Abstract

This report examines reported sexual harassment and sexual assault in 2006 and changes between 2002 and 2006. In addition, we analyze the relationship among different types of sexual harassment and sexual assault to assess whether indicators of assault have changed over this same time frame. We utilize a combination of univariate, bivariate and multivariate statistical techniques for the analyses. Data from DOD-wide surveys, one completed in 2002 and one in 2006, by the Defense Data Manpower Center (DMDC), provide the responses analyzed for our report. Results could increase our understanding of which policies may be effective in reducing these undesirable behaviors.

The content and opinions expressed in this report are those of the author and should not be construed to represent the official position of DEOMI, the U.S. military services, or the Department of Defense.
Sexual Harassment and Sexual Assault

As emphasized by Firestone and Harris (1994; 1997; 1999; 2003; 2007; 2008), the U.S. military provides an interesting context for analyzing sexual harassment and sexual assault behaviors. The military, including the reserve component, is large enough to provide an adequate sample of individuals across various demographic group memberships (sex, race, ethnicity, age) for meaningful comparisons. The active duty component, at least, claims to be the largest equal opportunity employer in the United States. Following orders and invoking hierarchical decision making is ingrained in the military culture so that personal opinions and/or prejudices are supposedly irrelevant to duty requirements. In addition, within the military system, cohesion is highly valued, and divulging negative information about fellow soldiers or about the organization in general is taboo.

Interestingly, cohesion has been used to exclude rather than include individuals seen as “outsiders” or “troublemakers” (e.g., women, race or ethnic minority members; see Harris & Firestone, 1997; Shields, 1998). Furthermore, since harassment in general is part of the military culture and sexual harassment may be a subset of those incidents, the military environment may be less open to receiving complaints (either formal or informal). In addition, sexual assault has been used as a technique of control by those with power over those with less power, especially in closed organizational settings\(^1\). This report examines changes in reported sexual harassment and sexual assault between 2002 and 2006. In addition, we analyze the relationship among different types of sexual harassment and sexual assault to assess whether indicators of assault have changed over time.
Sexual Harassment

Sexual harassment in the workplace has been the focus of much academic research across disciplines and has gained much media attention. Research shows that sexual harassment is a widespread phenomenon with negative consequences for both individuals and organizations, some of which are very serious. For example, some targets have been found to experience career interruptions, lowered productivity, lessened job satisfaction, lowered self-confidence, loss of motivation, physical health ailments, and loss of commitment to work and employers (Crull, 1982; DiTomaso, 1989; Fitzgerald, Hulin, & Drasgow, 1994; Gutek, 1985; Gutek & Koss, 1993, USMSPB, 1981, 1987, 1995), depending on the type and degree of harassment experienced. For the organization, legal damages are minor compared with costs of reduced productivity, turnover, absenteeism, employee transfers, loss of company loyalty, low levels of job satisfaction, and health care and insurance costs (Dansky & Kilpatrick, 1997; Faley, 1991; Niebhur, 1997).

The original definition of sexual harassment was "deliberate or repeated unsolicited verbal comments, gestures, or physical contact of a sexual nature which are unwelcome" (USMSPB, 1981). The initial definition was expanded to include any conduct of a sexual nature which created "an intimidating, hostile, or offensive working environment" (USMSPB, 1988; 1995). Even the expanded definition is criticized for being so broad that empirical and theoretical inconsistencies arising from specific studies remain (Schneider, 1982).

For instance, definitions are sometimes inconsistent and often discipline-specific, which further confounds clear conceptualizations (Terpstra & Baker, 1986). Recognizing that considerable overlap in conceptualizations exists, most researchers use the
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Definitions specific to their discipline. Sociologists focus on organizational and societal-level environmental variables (e.g., power and status differences); psychologists focus on individual variables (e.g., sexist attitudes); economists look at labor market issues (e.g., who benefits?); and organizational/business studies use work structures (e.g., formal and informal hierarchies, power dynamic, organization culture). As a result, the body of literature available may be so restricted that it is only useful within a specific discipline or for a single explicit purpose.

Because the defining criteria for identifying sexual harassment have been “uninvited and unwanted,” other complicating factors lie in the perceptions and evaluations of being “unwanted.” Definitions of “acceptable” versus “unwanted” as well as their visions of effective policies are likely to differ vastly between the perpetrators and the targets, as well as by whether they are men or women (Baker, Terpstra, & Cutler, 1990; Dougherty, 1999, 2006; Fitzgerald & Ormerod, 1991; Loredo, Reid, & Deaux, 1995; Saal, 1996; Sev’er & Ungar, 1997).

Perhaps most problematic is that virtually any behavior, including requests for dates, pressure for sexual activities, comments, jokes, and attempted and forcible rape can constitute as sexual harassment. Many argue that individual definitions of these behaviors as sexual harassment could vary systematically depending on individual characteristics as well as the specific contexts in which the behavior occurred. In other words, some argue that sexual harassment appears highly subjective and that the experiences of women and men are variable and open to alternative explanations (Dougherty, 1999, 2006; Gorden, 1981).

The fact remains that the definition of sexual harassment includes such a wide spectrum of behaviors, including legally defined harassment, sexist behaviors, and sexual
assault, and that these behaviors may overlap in real life situations. Thus, there is still a lack of conceptual distinction among them as well as a paucity of research attempting to sort through the various conceptualizations. This research focuses on creating conceptual distinctions among sexual harassment, sexist behaviors, sexual assault, and delineating the empirical relationships among them.

Sexual harassment in the workplace has typically been characterized as consisting of two forms, both of which are defined legally. The *quid pro quo* type is the easiest to identify and although frequencies are low, it is the most likely to be challenged. This form includes the exchange of work-related benefits or consequences for sexual favors through bribes, threats, or even physical force (see Firestone & Harris, 1994).

