated it is best combined with bystander intervention and the two in combination may be more effective than either alone, with normative feedback reducing the barriers to bystander intervention, and bystander intervention training providing the awareness and skills to intervene. It is advisable to consider the social norms approach as a strategy that can be part of a comprehensive program, in combination with other prevention strategies.

Theory Driven. As noted above, the social norms approach is based on a well-articulated theory and the assumptions of the theory have been supported in empirical research and in evaluations of interventions. Berkowitz (2003) has outlined the principle elements of the social norms approach and summarizes research in support of each of these elements.

Varied Teaching Techniques. Normative feedback can be delivered in multiple ways, including individual one-on-one conversations, leader instruction to units, web-based online courses, interactive group discussion, and media campaigns. The social norms approach does not, by itself, usually teach skills, as is considered best practice, although teaching individuals how to interpret normative messages and to respond to “believability” issues can be considered skills training. The social norms approach works best when combined with bystander intervention, which includes a significant skills acquisition component.

Strengths Promotion. The social norms approach is a “strengths promotion approach” because it identifies and strengthens healthy norms, removes justification for unhealthy attitudes and behavior, and facilitates pro-social behavior such as bystander intervention by removing barriers to it.

Sufficient Dosage. Providing sufficient dosage of the message, in varied forms to avoid habituation, is a critical element of the social norms approach. Guidelines for implementing this approach emphasize the importance of dosage and provide recommendations for it (Berkowitz,

2013; Haines et al., 2005; Perkins, 2003b). Included in the concept of dosage is addressing believability issues (i.e., to find out if the message is believed and if not, why not, and to take corrective action to address these concerns). The social norms approach requires an ongoing interaction with the intended audience to ensure there is sufficient dosage of the message and of corrective information to ensure the misperception is abandoned and the true norm takes hold. Research exhibiting rebound effects, for example the Gidycz et al. (2011) study which showed significant impacts on sexual aggression at four months, but not at seven months, further illustrates this point.

The Social Norms Approach and Principles Related to Matching Prevention Programs to Military Populations

The social norms approach is suited to use with military populations, ranging from the U.S. military as a whole to specific Services and to the varied units within them, at all levels of the infrastructure. Because the social norms approach provides normative feedback to a group, it is suitable to be used in groups of any size or identity.

Socioculturally Relevant/Contextualized, Timing/Developmentally Appropriate and Gender Sensitive. We can consider an appropriately timed developmentally targeted and gender sensitive message as a form of cultural relevance, or what is called “salience” in the social norms literature. As noted in Chapter 2 and illustrated in the discussion of bystander intervention in Chapter 4, interventions need to be developmentally appropriate and timed and tailored to the characteristics of the audience. In the case of the social norms approach, this would require collecting appropriate data and providing tailored normative feedback to different groups within the military, whether by age, posting, rank, readiness for change, etc. A normative message designed for women might be different from one designed for men, or for a predominantly male unit versus a highly gender integrated unit, or for potential perpetrators versus bystanders. A comprehensive social norms effort would identify the developmentally appropriate and salient or impactful norms messages for each of these groups and deliver them through a variety of channels in a developmentally appropriate manner.

Given that sexual assault prevention is more effective when delivered to gender-specific audiences and in light of the literature regarding male-male norms or normative pressure, it will be important for the military to determine the right mix of combined-gender and gender-specific normative feedback. One consideration would be to tailor the messages to appropriate environments. For example, gender-specific messages could be posted in bathrooms and provided in single-sex workshops, while gender-neutral messages or messages that contain both male and female norms can be included in public media campaigns.

Social Norms Interventions and Principles Related to Effective Program Implementation and Evaluation

Outcome Evaluation. In addition to conforming to best practice guidelines for outcome evaluation, there are specialized evaluation criteria for a social norms intervention. Changes in misperceptions must be evaluated and correlated with attitude and behavior change. Measurements used must be sensitive enough to capture these changes. Kilmer and Cronce (2003) and Rice (2002) review these evaluation criteria and methodological issues. Poor

implementation and evaluation have resulted in many published social norms studies that demonstrate poor outcomes, in contrast with the well-designed and well-evaluated studies reviewed here and elsewhere that demonstrate positive effects.

