



# TYPES OF **SEXUAL ASSAULT AND SEXUAL HARASSMENT IN THE ACTIVE-DUTY ARMY**

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## ABOUT THIS REPORT



This report documents research and analysis conducted as part of a project entitled *Timely Monitoring of Sexual Harassment and Gender Discrimination Within the U.S. Army*, sponsored by the Office of the Deputy Chief of Staff, G-1, U.S. Army. The purpose of the project was to develop and execute a survey infrastructure to ensure ongoing, timely access to data for monitoring and responding to experiences with sexual harassment and gender discrimination by specific subgroups within the U.S. Army and to provide additional analysis of secondary data to understand the circumstances surrounding sexual assault and sexual harassment. The purpose of this report is to provide results from a latent class analysis that identified profiles of sexual assault and sexual harassment experiences among active-duty soldiers.

This research was conducted within RAND Arroyo Center's Personnel, Training, and Health Program. RAND Arroyo Center, part of the RAND Corporation, is a federally funded research and development center (FFRDC) sponsored by the United States Army.

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**T**he final report of the Independent Review Commission on Sexual Assault in the Military in 2021 highlighted the importance of designing sexual assault and sexual harassment prevention and response efforts that address all experiences, not just the most stereotypical or common types.<sup>1</sup> Though the full picture of sexual assault and sexual harassment experiences is a complicated one, the broad strokes of those experiences often fall into particular types, and better understanding what those types look like is a first step toward prevention and response. This report, which describes different types of sexual assault and sexual harassment experienced by active-component soldiers, is intended to help Army leaders, individuals in charge of prevention and training efforts, and commanders better understand the full breadth of these experiences.

The Department of Defense (DoD) Workplace and Gender Relations Survey of Active Duty Members (WGRA)

assesses whether service members experienced behaviors consistent with legal and policy definitions of sexual assault or sexual harassment in the past year.<sup>2</sup> For the most-serious experiences identified by respondents, the WGRA also measures a wide variety of victim characteristics, perpetrator characteristics, specific behaviors, and the context in which events occurred. Many reports have been published that examine these characteristics and document how common they are across the military and within particular subgroups of service members—such as among men compared with women, heterosexual victims versus victims who are members of sexual minorities, and soldiers at high-risk installations versus lower-risk ones.<sup>3</sup> These previous reports often provide only a description of how common each characteristic is in isolation and do not offer information about how different characteristics of a given experience are related to each other. This is problematic because the associations



among these different characteristics can be crucial to prevention efforts.

As an example, previous reports have said that 20 percent of assault victims indicate that their work supervisor was a perpetrator, and 40 percent of assault victims were drinking alcohol at the time of their assault.<sup>4</sup> The success of a sexual assault prevention program that stresses the need for supervisors to avoid drinking with subordinates depends on the relationship between these two characteristics. It is possible there are no instances of sexual assaults involving both supervisors and alcohol, in which case the program likely would not be effective at preventing sexual assaults. A more useful description of sexual assault and sexual harassment experiences would reflect how the victim, perpetrator, behavioral, and situational characteristics of a sexual assault or sexual harassment event are related to one another and would represent the full list of these experiences. Therefore, the goal of this report is to describe the variety of sexual assault and sexual harassment events among active-duty soldiers in a way that simultaneously accounts for multiple characteristics of these experiences.

In this report, we present different types of sexual assault and sexual harassment experiences using soldiers' self-reported responses to questions from the 2018 WGRA.<sup>5</sup> It is important to keep in mind that we do not have detailed information about *all* sexual assault and sexual harassment experiences among soldiers. Rather, the WGRA asks these detailed questions about the respondent's self-reported worst or most serious experience in the year prior to the survey. For soldiers who experienced only a single sexual assault or sexual harassment event during that year, this one event was considered their worst or most serious. For those who indicated that they

had multiple events over the prior year, our data consist of only the self-reported worst or most serious. Thus, the results presented here represent only sexual assault and sexual harassment experience types among this subset of all soldier experiences.

We use a statistical method called latent class analysis (LCA).<sup>6</sup> LCA is useful when data are complex and multidimensional, such as when victims describe multiple different aspects of their sexual assault and sexual harassment experiences. These different aspects are what specific behaviors occurred as part of the event, the characteristics of the victim and perpetrator(s), the physical location(s) of the event, and social context(s) of the event. By sorting experiences into different classes (or *types*) according to shared characteristics, this method allows us to describe a small number of more-understandable groups and better understand the full array of soldiers' experiences.

Each type of sexual assault or sexual harassment event described in the next section groups together individuals who had similar victim and event characteristics, and we describe the characteristics that make each type unique from the others (i.e., defining characteristics). When describing these characteristics, it is important to remember that all percentages refer to the proportion of sexual assault or sexual harassment *victims* experiencing them rather than the percentage of all sexual assault or sexual harassment incidents. This may seem like a minor detail, but—as noted earlier—some victims report multiple sexual assault and/or sexual harassment experiences, which means that the number of events in any given year is greater than the number of victims. Results may look very different if the unit of analysis was incidents rather than soldiers.

## INTERPRETING THESE RESULTS

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The analyses presented in this report are based on several definitions and assumptions.

- Because sexual harassment behaviors are associated with gender discrimination behaviors, we use victims of both in our analyses. For simplicity, in this report we use the term *sexual harassment* broadly to refer to gender discrimination behaviors and victims.
- For those victims with multiple sexual harassment situations or sexual assault incidents in the preceding year, the incident and perpetrator characteristics refer to the experience described by the victim as the worst or most serious.
- We analyze victims of sexual assault separately from victims of sexual harassment.
- The analyses use survey weights, a statistical technique designed to ensure that the results represent sexual assault and sexual harassment victims across the active-component Army.
- For each type of sexual assault or sexual harassment identified in our analysis, we list its most-distinctive characteristics. These are the characteristics that are either more or less common in that particular type compared with other types. These designations are based on effect sizes, which are a common way to assess the magnitude of a difference (see the appendix for more details).
- All percentages refer to the proportion of sexual assault or sexual harassment victims experiencing these events rather than the percentage of all sexual assault or sexual harassment incidents.
- The labels used for each type are intended to capture the features that distinguish a given type of sexual assault or sexual harassment from other types. However, these labels are not always a perfectly accurate description of every victim experience that was classified into that type. The method used to create types of experiences combines sexual assaults and sexual harassment events with similar characteristics, but, in order to assign all experiences to one type, there is necessarily some variation across characteristics within each type.

# TYPES OF SEXUAL ASSAULT



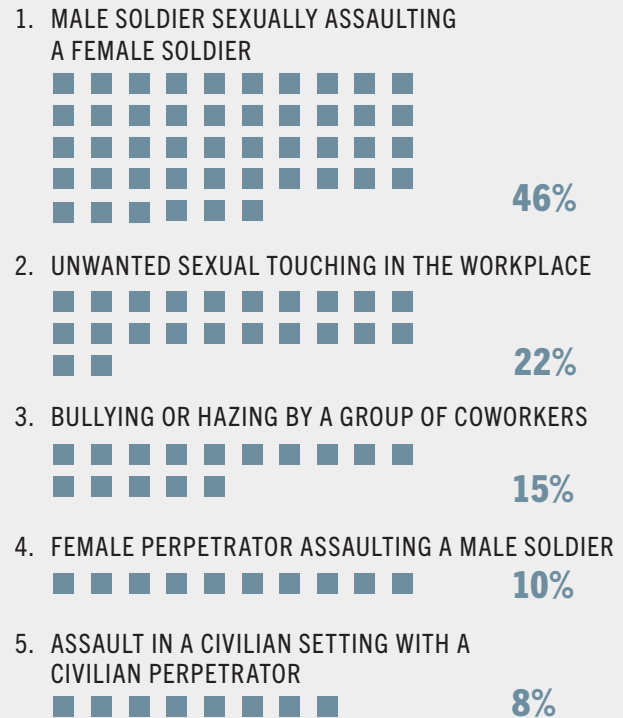
Using model fit statistics, interpretability, and our prior experience working with the data, we identified a latent class solution that created five types of sexual assault, which we named according to their most-distinguishing characteristics. Listed from most common to least common, these types are:

1. male soldier sexually assaulting a female soldier
2. unwanted sexual touching in the workplace
3. bullying or hazing by a group of coworkers
4. female perpetrator assaulting a male soldier
5. assault in a civilian setting with a civilian perpetrator.

The proportion of sexual assault victims whose worst (or only) experience fell into each type is shown in Figure 1. Recall that these percentages apply only to the population of soldiers that experienced a sexual assault, not the entire population of soldiers. For each type, a table (Tables 2–6) presents its distinguishing characteristics and indicates whether the characteristic is more or less common relative to the average across all types.

**FIGURE 1**

Sexual Assault Types, by Percentage of Victims



NOTE: The sum of percentages by sexual assault type adds to more than 100 percent because of rounding.



## FULL DESCRIPTION OF SEXUAL ASSAULT TYPES

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Before describing the distinguishing characteristics of the five sexual assault types, we first present the full descriptive results from the LCA. Table 1 provides (a) the percentage of soldiers who fall into each of the sexual assault types according to their past-year worst experience and (b) the percentage of victims within each type who indicated that a particular characteristic was part of their worst assault experience (or, if they were assaulted only once, their only experience). The table also contains two columns of information summarizing assault characteristics across all sexual assault types: (1) the percentage of victims experiencing each characteristic averaged across the types (weighting each type equally) (“Average Over Types”) and (2) the percentage of all victims who experienced each characteristic (“Average Over Individuals”).<sup>7</sup>

Cells in Table 1 are shaded to indicate characteristics that are distinctive of each particular type of sexual assault. This is done using an effect size measure, described in the appendix, that assesses how different a given percentage is relative to the percentage averaged over types (i.e., the column labeled “Average Over Types”). Cells for percentages that are uncommon compared with the average are shaded in blue (i.e., lower than average), those that are more common compared with the average are shaded in red (i.e., higher than average), and those near average are white or unshaded. The gradient of blue or red indicates how far the percentage

is below or above the average over types; darker colors indicate a larger difference, and lighter colors indicate a smaller difference.

Table 1 describes the complete experience of soldiers in each sexual assault type. For example, in column 2, if we examine victims in the “Male Soldier Sexually Assaults Female Soldier” type, victims are predominantly women, with only 10 percent being men, and the majority are junior enlisted in the ranks of E1–E4 (68 percent) and identify as heterosexual (75 percent). Yet the only victim characteristic that is uniquely different about this group compared with the average across all types of sexual assault is that men are the minority of victims, as indicated by darker blue shading. Pay grade and sexual orientation are not so different from the average as to be a distinguishing feature of this type of sexual assault.

As we explain later, the other sexual assault experience characteristics—perpetrator characteristics, when and where the event took place, and other context characteristics—can be interpreted in the same way. The descriptions of sexual assault types that follow focus only on the top seven distinguishing characteristics for each type. We limit our descriptions to these few characteristics in the interest of brevity. Note also that the name we adopt for each type does not mean that all assault experiences in that type look exactly the same, nor does the name mean that characteristics that do not align with the name do not occur among victims in that group. There are very few instances of percentages of victims within a given type that are all (i.e., 100) or nothing (i.e., 0).

