

NIH Public Access

Author Manuscript

J Interpers Violence. Author manuscript; available in PMC 2014 April 08.

Published in final edited form as:

J Interpers Violence. 2009 May ; 24(5): 819–843. doi:10.1177/0886260508317182.

Prevalence and Mental Health Correlates of Harassment and Discrimination in the Workplace: Results from a National Study

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Abstract

This study describes past-year prevalence and effects on mental health and drinking outcomes for harassment and discrimination in the workplace (HDW) in a nationally-representative randomdigit dial phone survey conducted in 2003–2004 (n=2,151). HDW measures included experiences and perceptions of sexual harassment and generalized workplace harassment, and perceived harassment or discrimination due to race/ethnicity. Prevalence was examined by sex, race, age, occupation, marital status, and education. Effects of HDW were assessed controlling for demographics and job and life stressors. Experiencing multiple types of HDW was common. Sexual harassment was more prevalent among women, and Blacks and those of other or mixed race/ethnicity experienced the highest levels of HDW overall. HDW variables explained additional variance in problem drinking and mental health beyond life and job stressors, particularly for women. This study demonstrates that HDW is a prevalent problem associated with poor mental health and problem drinking in the U.S. workforce.

Keywords

workplace harassment; discrimination; stress; drinking behavior; mental health

Harassment and discrimination in the workplace (HDW) takes many forms, and can occur for a variety of reasons such as one's sex, race/ethnicity, or age. HDW may also occur for reasons not obviously based on one's social status characteristics, as in the case of generalized workplace harassment or workplace bullying¹. A major limitation of existing research involves the lack of direct comparison of the prevalence, demographic correlates, and outcomes of different types of HDW. Such knowledge is essential in order to accurately understand the scope of the problem, further develop harassment theory, and to better translate research findings into development of appropriately targeted interventions. Utilizing a stress framework, we address the conceptualization and measurement of various forms of HDW, examine their comparative prevalence under different measurement strategies, and address mental health and alcohol use outcomes of HDW using data from the first national sample to examine multiple types of HDW.

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Preliminary data related to this paper were presented at the conference, "Work, Stress, and Health 2006: Making a difference in the workplace," Miami, Florida, March, 2006.

¹While generalized workplace harassment and bullying are closely related constructs, they differ in operationalization, with the term "bullying" applied specifically to experiences occurring on a regular basis and with a duration of six months or longer. See the volume edited by Einarsen and colleagues (Einarsen, Hoel, Zapf, & Cooper, 2003) for perspectives on definition and measurement of the "bullying" construct.

Definitions and Conceptualization of Harassment and Discrimination in the Workplace

Perceived mistreatment in the workplace that contributes to an unwelcoming or hostile working environment underlies most definitions of harassment. From a legal perspective, the term "harassment" encompasses individual behaviors that cause harm or contribute to a hostile working environment, while "discrimination" represents the net effect of harassment (Ehrenreich, 1999). Thus, discrimination results when harassment creates a hostile working environment or affects the terms, conditions, or ability to do one's job disparately for members of a protected class. (In the U.S., workers are protected from discrimination based on sex, race, color, national origin, religion, age, and disability.) Although researchers have focused on single types of HDW, individual types generally differ only in terms of the perceived reason for the harassment or discrimination, e.g., a target's sex in the case of sexual harassment (SH), race/ethnicity in the case of racial harassment/discrimination (RHD), or a reason other than a legally-protected characteristic in the case of generalized workplace harassment (GWH) (Rospenda & Richman, 2004, 2005). Thus, we consider "workplace harassment and discrimination" (HDW) to be an umbrella term encompassing all specific forms of harassment and discrimination.

HDW as a Stressor

Many researchers have examined various types of HDW from within a stress theory framework (e.g., Fitzgerald, Hulin, & Drasgow, 1994; Richman, Flaherty, & Rospenda, 1996; Sanchez & Brock, 1996). From this perspective, grounded in the work of Lazarus and Folkman (1984), HDW experiences are cognitively appraised as stressful and overwhelm targets' coping capacities, leading to negative mental health and behavioral outcomes. Research on SH, RHD, and GWH suggests that each are associated with negative health and mental health outcomes, such as depression, anxiety, and distress (Bowling & Beehr, 2006; Kessler, Mickelson, & Williams, 1999; Pavalko, Mossakowski, & Hamilton, 2003; Richman et al., 1999), as would be predicted by stress theory. Accumulating evidence shows that both SH and GWH are additionally linked to alcohol and substance use (e.g., Richman et al., 1999), possibly as a coping strategy to reduce tension associated with HDW. However, there is a lack of directly comparable information about prevalence of different forms of HDW and effects on psychological and physical outcomes, because studies typically have not examined multiple forms of HDW.