Program Staff and Supporting Infrastructure. The social norms approach requires specialized data collection, well-trained staff, and the creation of media and messages meeting carefully defined criteria. Any implementation of this approach within the military will require the creation of an infrastructure to support it and ensure it is implemented according to best practices. Particularly important is training of those who deliver social norms messages to ensure they know how to address “believability” issues and that they do not act as “carriers of the misperception.”

Future Research Opportunities

Research has consistently demonstrated perceived norms influence behavior and actual norms are often over- or under-estimated. One of the strongest influences on behavior in general and on male behavior in particular is perceived norms—for men, what men think their friends and men in general believe about how one should act as a man. Over-estimation and over-conformity to perceived masculine norms (hyper-masculinity) is associated with increased violence, with perpetrators relying on these misperceptions to justify their behavior. Among non-perpetrating men, underestimation of male norms in support of violence prevention is associated with decreased willingness to intervene. This points to the potential of correcting men’s misperceived norms about violence as a promising evidence-based strategy for preventing violence, confirmed by the results of actual social norms interventions to reduce men’s violence. The social norms approach is highly applicable to the military. The following research recommendations would support such an effort.

- *Measurement of Positive Attitudes and Behaviors.* We recommend evaluating additional survey questions to identify positive attitudes and behaviors relating to violence prevention, including bystander intervention norms. The improved emphasis on the positive would serve two functions. First, such data would provide normative information for social norms approach -based prevention efforts. Second, collecting data about positive norms and behavior could be an important strategy for improving the perception of the Services in combatting these issues.
- *Measurement of Unit Level Norms.* Providing commanders with data about positive norms within a unit would be a good violence prevention strategy. Measures of misperceptions could be incorporated into the Defense Equal Opportunity Management Institute (DEOMI) command climate surveys and other military data collection efforts. This would be in line with the DoD’s emphasis on the role of the commander as an agent of change for prevention, and provide them with an important tool.

CHAPTER 6: ADDRESSING VICTIM RETALIATION IN THE MILITARY: UNDERSTANDING FALSE ACCUSATIONS, VICTIM TRAUMA, RAPE MYTHS, AND PERPETRATORS' MODI OPERANDI

Introduction

The Department has made combatting social and professional retaliation against sexual assault victims who report these assaults a high priority (DoD, 2014b). In this chapter, we identify four interrelated issues that underlie the problem of victim retaliation requiring research and the development of training curricula: 1) belief in false accusations, 2) lack of understanding of trauma's effects on behavior, 3) rape myths and victim-blaming attitudes, and 4) perpetrators' modi operandi (MO). The combination of these issues results in disbelief of victims' accounting of sexual assaults. This disbelief then serves as justification for retaliation against the victim for the perceived untrue or exaggerated accusation, which is seen as damaging and unfair to the accused and/or unit. Moreover, it is possible that the focus on sexual assault by the Services has the unintended effect of increasing the likelihood of retaliation against those who report assault: because accusations of sexual assault may be seen as more serious now than in the past, so the backlash against those who report such assaults may be more serious. We discuss the factors contributing to retaliation, offer suggestions for military training to reduce its likelihood, and highlight future research opportunities to further combat retaliation.

Factors Contributing to Retaliation

Belief in False Accusations. An erroneous, commonly held belief is that many reports of rape are false accusations, filed either maliciously (as revenge or to cover up illicit behavior) or represent a misunderstanding, miscommunication, or regretted sex (Lonsway, 2010). Research on false accusations refutes this common misperception, estimating the actual rate of false accusations to be between 2% and 8% when appropriate scrutiny to police classifications is applied; moreover, the greater the scrutiny applied, the lower the rate of false reporting (Lisak, Gardinier, Nicksa, & Cote, 2010).

Belief in the prevalence of false accusations is grounded in the failure to distinguish between lack of sufficient evidence to pursue a case and extant evidence of a false report. The critical issue in correct classification of rape reports is application of the principle that a report can only be labeled as false if there is evidence that the assault did not happen (Lisak et al., 2010). Misclassification of reports as false based on lack of evidence has been an ongoing issue within police departments for years (Lisak et al., 2010). While current law enforcement guidance seeks to correct this (i.e., International Association of Chiefs of Police [IACP], 2005, 2008), it is unlikely the general population has made the same correction in perceptions.