**TABLE 1**

## Percentage of Sexually Assaulted Soldiers Whose Experiences Included Each Characteristic by Assault Type

Sexual Assault Experience Characteristic	Male Soldier Sexually Assaults Female Soldier	Unwanted Sexual Touching in the Workplace	Group Bullying and Hazing	Female Perpetrator, Male Victim	Civilian Setting, Civilian Perpetrator	Average over Types <sup>a</sup>	Average over Individuals <sup>b</sup>
<b>PERCENTAGE OF VICTIMS IN EACH TYPE</b>	46	22	15	10	8		
<b>VICTIM CHARACTERISTICS</b>							
Male	10	50	63	100	62	57	39
E1–E4	68	43	67	36	44	51	57
E5–E9; W1–W5	19	42	32	35	27	31	28
O1–O4	13	13	1	21	25	15	13
O5+	0	3	0	8	4	3	2
Heterosexual (vs. LGBO/NR/PNA)	75	89	44	95	33	67	72
<b>SEXUAL ASSAULT BEHAVIOR</b>							
Put their penis in your anus, mouth, or vagina	46	2	34	0	70	30	32
Put any object or any body part other than a penis into your anus, mouth, or vagina	33	12	37	0	14	19	24
Made you put any part of your body or any object into someone’s mouth, vagina, or anus	12	0	19	38	0	14	12
Intentionally touched private areas of your body	86	88	88	77	44	76	82
Made you touch private areas of their body or someone else’s body	32	15	45	32	17	28	29
<b>PERPETRATOR INTENT</b>							
Abusive or humiliating	37	61	95	16	70	56	51
Sexual purpose	99	83	68	96	100	89	90
<b>TYPE OF COERCION</b>							
Threatened or used physical force	25	28	74	18	45	38	34
<b>PERPETRATOR CHARACTERISTICS</b>							
In military	95	95	95	46	0	66	83
One person	72	70	17	71	79	62	64
Only men	96	79	60	3	97	67	79
Mix of men and women	3	8	40	0	3	11	9
Only women	2	13	0	97	0	22	12

**TABLE 1—CONTINUED**

Sexual Assault Experience Characteristic	Male Soldier Sexually Assaults Female Soldier	Unwanted Sexual Touching in the Workplace	Group Bullying and Hazing	Female Perpetrator, Male Victim	Civilian Setting, Civilian Perpetrator	Average over Types <sup>a</sup>	Average over Individuals <sup>b</sup>
<b>VICTIM RELATIONSHIP TO PERPETRATOR</b>							
Supervisor or another higher-ranked member of the victim's chain of command	11	21	51	9	0	18	19
Current or former romantic relationship <sup>c</sup>	9	0	10	3	6	6	7
Stranger	13	4	23	21	43	21	15
<b>TIME AND PLACE OF ASSAULT</b>							
On base or installation	60	95	90	30	0	55	64
In someone's home <sup>d</sup>	53	11	51	21	35	34	39
In a social setting <sup>e</sup>	46	4	34	61	47	38	37
At work, during duty hours	8	88	82	26	0	41	37
<b>PERCEIVED BULLYING AND HAZING</b>							
Victim described assault as bullying	8	24	100	6	0	28	24
Victim described assault as hazing	4	15	80	4	0	21	17
<b>ALCOHOL USE</b>							
Victim was drinking alcohol	58	0	20	63	63	40	40
Perpetrator was drinking alcohol	65	3	31	72	36	41	45

SOURCE: Features data from Breslin et al., 2019.

NOTE: Cell shading indicates that specific experience characteristics are more or less than the average over all types of sexual assault. The darker the shading, the larger the distance from the average of all types. Red cells indicate higher-than-average prevalence (i.e., more common); blue cells indicate lower-than-average prevalence (i.e., uncommon). Numbers in the cells are the actual percentages of victims assigned to each profile group that experienced each assault characteristic. Numbers might not sum to 100 because of rounding. LGBO = lesbian, gay, bisexual, other; NR = no response; PNA = prefer not to answer.

<sup>a</sup> Average over types is the average of the percentages over the five assault types.

<sup>b</sup> Average over individuals is the percentage of all sexual assault victims who experienced each characteristic regardless of type.

<sup>c</sup> Includes current or former spouse, significant other (i.e., boyfriend or girlfriend), and someone the respondent has a child with.

<sup>d</sup> Includes the respondent's home or a friend's home.


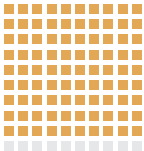
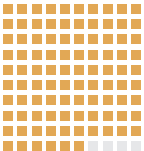
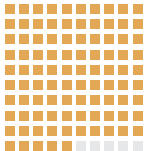
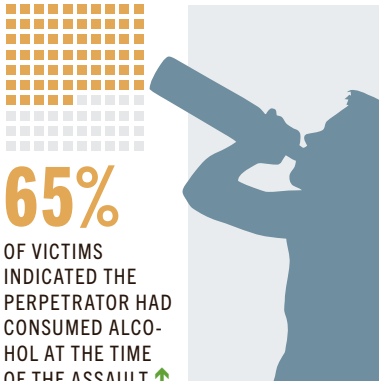

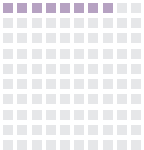
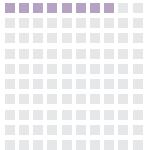
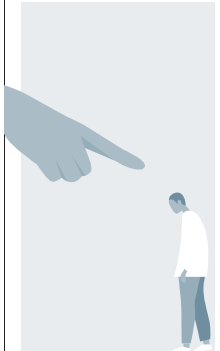
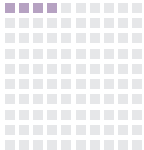
<sup>e</sup> Includes out with friends or at a party.

## MALE SOLDIER SEXUALLY ASSAULTING A FEMALE SOLDIER

A male soldier sexually assaulting a female soldier is the most common type of sexual assault experience; 46 percent of all victims had experiences that fell into this type. Table 2 shows that 90 percent of the victims in this type of sexual assault were women and this percentage is much higher than the average across all types of sexual assault. Although not every victim of this type of assault was a woman, our name for this type reflects the fact that having a female victim is a distinctive feature of this type relative to the other types. Similarly, Table 2 shows that 2 percent of victims identified the perpetrators as all women, however the vast majority of victims identified all the perpetrators as men.

**TABLE 2**

Distinguishing Characteristics of the Male Soldier Sexually Assaulting a Female Soldier Type (46 percent of sexual assault victims)

<p><b>Common</b> Characteristics relative to the average across all types of sexual assault</p>		 <p><b>90%</b> OF VICTIMS WERE WOMEN ↑↑</p>	 <p><b>96%</b> OF VICTIMS IDENTIFIED ALL PERPETRATORS AS MEN ↑↑</p>	 <p><b>95%</b> OF VICTIMS IDENTIFIED AT LEAST ONE PERPETRATOR AS BEING IN THE MILITARY ↑</p>	 <p><b>65%</b> OF VICTIMS INDICATED THE PERPETRATOR HAD CONSUMED ALCOHOL AT THE TIME OF THE ASSAULT ↑</p>
<p><b>Uncommon</b> Characteristics relative to the average across all types of sexual assault</p>	 <p><b>2%</b> OF VICTIMS IDENTIFIED ALL PERPETRATORS AS WOMEN ↓↓</p>	 <p><b>8%</b> OF VICTIMS' EXPERIENCES OCCURRED AT WORK, DURING DUTY HOURS ↓</p>	 <p><b>8%</b> OF VICTIMS CHARACTERIZED THE INCIDENT AS BULLYING ↓</p>	 <p><b>4%</b> OF VICTIMS CHARACTERIZED THE INCIDENT AS HAZING ↓</p>	

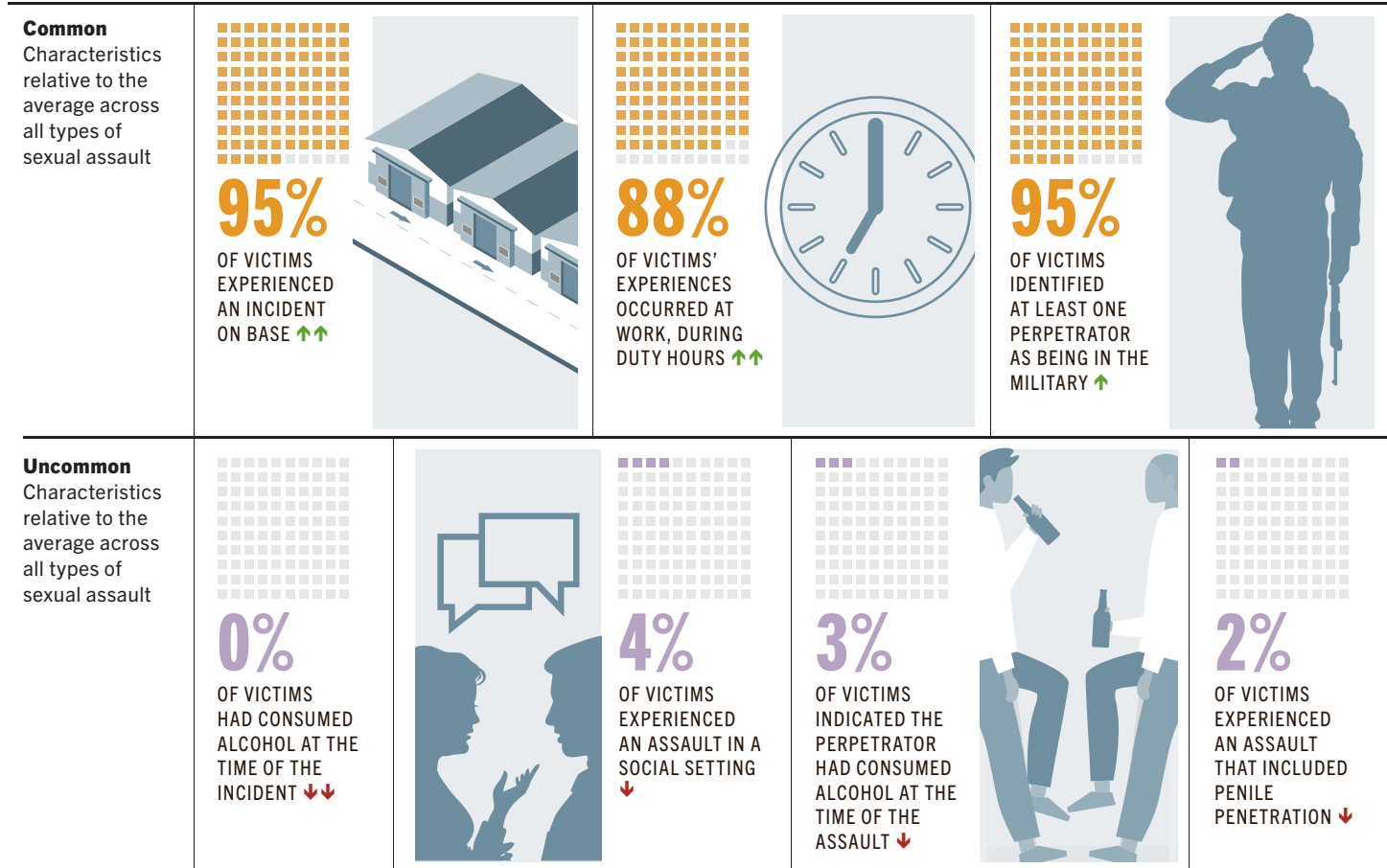
NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types. ↓↓ indicates very uncommon characteristics compared with the average across all types; ↓ indicates uncommon characteristics compared with the average across all types.

## UNWANTED TOUCHING IN THE WORKPLACE

The second most common type of sexual assault is unwanted touching in the workplace (Table 3); 22 percent of all victims had experiences that fell into this type.

