

**Sexual Assault Prevention and Response Climate DEOCS 4.1
Construct Validity Summary**



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Introduction

In 2014, DEOMI released DEOCS 4.0 for Department of Defense military and civilian members. DEOMI initiated development of DEOCS 4.1 in May 2016. This effort includes various updates to improve climate factors and individual items on the DEOCS. The following details the work completed to update the area of sexual assault prevention and response (SAPR) to construct new measures that target: prevention, reporting knowledge, response, and retaliation.

The goal of this revision is to realign the SAPR scales with SAPRO initiatives as well as remove items or scales that do not serve the commander well (for reasons including, but not limited to: lack of variance, overlap between scales, survey burden). To accomplish these goals, the process involved (1) reviewing the 2014-2016 DoD Sexual Assault Prevention Strategy and April 2016 DoD Retaliation Prevention and the Response Strategy, (2) writing new questions and revising existing questions to reflect DoD strategy (3) gaining feedback and input on the questions from subject matter experts (SMEs); (4) organizing the questions into areas of: prevention, bystander intervention experience, reporting knowledge, response, and retaliation climate, (5) gaining feedback and input on the questions from DoD Sexual Assault Prevention and Response Office (6) piloting items on the DEOCS, (7) examining variance and descriptive statistics (8) examining the relationship among items/areas to reduce multicollinearity, and (9) selecting items that demonstrate the strongest scale properties. Included is a review of the 4.0 description and items, followed by the proposed modifications to the SAPR Climate questions.

The SAPR section on DEOCS 4.0 contains seven measures. Five of the measures assess climate, one assesses behavior (behavioral intent and past behavior), and one assesses knowledge. The five measures that assess climate include: (1) *Perceptions of Safety*, (2) *Chain of Command Support*, (3) *Publicity of SAPR Information*, (4) *Unit Reporting Climate*, and (5) *Perceived Barriers to Reporting Sexual Assault*. The behavior scale is (6) *Unit Prevention Climate (Bystander Intervention)* and the knowledge scale is (7) *Restricted Reporting Knowledge*. Although the seven measures assess climate, behavior, and knowledge, for brevity, they will subsequently be referred to as SAPR climate measures. Refer to Tables 1 – 7 for the description of each measure and corresponding items.

Table 1.
DEOCS 4.0 Perceptions of Safety Measure

Description: *Perceptions of Safety* refers to members' feelings of safety from being sexually assaulted where they currently live and perform their work/duties.

1. To what extent do you feel safe from being sexually assaulted where you currently live?
 2. To what extent do you feel safe from being sexually assaulted where you perform your work/duties?
-

Note. Rating Scale: 4-point scale, respondents may select *very unsafe*, *unsafe*, *safe*, or *very safe*.

Table 2.
DEOCS 4.0 Chain of Command Support Measure

Description: *Chain of Command Support* refers to members' perceptions of the extent to which command behaviors are targeted towards preventing sexual assault and creating an environment where members feel comfortable reporting a sexual assault.

1. To what extent does your chain of command:
 - a. Promote a unit climate based on "respect and trust"
 - b. Refrain from sexist comments and behaviors
 - c. Actively discourage sexist comments and behaviors
 - d. Provide sexual assault prevention and response training that interests and engages you
 - e. Encourage bystander intervention to assist others in situations at risk for sexual assault or other harmful behavior
 - f. Encourage victims to report sexual assault
 - g. Create an environment where victims feel comfortable reporting sexual assault

Note. Rating Scale: 4-point scale, respondents may select *not at all*, *slight extent*, *moderate extent*, or *great extent*.

Table 3.
DEOCS 4.0 Publicity of SAPR Information Measure

Description: *Publicity of SAPR Information* refers to the extent to which members perceive that SAPR-related information and resources are publicly displayed and openly communicated.

1. To what extent does your chain of command:
 - a. Disseminate information on the outcomes of sexual assault courts-martial occurring within your Service
 - b. Publicize sexual assault reporting resources (e.g., Sexual Assault Response Coordinator contact information; Victim Advocate contact information; awareness posters; sexual assault hotline phone number)
 - c. Publicize the Restricted (confidential) Reporting option for sexual assault

Note. Rating Scale: 4-point scale, respondents may select *not at all*, *slight extent*, *moderate extent*, or *great extent*.

Table 4.
DEOCS 4.0 Unit Reporting Climate Measure

Description: *Unit Reporting Climate* refers to the extent to which members perceive that the chain of command would take appropriate actions to address an Unrestricted Report of sexual assault and the extent to which retaliation would occur if a sexual assault was reported.

1. If someone were to report a sexual assault to your current chain of command, how likely is it that:
 - a. The chain of command would take the report seriously
 - b. The chain of command would keep knowledge of the report limited to those with a need to know
 - c. The chain of command would forward the report outside the unit to criminal investigators
 - d. The chain of command would take steps to protect the safety of the person making the report
 - e. The chain of command would support the person making the report
 - f. The chain of command would take corrective action to address factors that may have led to the sexual assault
 - g. Unit members would label the person making the report a troublemaker*
 - h. Unit members would support the person making the report
 - i. The alleged offender(s) or their associates would retaliate against the person making the report*
 - j. The career of the person making the report would suffer*

Note. Rating Scale: 4-point scale, respondents may select *not at all*, *slightly likely*, *moderately likely*, or *very likely*. The items requiring reverse coding are indicated above with an asterisk (*).

Table 5.

DEOCS 4.0 Perceived Barriers to Reporting Sexual Assault Measure

Description: *Perceived Barriers to Reporting Sexual Assault* refers to the type and frequency of barriers to reporting sexual assault that individuals perceive within their unit/organization.

1. In your current unit/organization, which of the following would be the most likely reasons why a victim of sexual assault would not report the incident? (Select all that apply)
 - Negative impact to career or progress
 - Loss of privacy/confidentiality
 - Fear of professional retaliation for making the report
 - Fear of social retaliation for making the report
 - Lack of confidence in the military justice system
 - Lack of confidence in the chain of command
 - Takes too much time and effort to report
 - Not knowing how to make a sexual assault report
 - Another reason other than what is provided above
 - There are no barriers that would prevent victims from reporting a sexual assault
-

Table 6.

DEOCS 4.0 Unit Prevention Climate Measure

Description: *Unit Prevention Climate* refers to individuals' intentions to act if they were to observe a situation that may lead to a sexual assault.