Because many reports of sexual assault contain significant ambiguity, it is all too easy to make the assumption of false accusation. The belief in false accusations is further reinforced by lack of knowledge about the effects of trauma, victim-blaming attitudes, and perpetrator MO.

Lack of Understanding of Victim Trauma and its Effects on Behavior. Research on the effects of trauma on victims' behavior illuminates common responses to trauma often incorrectly interpreted as indicators of untruthful accounts.

- The impact of trauma on memory often results in omissions, inconsistencies, and untrue details within victims' statements (Lonsway, 2010). In fact, a typical statement from a trauma victim is disorganized, displays a mixed range of emotions, is unstructured in delivering the sequence of events, and jumps from aspect to aspect of the assault (Lonsway, 2010). Relatedly, victims might even lie to try to hide their own illegal acts or particularly humiliating details of the attack (Lisak et al., 2010).
- Trauma victims might display a range of emotions, including hysteria, laughter, crying, rage, calmness and unresponsiveness; therefore, there is no one "appropriate" emotional response indicative of a "real assault" (IACP, 2005).
- Delayed reporting is extremely common and is not a clear indicator of a fabricated event (IACP, 2005).
- Victims also might recant their statements or refuse to participate in an investigation. This can be out of concern about not being believed; fear of retaliation by the offender, the offender's friends and/or the unit; loss of privacy concerns; and/or hesitancy regarding fair treatment within the criminal justice system (IACP, 2008). Additionally, victims sometimes fear their reports will lead to legal trouble for themselves (Lonsway, 2010). Specific to the military, situations in which the victim was intoxicated or involved in fraternization may lead to fears of being charged with collateral misconduct.

These common responses to trauma result in perceptions that the victim is not being truthful, serving to reinforce beliefs about false accusations. One possible strategy for providing education about victim trauma is to draw on Service members' experiences of combat-related trauma which produces many similar symptoms, creating an opportunity for victim-empathy based on parallels with Service members' experiences of personal or "battle-buddy" trauma.

Rape Myths and Victim-Blaming Attitudes. Rape myths are commonly held beliefs serving the purpose of protecting individuals from uncomfortable truths and further reinforcing beliefs in false accusations. For example, "belief in a just world" describes the tendency to see the world as a fair place where people get what they deserve; where bad things only happen to bad people; and where if people take the necessary precautions, nothing bad will happen to them (Bohner, Eyssel, Pina, Siebler, & Viki, 2009). Rape myths serve to provide an explanation for the assault and remove the discomfort of evidence contrary to the "just world belief." Victim blaming rape myths suggest, for example, a woman caused the incident through her dress or behavior, or she unconsciously desired to be raped (Bohner et al., 2009), or a man cannot be raped (Chapleau, Oswald, & Russell, 2008) and therefore it was not a "real rape."

Perpetrators' MO. Common perpetrators' MO also reinforce beliefs in false accusations.

- Perpetrators may manipulate others with their "nice guy" persona. The research in this area is scant, but supports the idea that the perpetrator presents a public persona making

him seem the nice guy who has been wrongly accused (Kaufman & Patterson, 2010; Thompson, 1996).¹⁶ The often described profile of an acquaintance rape perpetrator is attractive, well-liked, athletic, and confident; victims often describe him as someone she thought was a “very nice guy” (Thompson, 1996). In the military, he may be a highly respected or decorated Service member who uses his military training for an unethical and illegal purpose. Importantly, the perpetrator deliberately uses the nice guy persona to groom and gain the trust of the victim, leverage that trust into opportunities for sexual assault, and appear innocent to others (Kaufman & Patterson, 2010; Thompson, 1996).