The second form, *environmental harassment*, includes unwanted sexualized actions to alter, interfere with, or affect one’s work performance by creating a hostile and offensive work climate (Firestone & Harris, 1994; Sev’er, 1999). The definition of this second type of harassment is considered even more blurred. One problem was how to ascertain whether an act is “unwanted,” and another was deciding on whom the burden of proof should fall that the action was against the individual’s will. Expectations of economic losses and/or psychological pain due to the harassment have also been an issue. Some courts demand that targets have proof of both before claims of environmental harassment can be made. Two Supreme Court rulings may help put to rest the belief that assessments of environmental harassment are subjective. First, the “reasonable” woman standard grants any woman classified as reasonable to assess whether she is being subject to harassment or to acceptable behaviors (e.g., teasing, fun jokes, etc.) (Greenhouse, 1993; Wells & Kracher, 1993). Second, the ruling that "psychological stress" does not have to be documented by medical professionals establishes precedent for allowing
women to interpret their own experiences within the boundaries of the organization (Wells & Kracher, 1993). This is noted by Ormerod et al. (2005) in their conclusion:

Empirical research to date suggests that reducing sexual harassment and other unprofessional, gender-related behavior, recruiting and promoting women into positions of leadership, creating gender-balanced work environments, and creating an organizational climate where complaints of sexual harassment and assault are taken seriously, responded to swiftly, and where such behavior is sanctioned, can help to reduce the occurrence of sexual assault. [Emphasis added]

Finally, while typically defined as an individual level issue, the organizational context may be the key to truly understanding the perpetuation of harassment in spite of policies designed to prevent such behaviors (Firestone & Harris, 1994, 1999, 2004, 2007, 2008; Harris & Firestone, 1997, 2008). For example, an organization’s culture includes the value and belief system, including regularities, norms, rules for working and getting along, and the organizational climate, or how it feels to work in that organization (Schein, 1990). Essentially, it is the organization’s social system as enacted by management and employees (Schein, 1996). Bastien, McPhee, and Bolton (1995) demonstrated the ways in which culture is structured to have considerable impact on how people behave in an organizational setting. With respect to sexual harassment, practices are likely to be the primary cultural manifestations. How sexual harassment policies (reporting procedures, training) are exacted is impetus for the stories employees tell about an organization’s willingness to eradicate or perpetuate sexual harassment. How an organization responds to sexual harassment creates a social system (culture) in which employees make sense of their environment and use to guide or control their own behaviors (Conrad & Taylor,
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1994; Hulin, Fitzgerald, & Drasgow, 1996). Thus exposing sexual harassment at its causal level may require examination of the organization’s culture.

One aspect of organizational culture derives from the sex make-up of the employees. It seems likely that sexual harassment is more prevalent in male-dominated occupations (e.g., police, professional sports, military), and that the U. S. military is a male dominated organization. Why might there be more sexual harassment in male-dominated work settings such as the military? It has been suggested that work settings that place a high value on “masculine” qualities such as power, toughness, dominance, aggressiveness, and competitiveness may contribute to negative attitudes toward women (Firestone & Harris, 1997, 2007, 2008; Malumuth, Sockloskie, Koss, & Tanaka, 1991; Mosher & Anderson, 1986; Rosen & Martin, 1998; Vogt et al., 2007)). In addition, there is some evidence that fields such as the military may attract individuals who possess more traditional gender-role attitudes (DeFleur, 1985). In such a setting, women may be seen as disrupting the masculine camaraderie that infuses the culture of the occupation. In the military setting, in particular, women may be perceived as threatening the “warrior culture” that some believe is necessary to maintain a ready and effective fighting force (Fiske & Glick, 1995; Schmidt, 1996). In turn, individuals who possess more negative attitudes toward women may be more tolerant of sexual harassment. Importantly, people are likely to take stronger actions when they are certain that the situation will be perceived as sexual harassment by others (Fitzgerald, Swan, & Fischer, 1995)

Sexism

Assumptions about how women and men differ with regard to work-related skills, attitudes and knowledge have been around for a long time. For the most part, those attitudes find women deficient with respect to male peers (Heilman, 1997). For example,
the pop-psych literature is replete with self-help advice to help women overcome their
deficiencies by “succeeding at corporate gamesmanship,” (Harragan, 1977), “breaking
into the boys’ club,” (Jardim & Hennig, 1990), and “improving communication styles
and supervising skills” (Feuer, 1998; Fierman, 1990). Recent examples focus on how to
be “feminine and still succeed in the workplace,” (Foley, 2007; Trunk, 2007; Wish,
2008). These attitudes often translate, whether intentionally or not, into sexist behaviors.

Sometimes labeled gender harassment, sexism includes generalized sexual or
sexist comments or behaviors that insult, degrade or embarrass women. Sexist attitudes
are typically based on stereotypical views of gender appropriate behavior (De Judicibus
& McCabe, 2001). As conceptualized by Bem (1974), typical masculine traits include
rationality, risk taking, and aggression. Feminine traits include nurturance, emotional
expressiveness, and self-subordination. These attitudes result in the stereotypical beliefs
that women are inferior to men (particularly in the paid workplace), and that men have
the prerogative to initiate sexual behavior of any kind and to use pressure to achieve it
when necessary (Bartling & Eisenman, 1993; Walker, Rowe, & Quinsey, 1993).For
example, McElroy, Morrow, and Mullen (1996; see Saal & Moore, 1993; McEnrue,
1989) found that blacks and women are more likely than white males to perceive that a
promotion decision is based on unfair criteria (e.g., “she slept her way to the top,” or if a
black is promoted it constitutes “reverse discrimination). Such perceived inequities are
associated with reduced job satisfaction, increased work attendance and organizational
commitment (McElroy, Morrow, & Mullen, 1996). Thus, an environment can be sexist
based on perceptions of inequity, although the behaviors creating that situation may not
constitute as the legal definition of sexual harassment.
Sexism relates to both sexual harassment and sexual assault because people with sexist attitudes are unlikely to believe a target who says the behavior was unwanted and may blame the target for having, in some way, encouraged the perpetrator (Valentine-French & Radtke, 1993). Glick and Fiske (1996) proposed that sexism may not only be a single concept; rather attitudes toward women may be ambivalent, comprising “hostile sexism” and “benevolent sexism”. Hostile sexism can be described as the negative attitude toward women that is commonly associated with sexist prejudices (e.g., Tougas, Brown, Beaton, & Joly, 1995). In contrast, benevolent sexism can be characterized as a set of attitudes that are sexist in their manifestation of stereotypical roles for women but are subtly positive and affectionate towards women (Harris & Firestone, 1997; Glick & Fiske, 1996). According to Glick and Fiske (1996), ambivalent sexists reconcile their hostile and benevolent attitudes by differentiating between "good" and "bad" women. Thus, benevolence is targeted at those women that conform to traditional roles ("good girls"), whereas hostility is reserved for women in nontraditional roles ("bad girls"), (Glick, Diebold, Bailey-Werner, & Zhu, 1997). This differentiation between "good" and "bad" subcategories of women appears to provide a means for men to justify and excuse aggressive behaviors towards some women. Such behaviors may include sexual harassment and sexual assault.