If, SH, GWH, and RHD are all elements of the same general construct of HDW, one logical question is whether some forms of HDW are inherently more stressful than others, and thus have different effects on outcomes. However, researchers have not directly compared the degree to which workers appraise different types of HDW as stressful. One simple proxy for appraisal is the extent to which workers perceive or label their experiences as "harassment" or "discrimination". Labeling one's experiences as harassing or discriminatory implies that they are stressful. According to stress theory then, those who label their experiences as harassing or discriminatory should suffer worse outcomes. While SH research shows that labeling does not result in worse outcomes (e.g., Magley, Hulin, Fitzgerald, & DeNardo, 1999; Munson, Miner, & Hulin, 2001), similar research on other forms of HDW is lacking. Understanding the effects of labeling versus not labeling one's experiences as harassing or discriminatory has implications for organizational policy: even if employees do not report being harassed or discriminated against, their mental health and productivity may be just as strongly affected when they experience harassment-related behaviors, yet **do not** label these experiences as HDW.

Shortcomings of Existing Research on HDW

The issue of labeling is related to the appropriateness of using multi-item measures (incorporating an array of individual experiences that might be considered harassing or discriminatory) versus single-item assessments of whether or not respondents feel they have been harassed or discriminated against. Sexual harassment researchers have found that only between 10% and 48% of women and about 7% of men actually label their experiences as SH (e.g., Fitzgerald et al., 1988; Magley et al., 1999; Munson et al., 2001). Again, research outside the SH literature is lacking (for an exception, see Brown, 2001), although it is likely that a reluctance to label all of one's negative experiences as harassing or discriminatory would operate regardless of harassment/discrimination type. This is an important issue insofar as prevalence rates will differ based on which measurement strategy is used, distorting assessment of true prevalence.

Beyond measurement strategy issues, research suffers from other limitations. First, most studies have relied on small, convenience samples restricted to single workplaces or occupations. Resulting prevalence estimates may be biased if respondents are from organizations where management suppresses reports of harassment, or if harassment targets have left the organization. The largest American studies of HDW to date are the SH studies conducted by the United States Merit Systems Protection Board (USMSBP)(United States Merit Systems Protection Board, 1981, 1988, 1995) and the U.S. Department of Defense (DoD)(Hay & Elig, 1999). Prevalence of SH experiences ranged between 42% and 64% for women and 14% to 19% for men in these studies. As noted above, prevalence of SH is lower when respondents are asked specifically if they have experienced sexual harassment.

The U.S. Department of Defense (DoD) conducted a large scale study of RHD in the military (Scarville, Button, Edwards, Lancaster, & Elig, 1999). In this study, prevalence of racially harassing experiences was about 62% for whites and 78% for minorities (Scarville et al., 1999), although the measure of RHD also contained items assessing perceived racial/ ethnic harassment or differential treatment not necessarily occurring in the workplace (e.g., off-base). Prevalence rates in civilian populations are lower: less than 10% for whites and 40-50% for minorities (Krieger, 1990; Schneider, Hitlan, & Radhakrishnan, 2000). However, research is lacking on whether respondents label such experiences as harassing or discriminatory. While there are a wide variety of occupations represented in the USMSPB and DoD studies, respondents were federal or military employees, limiting the generalizability of the results. An exception is a recent national study of workplace aggression (including GWH)(Schat, Frone, & Kelloway, 2006), which found a prevalence rate of 41%. This rate was higher for men, those aged 26–35, and those in service or sales jobs. However, this study suffers from its exclusion of multiple forms of HDW and its limited measure of workplace aggression. Studies of single workplaces have found rates of GWH experiences ranging from 55% (Bjorkqvist, Osterman, & Hjelt-Back, 1994) to 75% (Rospenda, Richman, Wislar, & Flaherty, 2000).