1. Suppose you see someone secretly putting something in another person's drink. You're unsure what it was. Which of the following are you most likely to do in this kind of situation? (Select one)
 - Nothing
 - Leave to avoid any kind of trouble
 - Watch the situation to see if it escalates
 - Seek assistance from someone to help deal with the situation
 - Tell the drink owner what you saw
 - Confront the person who put the substance in the drink
 2. Imagine you go to a bar with a group of people whom you just met. What is the earliest point at which you would intervene in the following escalating situation? (Select one)
 - A senior leader buys a drink for a person in the group and tells him/her a drink cannot be refused, as doing so would go against tradition
 - The senior leader buys a second and third drink for the same person despite his/her repeated objections
 - The person appears intoxicated and disoriented, and continues to be the senior leader's main focus of attention
 - The senior leader repeatedly hugs the person, rubs his/her shoulders, and offers to walk him/her back to quarters
 - You see the senior leader quietly escorting the intoxicated person out of the bar
 - As they leave, the person resists the senior leader and says, "No"
 - In this scenario, I would not intervene at any point
 3. In the past 12 months, I observed a situation that I believe was, or could have led to, a sexual assault.
 - Yes
 - No
 - 3b. In response to this situation: (Select the one response that most closely resembles your actions)
 - I stepped in and separated the people involved in the situation
 - I asked the person who appeared to be at risk if they needed help
 - I confronted the person who appeared to be causing the situation
 - I created a distraction to cause one or more of the people to disengage from the situation
 - I asked others to step in as a group and diffuse the situation
 - I told someone in a position of authority about the situation
 - I considered intervening in the situation, but I could not safely take any action
 - I decided to not take action
-

Table 7.
DEOCS 4.0 Restricted Reporting Knowledge Measure

Description: *Restricted Reporting Knowledge* measures individuals' knowledge of the Restricted Reporting option.

1. All of the following people can receive an Unrestricted Report of sexual assault. However, a Restricted (confidential) Report can only be made to certain people. Please identify which of the following types of people can and cannot take a Restricted Report.
 - Sexual Assault Response Coordinator
 - Victim Advocate
 - Military Service Healthcare Personnel (assuming state law permits)
 - Anyone in my chain of command
 - Criminal investigator and Military Police Officer
-

Note. Response options include: "Yes, can take a Restricted Report" and "No, cannot take a Restricted Report".

Background

This section describes the SAPR areas (*Sexual Assault Prevention Climate, Bystander Intervention Experience in Past 12 Months, Sexual Assault Reporting Knowledge, Sexual Assault Response Climate, and Sexual Assault Retaliation Climate*) and provides definitions of each SAPR area for the purpose of DEOCS 4.1.

Sexual Assault Prevention Climate

For the purpose of DEOCS 4.1, *Sexual Assault Prevention Climate* is defined as: Members' perceptions that their immediate supervisor takes action to prevent sexual assault by promoting a respectful and safe command climate and deterring sexism and sexual harassment in the workplace. Utilizing the U.S. Centers for Disease Control and Prevention (CDC) definition of the prevention of sexual violence, the DoD focuses efforts on primary prevention. Primary prevention is defined as "approaches that take place before a sexual violence has occurred to prevent initial perpetration" (DoD, 2014a, p. 2). Within the DoD's adopted CDC Social Ecological Model (SEM), there are two main types of influences of sexual violence: 1) risk factors and 2) protective factors. Risk factors *increase* the possibility that sexual violence will occur, while protective factors *decrease* the possibility that sexual violence will occur. Risk factors include alcohol use and presence of sexual harassment (DoD, 2014a). Protective factors include bystander intervention and organizational climates promoting mutual respect and dignity for all members. Thus, the *Sexual Assault Prevention Climate* questions developed for DEOCS 4.1 focus on climate related risk and protective factors that may impact the occurrence of sexual violence.

Bystander Intervention Experience in Past 12 Months

For the purpose of DEOCS 4.1, *Bystander Intervention Experience in Past 12 Months* is defined as: Members' observation of a high-risk situation (i.e., a situation that may precede a sexual assault), and how they intervened. Bystander intervention is defined as "the willingness to safely take action and help someone in time of need" (DoD, 2014a, p.21). The DoD encourages members to take action if they witness any unacceptable behavior (DoD, 2014a). Similarly to DEOCS 4.0, version 4.1 maintains the *Bystander Intervention Experience in Past 12 Months*

question on the survey. Per the request of DoD SAPRO, no modifications were made to this question.

Sexual Assault Reporting Knowledge

For the purpose of DEOCS 4.1, *Sexual Assault Reporting Knowledge* is defined as: Members' knowledge of the sexual assault reporting options. The DoD places great focus on victim support. To assist victims, DoD implemented the restricted and unrestricted reporting options. Similar to DEOCS 4.0, version 4.1 maintains the Restricted Reporting Knowledge question on the survey. The only modification to this question was include a response option of "Not sure/Do not know." This response option is included in an effort to reduce error associated with respondents guessing the correct answer.

To further support victims, the DoD provides victims who report sexual assault the ability to seek legal advice and guidance from military attorneys (DoD, 2014b). The Army, Air Force, National Guard, and Coast Guard refer to these professionals as Special Victims' Counsel (SVC), while the Navy and Marine Corps refer to them as Victims' Legal Counsel (VLC). The FY15 Annual Report on Sexual Assault in the Military states that participants of the FY15 focus groups on SAPR among active duty members indicated a lack of awareness of the SVC/VLC program (DoD, 2016a). Therefore, DoD SAPRO requested DEOMI include a knowledge question regarding this topic on the DEOCS.

Sexual Assault Response Climate

For the purpose of DEOCS 4.1, *Sexual Assault Response Climate* is defined as: Members' perception of whether their chain of command would take appropriate action to address an Unrestricted Report of sexual assault and the extent to which leadership would support victims and encourage their recovery. A healthy command climate supports victims of sexual assault who make the difficult decision to report the assault. Additionally, appropriate responses by leadership can help mitigate potential re-traumatization and may encourage other victims of sexual assault to make a report. The response climate questions focus on chain of command behaviors that contribute to the victim's recovery. These behaviors include taking the report seriously, protecting the privacy of the reporter, discouraging rumors and speculations regarding the allegation, promoting support services and offering support to the reporter. DEOCS 4.0 did not formally measure a *Sexual Assault Response Climate*; however this is an initiative of SAPRO's and therefore will be explicitly targeted as part of the SAPR climate measures.

Sexual Assault Retaliation Climate

For the purpose of DEOCS 4.1, *Sexual Assault Retaliation Climate* is defined as: Members' perception of whether retaliation would occur if a sexual assault was reported in their unit/organization. The DoD Retaliation Prevention and Response Strategy (RPRS; DoD, 2016b) defines retaliation as "an umbrella term encompassing illegal, impermissible, or hostile actions taken by the chain of command or peers/coworkers as a result of making or being suspected of making a protected communication (e.g., a report of sexual assault or a complaint of sexual harassment)" (p. 27). There are two main forms of retaliation, *reprisal* and *ostracism*. Reprisal

refers to retaliation affecting member's professional opportunities or career. Ostracism refers to retaliation affecting individuals social well-being and acceptance (refer to Appendix B of RPRS to read full DoD Retaliation Prohibitions). The RPRS addresses retaliation as it relates to reports of sexual assault and complaints of sexual harassment; therefore, the DEOCS 4.1 will include questions that focuses on sexual assault and sexual harassment. Additionally, the questions were written to focus on climate rather than prevalence and seek to capture climate factors related to both reprisal and ostracism. The current paper discusses validation efforts for *Sexual Assault Retaliation Climate* only; please see *Sexual Harassment Retaliation Climate DEOCS 4.1 Construct Validity Summary* for details of the development and validation of the sexual harassment retaliation questions.