**TABLE 3**

Distinguishing Characteristics of the Unwanted Touching in the Workplace Type (22 percent of sexual assault victims)



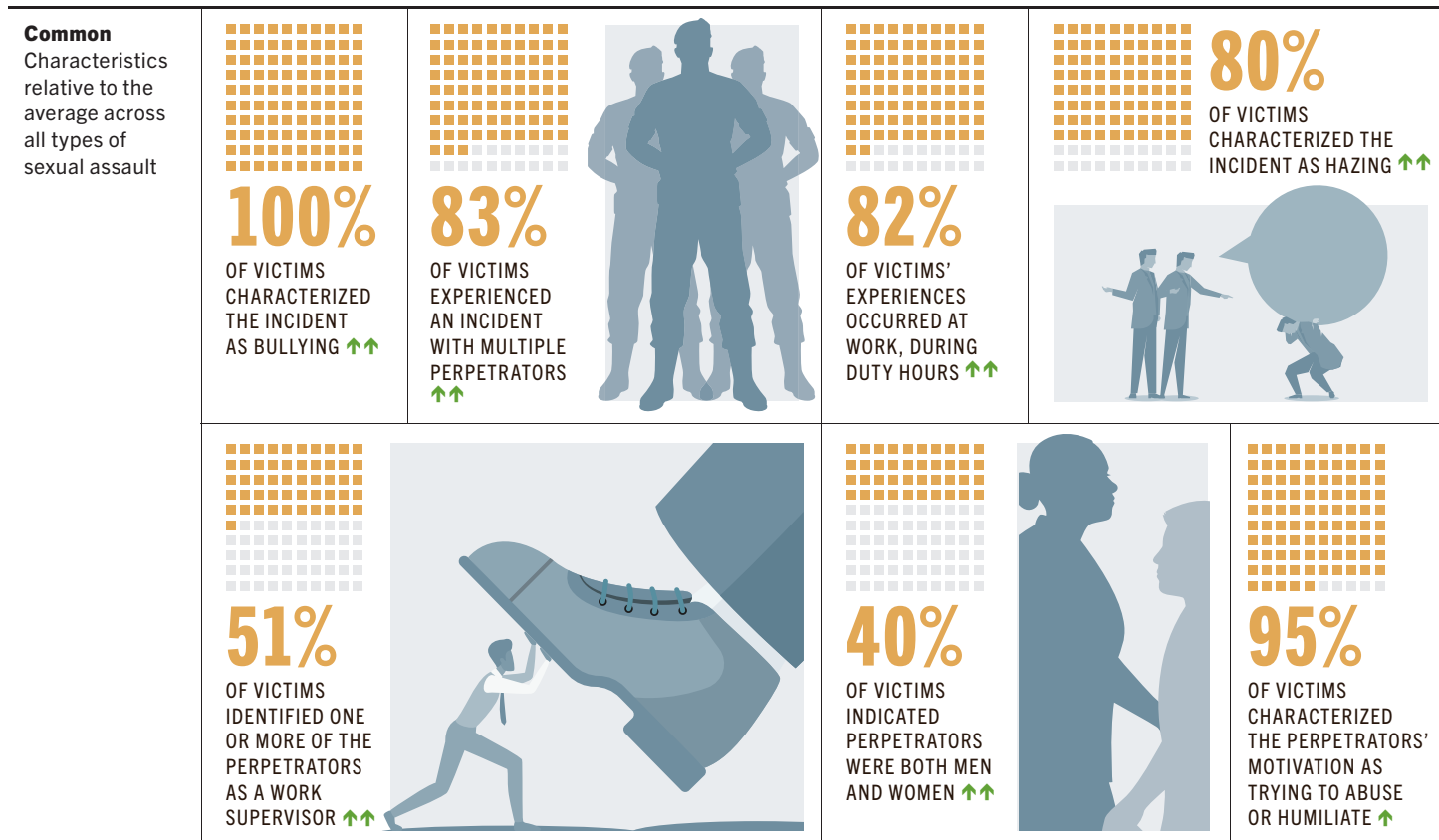
NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types. ↓↓ indicates very uncommon characteristics compared with the average across all types; ↓ indicates uncommon characteristics compared with the average across all types.

## BULLYING OR HAZING BY A GROUP OF COWORKERS

Bullying or hazing by a group of coworkers is the third most common type of sexual assault (Table 4); 15 percent of all victims had experiences that fell into this type. None of the most distinct characteristics for this type of sexual assault experience were less common than average across types.

**TABLE 4**

Distinguishing Characteristics of the Bullying or Hazing by a Group of Coworkers Type (15 percent of sexual assault victims)




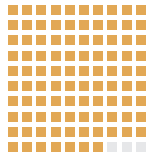
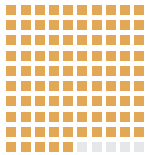
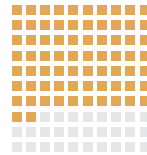
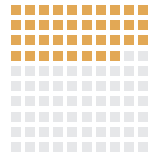
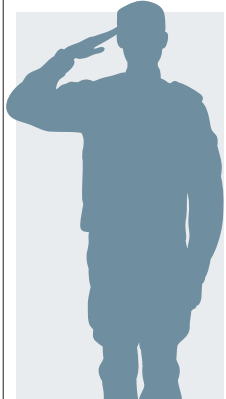

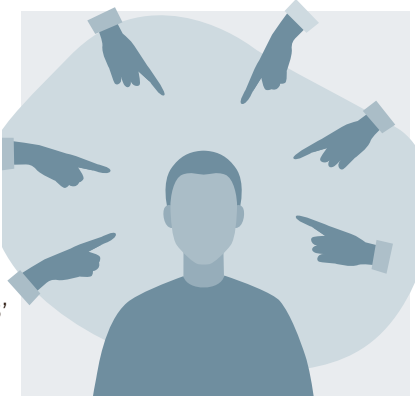

NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types.

## FEMALE PERPETRATOR ASSAULTING A MALE SOLDIER

A female perpetrator assaulting a male soldier is the fourth most common type of sexual assault (Table 5); 10 percent of all victims had experiences that fell into this type.

**TABLE 5**

Distinguishing Characteristics of the Female Perpetrator Assaulting a Male Soldier Type (10 percent of sexual assault victims)

<p><b>Common</b> Characteristics relative to the average across all types of sexual assault</p>	 <p><b>100%</b> OF VICTIMS WERE MEN ↑↑</p>	 <p><b>97%</b> OF VICTIMS IDENTIFIED ALL PERPETRATORS AS WOMEN ↑↑</p>	 <p><b>95%</b> OF VICTIMS IDENTIFIED AS HETEROSEXUAL ↑</p>	 <p><b>72%</b> OF VICTIMS INDICATED THE PERPETRATOR HAD CONSUMED ALCOHOL AT THE TIME OF THE ASSAULT ↑</p>	 <p><b>38%</b> OF VICTIMS EXPERIENCED AN INCIDENT WHERE THEY WERE FORCED TO PENETRATE THE PERPETRATOR ↑</p>
<p><b>Uncommon</b> Characteristics relative to the average across all types of sexual assault</p>	 <p><b>3%</b> OF VICTIMS IDENTIFIED ALL PERPETRATORS AS MEN ↓↓</p>	 <p><b>16%</b> OF VICTIMS CHARACTERIZED THE PERPETRATORS' MOTIVATION AS TRYING TO ABUSE OR HUMILIATE ↓↓</p>		 <p><b>0%</b> OF VICTIMS EXPERIENCED AN INCIDENT THAT INCLUDED PENILE PENETRATION OF THE VICTIM ↓</p>	



NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types. ↓↓ indicates very uncommon characteristics compared with the average across all types; ↓ indicates uncommon characteristics compared with the average across all types.

## ASSAULT IN A CIVILIAN SETTING BY A CIVILIAN PERPETRATOR

The least common type of sexual assault is assault in a civilian setting by a civilian perpetrator (Table 6); 8 percent of all victims had experiences that fell into this type.

**TABLE 6**

Distinguishing Characteristics of the Assault in a Civilian Setting by a Civilian Perpetrator Type (8 percent of sexual assault victims)

<p><b>Common</b> Characteristics relative to the average across all types of sexual assault</p>	 <p><b>70%</b> OF VICTIMS EXPERIENCED AN INCIDENT THAT INCLUDED PENILE PENETRATION ↑↑</p>		 <p><b>97%</b> OF VICTIMS IDENTIFIED ALL PERPETRATORS AS MEN ↑</p>			
<p><b>Uncommon</b> Characteristics relative to the average across all types of sexual assault</p>	<p><b>0%</b> OF VICTIMS IDENTIFIED AT LEAST ONE PERPETRATOR AS BEING IN THE MILITARY ↓↓</p>	<p><b>0%</b> OF VICTIMS EXPERIENCED AN INCIDENT ON BASE ↓↓</p>	<p><b>0%</b> OF VICTIMS EXPERIENCED AN INCIDENT AT WORK, DURING DUTY HOURS ↓↓</p>	<p><b>44%</b> OF VICTIMS EXPERIENCED THE PERPETRATOR INTENTIONALLY TOUCHING PRIVATE AREAS ↓</p>	<p><b>33%</b> OF VICTIMS IDENTIFIED AS HETEROSEXUAL ↓</p>	<p><b>3%</b> OF VICTIMS IDENTIFIED ALL PERPETRATORS AS WOMEN ↓</p>

NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types. ↓↓ indicates very uncommon characteristics compared with the average across all types; ↓ indicates uncommon characteristics compared with the average across all types.





# TYPES OF SEXUAL HARASSMENT



Using model fit statistics, ease of interpretation, and our prior experience working with the data, we identified eight types of sexual harassment, which are named according to the characteristics that best distinguish them from one another. Listed from most common to least common these types are:

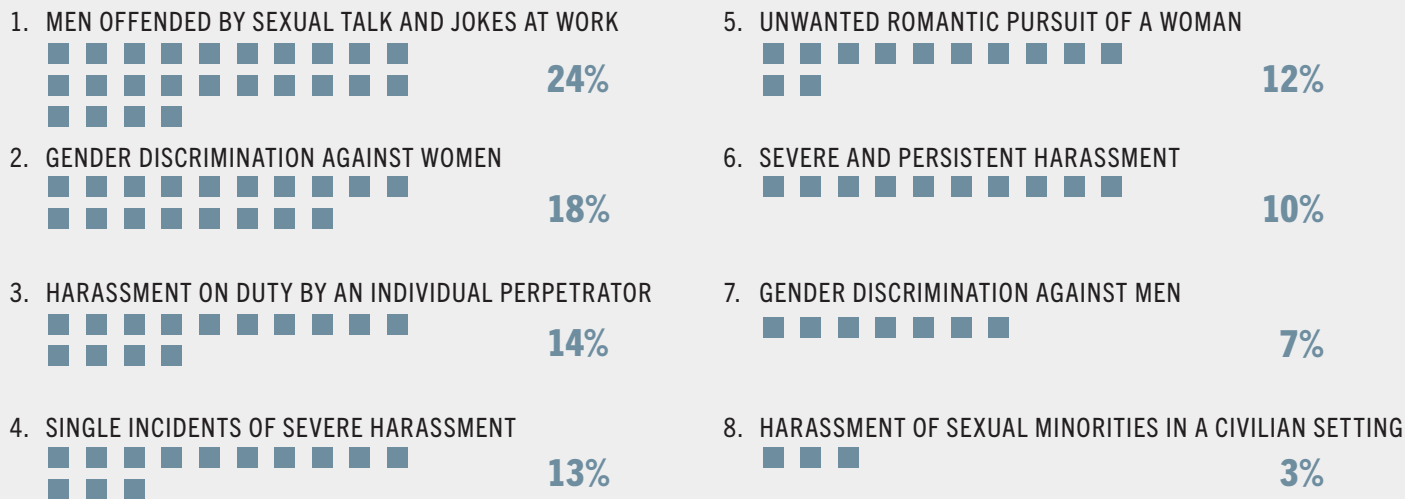
1. men offended by sexual talk and jokes at work
2. gender discrimination against women
3. harassment on duty by an individual perpetrator
4. single incidents of severe harassment
5. unwanted romantic pursuit of a woman
6. severe and persistent harassment
7. gender discrimination against men
8. harassment of sexual minorities in a civilian setting.