Another problem with existing research is that, with a few exceptions (Glomb, Munson, Hulin, Bergman, & Drasgow, 1999; Rospenda et al., 2000), HDW researchers have overlooked sources of stress from one's broader job context, and no studies to date have examined the effects of HDW in the context of non-work stressors, despite the fact that life stressors are associated with mental health (Pearlin, 1999) and alcohol use (Steffy & Laker, 1991). By neglecting alternate sources of stress, estimates of the overall effects of HDW on outcomes may be inaccurate. On the other hand, researchers have argued that HDW represents a particularly pathogenic stressor because it may be seen as an unexpected and unnecessary aspect of work (Richman et al., 1996). Thus, even if relationships between

HDW and outcomes are attenuated in the presence of other stressors, we expect HDW to have significant effects on mental health and drinking, beyond the effects of other stressors.

Finally, assumptions about HDW have led to a nearly exclusive focus on certain groups as targets. For example, men are often excluded from SH research because of a belief that SH does not apply to men, although research that directly compared rates of SH for women versus men in a university workplace found no significant difference in prevalence (Richman et al., 1999). Limiting research to certain groups has resulted in a dearth of knowledge about the prevalence and correlates of harassment in "unlikely target" groups, e.g., sexual harassment or gender discrimination of men, and RHD of whites.

This study overcomes the shortcomings of prior research by examining the prevalence and outcomes of multiple forms of HDW, including experiences and perceptions of SH and GWH, and perceptions of RHD in a nationally-representative U.S. sample. Our goals were to: (a) assess the comparative prevalence of different kinds of HDW by various demographic categories, in order to show which groups may be at highest risk for HDW, (b) compare prevalence rates of HDW when measured with single perceptual items versus responses to multi-item behaviorally-based scales, where possible, (c) determine whether relationships between forms of HDW and mental health and drinking still hold in the context of other stressors that may affect these outcomes, (d) examine if appraisal of HDW experiences as harassing or discriminatory is more strongly associated with negative outcomes than composite measures of HDW experiences, and (e) examine whether the effects of HDW differ by gender.

Based on the literature outlined above, we propose to test two hypotheses:

- Hypothesis 1Labeling one's experiences as harassing or discriminatory will be
more strongly associated (i.e., larger regression coefficients, greater
additional variance explained in outcomes) with mental health and
drinking outcomes than HDW experiences.
- **Hypothesis 2** Both types of measures of HDW (labeling and experiences) will predict significant additional variance in mental health and drinking outcomes, beyond the effects of other stressors.

While we explore gender differences in HDW-outcome relationships in this paper, we do not propose specific hypotheses about gender, since theory and research do not support consistent predictions. For example, women experience SH at higher levels than men (Magley et al., 1999) and are more likely to experience GWH, particularly chronic GWH (Bjorkqvist et al., 1994; Rospenda et al., 2000). Research demonstrates that women are more likely to exhibit depression in response to stressors (Aneshensel, Rutter, & Lachenbruch, 1991), while men are more likely to exhibit alcohol use (Swendsen et al., 2000), but composite measures of SH and GWH have been similarly linked to increased alcohol use and abuse (Richman et al., 1996; Richman et al., 1999) and mental health (Richman et al., 1999) for both genders. By contrast, a recent meta analysis demonstrated that GWH more strongly affected women's job satisfaction (a workplace outcome linked to workers' mental health)(Lapierre, Spector, & Leck, 2005). Finally, research on men and women in the military found no gender difference in the effects of experiencing versus labeling SH; frequency of SH experiences was more important in explaining outcomes for both genders (Munson et al., 2001). However, most research has been limited to individual workplaces or occupations. Thus, it is possible that perceiving different types of experiences as harassing or discriminatory may have different effects on mental health and drinking outcomes for women versus men in a more representative sample. We explored this possibility as a research question.

Method

Sampling and Data Collection

Households within the continental U.S. (in August 2003 through February 2004) were contacted using random digit dial (RDD) telephone survey methodology. All cases with a listed address received an advance letter. Trained telephone interviewers screened households for number of adults (age 18+) who had worked at least 20 hours/week at some point in the past 12 months. Where multiple adults met these criteria, interviewers selected one adult for participation using the Troldahl-Carter-Bryant method (Lavrakas, 1986). Of 4,116 households with eligible individuals, n=2,151 (52.3%) agreed to participate. Interviews averaged about 30 minutes and were conducted in English or Spanish (4%). A \$10 incentive was sent to respondents. We applied selection weights (to adjust for number of phone lines and number of eligible adults within the household) and post-stratification weights (to ensure the distribution of key demographic variables in the sample conformed to their distribution in the 2003 Current Population Survey) to the data. We used weighted data in all statistical analyses, to obtain population estimates of prevalence and to allow for generalization of results to the U.S. adult working population.