Individual-Level Data Analysis

The SAPR questions were piloted on the research blocks of the DEOCS from 30 July 2016 to 4 August 2016. A total of 4,234 responses were collected. The respondents were randomly placed in one of three samples to allow for both exploratory and confirmatory analysis.¹ There were four goals of data analysis:

- 1) Reduce the number of questions by taking into account cross-loadings and similarity of items via exploratory factor analysis and bivariate correlations (sample 1).
- 2) Determine the factor structure of each set of questions via exploratory factor analysis and determine reliability of scales (sample 2).
- 3) Analyze the factor structure of the measurement model via a confirmatory factor analysis (sample 3). The focus of this paper is on exploratory analyses and the confirmatory analyses are forthcoming, therefore not included in this current licensure paper.
- 4) Determine if the factors are appropriate to aggregate to the unit-level (entire sample).

Initial Exploratory Analysis

The first goal of analyses was to pare down the number of prospective SAPR Climate questions. The strategy employed was to analyze the cross-loadings within an exploratory factor analysis and analyze the bivariate correlations among items. This section displays the demographics of sample 1, item descriptive statistics, exploratory factor analysis and bivariate correlations.

Sample Descriptive Statistics

This section contains the demographic characteristics of sample 1 ($n = 1,395$), collected from 30 July 2016 to 4 August 2016. The variables are displayed according to the individual respondents' selections (with the exception of branch of Service, which is reported by the survey administrator). For information regarding the composition of sample 1, refer to Table 8.

¹ The confirmatory analyses are forthcoming, therefore not included in this current licensure paper.

Table 8.
Sample 1 Demographics

	<i>n</i>	%
Branch of Service		
Army	570	40.9%
Navy	545	39.1%
Marine Corps	125	9.0%
Air Force	61	4.4%
Coast Guard	2	<1.0%
National Guard	53	3.8%
Joint Command	39	2.8%
Component		
Active Duty	747	93.8%
Reserve	49	6.2%
Employment Type		
Military	852	61.1%
Civilian	523	37.5%
Gender		
Male	1,046	75.0%
Female	349	25.0%
Seniority		
Junior Enlisted (E1 – E3)	184	21.6%
Non-Commissioned Officer (E4 – E6)	466	54.7%
Senior Non-Commissioned Officer (E7 – E9)	87	10.2%
Junior Officer (O1 – O3)	62	7.3%
Senior Officer (O4 and above)	53	6.2%

Item Descriptive Statistics

This section displays descriptive statistics for the prospective *Sexual Assault Prevention Climate*, *Sexual Assault Response Climate* and *Sexual Assault Retaliation Climate* questions. All items were measured on a seven-point scale from *strongly disagree* to *strongly agree*. All scales had a range between 1 and 7. For item descriptive statistics refer to Tables 9 - 11.

Table 9.
Descriptive Statistics of Prospective Sexual Assault Prevention Climate Items

Item	Mean	SD	Skewness	Kurtosis
My immediate supervisor models respectful behavior.	5.66	1.58	-1.36	1.11
My immediate supervisor promotes responsible alcohol use.	5.63	1.48	-1.10	.608
My immediate supervisor refrains from sexist comments and behaviors.	5.91	1.40	-1.63	2.37
My immediate supervisor would correct individuals who make sexist comments.	5.76	1.47	-1.37	1.40
My immediate supervisor would correct individuals who make inappropriate or sexual comments about someone.	5.83	1.42	-1.43	1.63
My immediate supervisor would correct individuals who display sexually harassing behaviors.	5.93	1.39	-1.63	2.35
My immediate supervisor would correct individuals who refer to coworkers as 'honey,' 'babe,' 'sweetie,' or use other unprofessional language at work.	5.74	1.47	-1.30	1.16
My immediate supervisor would stop individuals who are talking about sexual topics at work.	5.70	1.50	-1.24	.86
My immediate supervisor would intervene if an individual was receiving sexual attention at work (e.g., staring at someone's chest, standing too close, rubbing someone's shoulders).	5.83	1.38	-1.40	1.69
My immediate supervisor encourages individuals to help others in risky situations that could result in harmful outcomes.	5.48	1.70	-1.16	.47
My chain of command treats others with respect regardless of position or title.	5.54	1.68	-1.20	.56
My chain of command visibly supports and reinforces standards of behavior.	5.59	1.64	-1.31	.95

Note: $n = 1,336$. The Std. Error for Skewness is .07 and Kurtosis is .13 for all questions.

Table 10.
Descriptive Statistics of Prospective Sexual Assault Response Climate Items

Item	Mean	SD	Skewness	Kurtosis
If a coworker were to report a sexual assault, my chain of command would take the report seriously.	5.97	1.58	-1.93	3.07
If a coworker were to report a sexual assault, my chain of command would keep the knowledge of the report limited to those with a need to know.	5.82	1.61	-1.64	2.00
If a coworker were to report a sexual assault, my chain of command would take steps to protect the safety of the person making the report.	5.96	1.49	-1.80	2.82
If a coworker were to report a sexual assault, my chain of command would discourage members from spreading rumors speculating about the allegation.	5.68	1.70	-1.43	1.15
If a coworker were to report a sexual assault, my chain of command would promote healthcare, legal, or other support services to the reporter.	5.96	1.47	-1.78	2.80
If a coworker were to report a sexual assault, my chain of command would support the reporter for speaking up.	5.82	1.58	-1.57	1.85
If a coworker were to report a sexual assault, my chain of command would take action to promote the reporter's well-being.	5.87	1.51	-1.63	2.26

Note: $n = 1,336$. The Std. Error for Skewness is .07 and Kurtosis is .13 for all questions.