**Sexual Assault**

The term sexual assault has been used to describe a large range of nonconsensual sexual behaviors from kissing and/or touching to coerced penetration by physical force or threat of force. While most people have a script about rape which plays in their mind, proving a case legally is typically not as clear cut. For example, how do you show someone was forced against his/her will. The conceptualizations of “bad girls” who
deserve bad things and “good girls” who need protection from bad things strongly impact that script (Tendayi, Abrams, & Masser, 2004). To coerce someone into having sex requires intent on the part of the perpetrator (Conly, 2004). Furthermore, if a victim is considered incapable of giving consent (e.g., due to age, mental or physical status, or intoxication) the act may also be considered rape or sexual assault. To confuse matters even more, attempted rape is often considered the equivalent of actual rape. Furthermore, sometimes rape is considered as an extreme form of sexual harassment. Whether rape is subsumed under sexual harassment, or sexual harassment is considered a form of rape, conceptual distinctions between the two become clouded and provide some with the evidence to contend that sexually wrong behaviors are in the eye of the beholder.

While most people believe that rape in the workplace is uncommon, Lee and Kleiner (2003) contended that at the time of their research, 51,000 rapes or sexual assaults occurred in the workplace each year. Being sexually assaulted in the workplace not only leads to physical injuries and psychological trauma, many victims develop symptoms similar to posttraumatic stress disorder (PTSD). This reaction may be compounded when the environment where the assault occurred is a military workplace where women are sometimes viewed as “outsiders” or as “bad girls”. In either case, such women are sometimes perceived as deserving whatever happens to them (Lee & Kleiner, 2003; Tendayi, Abrams, & Masser, 2004). Targets who experience PTSD symptoms often attempt to avoid the place where the rape occurred, thus contributing to low job satisfaction, low commitment, and increased absenteeism and turnover.

The definition of sexual assault and rape has evolved from one designed to control “competing male interests in controlling sexual access to females, rather than protecting women’s interests in controlling their own bodies and sexuality,” (Greenberg,
Minow, & Roberts, 2004: p. 776; Hasday, 2000) to a code focused on the use of force and lack of consent (Lyon, 2004). The Uniform Code of Military Justice (UCMJ) originally defined sexual assault as:

…a crime…; intentional sexual contact, characterized by use of force, physical threat or abuse of authority or when the victim does not or cannot consent. Sexual assault includes rape, nonconsensual sodomy (oral or anal sex), indecent assault (unwanted, inappropriate sexual contact or fondling), or attempt to commit these acts. … “Consent” shall not be deemed or construed to mean the failure by the victim to offer physical resistance (DOD, 2004).

Revised Uniform Code of Military Justice Provisions

In Section 522 of the NDAA for FY 2006, Congress amended the UCMJ regarding sex offenses to consolidate and reorganize the array of military sex offenses under Article 120, UCMJ, “Rape, Sexual Assault, and Sexual Misconduct.” These revised provisions took effect October 1, 2007. As amended, rape is defined in the UCMJ as a situation where any person causes another person of any age to engage in a sexual act by: (a) using force; (b) causing grievous bodily harm; (c) threatening or placing that other person in fear that any person will be subjected to death, grievous bodily harm, or kidnapping; (d) rendering the person unconscious; or (e) administering a substance, drug, intoxicant or similar substance that substantially impairs the ability of that person to appraise or control conduct. The revised Article 120 of the UCMJ defines “consent” as “words or overt acts indicating a freely given agreement to the sexual act at issue by a competent person.” The term is further explained as:

1. An expression of lack of consent through words or conduct means there is no consent.
2. Lack of verbal or physical resistance or submission resulting from the accused’ use of force, threat of force, or placing another person in fear does not constitute consent.

3. A current or previous dating relationship by itself or the manner of dress of the person involved with the accused in the sexual conduct at issue shall not constitute consent.

4. A person cannot consent to sexual activity if he or she is “substantially incapable of appraising the nature of the sexual conduct at issue” due to mental impairment or unconsciousness resulting from consumption of alcohol, drugs, a similar substance, or otherwise,” as well as when the person is unable to understand the nature of the sexual conduct at issue due to a mental disease or defect.

5. Similarly, a lack of consent includes situations where a person is “substantially incapable of physically declining participation” or “physically communicating unwillingness” to engage in the sexual conduct at issue (UCMJ, Article 120).

In situations where the issue of “mistake of fact as to consent” is raised or becomes an issue in the case, the statute explains that the term means that the accused held, as a result of ignorance or mistake, an incorrect belief that the other person consented. That belief has to be reasonable under all the circumstances. The accused’ state of intoxication is not relevant to mistake of fact. A mistaken belief that the other person consented must be that which “a reasonably careful, ordinary, prudent, sober adult would have had under the circumstances at the time of the offense” (About.com, US Military, 2009).
Military crime statistics for 2007 indicated that 2,085 total sexual assaults were reported by or against service members (DOD, 2007). However, past research suggests that few individuals (the range of reported incidences is 15% –25%) report sexual assault to authorities (Clay-Warner & Burt, 2005; Firestone & Harris, 1996, 2003, 2007, 2008; Harned et al., 2002). Past research also indicated that while both men and women can experience sexual assault, the risk of workplace assault may be higher for women, especially those in male-dominated occupations (Dekker & Barling, 1998; Frank, Brogan, & Schiffman, 1998; Haavio-Mannila, Kauppinen-Toropainen, & Kandolin, 1998; Sadler et al., 2003). This is reinforced by data from a recent DOD survey. A single-item measure of unwanted sexual contact (asking whether someone, without their consent or against their will, sexually touched them, had (attempted or completed) sexual intercourse with them, oral sex with them, anal sex with them, or penetrated them with a finger or object), as reported in the 2006 Gender Relations Survey of Active Duty Members report, indicated that:

1. Overall, 6.8% of women and 1.8% of men indicated experiencing unwanted sexual contact.
2. Women in the Army were more likely than women in the other Services to indicate experiencing unwanted sexual contact, whereas women in the Air Force were less likely.
3. Men in the Air Force were less likely than men in the other Services to indicate experiencing unwanted sexual contact.
4. Among women, junior enlisted members were more likely than senior enlisted members, junior officers, and senior officers to indicate experiencing unwanted sexual contact.
5. Among men, junior enlisted members were more likely than men in the other pay grades to indicate experiencing unwanted sexual contact, whereas junior officers were less likely (Lipari et al., 2008: iv).