- Many perpetrators choose a victim they believe will either not report, or if he/she does, will not likely be believed (Lonsway, 2010). The very characteristics making a victim seem unbelievable (e.g., intoxication at the time, pre-existing emotional instability, and/or being seen as a problem person in the unit) are the same factors that make a victim an attractive target to a sexual predator (Lisak, et al., 2010; Lonsway, 2010). In a military unit, a highly respected individual who is seen as believable might be accused by a victim who is a problem for the unit and who in contrast seems inherently unbelievable.
- In addition to seeking out vulnerable targets, perpetrators employ isolating and controlling behaviors during the act of perpetration (Abbey & Jacques-Tiura, 2011). This MO serves to hide the assault and make reports less believable.
- Many perpetrators also use only the level of force or coercion necessary to get what they want. Contrary to common perceptions that rapes are always forceful and that there should be injuries, most perpetrators do not use severe physical violence or a weapon (Lonsway, 2010). Lack of visible physical injuries, therefore, is common, and not a reliable indicator of a false accusation.
- Some researchers suggest perpetrators of criminal offenses are serial offenders (Lonsway, 2010). This information is compelling because it helps to dispel the myth that many assaults are a misunderstanding or regretted sex. A study by Lisak and Miller (2002) calculated 63.3% of the perpetrators (those who met the definition for attempted or completed rape) were repeat offenders, with an average number of 5.8 assaults per perpetrator. Of all the sexual assaults reported in the study, 91% were perpetrated by serial offenders. In a study of newly enlisted male Navy personnel, 71% of the identified perpetrators (i.e., had committed or attempted rape) were repeat offenders, with an average of 6.4 assaults each (McWhorter, Stander, Merrill, Thomsen, & Milner, 2009). In

¹⁶ This conclusion is made with some qualifications. This observation is made often by experts in the field who have had the opportunity to talk to victims (Lisak, personal communication) and by military sexual assault investigator trainers. The characteristics of perpetrators’ MO constitute an important element in the military investigator training curriculum of subject matter experts such as Russell Strand and David Lisak. However, the research literature to support the point empirically is insufficient. Kaufman and Patterson’s (2010) work is based on a review of the literature on child sexual abuse and, therefore, describes child sexual assault predators. Thus, application to the adult sexual predator population cannot be assumed. The work by Thompson (1996) is unpublished. Interestingly, the research literature on adult sexual assault perpetrators focuses almost exclusively on predicting perpetrator behavior through attitudinal and psychological characteristics. We were able to find little literature addressing MO of perpetrators of adult sexual assault; a point we return to in the research opportunities section.

this sample, 95% of the total sexual assaults were perpetrated by serial offenders. These data, confirmed in other research studies, are supportive of the hypothesis that the majority of sexual assaults (attempted or completed rapes) are perpetrated by serial offenders, thus contradicting the idea that most assaults are mistakes or misunderstandings. However, recent research described below suggests some limitations to these findings.

- Although a portion of sexual assault perpetrators may be serial offenders as described above, recent research suggests there may be multiple trajectories for perpetrators of rape¹⁷ that vary over time (Swartout, Koss, White, Thompson, Abbey, & Bellis, 2015). In light of this research, the National Sexual Violence Resource Center¹⁸ is encouraging the field to rethink the serial perpetration hypothesis in order to revise prevention efforts that may over-emphasize the assumption that the majority of rapes are committed by repeat offenders. Using longitudinal datasets, Swartout et al. (2015) examined offender behavior among college men prior to and after entering college using a derivation sample and a validation sample. Combined results indicated there were three trajectories that explained rape perpetration over time: low or time limited, decreasing, and increasing. Most men (92.6%), including 92.5% of men who did not endorse rape perpetration at any time point and 7.5% who endorsed rape perpetration at one time point only, were classified in the low or time limited trajectory and regarded as having a low likelihood of perpetration over time. The decreasing trajectory (5.3%) was comprised of men who endorsed rape perpetration prior to and during college, but decreased their perpetration as college progressed. This group of repeat offenders decreased their perpetration over time. Finally, the increasing trajectory (2.1%) included men who endorsed rape perpetration across multiple years after they entered college. This group of repeat offenders increased their perpetration over time and may be classified as serial offenders. Collectively, 10.8% of men committed rape before or during college across the three trajectories in both samples, but the majority (72.8%) only did so at one time point which challenges the hypothesis that most rapists are repeat or serial offenders.¹⁹ These data suggest that perpetrators of rape may be more heterogeneous than once believed.