Table 11.
Descriptive Statistics of Prospective Sexual Assault Retaliation Items

Item	Mean	SD	Skewness	Kurtosis
If a coworker reported a sexual assault, they would be excluded from the social interactions or conversations.	5.23	1.79	-.79	-.48
If a coworker reported a sexual assault, they would be ignored or given “the silent treatment.”	5.69	1.58	-1.20	.56
If a coworker reported a sexual assault, they would be subjected to insulting or disrespectful remarks or jokes.	5.75	1.57	-1.29	.81
If a coworker reported a sexual assault, they would be blamed for causing problems.	5.71	1.56	-1.21	.63
If a coworker reported a sexual assault, they would be blamed for the assault.	5.83	1.47	-1.30	.97
If a coworker reported a sexual assault, they would be denied career opportunities (e.g., denied training, awards, or promotions).	5.79	1.51	-1.29	.87
If a coworker reported a sexual assault, they would be disciplined or ordered other corrective action.	5.84	1.53	-1.42	1.30
If a coworker reported a sexual assault, they would be discouraged from moving forward with the report.	5.83	1.52	-1.39	1.18

Note: $n = 1,336$. The Std. Error for Skewness is .07 and Kurtosis is .13 for all questions. The Proposed Sexual Assault Retaliation Climate questions were reversed coded prior to analyses.

Exploratory Factor Analysis

Following the review of the item descriptive statistics, an item reduction strategy was used to make the scales more parsimonious by eliminating items that loaded across factors. Exploratory factor analysis (EFA) is a tool for consolidating the number of measured variables into a fewer number of factors (Tabachnick & Fidell, 1996). Prior to analyses, the data was tested for normality using the Kolmogorov-Smirnov statistic; the test was significant, indicating non-normality.

Fabrigar, Wegener, MacCallum, and Strahan (1999) suggest utilizing principal factor methods if data violates the assumption of normality. Costello and Osborne (2005) recommend utilizing oblique rotation (which assumes correlations among factors) over orthogonal rotation (which does not recognize the correlation between factors) because it more accurately depicts the relationship between variables. Based on these recommendations, EFA was conducted using principal axis factoring with oblique rotation, specifically direct oblimin rotation.

To examine the factorability of the items, the correlations among items were analyzed. All correlations were statistically significant ($p < .01$), suggesting adequate factorability (Tabachnick & Fidell, 1996). Additionally, The Bartlett Test of Sphericity (BTS) and the Kaiser Meyer-Olkin (KMO) measures were examined to assess the fit between the data and the factor. The BTS hypothesizes that the correlation matrix is an identity matrix. The BTS was significant ($X^2(352) = 41,071.25, p < .01$), therefore allowing us to reject the null hypothesis that the correlation matrix is an identity and to conclude that the factor analysis is an appropriate method to utilize for this data (George & Mallery, 2006). The KMO measure of sampling adequacy was also employed to compare the sum of the squared correlation coefficients and the squared partial correlation coefficients. The obtained statistic was .97. This indicates a very good fit and

suggests that a factor analysis is an appropriate statistical method to utilize for analyzing this data.

The exploratory factor analysis yielded a three factor solution which supports the theoretical distinction of the SAPR Climate areas. Items with cross-loadings above .32 were eliminated (see Tabachnick and Fidell, 1996); however, no items met this criterion and, therefore, none had to be removed for this reason. Refer to Table 12 for more information.

Table 12.
Exploratory Factor Analysis Pattern Matrix of Prospective SAPR Climate Items

Items	Factor 1	Factor 2	Factor 3
1. My immediate supervisor models respectful behavior.	.75	.01	.02
2. My immediate supervisor promotes responsible alcohol use.	.72	.00	-.01
3. My immediate supervisor refrains from sexist comments and behaviors.	.88	.02	-.03
4. My immediate supervisor would correct individuals who make sexist comments.	.97	-.01	-.06
5. My immediate supervisor would correct individuals who make inappropriate or sexual comments about someone.	.97	.01	-.06
6. My immediate supervisor would correct individuals who display sexually harassing behaviors.	.94	-.01	-.01
7. My immediate supervisor would correct individuals who refer to coworkers as ‘honey,’ ‘babe,’ ‘sweetie,’ or use other unprofessional language at work.	.82	.01	-.01
8. My immediate supervisor would stop individuals who are talking about sexual topics at work.	.91	.01	-.03
9. My immediate supervisor would intervene if an individual was receiving sexual attention at work (e.g., staring at someone’s chest, standing too close, rubbing someone’s shoulders).	.87	.01	.00
10. My immediate supervisor encourages individuals to help others in risky situations that could result in harmful outcomes.	.57	-.07	.06
11. My chain of command treats others with respect regardless of position or title.	.56	.11	.19
12. My chain of command visibly supports and reinforces standards of behavior.	.58	.10	.20
13. If a coworker were to report a sexual assault, my chain of command would take the report seriously.	-.01	-.02	.83
14. If a coworker were to report a sexual assault, my chain of command would keep the knowledge of the report limited to those with a need to know.	.04	-.01	.84
15. If a coworker were to report a sexual assault, my chain of command would take steps to protect the safety of the person making the report.	-.03	.01	.92
16. If a coworker were to report a sexual assault, my chain of command would discourage members from spreading rumors speculating about the allegation.	.01	.00	.82
17. If a coworker were to report a sexual assault, my chain of command would promote healthcare, legal, or other support services to the reporter.	.01	-.01	.90
18. If a coworker were to report a sexual assault, my chain of command would support the reporter for speaking up.	.00	.05	.86
19. If a coworker were to report a sexual assault, my chain of command would take action to promote the reporter’s well-being.	.02	.03	.89

20. If a coworker reported a sexual assault, they would be excluded from the social interactions or conversations.	.03	.72	-.03
21. If a coworker reported a sexual assault, they would be ignored or given “the silent treatment.”	.00	.90	-.01
22. If a coworker reported a sexual assault, they would be subjected to insulting or disrespectful remarks or jokes.	.00	.92	-.03
23. If a coworker reported a sexual assault, they would be blamed for causing problems.	-.01	.92	.00
24. If a coworker reported a sexual assault, they would be blamed for the assault.	.00	.94	-.02
25. If a coworker reported a sexual assault, they would be denied career opportunities (e.g., denied training, awards, or promotions).	.00	.91	.01
26. If a coworker reported a sexual assault, they would be disciplined or ordered other corrective action.	-.01	.86	.04
27. If a coworker reported a sexual assault, they would be discouraged from moving forward with the report.	.00	.87	.06

Bivariate Correlations

Bivariate Pearson correlation among items were examined to identify and reduce questions with overlapping content. Tables 13 through 15 display the bivariate correlations.