Clearly the researcher’s understanding and conceptualization of rape and other forms of sexual assault, as well as how the question is worded (Ormerod et al., 2007), as well as the sex of the target and perpetrator (Tendayi, Abrams, & Masser, 2004) can affect how these actions are measured and determine which behaviors are included or excluded as part of that definition. As Conly (2004, p 121) notes:

To subsume all areas of sexual wrong under the heading of rape does a disservice to all concerned. It hurts those whose laudable goal is just to show that sex can be dark and hurtful…It is bad for those who are aggressors in any sexual situation, who may feel that, as long as they have not committed rape, their actions are morally neutral…This may be a case where analytical philosophy, with its conceptual distinction and semantic precision [italics added] can indeed explain something to our sense of order…

For the following analyses, sexual assault was defined as attempted and/or actual sexual relations without the members consent and against his or her will (Lipari, Lancaster, & Jones, 2005, p. 39; Lipari, Shaw, & Rock, 2005). This definition is consistent with the DOD’s new definition of sexual assault (DOD, 2004).

Retention

For the most part, organizational retention is viewed as the opposite of voluntary employee turnover which is viewed negatively. According to classical organizational theory, voluntary turnover is a function of two primary factors: (a) the perceived desirability of movement from the organization, and (b) the perceived ease of movement.
Individuals who are more likely to quit a job voluntarily are hypothesized as desiring to leave and being able to leave more so than those individuals who do not quit (March & Simon, 1958).

Aside from the recruitment, selection, training and development costs associated with turnover, the loss of large numbers of personnel or key members of the organization can also be costly in terms of general disruption. When people leave it may affect the ability of others to produce their work because of interdependence of work roles within the organization. When a key person leaves, the whole system may break down if the organization is both highly interdependent and specialized. As a result, many organizations have backup personnel for key roles, and if a large number of roles are essential for functioning, employees may be trained in a multiplicity of skills. At the extreme, when members of a team are both necessary to the functioning of a mission and at the same time vulnerable to loss, each member may be trained to carry out the most essential tasks of the entire work unit. In general, the higher level of a position to be filled leaves a greater amount of potential for disruption. Yet, there are some exceptions to this general rule. The loss of a key production manager or even a specialized equipment repair person (Crozier, 1964) may cause greater disruption to the organization than changing executive officers.

Across all positions, the predictability of turnover will also be important (Price, 1977). Some organizations expect large amounts of turnover for lower level employees and have standardized the replacement of much of the organization. For higher level positions, indication of impending departure greatly reduces risks of disruption since procedures can often be implemented to bypass the particular position in the organization or to fill it temporarily while a replacement is found. The most obvious consequence of
turnover is the energy and expense of finding replacement personnel. When someone leaves an organization others must be recruited, screened through some selection mechanism, and finally hired. If large numbers of people leave an organization on a regular basis, the organization will most likely have adapted to this consequence by retaining full-time specialists in recruitment and selection, thereby increasing its administrative intensity (Kasarda, 1973). In fact, for organizations that hold members for only a relatively short and specified period (e.g., the military, universities, voluntary groups), the search for potential members and their selection becomes a very major function of the organization (Staw, 1980).

More recently, research focuses on a dichotomous understanding of turnover/retention; thus, the loss of a valued employee can be organizationally dysfunctional only if it detracts from overall organizational effectiveness, measured in terms completing the mission and organizational survival. Because the costs of retaining any employee can be excessive, the norms of rationality suggest that organizations could welcome a positive rate of turnover. Organizations most likely attempt to achieve an optimal rate of aggregate organizational turnover: the rate consistent with balancing the organizational costs of voluntary turnover against the organizational costs of reducing such behavior. At this level of aggregation, dysfunctional turnover therefore would be defined as any rate that deviates from an optimal turnover rate (see Abelson & Baysinger, 1984; Staw, 1980). The dichotomous conceptualization of turnover also suggests that an employee’s motivation to quit may be based on either dissatisfaction with his/her current job or because s/he believes it would be desirable and easy to move to another job or some combination of the two (Jackofsky, 1984). Thus it is very likely that behaviors or
perceptions which lead to lowered job satisfaction, such as sexual harassment, sexism, or sexual assault, may lead to individuals leaving their jobs.

Methods

This report examines reported sexual harassment and sexual assault in 2006 and changes between 2002 and 2006. In addition, we analyze the relationship among different types of sexual harassment and sexual assault to assess whether indicators of assault have changed over this same time frame. Results could increase our understanding of which policies may be effective in reducing these undesirable behaviors. Because some leaders suggest that there is not enough sexual harassment or assault to warrant spending scarce organizational resources attempting to control them, we intended to compare the effects of both on retention of military members. We have the analysis for 2002, however the results for the retention question were not released to us for the 2006 data. We do have a question which asks the respondent whether “as a result of the [harassment/assault] situation did you think about getting out of your service.” Therefore while we are unable to make exact comparisons, we can approximate a contrast over both years.

Data Sources

2002 Sexual Harassment Survey

Our research examines a sample of respondents from the "Armed Forces 2002 Sexual Harassment Survey," (Lipari & Lancaster, 2003) conducted for the Office of the Secretary of Defense by the Defense Manpower Data Center. This was a "worldwide scientific survey of how men and women work together in the...Active-duty Military Services ..." The stated purpose of the survey was "To assess the prevalence of sexual harassment and other unprofessional, gender-related behaviors…" (Lipari & Lancaster, 2003: p.6). The instrument “was based on the 1995 Form B questionnaire and
incorporated further psychometric and theoretical advances in sexual harassment research” (Lipari & Lancaster, 2003: p.6).

A single-stage, stratified random sample of 60,415 respondents was drawn for the survey, representing male and female enlisted personnel and officers in the Army, Navy, Marines, Air Force, and Coast Guard. Data were collected by mail and via the Web, with one-third of respondents returning responses via the internet. A total of 19,960 usable surveys were returned for a response rate of 36% (see Flores-Cervantes, Valiant, Harding, & Bell, 2003). The original sample includes 10,235 males and 9,725 females, illustrating the oversampling of women. The sampling frame was stratified by service branch, sex, pay grade, race/ethnicity, likelihood of deployment, and geographic location (Elig, 2003). A series of weighting schemes was developed by the original survey team at the Defense Manpower Data Center tied to branch of service, rank, sex and race, and to test for non-response bias. The full weights provide estimated numbers of respondents that approximate the total active force as of December 2001 (Lipari & Lancaster, 2003: p.5).

For most of the analyses that follow, the full weight was divided by the mean weight, retaining estimates of the approximate total number of cases in the original survey. Periodically the full weight is used to obtain estimates of the total numbers of incidents. In this analysis, cross-tabulation is used to assess the extent to which men and women report various types of behaviors that might be construed as harassment. Logistic regression is used to test the impact of different forms of sexual harassment on the likelihood of reporting sexual assault. In addition, we investigate whether men or women, different race and ethnic groups, and/or different ranks are more or less likely to label an event as sexual harassment. We expect results to support past research indicating that the
presence or absence of environmental sexual harassment is highly predictive of both individual harassment and sexual assault.