In sum, these four interrelated issues underlie the problem of victim retaliation and are topics worthy of additional research by DoD and of incorporation into sexual assault prevention curricula.

¹⁷ The authors used the definition of rape as a penetrative sexual assault defined by the Federal Bureau of Investigations and does not include attempted rape or other behaviors that may be classified under the umbrella term “sexual assault.”

¹⁸ Tharp, A.T., Swartout, K., Koss, M.P., DeGue, S., Basile, K.C., White, J. et al. (2015). *Key Findings: Rethinking Serial Perpetration*. Enola, PA: National Sexual Violence Resource Center.

¹⁹ It is noted that the authors did not specify how many rapes were committed by each perpetrator across trajectories due to measurement limitations. It is understood that the 72.8% of men who endorsed rape perpetration at one time only would amount to approximately 130 rapes total based on our calculations using the data provided, though it is unknown how many rapes the “serial offenders” (decreasing and increasing trajectories combined) perpetrated over time. Because of this, one cannot definitively say that the majority of rapes are committed by “one time only” offenders or serial/repeat offenders; just that many men who commit rape may not necessarily perpetrate again and some men who are repeat offenders decrease their perpetration over time.

A possible additional complicating factor contributing to retaliation is the strong effort currently underway in the military to educate Service members about the negative consequences and unacceptability of gender-based violence. This in itself is laudable. To the extent that the military is successful in increasing Service members' awareness of the seriousness of sexual assault, there is also a danger these efforts can, in some instances, stimulate retaliation without addressing and correcting underlying victim-blaming beliefs, misunderstanding of victim trauma, lack of understanding of perpetrators' MO, and over-estimates of false accusation.

The major push to educate Service members about the unacceptability of gender-based violence combined with the emphasis on education about its costs (financially, impact on unit morale and combat readiness, etc.) might fuel backlash against individuals who report it because these four underlying issues are not sufficiently and concurrently addressed in DoD trainings or understood by commanders. When we increase the perception that something is bad, then the messenger who brings the bad news is more likely to be blamed that much more for bringing the bad news if the bad news is not believed. These dynamics are exacerbated when the perpetrator is respected and liked while the victim is seen as unreliable and problematic. Conversely, if the messenger is seen as reliable and a contributing member of the unit, the message will likely be believed. Assuming this line of reasoning is correct, for the military to reduce victim retaliation, it will be fruitful to increase victim believability by addressing the four factors (belief in false accusations, victim response to trauma, victim blaming attitudes, and perpetrators' MO) and to conduct supporting research about them.

Training Recommendations

Currently, there is some effort in DoD trainings to address rape myths and perpetrators' MO. To our knowledge, there is much less education about rape trauma syndrome and little training on the issue of false accusations. Even when these issues are addressed, their inter-relationship is not discussed. Based on the above discussion and current research, the following recommendations for training are made. DoD is also encouraged to conduct research to support training and specific recommendations are made in the research recommendations section at the end of this chapter.

False Accusations. The percentage of false accusations is overestimated. This overestimation fosters victim blaming and undermines victim credibility. To address this issue, the following points should be covered in trainings and media campaigns:

- Distinguish between false/disproven and unfounded/insufficient evidence.
- Understand that a perpetrator can believe and act as if there was consent when there was none, and consequently, have a genuine reaction of felt innocence to an accusation of assault.
- Provide statistics on false accusations. Multiple studies on four continents document the actual rate of false accusations ranges from 2% to 8% (Lisak et al., 2010). Such a discussion could include DoD data on perceptions of false accusations (see data collection discussion under Future Research Opportunities below).

- Point out that many studies with high reported rates of false accusations are methodologically flawed (Lisak et al., 2010).
- Understand a perpetrator might be highly respected, believable, and change perpetration patterns or habit over time.