Table 13.
Bivariate Correlation among Prospective Sexual Assault Prevention Climate Items

Items	1	2	3	4	5	6	7	8	9	10	11
1. My immediate supervisor models respectful behavior.											
2. My immediate supervisor promotes responsible alcohol use.	.63**										
3. My immediate supervisor refrains from sexist comments and behaviors.	.72**	.64**									
4. My immediate supervisor would correct individuals who make sexist comments.	.69**	.64**	.82**								
5. My immediate supervisor would correct individuals who make inappropriate or sexual comments about someone.	.69**	.64**	.82**	.91**							
6. My immediate supervisor would correct individuals who display sexually harassing behaviors.	.70**	.65**	.82**	.88**	.90**						
7. My immediate supervisor would correct individuals who refer to coworkers as ‘honey,’ ‘babe,’ ‘sweetie,’ or use other unprofessional language at work.	.59**	.57**	.70**	.77**	.78**	.78**					
8. My immediate supervisor would stop individuals who are talking about sexual topics at work.	.67**	.60**	.77**	.86**	.86**	.82**	.77**				
9. My immediate supervisor would intervene if an individual was receiving sexual attention at work (e.g., staring at someone’s chest, standing too close, rubbing someone’s shoulders).	.64**	.61**	.75**	.81**	.82**	.81**	.76**	.81**			
10. My immediate supervisor encourages individuals to help others in risky situations that could result in harmful outcomes.	.44**	.46**	.48**	.51**	.51**	.52**	.46**	.50**	.54**		
11. My chain of command treats others with respect regardless of position or title.	.62**	.51**	.62**	.63**	.63**	.62**	.57**	.62**	.62**	.45**	
12. My chain of command visibly supports and reinforces standards of behavior.	.61**	.54**	.63**	.65**	.65**	.66**	.60**	.64**	.64**	.46**	.86**

Note. ** $p < .01$

After analyzing the bivariate correlations among the prospective *Sexual Assault Prevention Climate* questions, items 3, 4, 5, and 6 were eliminated from the scale due to their high correlations with questions 7, 8, and 9 (correlations ranged from .70 to .86). SMEs reviewed the items and concluded that the content of items 3 through 6 is adequately reflected within items 7 through 9. Additionally, the items (11 and 12) that contain the frame of reference of “My chain of command” were removed to make the scale more parsimonious; therefore, the remaining items contain the frame of reference of “My immediate supervisor.” Items 1, 2, 7, 8, 9 and 10 were retained.

Table 14.
Bivariate Correlation among Prospective Sexual Assault Response Climate

	1	2	3	4	5	6
1. If a coworker were to report a sexual assault, my chain of command would take the report seriously.						
2. If a coworker were to report a sexual assault, my chain of command would keep the knowledge of the report limited to those with a need to know.	.74**					
3. If a coworker were to report a sexual assault, my chain of command would take steps to protect the safety of the person making the report.	.75**	.79**				
4. If a coworker were to report a sexual assault, my chain of command would discourage members from spreading rumors speculating about the allegation.	.66**	.74**	.72**			
5. If a coworker were to report a sexual assault, my chain of command would promote healthcare, legal, or other support services to the reporter.	.72**	.74**	.81**	.73**		
6. If a coworker were to report a sexual assault, my chain of command would support the reporter for speaking up.	.67**	.73**	.80**	.73**	.81**	
7. If a coworker were to report a sexual assault, my chain of command would take action to promote the reporter's well-being.	.70**	.74**	.82**	.74**	.86**	.84**

Note. ** $p < .01$

After analyzing the bivariate correlations among the prospective *Sexual Assault Response Climate* questions, items 3 and 7 were removed from the scale due to their high correlations with other questions (correlations ranged from .70 to .86). Further, SMEs reviewed the items and concluded that the content of item 7 is adequately reflected in item 5. Items 1, 2, 4, 5, and 6 were retained.

Table 15.
Bivariate Correlation among Prospective Sexual Assault Retaliation Climate Items

	1	2	3	4	5	6	7
1. If a coworker reported a sexual assault, they would be excluded from the social interactions or conversations.							
2. If a coworker reported a sexual assault, they would be ignored or given "the silent treatment."	.68**						
3. If a coworker reported a sexual assault, they would be subjected to insulting or disrespectful remarks or jokes.	.68**	.82**					
4. If a coworker reported a sexual assault, they would be blamed for causing problems.	.66**	.83**	.85**				
5. If a coworker reported a sexual assault, they would be blamed for the assault.	.65**	.83**	.85**	.89**			
6. If a coworker reported a sexual assault, they would be denied career opportunities (e.g., denied training, awards, or promotions).	.64**	.82**	.82**	.84**	.85**		
7. If a coworker reported a sexual assault, they would be disciplined or ordered other corrective action.	.61**	.76**	.79**	.78**	.82**	.83**	
8. If a coworker reported a sexual assault, they would be discouraged from moving forward with the report.	.62**	.80**	.79**	.81**	.84**	.87**	.84**

Note. ** $p < .01$

After analyzing the bivariate correlations among the prospective *Sexual Assault Retaliation Climate* questions, items 2 and 5 were eliminated from the scale due to their high correlations with other questions (correlations ranged from .65 to .89). Further, SMEs reviewed the items and concluded that item 1 adequately reflects the content of item 2. Additionally,

SMEs preferred item 4, which focuses on being blamed for causing problems within the unit, as opposed to item 5 which places focus on being blamed for the assault. Items 1, 3, 4, 6, 7, and 8 were retained.

Testing the Psychometric Properties of the Final SAPR Climate Scales

Following the exploratory analysis and item reduction, the reliability of the remaining (final) items on each scale were analyzed. Additionally, the dimensionality of the SAPR climate scales were confirmed. This section displays the demographics of sample 2, reliability analysis, and an EFA of the final SAPR questions.

Sample Descriptive Statistics

This section contains the demographic characteristics of sample 2 ($n = 1,428$), collected from 30 July 2016 to 4 August 2016. The variables are displayed according to the individual respondents' selections (with the exception of branch of Service, which is reported by the survey administrator). For information regarding the composition of sample 2, refer to Table 16.

Table 16.
Sample 2 Demographics

	<i>n</i>	%
Branch of Service		
Army	580	40.6%
Navy	572	40.1%
Marine Corps	123	8.6%
Air Force	78	5.5%
Coast Guard	4	<1.0%
National Guard	48	3.4%
Joint Command	23	1.6%
Component		
Active Duty	810	93.8%
Reserve	54	6.3%
Employment Type		
Military	914	65.1%
Civilian	489	34.9%
Gender		
Male	1,072	75.1%
Female	356	24.9%
Seniority		
Junior Enlisted (E1 – E3)	173	18.9%
Non-Commissioned Officer (E4 – E6)	482	52.7%
Senior Non-Commissioned Officer (E7 – E9)	107	11.7%
Junior Officer (O1 – O3)	92	10.1%
Senior Officer (O4 and above)	60	6.6%

Reliability Analysis

All reliability analyses were conducted using Cronbach’s Alpha. The reliability coefficients for the three scales were adequate, with alphas ranging from .91 to .95 (Nunnally, 1978). Refer to Tables 17 – 19 for reliability analysis of the prospective SAPR Climate scales.