Variable Construction 2002 Sexual Harassment Survey

Among the items in the “Gender Related Experiences in the Military in the Past 12 Months” section of the survey, respondents were asked the following:

In this question you are asked about sex/gender related talk and/or behavior that was unwanted, uninvited, and in which you did not participate willingly.

How often during the past 12 months have you been in situations involving

- Military Personnel
  - On- or off-duty
  - On-or off installations or ship; and/or

- Civilian Employees and/or Contractors
  - In your workplace or on your installation/ship

Where one or more of these individuals (of either gender)…

Respondents were then provided a list of 19 items and asked whether that item had occurred “very often,” “often,” “sometimes,” “once or twice,” or “never.” We recoded the first four responses in an “ever” occurred category with a value of 1. “Never” was coded 0. Based on the original statements, we identified individualistic forms of sexual harassment that are personal and frequently directly physical in nature, and leave little room for misinterpretation by either the victim or the perpetrator (sexual assault, touching, sexual phone calls). This form can be differentiated from a broader category of more public, environmental harassment (jokes, whistles, suggestive looks). The latter actions can be experienced even if directed at another individual, and are ambiguous enough to leave their interpretation dependent on the environmental context.2
Respondents were initially classified as having experienced individualistic or environmental unwanted, uninvited sexual behavior, or any form, (individualistic, environmental, or both). We focus on the separate categories of environmental and individual harassment for this research.

Respondents were then asked whether they considered “ANY of the behaviors…which YOU MARKED AS HAPPENING TO YOU…to have been sexual harassment [emphases part of original survey]”. Responses included “none were sexual harassment, some were sexual harassment, some were not sexual harassment,” and “all were sexual harassment.” This variable was dichotomized to indicate whether “any” events were labeled as sexual harassment, or none were labeled as harassment. Another question asked, “Did you report this situation to any of the following installation/Service/DOD individuals or organizations.” The responses included references to the various official channels for reporting. Individuals who responded “yes” to any of the categories were classified as having used official channels to report the incident.

Independent variables utilized include sex of respondent, rank (junior enlisted, senior enlisted, junior officer, senior officer), whether respondent was married, and service branch.

Sexism

Sexism was operationalized by the following four questions with response categories ranging according to frequency (very often, often, sometimes, once or twice, or never):

1. How frequently have you heard people of your gender referred to in negative or insulting terms?
2. How frequently were you treated you “differently” because of your gender (for example, mistreated, slighted or ignored you)?

3. How frequently did you hear offensive sexist remarks (for example, suggesting that people of your gender are not suited for the kind of work you do).

4. How frequently did someone put you down or was condescending to you because of your gender?

Retention

Retention was measured by responses to the single question asking respondents about their “Likelihood of Staying on Active Duty.” Response categories for this measure ranged from “very likely” to “very unlikely” on a 5-point Likert scale.

2006 Gender Relations Survey (WGRA2006)

DMDC conducted the mainly Web-based WGRA2006 in June-September 2006, with paper surveys mailed on August 1 to those who did not respond via the Web.

DMDC received completed surveys from 26,867 eligible respondents for a weighted response rate of 30.4%. This survey was modeled on its predecessor surveys of gender issues, the 2002 Status of the Armed Forces Survey—Workplace and Gender Relations and the Service Academy 2006 Gender Relations Survey. WGRA2006 is part of a quadrennial cycle begun in 2002 of human relations surveys authorized in Title 10 U. S. Code Section 481. The quadrennial cycle includes one survey each year, alternately surveying active duty and Reserve component members on gender relations and equal opportunity issues. The cycle repeats itself with one survey per year.

The administration process began on June 19, 2006, with the mail out of notification letters to sample members. This notification letter explained why the survey was being conducted, how the survey information would be used, and why participation was important. Throughout the administration period, additional e-mail and postal reminders were sent to encourage survey participation. Data collection on the Web started on June 26, 2006, with paper surveys mailed on August 1 to those who did not respond via the Web. Web and paper survey administration continued through September 5, 2006.

The population of interest for the survey consisted of active duty members of the Army, Navy, Marine Corps, Air Force, and Coast Guard who (1) had at least six months of service at the time the questionnaire is first fielded and (2) are below flag rank. Members of the National Guard and Reserves serving on active duty are not included in the population of interest for this survey. Single-stage, nonproportional, stratified random sampling procedures were used…The sample consisted of 79,396 individuals drawn from the sample frame constructed from DMDC’s Active Duty Master Edit File. Members of the sample became ineligible if they indicated in the survey or by other contact (e.g., telephone calls to the data collection contractor) that they were not on active duty as of the first day of the survey, June 26, 2006 (0.46% of sample).

Completed surveys (defined as answering 50% or more of the survey questions asked of all participants, including the critical question, Q35, on sexual harassment) were received from 23,595 eligible respondents. The overall
weighted response rate for eligible sample members was 30%. Data were weighted using the industry standard three-stage process to reflect the populations of interest. This form of weighting produces survey estimates of population totals, proportions, and means (as well as other statistics) that are representative of their respective populations. Unweighted survey data, in contrast, are likely to produce biased estimates of population statistics.  

Variable Construction 2006 Gender Relations Survey

Sexual Harassment

Sexual harassment is comprised of three component measures (each measured by four of the 12 items in Question 35 that measures sexual harassment): crude/offensive behavior (verbal/nonverbal behaviors of a sexual nature that were offensive or embarrassing), unwanted sexual attention (attempts to establish a sexual relationship), and sexual coercion (classic *quid pro quo* instances of specific treatment or favoritism conditioned on sexual cooperation).

To ensure valid comparisons for the analysis, respondents were then provided a list of 19 items and asked whether that item had occurred “very often, often, sometimes, once or twice, or never.” We recoded the first four responses in an “ever” occurred category with a value of 1. “Never” was coded 0. Based on the original statements, we identified individualistic forms of sexual harassment that are personal and frequently directly physical in nature, and leaving little room for misinterpretation by either the victim or the perpetrator (sexual assault, touching, sexual phone calls). This form can be differentiated from a broader category of more public, environmental harassment (jokes, whistles, suggestive looks). The latter actions can be experienced even if directed at another individual, and are ambiguous enough to leave their interpretation dependent on
the environmental context. Respondents were initially classified as having experienced individualistic or environmental unwanted, uninvited sexual behavior, or any form, (individualistic, environmental, or both). We focus on the separate categories of environmental and individual harassment for this research.