The proportion of sexual harassment victims whose worst (or only) experience fell into each type is shown in Figure 2. These percentages apply only to the population of soldiers that experienced sexual harassment, not the entire population of soldiers. For each type, a table (Tables 8–15) presents the distinguishing characteristics, and indicates whether the characteristic is more or less common relative to the average across all types. In some cases, the most-distinct characteristics might include only characteristics that are more common than average.



**FIGURE 2**

## Sexual Harassment Types, by Percentage of Victims



NOTE: The sum of percentages by sexual harassment type sums to more than 100 percent because of rounding.

## GENERAL DESCRIPTION OF SEXUAL HARASSMENT TYPES

Before describing the distinguishing characteristics of the eight sexual harassment types, we first present the full descriptive results from the LCA. Table 7 is identical to Table 1, except that it presents the results for sexual *harassment* types (rather than sexual *assault* types) according to victims' only or worst experience. As a reminder, cells in the table are shaded to indicate characteristics that are distinctive of each particular type of sexual harassment. Uncommon characteristics are shaded in blue (i.e., lower than average), those that are more common are shaded in red (i.e., higher than aver-

age), and those near average are white or unshaded. The gradient of blue or red indicates how far below or above the percentage is from the average over types; darker colors indicate a larger difference, and lighter colors indicate a smaller difference.

For brevity, the sexual harassment type descriptions that follow focus only on the top seven distinguishing characteristics for each type. As we did with the sexual assault types, the name we adopt for each harassment type does not mean that all experiences in that type look exactly the same, nor that characteristics that do not align with the name do not occur among victims in a particular group.

**TABLE 7**

## Percentage of Sexually Harassed Soldiers Whose Experiences Included Each Characteristic by Harassment Type

Sexual Harassment Experience Characteristic	Men Offended by Sexual Talk and Jokes	Gender Discrimination Against Women	Sexual Harassment on Duty, Solo Perpetrator	Single Incidents of Severe Sexual Harassment	Unwanted Romantic Pursuit of Women	Severe and Persistent Sexual Harassment	Gender Discrimination Against Men	Sexual Minority Civilian Setting	Average over Types <sup>a</sup>	Average over Individuals <sup>b</sup>
<b>PERCENTAGE OF VICTIMS IN EACH TYPE</b>	24	18	14	13	12	10	7	3		
<b>VICTIM CHARACTERISTICS</b>										
Male	88	0	86	71	16	54	89	86	61	58
E1-E4	43	40	46	61	61	54	35	82	53	49
E5-E9, W1-W5	38	36	35	22	26	34	51	18	33	34
O1-O4	18	24	19	16	12	9	13	0	14	16
O5+	1	1	0	2	1	2	1	0	1	1
Heterosexual (vs. LGBO/NR/PNA)	78	69	88	81	74	69	69	38	71	75
<b>SEXUAL HARASSMENT BEHAVIOR</b>										
Repeated sexual jokes	46	28	24	14	20	86	13	38	33	34
Repeatedly said that you do not act like a woman or man is supposed to	30	36	29	15	2	65	46	69	36	31
Repeated sexual gestures	14	4	7	2	16	81	10	60	24	17
Displayed or sent sexually explicit material	11	5	4	14	6	53	1	41	17	13
Repeated sexual talk <sup>c</sup>	38	26	28	15	34	91	16	50	37	35
Repeated sexual comments about appearance	11	21	14	5	34	83	6	48	28	23
Took or shared sexual photos or video of you	1	0	0	7	5	18	2	17	6	4
Repeated attempts to establish unwanted relationship	2	18	0	9	78	52	1	24	23	20
Nonconsensual sexual touching	3	6	8	34	28	37	3	14	17	15
Nonconsensual nonsexual touching	6	9	20	9	12	23	5	9	12	11

**TABLE 7—CONTINUED**

Sexual Harassment Experience Characteristic	Men Offended by Sexual Talk and Jokes	Gender Discrimination Against Women	Sexual Harassment on Duty, Solo Perpetrator	Single Incidents of Severe Sexual Harassment	Unwanted Romantic Pursuit of Women	Severe and Persistent Sexual Harassment	Gender Discrimination Against Men	Sexual Minority Civilian Setting	Average over Types <sup>a</sup>	Average over Individuals <sup>b</sup>
<i>Quid pro quo</i> <sup>d</sup>	1	5	0	2	10	38	4	30	11	8
Sexist comments about the ability to do your job <sup>e</sup>	5	73	0	6	11	62	44	19	27	26
Ignored, mistreated, insulted because of gender	6	85	5	4	11	73	91	47	40	34
Occurred once	37	17	39	72	11	3	15	35	29	30
<b>PERPETRATOR CHARACTERISTICS</b>										
In military	98	99	93	82	93	99	97	29	86	93
Higher relative rank	22	37	18	13	27	48	52	0	27	27
Supervisor or higher-ranked in the victim's chain of command	42	62	37	5	28	81	64	17	42	43
One person	9	30	96	88	66	15	38	59	50	46
Only men	57	73	87	67	83	44	14	21	56	63
Mix of men and women	42	26	7	18	11	52	45	65	33	30
Only women	1	1	7	15	6	4	40	15	11	8
<b>TIME AND PLACE OF HARASSMENT</b>										
On base/installation	94	93	92	60	90	98	92	27	81	87
Off base	17	18	5	20	33	66	19	12	24	22
Online	18	19	0	20	47	64	10	4	23	23
At work, during duty hours	88	91	100	28	69	90	88	0	69	78

SOURCE: Features data from Breslin et al., 2019.

NOTE: Cell shading indicates that specific experience characteristics are more or less than the average over all types of sexual harassment events. The darker the shading, the larger the distance from the average of all types. Red cells indicate higher than average prevalence (i.e., more common); blue cells indicate lower than average prevalence (i.e., uncommon). Numbers in the cells are the actual percentages of victims assigned to each profile group who experienced each harassment characteristic. Numbers might not sum to 100 because of rounding.

<sup>a</sup> Average over types is the average of the percentages over the eight harassment types.

<sup>b</sup> Average over individuals is the percentage of all sexual harassment victims who experienced each characteristic regardless of type.

<sup>c</sup> Combines two behaviors: “repeatedly told you about their sexual activities” and “repeatedly asked you questions about your sex life or sexual interests.”

<sup>d</sup> Combines two behaviors: “made you feel like you would get some workplace benefit in exchange for doing something sexual” and “made you feel like you would be punished or treated unfairly if you refused to do something sexual.”

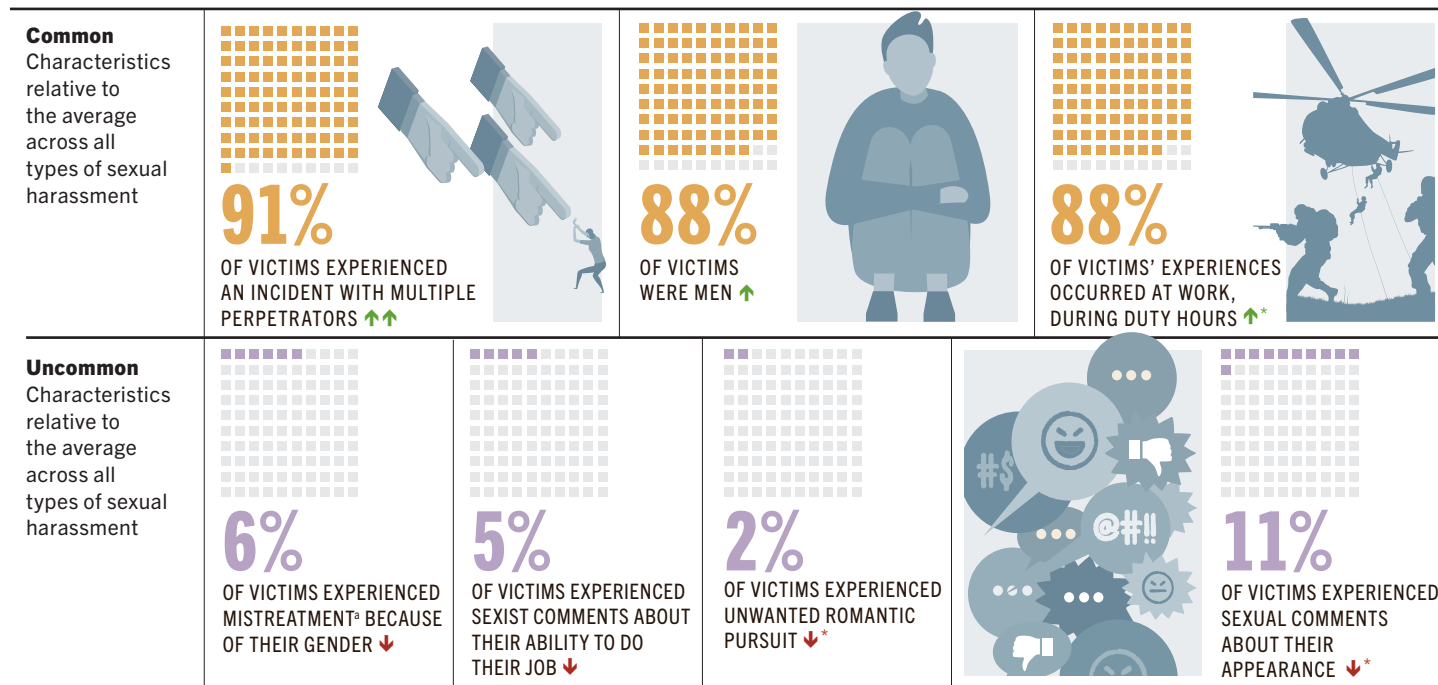
<sup>e</sup> Actual survey language is “said that [men][women] are not as good as [women][men] at your job, or that [men][women] should be prevented from having your job.”

## MEN OFFENDED BY SEXUAL TALK AND JOKES AT WORK

The most common type of sexual harassment is men being offended by sexual talk at work; 24 percent of all victims had experiences that fell into this type (Table 8). Note that this is the only type of sexual harassment where the most distinctive characteristics included those that could be described as “somewhat” more common (or uncommon) than the average across all types.

**TABLE 8**

Distinguishing Characteristics of the Men Offended by Sexual Talk and Jokes at Work Type (24 percent of sexual harassment victims)



NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types; ↑\* indicates somewhat common characteristics compared with the average across all types.

↓ indicates uncommon characteristics compared with the average across all types; ↓\* indicates somewhat uncommon characteristics compared with the average across all types.

\* Mistreatment includes being ignored, mistreated, or insulted because of gender.