Table 17.
Reliability Analysis of Prospective Sexual Assault Prevention Climate Items

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. My immediate supervisor models respectful behavior.	28.21	41.23	.74	.89
2. My immediate supervisor promotes responsible alcohol use.	28.28	43.58	.67	.90
3. My immediate supervisor would correct individuals who refer to coworkers as ‘honey,’ ‘babe,’ ‘sweetie,’ or use other unprofessional language at work.	28.19	41.05	.81	.88
4. My immediate supervisor would stop individuals who are talking about sexual topics at work.	28.24	40.38	.81	.88

5.	My immediate supervisor would intervene if an individual was receiving sexual attention at work (e.g., staring at someone's chest, standing too close, rubbing someone's shoulders).	28.08	41.57	.85	.88
6.	My immediate supervisor encourages individuals to help others in risky situations that could result in harmful outcomes.	28.39	42.60	.62	.91

Note: $\alpha = .91$

Table 18.
Reliability Analysis of Prospective Sexual Assault Response Climate Items

	Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1.	If a coworker were to report a sexual assault, my chain of command would take the report seriously.	23.42	30.01	.76	.92
2.	If a coworker were to report a sexual assault, my chain of command would keep the knowledge of the report limited to those with a need to know.	23.65	27.76	.83	.91
3.	If a coworker were to report a sexual assault, my chain of command would discourage members from spreading rumors speculating about the allegation.	23.74	28.22	.78	.92
4.	If a coworker were to report a sexual assault, my chain of command would promote healthcare, legal, or other support services to the reporter.	23.47	29.70	.84	.90
5.	If a coworker were to report a sexual assault, my chain of command would support the reporter for speaking up.	23.58	29.03	.84	.90

Note: $\alpha = .93$

Table 19.
Reliability Analysis of Prospective Sexual Assault Retaliation Climate Items

	Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1.	If a coworker reported a sexual assault, they would be excluded from the social interactions or conversations.	28.48	55.72	.69	.96
2.	If a coworker reported a sexual assault, they would be subjected to insulting or disrespectful remarks or jokes.	27.94	54.53	.89	.94
3.	If a coworker reported a sexual assault, they would be blamed for causing problems.	28.03	53.86	.90	.93
4.	If a coworker reported a sexual assault, they would be denied career opportunities (e.g., denied training, awards, or promotions).	27.92	54.96	.90	.94

5.	If a coworker reported a sexual assault, they would be disciplined or ordered other corrective action.	27.82	55.99	.86	.94
6.	If a coworker reported a sexual assault, they would be discouraged from moving forward with the report.	27.84	56.02	.87	.94

Note: $\alpha = .95$

Exploratory Factor Analysis

An EFA with principal axis factoring was used to examine the dimensionality of each of the prospective SAPR climate scales. Results from the initial EFA suggest that a single factor structure will be found for each of the SAPR Climate scales. The remainder of this section will discuss the results of the EFA on the final SAPR scales.

Sexual Assault Prevention Climate

An EFA revealed a single factor structure to the *Sexual Assault Prevention Climate* scale, with this factor accounting for 67% of the variance. Each item exhibited strong primary loadings on the factor (see Costello & Osborne, 2005, for recommended factor loading strengths).² Table 20 displays the factor matrix.

Table 20.
Exploratory Factor Matrix of Sexual Assault Prevention Climate Items

	Factor 1
1. My immediate supervisor models respectful behavior.	.78
2. My immediate supervisor promotes responsible alcohol use.	.69
3. My immediate supervisor would correct individuals who refer to coworkers as ‘honey,’ ‘babe,’ ‘sweetie,’ or use other unprofessional language at work.	.86
4. My immediate supervisor would stop individuals who are talking about sexual topics at work.	.87
5. My immediate supervisor would intervene if an individual was receiving sexual attention at work (e.g., staring at someone’s chest, standing too close, rubbing someone’s shoulders).	.91
6. My immediate supervisor encourages individuals to help others in risky situations that could result in harmful outcomes.	.65

Sexual Assault Response Climate

An EFA revealed a single factor structure to the *Sexual Assault Response Climate* scale, with this factor accounting for 78% of the variance and each item exhibited strong primary loadings on this factor.³ Table 21 displays the factor matrix.

² Due to the single factor solution, the solution could not be rotated.

³ Due to the single factor solution, the solution could not be rotated.

Table 21.
Exploratory Factor Matrix of Sexual Assault Response Climate Items

	Factor 1
1. If a coworker were to report a sexual assault, my chain of command would take the report seriously.	.79
2. If a coworker were to report a sexual assault, my chain of command would keep the knowledge of the report limited to those with a need to know.	.86
3. If a coworker were to report a sexual assault, my chain of command would discourage members from spreading rumors speculating about the allegation.	.82
4. If a coworker were to report a sexual assault, my chain of command would promote healthcare, legal, or other support services to the reporter.	.89
5. If a coworker were to report a sexual assault, my chain of command would support the reporter for speaking up.	.89

Sexual Assault Retaliation Climate

An EFA revealed a single factor structure to the *Sexual Assault Retaliation Climate* scale, with this factor accounting for 81% of the variance and each item exhibited strong primary loadings this factor.⁴ Table 22 displays the factor matrix.

Table 22.
Exploratory Factor Matrix of Sexual Assault Retaliation Climate Items

	Factor 1
1. If a coworker reported a sexual assault, they would be excluded from the social interactions or conversations.	.70
2. If a coworker reported a sexual assault, they would be subjected to insulting or disrespectful remarks or jokes.	.92
3. If a coworker reported a sexual assault, they would be blamed for causing problems.	.93
4. If a coworker reported a sexual assault, they would be denied career opportunities (e.g., denied training, awards, or promotions).	.93
5. If a coworker reported a sexual assault, they would be disciplined or ordered other corrective action.	.89
6. If a coworker reported a sexual assault, they would be discouraged from moving forward with the report.	.90

Unit-Level Aggregation Statistics

This section will describe analysis to determine whether it is appropriate to aggregate the SAPR Climate scales to a higher-level of analysis. Surveys, including climate surveys, often measure a construct by obtaining multiple ratings from individuals and aggregating that data to the group-level. The construct of interest is then able to be interpreted at the group-level; this allows for interpretation of the results to shift from saying that Person A and Person B differ on a specific construct to being able to say that Organization A and Organization B differ on a specific construct. The interpretation of the same construct differs at the individual-level versus at the group-level. For instance, displaying a climate factor mean across all individuals within the

⁴ Due to the single factor solution, the solution could not be rotated.

DoD provides a snapshot of a larger DoD climate, and can provide insight into demographic subgroup differences. Alternatively, these individuals could be considered dependent data points, as they are all observations within units. Therefore, aggregating individuals into unit-level means provides insight into the favorability of the unit climates across the DoD.

Some researchers believe the assessment of agreement is a prerequisite for arguing that a higher-level construct can be operationalized from individual-level data; other researchers believe that the variance of within-group agreement is of theoretical importance and should be studied (see Burke, Borucki & Kaufman, 2002). For exploratory purposes, the aggregation statistics for the SAPR Climate Scales were examined.