Victim Response to Trauma. Drawing largely from the IACP guidelines (IACP, 2008), training should include the topics listed below. While these topics are currently covered in military sexual assault investigator training, it may be important for all Service members (and especially leaders) to understand the following:

- Individuals react to trauma differently; an individual may display any range of emotions, or no emotion at all. Some may react in counter-intuitive ways.
- Delay in reporting is common; of the victims who do report, the majority delay. As a case in point, data from the 2012 WGRA indicate 28% of victims who reported delayed by 30 or more days.
- A victim's memory is often impaired, fragmented, and impacted by the trauma of the assault; victims may struggle with gaps in memory and provide statements that appear contradictory as they try to make sense of what happened to them.
- Healing takes time; often as the trauma recedes, details of the assault will emerge.
- Inconsistent statements, omissions, and even lies are common and not necessarily indicative of false accusations.
- Recanting statements or refusing to participate in an investigation is not, by itself, an indicator of a false accusation.
- Most victims experience ongoing trauma, which can affect their physical, emotional, and social state of being.

Victim Blaming Rape Myths. Discussion should include not only rape myths, but also how rape myths, belief in false accusations, victim trauma, and perpetrators' MO work together to undermine the credibility of victims.

Perpetrators' MO. While there is currently some education within the military on perpetrator behavior, this education is not tailored to all of the situations in which perpetration occurs or account for potential differences in perpetration patterns over time. Rather, current training tends to focus on the lower ranks and is less likely to include examples of higher ranking perpetrators, perpetration by school-house instructors, etc. Research should address profiles of perpetrators, the settings in which they perpetrate, the strategies they use, and the characteristics or strategies that allow them to appear believable. Detailed case study analysis of perpetrators' characteristics and behavior would be a profitable source of additional information.

In terms of victim believability, perpetrator behavior can be inherently traumatizing and self-serving in the following ways:

- The perpetrator may act in a manner that appears blameless²⁰ or may decrease perpetrating rates over time which could challenge the believability of the victim.
- The perpetrator may create a situation with “plausible deniability.”
- The perpetrator may act to increase victim self-blame and guilt.²¹
- Victim trauma increases lack of belief in victim.
- The perpetrator often believes in lack of wrongdoing and will feel and act “falsely accused.”
- The perpetrator appears to have his/her “act together” and may be highly respected and awarded.²²
- The perpetrator often chooses a victim who seems unreliable, has problems or a bad reputation.
- The perpetrator often uses only the level of force or coercion necessary to get what is wanted.

²⁰ Thompson (1996) and/or Kaufman & Patterson (2010): further validation recommended. See footnote 11.

²¹ Ibid.

²² Ibid.

Training Format. We have asserted retaliation can occur as a function of widely held perceptions that false accusations are common. Convincing individuals that false accusations are uncommon is a difficult task. Experience suggests it is not well accomplished by mere presentation of study statistics, but by drawing participants through a series of exercises designed to illuminate the interrelated issues leading to perceptions of false accusations (Lonsway, 2010). Thus, the following recommendations are made:

- Make victim believability a critical element of training early in an individual’s military career, beginning with recruit training. Unless victim believability issues are addressed and understood, training on other issues will not be credible and will not be effective.
- Share stories of perpetrator narratives. Listening to perpetrators tell their stories makes it clear they did not have consent (Lonsway, 2010). The military can collect narratives of military perpetrators—ideally, Service and rank-specific—to include in educational trainings.
- Have workshop participants recollect their own experiences with trauma (themselves and others) to illustrate the common dynamics of victim trauma (Lonsway, 2010). In a military environment, many Service members will have relevant experience of combat-related trauma useful to illustrate victim dynamics and believability issues, or they may know and believe a sexual assault victim.
- Teach Service members to tolerate and suspend judgment in light of a paradox, i.e., while on the one hand all victims deserve to be believed and treated compassionately and respectfully, on the other hand all accused individuals deserve to be treated “innocent until proven guilty” and to be offered a fair process. Both of these incompatible statements must be treated as true until the military justice system makes a decision. A “both/and” rather than an “either/or” mentality must be taught. To our knowledge, current military trainings focus more on victim rights and procedures and less on fair treatment of perpetrators, which might serve to trigger underlying frustrations with military procedures and a perception of bias towards victims, which in turn might foster victim-blaming and retaliation. “Holding the paradox” and suspending judgment is an especially important skill for commanders and should be an essential part of commander training.