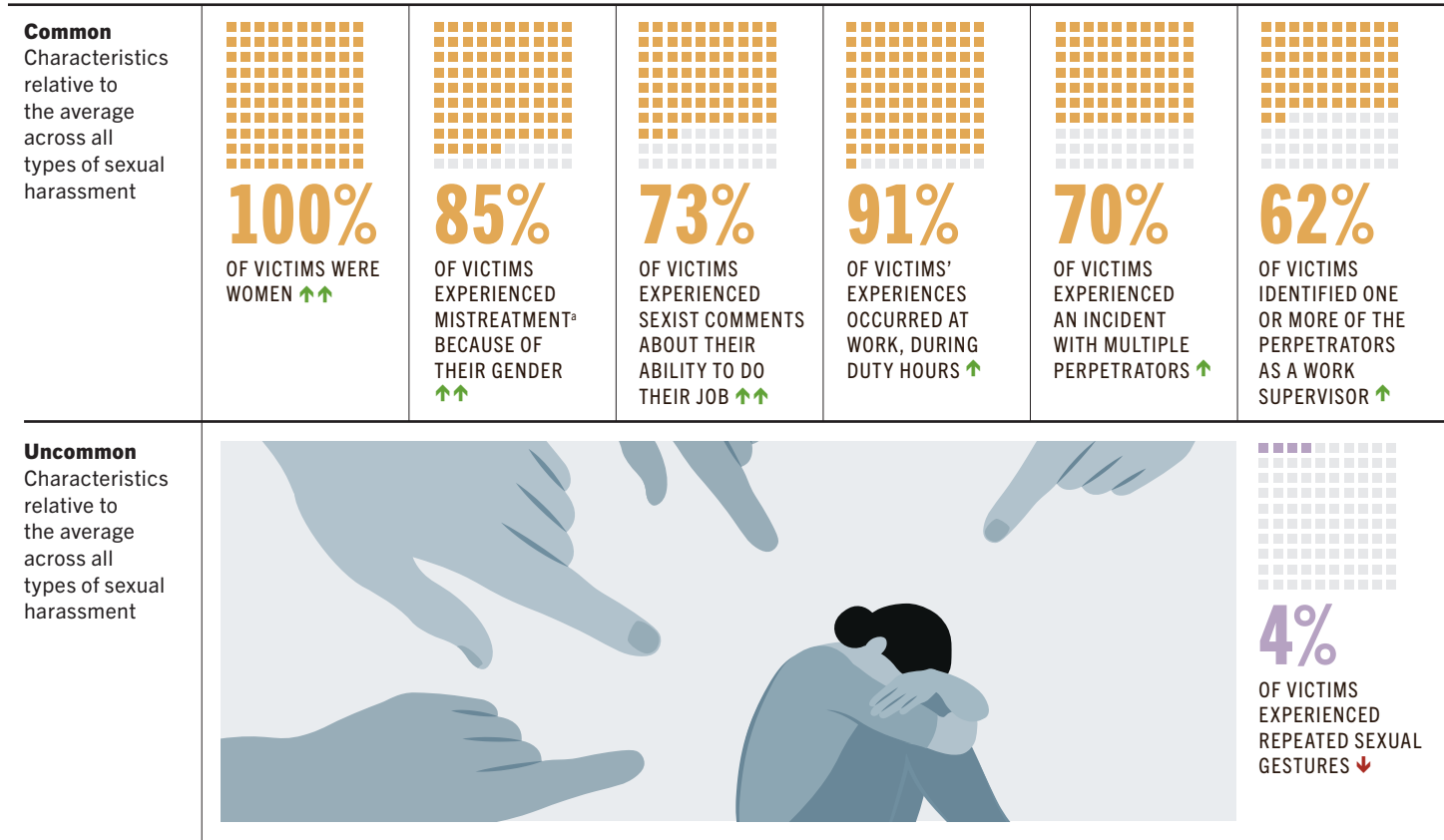
Sexual harassment victims often experience a wide variety of harassing, discriminatory, or sexist behavior. For this type of harassment, however, most of the common harassment and discrimination behaviors are not experienced by victims. With the exception of offensive sexual jokes and unwanted sexual talk behaviors (experienced by 46 percent and 38 percent of victims, respectively), other behaviors were experienced less frequently by victims in this type compared with those who experience the other types of sexual harassment. This type is characterized by victims who experienced only offensive sexually explicit talk and jokes without experiencing the broader set of harassing behaviors.

## GENDER DISCRIMINATION AGAINST WOMEN

This is the second most common type of sexual harassment (Table 9); 18 percent of all victims had experiences that fell into this type.

**TABLE 9**

Distinguishing Characteristics of the Gender Discrimination Against Women Type (18 percent of sexual harassment victims)



NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types.

↓ indicates uncommon characteristics compared with the average across all types.



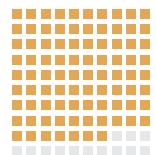
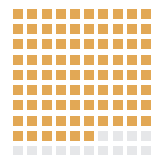
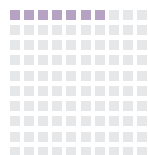
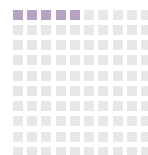
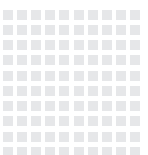


<sup>a</sup> Mistreatment includes being ignored, mistreated, or insulted because of gender.

## HARASSMENT ON DUTY BY AN INDIVIDUAL PERPETRATOR

This is the third most common type of sexual harassment (Table 10); 14 percent of all victims had experiences that fell into this type.

**TABLE 10**

Distinguishing Characteristics of the Harassment on Duty by an Individual Perpetrator Type (14 percent of sexual harassment victims)

<p><b>Common</b> Characteristics relative to the average across all types of sexual harassment</p>	 <p>96% OF VICTIMS EXPERIENCED AN INCIDENT WITH A SINGLE PERPETRATOR ↑↑</p>	 <p>100% OF VICTIMS EXPERIENCED HARASSMENT AT WORK, DURING DUTY HOURS ↑</p>	 <p>87% OF VICTIMS IDENTIFIED ALL PERPETRATORS AS MEN ↑</p>	 <p>86% OF VICTIMS WERE MEN ↑</p>	
<p><b>Uncommon</b> Characteristics relative to the average across all types of sexual harassment</p>	 <p>7% OF VICTIMS IDENTIFIED THE PERPETRATORS AS A MIX OF MEN AND WOMEN ↓</p>	 <p>5% OF VICTIMS EXPERIENCED MISTREATMENT* BECAUSE OF THEIR GENDER ↓</p>	 <p>0% OF VICTIMS EXPERIENCED SEXIST COMMENTS ABOUT THEIR ABILITY TO DO THEIR JOB ↓</p>	 <p>0% OF VICTIMS EXPERIENCED UNWANTED ROMANTIC PURSUIT ↓</p>	 <p>0% OF VICTIMS EXPERIENCED ONLINE HARASSMENT ↓</p>

NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types.

↓ indicates uncommon characteristics compared with the average across all types.

\* Mistreatment includes being ignored, mistreated, or insulted because of gender.

This type has some similarities to the most common type of harassment, *Men offended by sexual talk and jokes at work*, because (a) the victims are predominately men, and (b) they experience fewer different forms of harassing behaviors than victims of most other harassment types. The most common forms of harassment in this type are: Repeatedly saying you do not act like a woman or man is supposed to (29 percent), Offensive sexual talk (28 percent), Offensive sexual jokes (24 percent), and Nonconsensual sexual touching (20 percent). The primary difference between these two types is that *Men offended by sexual talk and jokes at work* involves a group of perpetrators, while *Harassment on duty by an individual perpetrator* involves offensive or insulting behaviors by a single individual that often directly target the victim.

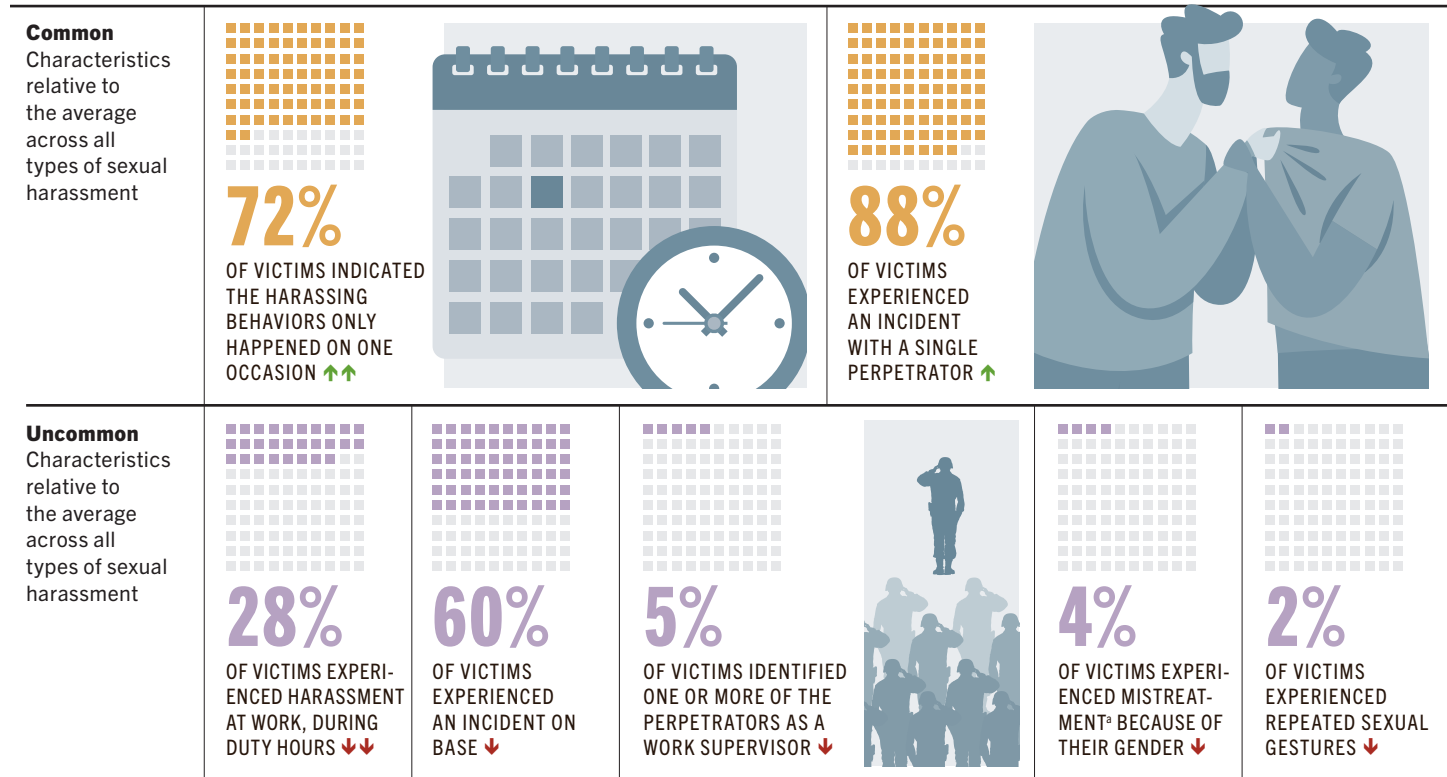


## SINGLE INCIDENTS OF SEVERE HARASSMENT

This is the fourth most common type of sexual harassment (Table 11); 13 percent of all victims had experiences that fell into this type.

**TABLE 11**

Distinguishing Characteristics of the Single Incidents of Severe Harassment Type (13 percent of sexual harassment victims)



NOTES: **↑↑** indicates very common characteristics compared with the average across all types; **↑** indicates common characteristics compared with the average across all types. **↓↓** indicates very uncommon characteristics compared with the average across all types; **↓** indicates uncommon characteristics compared with the average across all types. \* Mistreatment includes being ignored, mistreated, or insulted because of gender.