Additional unit-level analyses will be conducted after the survey is released. With a more robust dataset, different levels of analysis (e.g., based on sub-UICs or ‘breakouts’/departments) will be explored.⁵ The remainder of this section will discuss the aggregation statistics for the SAPR Climate scales by providing (1) sample description, (2) within-group agreement statistics, and (3) between-group differentiation statistics.

Sample Description

This section contains the demographic characteristics of the entire sample (samples 1-3). These individuals come from 37 units, with each unit containing 16 or more individuals ($n = 1,134$). The variables are displayed according to the survey requester’s selections. The personnel classifications of this sample are as follows: 42.3% Army ($n = 480$), 47.5% Navy ($n = 539$), 6.8% Marine Corps ($n = 77$), 1.9% National Guard ($n = 21$), and 1.5% Joint Command ($n = 17$). The majority of respondents within this sample are male ($n = 798$; 70.4%).

Within-Group Agreement

Within-group agreement indices were explored to determine if the construct that is supposed to be shared at the group-level actually demonstrates agreement among respondents within the same group. Several within-group agreement indices were explored, including: r_{wg} , AD_M , $ICC(1)$, $ICC(2)$.

The r_{wg} compares the observed within-group variances to an expected variance from random responding. This is a consensus measure or index of agreement within-group(s). LeBrenton and Senter (2008) suggest interpreting r_{wg} on a continuum of agreement, with values between .00 and .30 indicating a *lack of agreement*, .31 to .50 as *weak agreement*, .51 to .70 as *moderate agreement*, .71 to .90 as *strong agreement*, and .91 to 1.00 as *very strong agreement*.

⁵ There are two important caveats specific to the DEOCS methodology and this particular data collection: (1) The DEOCS typically remains open for 21 to 30 days – this data collection is representative of individuals who completed the research blocks of the DEOCS between 30 July 2016 and 4 August 2016; therefore, the sample reflects partial units/organizations. (2) Respondents are aggregated to the unit-level through a grouping variable that can identify who belongs to which unit. These units vary in size. For example, Commanders in the Air Force requesting the DEOCS may oversee a single Squadron, Group, or Wing. Therefore, a unit may comprise multiple commands. Due to these limitations, the fidelity of the aggregation statistics presented in the current paper may attenuate aggregation statistics (Ehrhart, Schneider, & Macey, 2014).

The averaged $r_{wg(j)}$ results for the *Sexual Assault Prevention Climate*, *Sexual Assault Response Climate*, and *Sexual Assault Retaliation Climate* ranged from .49 to .59, indicating weak to moderate agreement (see Table 23).

The mean average deviation (AD_M) can be interpreted such that 0 indicates complete agreement. Using the seven point response scale, an upper limit cut-off of 1.2 was utilized to determine within-group agreement (Burke & Dunlap, 2002), thus scores that fall under an AD_M value 1.2 represent satisfactory group agreement. Overall, the average of the AD_M indices for each of the three climate scales suggest some within-group agreement, with *Sexual Assault Prevention Climate* and *Sexual Assault Response Climate* falling below the cut-off and *Sexual Assault Retaliation Climate* averaging slightly above the 1.2 cut-off (see Table 23).

Intraclass correlations were conducted to determine the amount of variance that can be explained by the unit (LeBreton & Senter, 2008). The $ICC(1)$ explains the total variance that can be explained by group membership. Specifically, an $ICC(1)$ of .10 can be interpreted as 10% of the variability in individual's responses is explained by group membership (Bliese, 2000). Additionally, $ICC(1)$ can be interpreted similarly to effect size, with a value of .01 considered a "small" effect, a value of .10 considered a "medium" effect and a value of .25 considered a "large" effect (LeBreton & Senter, 2008). A small effect was found for each scale, suggesting that 3% to 5% of an individual's responses can be attributed to unit membership (see Table 23).

$ICC(2)$ is an estimate of the reliability of the group means. Thus, an $ICC(2)$ indicates whether groups can be reliably differentiated based on the group mean. Although there are no strict standards of acceptability for $ICC(2)$ values, Glick (1985) recommended an $ICC(2)$ cutoff of .60. The $ICC(2)$ scores were low, ranging from .46 to .60 (see Table 23).

Between-Group Differentiation

The between-group differentiation for the SAPR Climate scales were explored. Between-group analyses help determine if the groups that are expected to differ actually differ. A one-way analysis of variance (ANOVA) was performed to determine if minimal evidence exists for difference across groups.

The discriminant power was assessed for the *Sexual Assault Prevention Climate*, *Sexual Assault Response Climate*, and *Sexual Assault Retaliation Climate* scales to determine if differences across groups exist. The discriminant power was assessed with the one-way ANOVA procedure. The one-way ANOVAs were run on each SAPR Climate scale between the organizations/units. Hays (1981) suggests that an F ratio > 1.00 provides the minimal evidence for differences across groups. Within the current sample, the F ratio for *Sexual Assault Prevention Climate*, *Sexual Assault Response Climate* and *Sexual Assault Retaliation Climate* were greater than one across units, suggesting differences across groups.

Taken together, the within-group agreement and the between-group differentiation statistics provide initial support for aggregating this data to the unit-level. Aggregation statistics will be further explored once we have data for complete units.

Table 23.***Aggregation Statistics of DEOCS 4.1 Sexual Assault Prevention and Response Climate Scales***

Item	$r_{wg(j)}$	$AD_{M(J)}$	ICC(1)	ICC(2)	ANOVA
Sexual Assault Prevention Climate	.60	1.15	.04	.55	F(36, 1061) = 2.22**
Sexual Assault Response Climate	.59	1.06	.03	.46	F(36, 1097) = 1.84*
Sexual Assault Retaliation Climate	.49	1.23	.05	.60	F(36, 1097) = 2.48**

Note: * $p < .05$; ** $p < .01$

Descriptives of Final DEOCS 4.1 SAPR Questions

The descriptive statistics for the *Sexual Assault Prevention Climate*, *Sexual Assault Response Climate*, *Sexual Assault Retaliation Climate*, and *Sexual Assault Reporting Knowledge* question are presented in Tables 24-27 and the reliability analysis, when applicable, are presented in Tables 28-30. Please note, the descriptive statistics of the new sexual assault prevention and response climate scales are displayed below; the descriptive statistics of the two existing DEOCS 4.0 questions that will be used on DEOCS 4.1 (i.e., bystander intervention in the past 12 months and restricted reporting knowledge) are not shown.