Future Research Opportunities

To provide ongoing support for training content as well as to provide information for more comprehensive prevention programs, we recommend the following research efforts:

- Evaluating additional data collection to improve understanding of beliefs about what percent of accusations are false; belief or rejection of rape myths; normative and perceptual data of healthy, non-victim blaming attitudes and behaviors; and willingness to intervene to stop victim retaliation. Such information could be incorporated into DoD prevention efforts to correct misperceptions (e.g., most Service members know a victim and believe he or she is telling the truth; most Service members feel that victim retaliation is wrong) and provide useful metrics of DoD-wide progress.

- To understand and assess the extent to which Service members need education about victim trauma, research could be conducted to determine what makes victims appear believable or unbelievable and how well victim trauma is understood.
- Kaufman and Patterson (2010) recommend information be collected on differences in perpetrator behaviors based on age and relationship to the victim. In terms of the military, this would require a research program to develop profiles of offenders based on rank, assignment and other characteristics, and to offer this information in trainings given to individuals who are most likely to be bystanders in these situations. There is a lack of data in the academic literature on perpetrators' MO. The military collects case analyses on military perpetrations. We recommend case study analysis of existing reports, of profiles of perpetrators, the settings in which they perpetrate, the strategies they use, and the characteristics or strategies that allow them to appear believable. These data should be used for quantitative and qualitative analyses to better understand perpetrators' MO within the spectrum of military situations.
- Relatedly, develop a better understanding of perpetrators' MO through a research program on persistence of sexually aggressive behavior in military populations. Recent research on perpetrators shows perpetrators can be grouped in several categories. Researchers have variously called these groups persisters, desisters, and initiators (Abbey, Wegner, Pierce, & Jacques-Tiura, 2012), and persistently high, decreasing, and increasing (Thompson, Swartout, & Koss, 2013; Swartout et al., 2015). In both, the basic idea is the same: some perpetrators consistently perpetrate over time (described earlier as "serial perpetrators"); some have perpetrated at some time before the study period, but do not perpetrate again (at least during the study period); and some are not initially perpetrators, but admit to perpetrating during the study period. Research suggests the different types of perpetrators can be differentially predicted by risk factors (Abbey et al., 2012; Thompson et al., 2013). In particular, persisters look very different from the two other types of perpetrators. It may also be that persisters' MO looks very different from other types of perpetrators as well. Abbey et al. (2012) argue that men who persistently commit sexual assault have the most extreme measures of personality, attitudes, and past experiences that facilitate aggression. Moreover, non-persistent aggressors are most likely doing so within a (young adulthood/adolescent) pattern of acting out and experimentation diminishing over time. Similarly, recent research suggests that the majority of perpetrators of rape may be opportunistic and only engage in one act of completed rape over time (Swartout et al., 2015). The motivational differences in these groups suggest their methods for assault likely look very different, with the persistent aggressor group's method being much more planned and intentional, and the non-persistent aggressors being more impulsive or opportunistic.

The training implications here are that perpetrators' MO is likely to look very different as a function of age (and by association, rank) and may vary over time. Young perpetrators may be persisters or non-persisters, with associated variations in MO. In contrast,

because it is very rare for a man to initiate sexually aggressive behavior in adulthood²³ (Abbey et al., 2012), older male perpetrators are most likely to be persisters, with the associated persisters' MO.

Research on MO for perpetrators of adult sexual assault is somewhat lacking. We see this as a beneficial topic for the military to develop training content. Relatedly, we are not aware of any research that addresses female perpetrators' MO; as such, this is an area for future research.

All of these research recommendations noted here and in this entire review point to the inter-relationship of research and prevention. Good prevention requires good research so that prevention efforts are based on accurate understanding of the problem, with accurate data integrated into prevention programs, and so that effective solutions can be identified. DoD currently has a very robust survey and research effort that has grown over time and which can be used to generate additional empirical data to drive prevention efforts and ensure their effectiveness.

²³ We are referring to adulthood broadly as life after college but, as noted, some offenders commit their first offense of rape while in college after the age of 18.

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