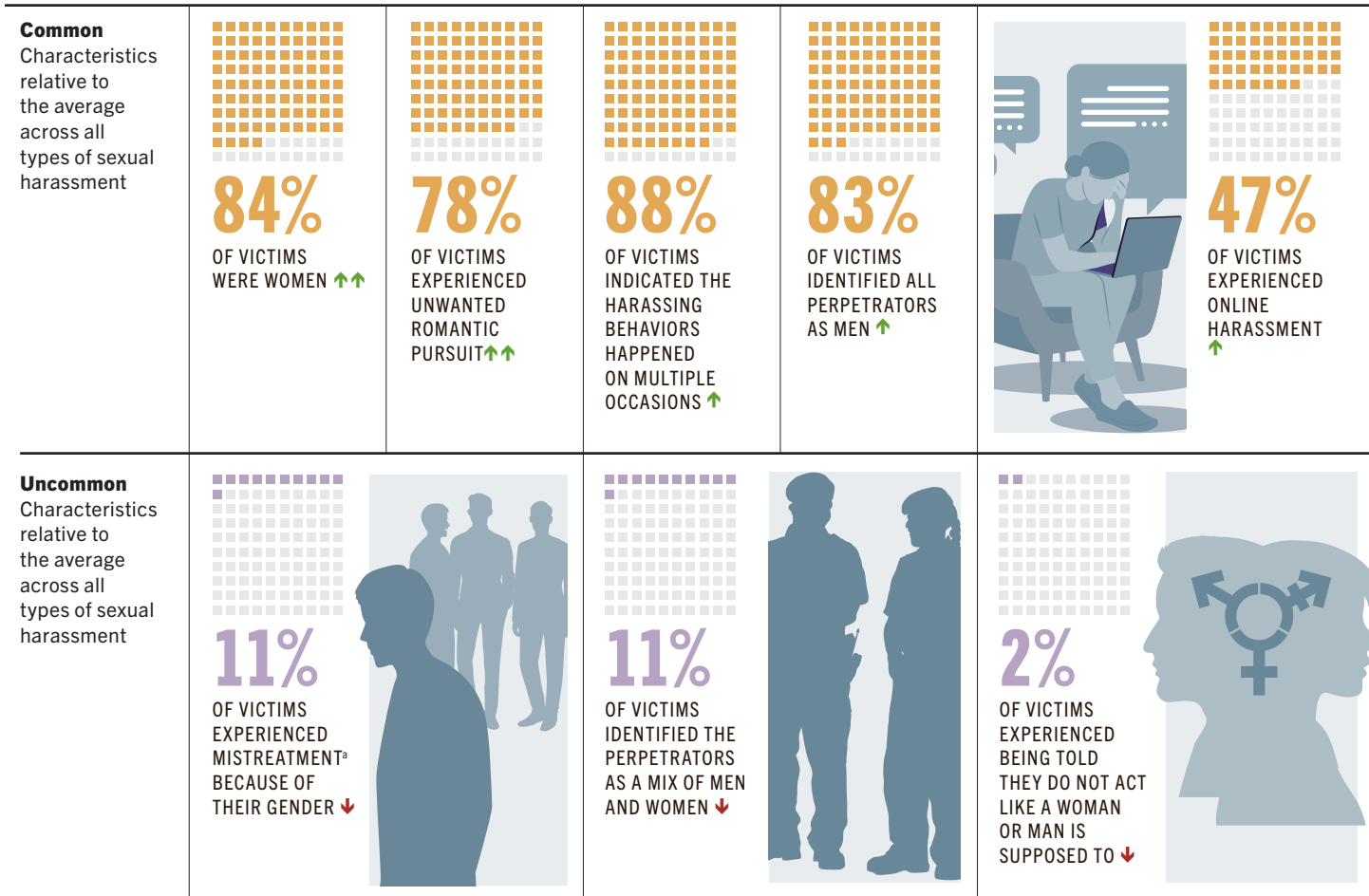
Being classified as experiencing sexual harassment requires that the offensive sexual behaviors of coworkers be persistent or severe. This type of harassment is defined by events that are severe but not persistent. Although the victims of this type of harassment did not experience a wide variety of harassment behaviors, they were likely to experience the more-severe forms. The most common harassment behavior for this type was unwanted sexual touching (34 percent), a behavior that often qualifies as criminal sexual assault, not just sexual harassment.

## UNWANTED ROMANTIC PURSUIT OF WOMEN

This is the fifth most common type of sexual harassment (Table 12); 12 percent of all victims had experiences that fell into this type.

**TABLE 12**

Distinguishing Characteristics of the Unwanted Romantic Pursuit of Women Type (12 percent of sexual harassment victims)



NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types.

↓ indicates uncommon characteristics compared with the average across all types.

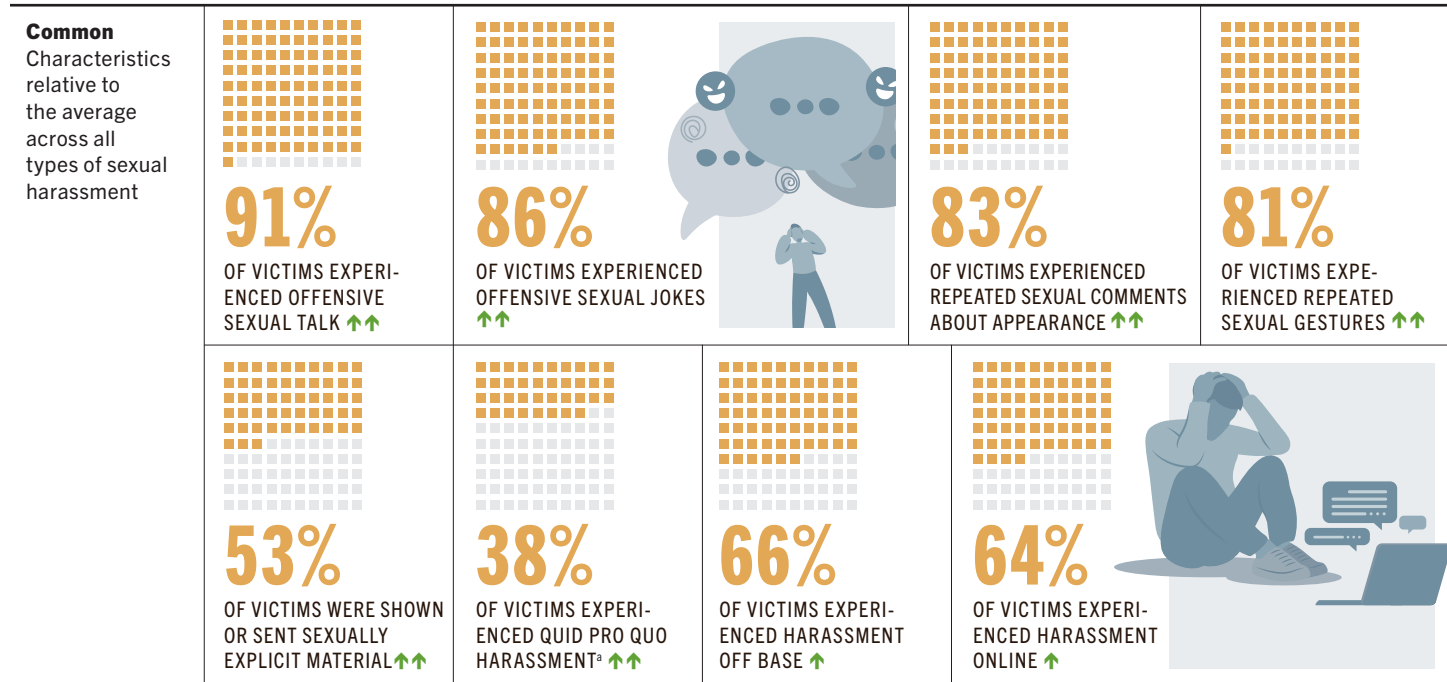
<sup>a</sup> Mistreatment includes being ignored, mistreated, or insulted because of gender.

## SEVERE AND PERSISTENT HARASSMENT

This is the sixth most common type of sexual harassment experience (Table 13); 10 percent of all victims had experiences that fell into this type. None of the most-distinct characteristics for this type of sexual harassment experience were less common than average across types.

**TABLE 13**

Distinguishing Characteristics of the Severe and Persistent Harassment Type (10 percent of sexual harassment victims)



NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types.

<sup>a</sup> *Quid pro quo* refers to instances in which a coworker made you feel like you would get some workplace benefit in exchange for doing something sexual and/or made you feel like you would be punished or treated unfairly if you refused to do something sexual.

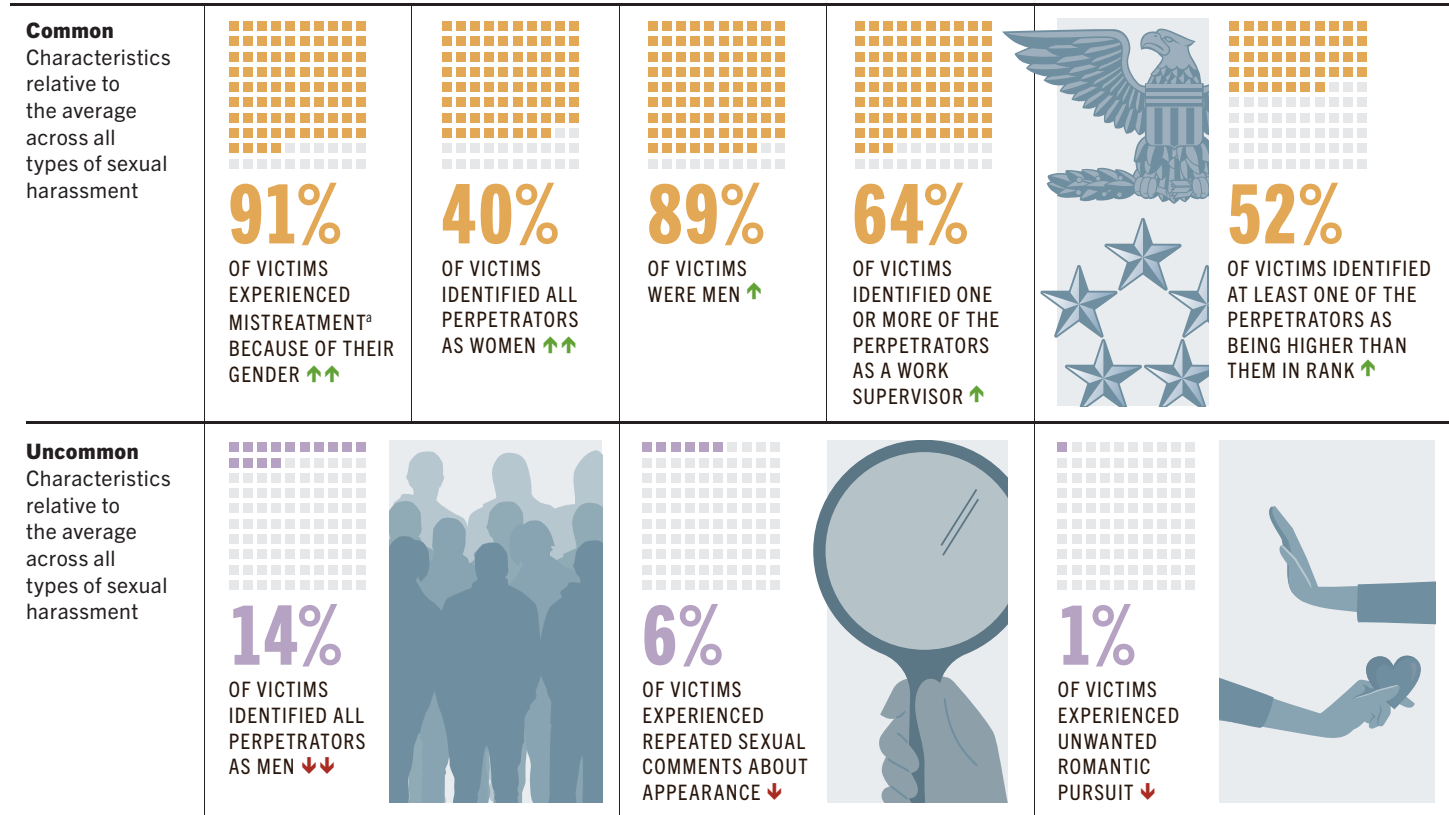
Although only 10 percent of victims experienced sexual harassment of this type, the harassment they experienced includes virtually all forms of harassing behavior. Its primary distinctive characteristics are that it involves multiple forms of harassing behavior occurring across multiple locations. In addition to these behavioral features, the perpetrator characteristics of this type of harassment are distinctive (81 percent identify a work supervisor as a perpetrator; 85 percent identify multiple perpetrators), as is the frequency with which it occurs (97 percent of victims indicate the behaviors happened on more than one occasion). Although this is not the most common type of sexual harassment, it is the most persistent and severe.