**Sexism**

Sexist behavior involves unwanted actions that refer to an individual’s sex and are directed toward all persons of that sex. Experiences of sexist behavior include verbal and/or nonverbal behaviors that convey insulting, offensive, or condescending attitudes based on the sex of the respondent. To be included in the calculation of the sexist behavior rate, members must have experienced at least one of the four behaviorally stated items defining sexist behavior. Sex discrimination is unfair or unequal access to professional development resources and opportunities due to a Service member’s gender. A new baseline measure of sex discrimination was introduced in 2006 where members were asked if they had experienced, within the 12 months preceding the survey, any discriminatory behaviors related to evaluations, career development, or assignments where their gender was factor and whether they considered at least one of the behaviors to be sex discrimination.

**Sexual Assault**

In this survey, unwanted sexual contact includes rape, non-consensual sodomy (oral or anal sex), or indecent assault (unwanted, inappropriate sexual contact or fondling), and can occur regardless of gender, age, or spousal relationship. Incident rates of unwanted sexual contact used two measures, 1) A two-item measure based on the Sexual Experiences Questionnaire (SEQ), allowing results to be compared to the 1995 and 2002 results, and 2) A new baseline measure designed for the WGRA2006 to be
consistent with the definition in the amended Article 120 of the Uniform Code of Military
Justice (UCMJ) effective in October 2007 (See Lipari et al., 2008: iv).

**Retention**

While we do not have the exact retention question as was asked in 2002, we were
provided responses to the question whether “as a result of the [harassment/assault]
situation did you think about getting out of your service.” Response categories included
“no” and “yes.”

**Analysis**

Table 1 presents the basic information on the extent to which respondents
reported sexual harassment behaviors in 2002 and 2006. More than half of the females
identified at least one unwanted, uninvited, did not participate willing type of incident in
both surveys, with a percent increase from 52.55% in 2002 to 56.25% in 2006. The
percent of women experiencing harassing behaviors was more than twice that of men in
2002 and nearly twice that of men in 2006. This comparative change is due to the fact
that the increase in reported harassment was greater for the men (increase by 5.99%) than
for the women (increase by 3.69%). These findings are displayed visually in Figure 1.

Table 2 provides data on type of harassment experience and sexual assault by sex
from the 2006 survey, utilizing the full weight developed by DMDC to provide estimates
of the total numbers of incidents occurring in a 12 month time period. These numbers
provide important and different information compared to the percentages. The numbers
emphasize “volume” of events while the percentages emphasize the comparative risk of
the events.

It is noteworthy that the data suggest that 475,913 members of the active duty
services reported one or more harassing incidents (34.27%). Of these 360,946 are
estimated for males and 114,967 are estimated for females. Similar patterns of results are displayed for environmental and individual harassment. The results for sexual assault are striking. With 2.17% of the males reporting attempted or actual sexual assault, this translates into 25,702 incidents. Over five percent of women (5.02%) reported attempted or actual assault, reflecting 10,185 incidents. The percentages reporting experiencing harassment or assault are displayed visually in Figures 2 through 5.

In an attempt to show the impact of environmental harassment on individualized experiences, Table 3 focuses on attempted or actual sexual assault for men and women by whether or not environmental harassment is reported. Results are provided both for 2006 and 2002. The most striking observation is that assault reports are very rare when no environmental harassment is claimed and much more prevalent when environmental harassment is reported. In a proportional sense, the impact is greater for the men than the women. With well under one percent of men reporting assault but no environmental harassment, but nearly nine percent when environmental harassment is reported, the odds of assault are increased by nearly 35 times (34.53). There is also a substantial increase in the odds of assault for women when environmental harassment is present, nearly twelve times higher (11.84). The same pattern of increased odds of assault is evident for 2002, even though the reported incidents were lower.

Figure 6 provides a clear display of the differing experiences of men and women and the impact of environmental harassment.

Further, Table 4 breaks out the data on sexual assault by sex and race/ethnicity of the respondents. As shown in the top portion of the table, of the males African American respondents have the highest percent reporting assault at 3.36%. Next are the “others” (2.72%), followed by the Hispanics (2.44%), and white non-Hispanic respondents have
the lowest incidence (1.77%). Females have higher rates than males for all race and ethnic categories, but Hispanic women have the highest rate (6.45%) followed by Black women (5.23%), then others (4.76%), and finally white non-Hispanic women (4.52%).

The middle and lower portions of Table 4 add a control for whether or not the respondents reported any environmental harassment. The differences are striking. For both males and females, when no environmental harassment is reported the percent reporting sexual assault is under one percent for all race and ethnic groups. The percentages are substantially higher for all categories when environmental harassment is reported. Among the males, nearly fifteen percent (14.63%) of the African American respondents report attempted or actual assault. This is followed by others (9.34%), then Hispanics (8.83%), and finally White, non-Hispanics (7.65%).

Though the percentages reporting assault are higher in all categories for the women than the men, the link to environmental harassment is very clear. Over twelve percent (12.20%) of Hispanic women report sexual assault if they also reported environmental harassment, compared to 0.66% reporting assault if they did not experience environmental harassment. Nearly eleven percent (10.95%) of Black women report assault if they also reported environmental harassment, followed by 8.99% for others, and 8.63% for Whites.

Table 5 shifts the focus slightly from prevalence of sexual harassment and assault to consequences. Respondents were asked: “As a result of the situation, did you … Think about getting out of your Service?” This is a good indicator of the likelihood of retaining versus losing service members. Those indicated that they experienced some individual or some environmental harassment is more likely to indicate that they thought about getting out. The increase in the percentages is greater for the women than the men. This is
captured by the ratios in the tables. Women reporting individual harassment are 28% more likely to think about getting out compared to those reporting no individual harassment. For men the increase in likelihood is 9%. Shifting to environmental harassment, the increase in likelihood is 63% for the women and 15% for the men. Nearly one in four women (24.9%) report thoughts of getting out based on their experience(s).

The results based on experience of sexual assault are even more striking. Ratios of 2.29 for the women and 2.37 for the men indicate that thinking about getting out is much more than double the likelihood for those reporting sexual assault. For the men, 35.47% report thoughts of getting out while the figure is 46.47% for the women.

Table 6 provides the results of logistic regression models designed to predict the probability of reporting attempted or actual sexual assault. The first model is for males, the second for females and the third for the total sample. In all three models the dominant variables increasing the likelihood of assault are individual harassment, followed by sexist behavior and then environmental harassment. When controlling for these three factors three other variables are statistically significant for the males. Officers are about half as likely, junior enlisted men are more than twice as likely, and Black males are nearly twice as likely to report sexual assault. The non-significant variables are also of interest. There are no meaningful differences by branch, deployment status, or being stationed outside the U.S.