Table 24.***Descriptive Statistics of Sexual Assault Prevention Climate Items***

Items	Mean	SD	Skewness	Kurtosis
1. My immediate supervisor models respectful behavior.	5.67	1.60	-1.40	1.20
2. My immediate supervisor promotes responsible alcohol use.	5.64	1.49	-1.13	.74
3. My immediate supervisor would correct individuals who refer to coworkers as 'honey,' 'babe,' 'sweetie,' or use other unprofessional language at work.	5.72	1.50	-1.35	.04
4. My immediate supervisor would stop individuals who are talking about sexual topics at work.	5.68	1.53	-1.28	.04
5. My immediate supervisor would intervene if an individual was receiving sexual attention at work (e.g., staring at someone's chest, standing too close, rubbing someone's shoulders).	5.82	1.40	-1.46	.04
6. My immediate supervisor encourages individuals to help others in risky situations that could result in harmful outcomes	5.50	1.69	-1.17	.04

Note: $n = 4,050$. The Std. Error for Skewness is .04 and Kurtosis is .08 for all items.

Table 25.***Descriptive Statistics of Sexual Assault Response Climate Items***

Items	Mean	SD	Skewness	Kurtosis
1. If a coworker were to report a sexual assault, my chain of command would take the report seriously.	6.03	1.50	-2.02	3.64
2. If a coworker were to report a sexual assault, my chain of command would keep the knowledge of the report limited to those with a need to know.	5.85	1.59	-1.65	2.01
3. If a coworker were to report a sexual assault, my chain of command would discourage members from spreading rumors speculating about the allegation.	5.73	1.65	-1.48	1.38

4.	If a coworker were to report a sexual assault, my chain of command would promote healthcare, legal, or other support services to the reporter.	6.00	1.40	-1.81	3.07
5.	If a coworker were to report a sexual assault, my chain of command would support the reporter for speaking up.	5.88	1.49	-1.62	2.19

Note: $n = 4,234$. The Std. Error for Skewness is .04 and Kurtosis is .08 for all items.

Table 26.
Descriptive Statistics of Sexual Assault Retaliation Climate Items

Items	Mean	SD	Skewness	Kurtosis
1. If a coworker reported a sexual assault, they would be excluded from the social interactions or conversations.	5.18	1.84	-.77	-.55
2. If a coworker reported a sexual assault, they would be subjected to insulting or disrespectful remarks or jokes.	5.71	1.61	-1.30	.80
3. If a coworker reported a sexual assault, they would be blamed for causing problems.	5.64	1.63	-1.17	.42
4. If a coworker reported a sexual assault, they would be denied career opportunities (e.g., denied training, awards, or promotions).	5.74	1.56	-1.27	.77
5. If a coworker reported a sexual assault, they would be disciplined or given other corrective action.	5.83	1.54	-1.42	1.24
6. If a coworker reported a sexual assault, they would be discouraged from moving forward with the report	5.80	1.54	-1.38	1.13

Note: $n = 4,234$. The Std. Error for Skewness is .04 and Kurtosis is .08 for all items. The Sexual Assault Retaliation Climate questions were reversed coded prior to analyses

Table 27.
Descriptive Statistics of Sexual Assault Reporting Knowledge Question

Items	Correct	Incorrect	Not sure/ Do not know
1. Service members who report they were sexually assaulted are eligible for the services of a military attorney.	64%	2%	34%

Note: $n = 4,234$.

Table 28.
Reliability Analysis of Sexual Assault Prevention Climate Items

Item	Scale Mean if Deleted	Scale Variance if Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted
1. My immediate supervisor models respectful behavior.	28.65	40.96	.72	.90
2. My immediate supervisor promotes responsible alcohol use.	28.38	41.53	.80	.89
3. My immediate supervisor would correct individuals who refer to coworkers as 'honey,' 'babe,' 'sweetie,' or use other unprofessional language at work.	28.61	40.63	.79	.89
4. My immediate supervisor would stop individuals who are talking about sexual topics at work.	28.65	39.62	.83	.89
5. My immediate supervisor would intervene if an individual was receiving sexual attention at work	28.50	40.71	.86	.88

(e.g., staring at someone's chest, standing too close, rubbing someone's shoulders).

6. My immediate supervisor encourages individuals to help others in risky situations that could result in harmful outcomes	28.83	42.54	.57	.93
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Note: $n = 4,234$; $\alpha = .91$

Table 29.
Reliability Analysis of Sexual Assault Response Climate Items

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. If a coworker were to report a sexual assault, my chain of command would take the report seriously.	23.47	30.47	.79	.92
2. If a coworker were to report a sexual assault, my chain of command would keep the knowledge of the report limited to those with a need to know.	28.65	30.00	.83	.91
3. If a coworker were to report a sexual assault, my chain of command would discourage members from spreading rumors speculating about the allegation.	23.76	29.00	.79	.92
4. If a coworker were to report a sexual assault, my chain of command would promote healthcare, legal, or other support services to the reporter.	23.49	30.51	.86	.91
5. If a coworker were to report a sexual assault, my chain of command would support the reporter for speaking up.	23.62	29.89	.83	.91

Note: $n = 4,234$; $\alpha = .93$

Table 30.
Reliability Analysis of Sexual Assault Retaliation Climate Items

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. If a coworker reported a sexual assault, they would be excluded from the social interactions or conversations.	28.72	53.38	.69	.90
2. If a coworker reported a sexual assault, they would be subjected to insulting or disrespectful remarks or jokes.	28.19	52.21	.88	.89
3. If a coworker reported a sexual assault, they would be blamed for causing problems.	28.26	51.85	.89	.89
4. If a coworker reported a sexual assault, they would be denied career opportunities (e.g., denied training, awards, or promotions).	28.15	52.58	.90	.89
5. If a coworker reported a sexual assault, they would be disciplined or given other corrective action.	28.07	53.50	.86	.88

6. If a coworker reported a sexual assault, they would be discouraged from moving forward with the report	28.09	53.30	.87	.93
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Note: $n = 4,234$; $\alpha = .95$

Conclusion

The revised Sexual Assault Prevention and Response Climate questions on the DEOCS contain five content areas, including: *Sexual Assault Prevention Climate*, *Bystander Intervention in the Past 12 Months*, *Sexual Assault Reporting Knowledge*, *Sexual Assault Response Climate*, and *Sexual Assault Retaliation Climate*. The focus of the current paper is the validation of the three sexual assault climate scales (i.e., *prevention*, *response*, and *retaliation*). Factor analysis and bivariate correlations were used to help reduce the number of the questions on the survey and make the scale more parsimonious. Factor analysis shown that the three climate scales represent three distinct constructs. Reliability analyses revealed that each scale exhibited acceptable reliability. Further, the dimensionality of each scale was analyzed and results suggest each scale represents a single factor. Additionally, while there was some support that the climate scales can be aggregated to reflect a meaningful unit-level variable, additional unit-level analyses will be conducted when we have data on complete units/organizations. Future analysis will also be conducted to establish correlations with theoretically related items to establish convergent and discriminant validity.

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