## GENDER DISCRIMINATION AGAINST MEN

This is the seventh most common type of sexual harassment (Table 14); 7 percent of all victims had experiences that fell into this type.

**TABLE 14**

Distinguishing Characteristics of the Gender Discrimination Against Men Type (7 percent of sexual harassment victims)




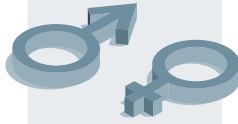




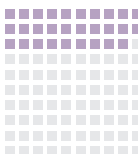
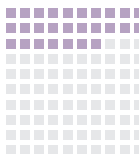



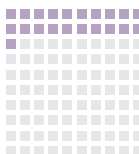
NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types. ↓↓ indicates very uncommon characteristics compared with the average across all types; ↓ indicates uncommon characteristics compared with the average across all types.  
<sup>a</sup> Mistreatment includes being ignored, mistreated, or insulted because of gender.

## HARASSMENT OF SEXUAL MINORITIES IN A CIVILIAN SETTING

This is the least common type of sexual harassment (Table 15); 3 percent of all victims had experiences that fell into this type.

**TABLE 15**

Distinguishing Characteristics of the Harassment of Sexual Minorities in a Civilian Setting Type (3 percent of sexual harassment victims)

<p><b>Common</b> Characteristics relative to the average across all types of sexual harassment</p>	 <p><b>69%</b></p> <p>OF VICTIMS EXPERIENCED BEING TOLD THEY DO NOT ACT LIKE A WOMAN OR MAN IS SUPPOSED TO ↑</p> 	 <p><b>65%</b></p> <p>OF VICTIMS IDENTIFIED THE PERPETRATORS AS A MIX OF MEN AND WOMEN ↑</p> 	 <p><b>60%</b></p> <p>OF VICTIMS EXPERIENCED REPEATED SEXUAL GESTURES ↑</p> 		
<p><b>Uncommon</b> Characteristics relative to the average across all types of sexual harassment</p>	 <p><b>29%</b></p> <p>OF VICTIMS IDENTIFIED AT LEAST ONE PERPETRATOR AS BEING IN THE MILITARY ↓↓</p>	 <p><b>27%</b></p> <p>OF VICTIMS EXPERIENCED HARASSING BEHAVIORS ON BASE ↓↓</p>	 <p><b>0%</b></p> <p>OF VICTIMS EXPERIENCED HARASSING BEHAVIORS AT WORK, DURING DUTY HOURS ↓↓</p> 	 <p><b>38%</b></p> <p>OF VICTIMS IDENTIFIED AS HETEROSEXUAL ↓</p>	 <p><b>21%</b></p> <p>OF VICTIMS IDENTIFIED ALL PERPETRATORS AS MEN ↓</p>

NOTES: ↑↑ indicates very common characteristics compared with the average across all types; ↑ indicates common characteristics compared with the average across all types. ↓↓ indicates very uncommon characteristics compared with the average across all types; ↓ indicates uncommon characteristics compared with the average across all types.

# SUMMARY



Some of the types of sexual assault and sexual harassment identified in this report do not closely align with popular stereotypes about victims, perpetrators, and contexts of sexual assault and sexual harassment in the Army. Using these types, we identify three stereotypes that do not align with the data and findings:

Military sexual assault prevention materials are heavily oriented to the stereotypical assaults regularly seen in college populations and have borrowed from prevention programs designed for the college setting.<sup>8</sup> However, such prevention programs may fail to address the unique features of sexual assault in the Army, and focusing primarily on this one type may fail to address the majority of assaults. Sexual assaults among college student populations largely occur in the context of dating or social activities (e.g., fraternity parties) or in residence halls or dorms, are perpetrated by individual men who

assault women, and involve the use of alcohol.<sup>9</sup> The most common type of sexual assault in the Army is similar to these stereotypical college assaults in that they, too, are more likely to occur in social settings or at home, perpetrators are most often men acting alone, and victims are women. However, at a prevalence of less than 50 percent, the majority of sexual assaults in the Army differ from collegiate sexual assaults in important ways. In the Army, a much larger fraction of assaults have male victims; are done with the intent to abuse, bully, or haze the victim; involve multiple perpetrators; do not involve alcohol; or occur in the workplace.

This stereotype of sexual assault being done by a man for his sexual gratification has led some to speculate—without evidence—that gay, male service members are largely responsible for the high rate of male sexual assault victims in the military.<sup>10</sup> Although it is not possi-



ble to know definitively the sexual orientation of the perpetrator in the data, the typology of sexual assault shows that this stereotype is not a likely explanation of the sexual assaults of the vast majority of male victims. The most-common types of assault with male victims involve perpetrators who are either (a) women or (b) groups of men in an abusive situation, such as hazing or bullying. The stereotype that perpetrators are motivated by sexual attraction (and thus that male sexual assault perpetrators are likely to be nonheterosexual men) ignores the extent to which assaults of men are motivated by the desire to abuse, humiliate, or dominate the victim.

Finally, there is a broad, cultural stereotype that men ordinarily speak about sex acts and tell sex jokes—often

dismissed as “locker room talk”—and that women experience harassment because they are more likely to find this explicit talk offensive when exposed to it. However, our analyses demonstrate that this stereotype is inaccurate for characterizing sexual harassment in the Army. One type of harassment is characterized exclusively by being offended by this type of sexually explicit talk, but the soldiers who experience this type of harassment are almost entirely men, not women. There is nothing in the data to suggest that female soldiers are more offended by sexually explicit talk or jokes than male soldiers. Research among civilians has found that women are more likely than men to rate statements about sexual behaviors as normal.<sup>11</sup>

## **POLICY IMPLICATIONS AND RECOMMENDATIONS: HOW THE ARMY CAN USE THIS INFORMATION**

This report characterizes the variety of sexual assault and sexual harassment experiences among active-duty soldiers. The results can be used by the Army in various ways.

- Army leadership should be aware of the full array of sexual assault and sexual harassment experiences and set aside simplistic stereotypes about who the victims and perpetrators are, the prevalence of behaviors that are actually experienced, and the contexts surrounding these experiences.
- Individuals in charge of developing and providing sexual assault and sexual harassment training and prevention can use the results presented here to make sure that training materials reflect the full array of victim experiences, especially the most-common and most-severe types, as well as the full array of victims, including men and sexual minorities.
- These findings should help individual commanders increase their awareness of the different types of sexual assault and sexual harassment victims and experiences and how those victims and experiences may apply to the soldiers under their command. In doing so, commanders may be better prepared to identify risk (and protective) factors unique to their units and adapt prevention efforts as needed.



## DETAILED DESCRIPTION OF METHODS

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The analytic goals of the project were to describe the diversity of sexual assault and sexual harassment experiences in the Army as a means of better informing the prevention of, and response to, these problems. The challenge is that these are complex problems that vary across many dimensions. An accurate description of these problems depends not only on how common each of these characteristics are but also on how these characteristics are associated with one another. For example, knowing that 20 percent of assault victims report that the perpetrator(s) included their work supervisor and that 40 percent of victims report having consumed alcohol prior to the assault is a relatively incomplete picture of sexual assaults even on only those two dimensions because it does not indicate how those two characteristics are associated.

It is possible they are positively associated (e.g., 100 percent of assaults involving supervisors also involved alcohol), negatively associated (e.g., 0 percent of assaults involving supervisors also involved alcohol), or completely independent (e.g., 40 percent of assaults involving supervisors also involved alcohol, and 40 percent of assaults not involving supervisors also involved alcohol). Therefore, the possible effectiveness of a sexual assault prevention program that stresses the need to avoid supervisors drinking with subordinates depends to a great extent on how those two dimensions are associated. It is possible there are no instances of sexual assaults involving both supervisors and alcohol.

Because there are 30 or more important dimensions when describing a sexual assault (e.g., victim characteristics, descriptions of assault behaviors, perpetrator characteristics, physical location of the assault, or time of the assault), describing the associations among them is difficult. It is easy to provide the averages on the 30 dimensions, but there is no easy-to-understand way to present the 435 pairwise associations among those characteristics.

### WHY LATENT CLASS ANALYSIS?

LCA is a tool that can help to describe this type of highly multidimensional distribution. It does so by creating a particular number of different classes, or *types*, and sorting each case in the dataset into the type it most resembles. The key feature of LCA is that it creates these types in such a way that they attempt to explain all of the associations between the dimensions and that within any given type, all of the characteristics are approximately independent of one another—which means one can assume that all characteristics are basically unassociated within each type. This allows an accurate description of the very complex joint distribution of these characteristics in a small number of more-understandable pieces. For example, this process summarizes the full multivariate distribution by describing the number of cases that fall into each of the five types of sexual assault and providing the average characteristics of each of those five types.



There are many different ways to divide incidents of sexual assault or sexual harassment into subtypes, and there is no single “correct” way. The choice of method depends on the intended purpose. We used LCA because, for any given number of classes or types, it provides the most accurate summary possible of the full multivariate distribution of characteristics using only the average characteristics of each type (i.e., without presenting associations between characteristics) and the proportion of people within each type. However, readers should view this as a tool for accurate data description rather than for uncovering the true structure of sexual assault and sexual harassment. For example, it is likely that conducting the analysis on the full DoD dataset rather than just the Army would have resulted in descriptively different subtypes even for the Army respondents. Similarly, it is likely that doing the analysis again on 2021 WGRA data (when available) would result in meaningfully different subtypes than those drawn from the 2018 WGRA, even if the changes in sexual assault or sexual harassment prevalence or characteristics are relatively small.

## DATA

All data for the analyses are drawn from the Army respondents to the 2018 WGRA,<sup>12</sup> and the analyses were conducted with survey weights to make the estimates representative for the full Army.<sup>13</sup> Because the items used in the analysis are follow-up questions for victims of sexual assault or sexual harassment, the analytic sample must be restricted to individuals who had those experiences. Thus, separate samples are used when creating sexual assault subtypes ( $N = 499$ ) and when creating sexual harassment subtypes ( $N = 2,482$ ).<sup>14</sup>

All of the assault and victim characteristics that were used in the final analyses are presented in Tables 1 and 7 for sexual assault and sexual harassment, respectively. To reduce the complexity of the interpretation, we did not include every possible victim and assault characteristic in the data. Specifically, we

- combined very similar incident assault features into single analytic characteristics
- dropped incident features that were nearly colinear with other features (i.e., when responses could be inferred from other characteristics)
- dropped some extremely rare incident characteristics from analysis because these are not well measured in the limited sample size available
- limited the victim characteristics to gender, pay-grade group (i.e., junior enlisted, senior enlisted and warrant officers, junior officers, and senior officers), and sexual orientation (i.e., identified as heterosexual versus did not identify as heterosexual).