Again controlling for the three major predictors, two other variables are statistically significant for the females. Being a junior enlisted member increases the odds of reporting assault by more than three times, though note that being an officer is not statistically significant in reducing the likelihood of assault. Being deployed outside of
the U.S. more than doubles the likelihood reporting assault. Again, branch and deployment status display no statistically meaningful differences and Black women are not significantly different from others in this model.

The results for the total sample roughly parallel those for the separate analyses, with one major surprise. When the other variables are controlled, the coefficient for “Female” is negative (-0.20) and statistically significant at the 0.04 level. This suggests that if sexist context, environmental harassment and, consequently, individualized harassment did not occur women would actually have a lower probability of reporting sexual assault than men in the armed services.

The roles of individual and environmental harassment in the logistic regression analyses are interesting. Our conceptual model (see Appendix A, Figure 8) suggests that environmental harassment along with sexist behavior create a context in which individual harassment is viewed as acceptable by potential perpetrators, and this context in turn increases the likelihood of sexual assault. Figure 7 captures the linkage between individual and environmental harassment in a clear and powerful display. When no environmental harassment is reported, individual harassment is very rarely reported. For males, of those reporting no environmental 89.11% also report an absence of individualized harassment. For females, of those reporting no environmental 81.61% also report an absence of individualized harassment. When environment is reported the probability that there will also be individualized harassment is extremely high: 98.09% of the time for males and 99.09% of the time for females. The reporting of individualized harassment has by far the greatest increase in the probability of sexual assault.

The results in Figure 7 are also displayed in Table 7, capturing the statistical strength of this relationship with gamma. Gamma is an interesting statistic that can attain
a value of 1.0 in circumstances where a relationship is “conditionally perfect.” This means that if one condition is present one could perfectly predict the presence of another condition. This is very close to the case here, with gammas of 0.995 for males and 0.996 for females. When environmental harassment is reported, individualized harassment also is almost always reported.

Discussion

Our analyses support past research indicating that sexism, sexual harassment, and sexual assault in the workplace are overlapping, yet distinct concepts. Findings indicate that those individuals experiencing various forms of unprofessional, gender-related behaviors (crude or offensive behaviors, unwanted sexual attention, sexual coercion, sexist behaviors) were also more likely to report experiencing attempted and actual rape, and increasing numbers of incidents increases the likelihood of sexual assault being reported. In our initial analysis of the 1988 data we indicated that our results highlight how attempting to remedy the problem of harassment by focusing on changing individual behaviors rather than on altering a military culture in which sexism may still be unofficially condoned and institutionally supported are doomed to failure.

It seems likely that an organizational context in which environmental harassment may still be unofficially condoned and institutionally supported as a process for excluding women, and even men considered as “outsiders”, (e.g., race and ethnic minorities, sexual minorities) from becoming part of an organization which values cohesion and esprit d’corp, sends a message to those individuals inclined to engage in the more egregious individualized forms of harassment and sexual assault that their behaviors are acceptable.
Importantly, our findings suggest that the context in which men and women perform their duties is a key factor in whether or not individuals reported sexual harassment or rape. In particular, when individualized harassment and unwanted sexual attention are reported, rape is very likely to be reported. Clearly our results indicate the importance of gender relations for enabling the active duty force to carry out its mission. More attention should be paid to gender relations and their impacts on retention of a diverse military.
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References


Upper Saddle River, NJ: Thompson, University Casebook Series.


Sev’er, A. (1999). Sexual harassment: Where we were, where we are and prospects for the new millennium. *Canadian Review of Sociology and Anthropology, 36*(4), 469-497.


Figure 1
Percent Reporting Some Form of Sexual Harassment, 2002 and 2006
Figure 2
Percent Reporting Sexual Harassment Behaviors, 2006
Figure 3
Percent Reporting Environmental Harassment 2006

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Figure 4
Percent Reporting Individual Harassment 2006
Figure 5
Percent Reporting Sexual Assault, 2006
Figure 6
Sexual Assault by Reported Environmental Harassment, 2006
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Figure 7
Individual by Environmental Harassment

Note: Blue = No Individualized Harassment Reported; Red = Some Individualized Harassment Reported
Figure 8
Explanatory Model to Predict Attempted and/or Actual Sexual Assault

- Environmental Harassment
- Sexist Environment
- Individual Harassment
- Attempted/Actual Sexual Assault
Table 1.

Reported Sexual Harassment Behaviors in 2002 and 2006 According to Sex

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<td>N</td>
<td>12234</td>
<td>1379</td>
<td>13613</td>
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<td></td>
<td>%</td>
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<td>47.45</td>
<td>71.42</td>
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<td>3920</td>
<td>1527</td>
<td>5447</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>24.27</td>
<td>52.55</td>
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<td>%</td>
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<th>Total</th>
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<td></td>
<td></td>
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<td>17171</td>
<td>1846</td>
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<td></td>
<td>%</td>
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<td>65.94</td>
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<td>%</td>
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<tr>
<td></td>
<td>%</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<td>Difference in Percent Harassed</td>
<td>5.99</td>
<td>3.69</td>
<td>5.48</td>
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Note: Weighted Results (Normalized)
Table 2.

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<td></td>
<td>Percent</td>
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<td>Percent</td>
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<td>No</td>
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<td>Yes</td>
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<td>Percent</td>
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<td>355897</td>
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**Sexual Assault Incident Rate by Sex**

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<td></td>
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<td>2.58</td>
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<td>Percent</td>
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Table 3.

Assault or Attempted Assault by Sex According to Reports of Environmental Harassment

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<tr>
<th>2006 Environmental Harassment</th>
<th>Assault</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
<th>Yes/No Ratio</th>
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<td>Male</td>
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<td></td>
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<td>Female</td>
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<td>90.22</td>
<td>94.98</td>
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<tr>
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Table 4.

Sexual Assault by Demographics and Respondents’ Reports of Environmental Harassment

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<td>Did not</td>
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<td>Female</td>
<td>Did not</td>
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<td>95.48</td>
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### Female

#### Reports of Sexual Assault Depending on Reports of Environmental Harassment

<table>
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<th>Reports Demographics</th>
<th>Reports Demographics</th>
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<td>Did not</td>
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<td>None experience</td>
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<td>99.34</td>
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Table 4 (continued).