Measures

Sexual Harassment (SH)—We used a shortened version of the 20-item Sexual Experiences Questionnaire (SEQ) (Fitzgerald et al., 1988) to measure SH experiences. The SEQ measures three components of SH: gender harassment (e.g., treated differently because of your gender), unwanted sexual attention, and sexual coercion (e.g., treated you badly because you refused to have sex)(Gelfand, Fitzgerald, & Drasgow, 1995). Nine items were included in this study (three items from each of the three conceptual components were selected based on item-total correlations, $\alpha = .77$). Items were worded to apply to either gender, and respondents rated frequency of each experience on a 3-point scale 1= "Never", 2= "Once", 3="More than once" for the past 12 months. We coded SH dichotomously for the prevalence analyses (1=experienced 1+ SH items at least once; 0=never experienced SH). Otherwise, we summed items to create a composite score.

Gender Harassment/Discrimination at Work (GHD)—We measured perceived GHD at work using the item, "In the past 12 months at work, have you been discriminated against or harassed because of your gender?" (1=yes, 0=no). This item is similar to the SEQ "labeling" item where respondents indicate whether they consider themselves to have been sexually harassed. Because sexual harassment is a form of discrimination based on gender, we used this as the perceptual or labeling item corresponding to SH.

Generalized Workplace Harassment (GWH)—We measured GWH using a shortened version of the 29-item Generalized Workplace Harassment Questionnaire (Rospenda & Richman, 2004), a measure developed to address five conceptual dimensions: verbal aggression (e.g., made negative comments about your intelligence), disrespectful behavior (e.g., humiliated you in front of others), isolation/exclusion (e.g., ignored you), threats/ bribes, and physical aggression. Ten items (**excluding** physical aggression) were included in this study (items were selected following the same procedure as for the development of the shortened SEQ scale, α =.86). Respondents rated their experiences on the same response scale as the SEQ. We dichotomized this measure into ever versus never experienced harassment in the past 12 months when examining prevalence and we used the composite score otherwise. To examine whether the shortened versions of these scales performed similarly, we conducted confirmatory factor analysis using AMOS 5.0. Results were consistent with Fendrich et al. (2002), indicating that the reduced-item versions of the SEQ and GWH represent distinct, but correlated, constructs (Correlation =.58; model root mean

squared error of approximation [RMSEA] = .047; 90% CI = .04-.05). While the original 3-factor structure of the SEQ was upheld by this CFA, the shortened version of the GWHQ was found to be best represented as a single construct.

Other Harassment/Discrimination at Work (OHD)—We measured perceived harassment or discrimination for reasons other than race or gender with the item, "In the past 12 months at work, have you been discriminated against or harassed for any other reason?" (1=yes, 0=no). Respondents who answered "yes" were asked to specify reason(s) for the perceived harassment/discrimination. We conceptualized OHD as the perceptual item corresponding to the multi-item GWH scale.

Racial/Ethnic Harassment/Discrimination at Work (RHD)—We assessed perceived racial/ethnic harassment or discrimination at work (RH) with the item, "In the past 12 months at work, have you been discriminated against or harassed because of your race, ethnicity, color, or national origin?" (1=yes, 0=no). We modeled this item after the racial discrimination item in Noh et al. (1999). Unfortunately we did not have a multi-item measure of RHD to compare with this perceptual item.

Life Stressors—We assessed past year life stress using the 12-item List of Threatening Experiences (LTE) (Brugha & Cragg, 1990). The LTE was based on life events drawn from a general population sample, rated for long-term contextual threat (e.g., illness, injury, separation from a loved one through divorce or death, financial difficulties, theft, etc.). Respondents indicated either "yes" or "no" to the life event specified, and we summed responses to each item to create an overall indicator of life stressors.