## STATISTICAL METHODS

The LCA was estimated in the Mplus 7.3 statistical package.<sup>15</sup> An LCA analysis is one type of a broader class of statistical methods called *finite mixture modeling* in which a particular multivariate distribution is explained as a mixture of simpler distributions.<sup>16</sup> The current LCA is represented as a series of logistic regressions that are solved simultaneously in which each victim and incident characteristic is predicted by a set number of latent (unobserved) classes. The software then identifies the set of latent classes that best explains the joint distribution of the characteristics in the population. In this way, the complex joint distribution of characteristics can be

explained by a fixed number of classes, each with a relatively simple distribution in which all characteristics are independent. In the current models, all the characteristics are treated as binary outcomes with the exception of pay grade and the gender of perpetrators, which were treated as ordered logistic (e.g., ordered from all male perpetrators, both male and female perpetrators, and all female perpetrators). Models were estimated with multiple random starting values to ensure that the true maximum likelihood solution was achieved; specifically, we ran with enough random starts that at least ten of the starts found the same maximum likelihood solution.

The data contains a small amount of missing information, either items that were skipped by respondents or were indicated as “don’t know” (e.g., some perpetrator characteristics are inherently unknown when the attacker is not known to the victim). These missing data were handled through the expectation-maximum (EM) algorithm during model estimation. EM estimates the model by optimizing log-likelihood on all complete data, even when some data are missing.<sup>17</sup> This method assumes that the relationship between the missing values and all other characteristics are the same for the respondents for which a characteristic is missing as for those respondents for which it was not missing. This results in slightly different estimates than with cruder techniques, such as computing all percentages among the nonmissing, and it is generally considered a more appropriate method for handling missing data.<sup>18</sup> It is worth noting that every respondent who saw the sexual orientation question is coded as either “indicated heterosexual orientation” or “did not indicate heterosexual orientation.” The only missing data for this characteristic are those respondents who did not see this question because they quit

the survey (i.e., dropped off) before this question was presented.

A series of LCA models were fit to both the sexual assault data and the sexual harassment data with increasing complexity, beginning with a 2-class model and increasing the number of classes until a unique solution could not be found in the data.<sup>19</sup> For each estimated model, we recorded the Bayesian Information Criteria (BIC), an index of how well the model fit the data given its complexity.<sup>20</sup> For types of sexual assault, the 5-class solution had the best model fit as indicated by the BIC of all models, and this provided a highly interpretable set of classes. For sexual harassment, a 9-class solution was the best fitting, however, it was very similar in fit to the 8-class solution. Because the simpler solution was also somewhat easier to describe and interpret, we present the 8-class solution in this report. Six of the sexual harassment types are identical across those two solutions. The key difference was that the 9-class solution divides the *Men offended by sexual talk and jokes at work* and *Harassment on duty by an individual perpetrator* into three types. It removes male victims whose primary harassing behavior was being told that they “do not act like a woman or man is supposed to” from those two types to create an additional type.

## PRESENTATION OF RESULTS

The LCA solution describes each class, or *type*, in terms of its average characteristics and the proportion of the population that falls into each class. All of this information is included in the report. To briefly describe these types in the text, we outline those characteristics that most clearly distinguish what is unique about each type.

We assess distinctiveness for each characteristic and each type by comparing how common that characteristic is within a given type with how common it is when averaged across types. This is then scaled by the standard deviation of that average to make an effect size ( $ES$ ). Specifically, the equation for a given characteristic is

$$ES = (mt - ma) / \text{sqrt}(ma(1 - ma))$$

where  $mt$  is the proportion in class  $t$  that have that characteristic, and  $ma$  is the simple average of the  $mt$ 's over all types.

In the text, we use these effect sizes to select the most distinctive features and to describe the strength of the association. When  $ES > 0.8$  for a given type, we describe the characteristic as “very common compared to other types” (or much higher than average); when  $0.8 > ES > 0.4$  we describe it as “common” (or more common than average); when  $0.4 > ES > 0.2$  we describe it as “somewhat common” (or somewhat more common than average). Similarly, when  $ES < -0.8$  for a given type, we describe the characteristic as “very uncommon compared to other types” (or much lower than average);

when  $-0.8 < ES < -0.4$  we describe it as “uncommon” (or lower than average); when  $-0.4 < ES < -0.2$  we describe it as “somewhat uncommon” (or somewhat lower than common). For each type of sexual assault or sexual harassment, the text describes at least the seven most-distinctive characteristics. In some cases, additional characteristics are discussed to improve the description of the type. These effect sizes are also used in Tables 1 and 7 to indicate distinctive characteristics, with large negative effect sizes in darker blue, large positive effect sizes in darker red, and small effect sizes in white.

Finally, we have chosen names for the various types that we believe reflect the most important features of each type. However, labeling is inherently a subjective process and not the product of the LCA algorithm. The full set of characteristics for each type are shown in Tables 1 and 7. Those tabled characteristics, rather than the labels we use as a shorthand, are an accurate and complete description of each type. Readers are encouraged to inspect those tables to better understand the types rather than rely on our labels.

# ENDNOTES



- <sup>1</sup> Independent Review Commission on Sexual Assault in the Military, *Hard Truths and the Duty to Change: Recommendations from the Independent Review Commission on Sexual Assault in the Military*, U.S. Department of Defense, 2021.
- <sup>2</sup> For more information on the specific approach taken by the WGRA, see Office of People Analytics, *2018 Workplace and Gender Relations Survey of Active Duty Members: Statistical Methodology Report*, U.S. Department of Defense, OPA Report No. 2019-026, May 2019.
- <sup>3</sup> Avery Calkins, Matthew Cefalu, Terry L. Schell, Linda Cottrell, Sarah O. Meadows, and Rebecca L. Collins, *Sexual Harassment and Gender Discrimination in the Active-Component Army: Variation in Most Serious Event Characteristics by Gender and Installation Risk*, RAND Corporation, RR-A1385-1, 2021; Avery Calkins, Matthew Cefalu, Terry L. Schell, Linda Cottrell, Sarah O. Meadows, and Rebecca L. Collins, *Sexual Assault in the Active-Component Army*, RAND Corporation, RR-A1385-2, 2022; National Defense Research Institute, *Sexual Assault and Sexual Harassment in the U.S. Military: Top-Line Estimates for Active-Duty Service Members from the 2014 RAND Military Workplace Study*, RAND Corporation, RR-870-OSD, 2014; Rachel Trump-Steele, Samantha Daniel, Tina DeMarco, and Ashlea Klahr, *Experiences of Sexual Minority Active Duty Service Members with Sexual Harassment and Sexual Assault: Analysis of the 2016 and 2018 WGRA*, Office of People Analytics, June 2021; Rachel A. Breslin, Lisa Davis, Kimberly Hylton, Ariel Hill, William Klauberg, Mark Petusky, and Ashlea Klahr, *2018 Workplace and Gender Relations Survey of Active Duty Members Overview Report*, Office of People Analytics, 2019; Lisa Davis, Amanda Grifka, Kristin Williams, and Margaret Coffey, eds. *2016 Workplace and Gender Relations Survey of Active Duty Members: Overview Report*, Office of People Analytics, May 2017.
- <sup>4</sup> Calkins et al., forthcoming; Breslin et al., 2019; Davis et al., 2017.
- <sup>5</sup> Breslin et al., 2019.
- <sup>6</sup> For readers who are interested, detailed information about the data and the statistical methods used in this report is included in the appendix.
- <sup>7</sup> This percentage is equivalent to averaging across types while weighting each assault type by the proportion of the population experiencing that type.
- <sup>8</sup> Coreen Farris, Coreen, Terry L. Schell, Margaret Tankard, Lisa H. Jaycox, Barbara Bicksler, Angela Clague, and Dionne Barnes-Proby, *Measures of Performance and Effectiveness for the Marine Corps' Sexual Assault Prevention Programs*, RAND Corporation, RR-2220-USMC, 2019.
- <sup>9</sup> David Cantor, Bonnie Fisher, Susan Chibnall, Shauna Harps, Reanne Townsend, Gail Thomas, Hyunshik Lee, Vanessa Kranz, Randy Herbison, and Kristin Madden, *Report on the AAU Campus Climate Survey on Sexual Assault and Misconduct*, Westat, 2020; Lisa Fedina, Jennifer Lynne Holmes, and Bethany L. Backes, "Campus Sexual Assault: A Systematic Review of Prevalence Research from 2000 to 2015," *Trauma, Violence, & Abuse*, Vol. 19, No. 1, 2018; Kathleen C. Basile, Kathleen C., Sharon G. Smith, Marcie-jo Kresnow, Srijana Khatiwada, and Ruth W. Leemis, *The National Intimate Partner and Sexual Violence Survey: 2016/2017 Report on Sexual Violence*, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 2022.
- <sup>10</sup> For example, see Rowan Scarborough, "'Gay' Rape in Military Underreported by Pentagon," *Washington Times*, November 3, 2015.
- <sup>11</sup> Stephanie Simeone and Elizabeth L. Jeglic, "Is Locker Room Talk Really Just Talk? An Analysis of Normative Sexual Talk and Behavior," *Deviant Behavior*, Vol. 40, No. 12, April 2019.
- <sup>12</sup> Breslin et al., 2019.
- <sup>13</sup> A description of the methods and descriptive results of that survey are available in Breslin et al., 2019.

- <sup>14</sup> Because of weighting designed to make the sample representative of the full population, the statistical precision offered by these samples is somewhat smaller than would occur with a simple random sample of the same size.
- <sup>15</sup> Linda K. Muthén and Bengt O. Muthén, *Mplus User's Guide*, 7th ed., Muthén & Muthén, 2012.
- <sup>16</sup> Geoffrey J. McLachlan and David Peel, *Finite Mixture Models*, John Wiley & Sons, 2000.
- <sup>17</sup> A. P. Dempster, N. M. Laird, and D. B. Rubin, "Maximum Likelihood From Incomplete Data via the EM Algorithm," *Journal of the Royal Statistical Society*, Ser. B, Vol. 39, No. 1, 1977.
- <sup>18</sup> Roderick J. A. Little and Donald B. Rubin, *Statistical Analysis with Missing Data*, 3rd ed., John Wiley & Sons, 2019.
- <sup>19</sup> Unique solutions to mixture models often cannot be found when there are a large number of classes and characteristics being analyzed relative to the number of cases in the dataset. Those wishing to develop a more detailed typology of sexual assault or sexual harassment may need a larger sample of victims than was available for this analysis.
- <sup>20</sup> Gideon Scwharz, "Estimating the Dimension of a Model," *Annals of Statistics*, Vol. 6, No. 2, March 1978.

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The Department of Defense Workplace and Gender Relations Survey of Active Duty Members (WGRA) assesses whether service members experienced behaviors consistent with sexual assault or sexual harassment in the past year. For the most-serious experiences identified by respondents, the WGRA also measures a wide variety of victim characteristics, perpetrator characteristics, specific behaviors, and the context in which events occurred. This report describes the results of analyses run within the Army sample of the 2018 WGRA. These analyses sorted the sexual assault and sexual harassment experiences of victims into separate types based on the behaviors involved, the context and location of the events, the perpetrator characteristics, and the victim characteristics. This process defined five types of sexual assault and eight types of sexual harassment. The report describes these types of sexual assault and sexual harassment and assesses how common each type is in the Army. The report describes a breadth of both sexual assault and sexual harassment experiences that go beyond those typically discussed in prevention materials, and that might cause some to reassess common stereotypes about sexual assault and sexual harassment. This more detailed description of these experiences should inform Army prevention and response efforts to ensure they reflect the full range of experiences that are prevalent in the Army.



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