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<td>Experienced</td>
<td>0.81</td>
<td>0.66</td>
<td>0.90</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Did not</td>
<td>89.0</td>
<td>90.1</td>
<td></td>
</tr>
<tr>
<td>Some experience</td>
<td>5</td>
<td>87.80</td>
<td>91.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.9</td>
<td></td>
</tr>
<tr>
<td>Experienced</td>
<td>5</td>
<td>12.20</td>
<td>8.63</td>
</tr>
</tbody>
</table>
Table 5.
Responses reflecting the degree males and females considered terminating service due to the situation.

<table>
<thead>
<tr>
<th></th>
<th>Individual Harassment</th>
<th>Environmental Harassment</th>
<th>Sexual Assault</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>Some</td>
<td>Total</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>84.99</td>
<td>83.58</td>
<td>83.73</td>
</tr>
<tr>
<td>Yes</td>
<td>15.01</td>
<td>16.42</td>
<td>16.27</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>None/Some Ratio</td>
<td>1.09</td>
<td>1.15</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>82.07</td>
<td>77.00</td>
<td>77.58</td>
</tr>
<tr>
<td>Yes</td>
<td>17.93</td>
<td>23.00</td>
<td>22.42</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>None/Some Ratio</td>
<td>1.28</td>
<td>1.63</td>
<td></td>
</tr>
</tbody>
</table>
Table 6.
Logistic regression models predicting the probability of reporting attempted or actual sexual assault, 2006

<table>
<thead>
<tr>
<th>Individual</th>
<th>Assault – Males</th>
<th>Assault – Females</th>
<th>Assault – Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Sig</td>
<td>Exp (B)</td>
</tr>
<tr>
<td>Environmental</td>
<td>3.89</td>
<td>0.0</td>
<td>48.95</td>
</tr>
<tr>
<td>Sexist Behavior</td>
<td>1.09</td>
<td>0.0</td>
<td>2.97</td>
</tr>
<tr>
<td>Female</td>
<td>3.13</td>
<td>0.0</td>
<td>22.92</td>
</tr>
<tr>
<td>Army</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Navy</td>
<td>0.20</td>
<td>0.56</td>
<td>1.22</td>
</tr>
<tr>
<td>Marines</td>
<td>0.48</td>
<td>0.17</td>
<td>1.62</td>
</tr>
<tr>
<td>Airforce</td>
<td>-0.15</td>
<td>0.68</td>
<td>0.86</td>
</tr>
<tr>
<td>Deployed</td>
<td>0.28</td>
<td>0.45</td>
<td>1.32</td>
</tr>
<tr>
<td>Stationed outside US</td>
<td>-0.03</td>
<td>0.83</td>
<td>0.97</td>
</tr>
<tr>
<td>Officer</td>
<td>-0.02</td>
<td>0.87</td>
<td>0.98</td>
</tr>
<tr>
<td>JR Enlisted</td>
<td>-0.73</td>
<td>0.00</td>
<td>0.48</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.83</td>
<td>0.00</td>
<td>2.30</td>
</tr>
</tbody>
</table>
Table 7.
Linkage between individual and environmental harassment.

<table>
<thead>
<tr>
<th>Individual Harassment</th>
<th>Environmental Harassment</th>
<th>None</th>
<th>Some</th>
<th>Total</th>
<th>Gamma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>None</td>
<td>89.11</td>
<td>1.91</td>
<td>70</td>
<td>0.995</td>
</tr>
<tr>
<td></td>
<td>Some</td>
<td>10.89</td>
<td>98.09</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>None</td>
<td>81.61</td>
<td>0.91</td>
<td>43.81</td>
<td>0.996</td>
</tr>
<tr>
<td></td>
<td>Some</td>
<td>18.39</td>
<td>99.09</td>
<td>56.19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Notes

1 Characteristics of closed organizations include: 1. Workers have minimal control over their working lives. 2. They are expected to be subordinate, passive and dependent. 3. They work to a short-term perspective. 4. The employee is like a “good soldier” a voluntary subordinate to higher purposes. 5. Their working conditions are conducive to psychological failure. In short, people are treated more as infants than as competent human beings. Other key elements include, Stability of Tenure of Personnel - High employee turnover is inefficient; Initiative - Employees who are allowed to originate and carry out plans will exert high levels of effort; Esprit de Corps - Promoting team spirit will build harmony and unity within the organization. Note how closely these characteristics resemble the U.S. military structure, and that this approach is entirely at variance with the rhetoric (but perhaps not the reality) of modern management thinking with its emphasis on empowerment, team-work and motivated performance (see for example, Weber, 1947; Fayol, 1947).

2 Because the questions used in the 2006 and 2002 surveys were not an exact match to the questions from the original 1988 survey, our conceptualizations for individual and environmental harassment are a broad match, but not an exact match of our earlier research. For a description of the statements classified as individual or environmental

3 The three-stage process of weighting consists of the following steps:

- **Adjustment for selection probability**—Probability samples, such as the sample for this survey, are selected from lists and each member of the list has a known nonzero probability of selection. For example, if a list contained 10,000 members in a demographic subgroup and the desired sample size for the subgroup was 1,000, one in every tenth member of the list would be selected. During weighting, this selection probability (1/10) is taken into account. The base, or first weight, used to adjust the sample is the reciprocal of the selection probability. In this example, the adjustment for selection probability (base weight) is 10 for members of this subgroup.

- **Adjustments for nonresponse**—Some sampled members do not respond to the survey. Continuing the previous example, suppose only half of the sample members (i.e., 500 out of 1,000) completed and returned a survey. Because the unweighted sample size would only be 500, weights are needed to project the sample up to the subgroup population total (10,000). In this case, the base-weighted respondents would sum to only 5,000 weighted respondents. To adjust for nonresponse, the base weights are multiplied by the reciprocal of the nonresponse rate. In this example, the base weight (10) is multiplied by the reciprocal of the nonresponse rate (2) to create a new weight of 20. The weighted sample sums to the subgroup population total of 10,000.

- **Adjustment to known population values**—The first of the two previous weighting adjustments are applied according to the demographic groupings used in designing the subgroups for the sample. The second is based on population characteristics that are known to be related to whether a sample person responds to the survey. Because the sample design and adjustments for nonresponse cannot take into account all demographic differences related to who responds to a survey and how they respond, auxiliary information is used to increase the precision of survey estimates. For this reason, a final weighting adjustment is computed that reproduces population totals for important demographic groupings related to who responds to a survey and how they might answer the survey. Suppose in our example the population for the subgroup was 8,500 men and 1,500 women, but the nonresponse-adjusted weighted estimate from the respondents was 7,000 men and 3,000 women. To reduce this possible bias and reproduce known population totals, the weights would be adjusted by 1.21 for men and 0.5 for women so that the final weights for men and women would be 24.3 and 10 which would give unbiased estimates of the total and of women and men in the subgroup.