Job Stressors—We measured general job stressors with a shortened version of the 15item Stress in General Scale (SIG) (Stanton, Balzer, Smith, Parra, & Ironson, 2001). The SIG was developed to be widely applicable across professions, industries, and cultures (Stanton et al., 2001). The SIG has two subscales: job pressure ($\alpha = .66$) assesses the sense of time pressure on the job, and job threat ($\alpha = .65$) assesses experienced overall threatening or negative quality of the job. Respondents indicated whether a series of words described their job using the response categories 1= "yes", 3= "no", and 1.5= "can't decide". We summed the items to create scores for the two subscales.

Brief MAST—We used six items from the Brief MAST (BMAST) (Pokorny, Miller, & Kaplan, 1972) to measure problematic alcohol use in the past-year. The BMAST correlates strongly with the full version of the MAST (Pokorny et al., 1972), and is used as a screening tool for alcohol problems among current drinkers (Allen, Maisto, & Connors, 1995). We omitted four items from the original BMAST that proved problematic in the survey pre-test (e.g., respondents didn't understand the meaning of the questions). Respondents answered "yes" (coded 1–5) or "no" (coded 0) for each item. We summed the items to create a composite index of problem drinking. Because four items from the original scale were omitted, the modified measure should be viewed as a conservative indicator of problem drinking.

Drinking to Intoxication was assessed with one item from Wilsnack and colleagues (S. C. Wilsnack, Klassen, Schur, & Wilsnack, 1991): "About how often in the past 12 months did you drink enough to feel drunk, that is, where drinking noticeably affected your thinking, talking, and behavior?" Responses were given on an 8-point scale from 1= "Never" to 8= "5 times a week or more".

Mental Health—We measured global psychological distress and well-being with the 5item Mental Health Inventory(MHI-5)(Davies, Sherbourne, Peterson, & et al., 1988), designed for use in general populations. Items are scored on a 6-point scale (1= "All of the time" to 6= "None of the time"). Items assess feelings of anxiety, depression, loss of emotional control, and psychological well-being (α =.77).

Demographics—Demographic variables included age, gender, race/ethnicity (white, Asian, black, Hispanic, other/mixed), education, marital status (married, widowed/divorced/ separated, and never married) and occupation (based on two-digit Standard Occupational Classification codes). Due to small numbers in some categories, we combined occupations into broader categories: Management/Business, Professional (e.g., computer, math, engineering, science, legal, education, healthcare occupations), Service (e.g., food preparation, maintenance, healthcare support occupations), Sales/Office, Construction/ Extraction, and Production/Transportation. (Farming, Fishing, Forestry, and Military professions were not well represented, and were dropped from the analyses.)

Results

Means and correlations of study variables are displayed in Table 1. We describe prevalence of harassment and discrimination at work (HDW) overall and by gender, then describe demographic correlates of HDW for women and men. As expected, past year prevalence of perceived (i.e., labeled) HDW was lower than behavioral experiences of HDW: 47% of the sample reported having one or more sexual harassment (SH) experiences, 9% perceived their experiences as being gender harassment/discrimination (GHD), 63% reported one or more generalized workplace harassment (GWH) experiences, 12% perceived their experiences as being an "other" form of harassment or discrimination (OHD), and 10% perceived their experiences as being racial harassment/discrimination (RHD). These rates are consistent with rates found in the existing literature (with the exception of past year workplace RHD perceptions, where no data has been published to our knowledge). Perceived reasons for OHD among the n=255 respondents who indicated a reason included age (16%), jealousy or competition (16%), respondents' opinions about or attitudes toward work (16%), and weight or disability (10%) (other reasons had frequencies of 9% or less, and reasons did not differ by gender).

Correlations between measures of HDW ranged from 0.23 to 0.53, suggesting a range in overlap between different measures. Further examination revealed that 40% of the sample reported both SH and GWH experiences, representing the most common overlap of HDW types. Of the entire sample, only 8% and 9% exhibited overlap of RHD with SH and GWH, respectively. Regarding overlap of multi-item measures with their corresponding perceptual/ labeling item, of those who experienced SH, 19% (13% of men; 24% of women) labeled their experiences as gender harassment or discrimination (GHD). Of those who experienced GWH, 18% (17% of men; 21% of women) labeled their experiences as "other" harassment or discrimination (OHD). HDW measures also generally exhibited significant positive correlations with stressful life events, job pressure, and job threat. Prevalence rates by sex, race/ethnicity, occupation, age, education, and marital status are displayed in Table 2. Gender differences in overall prevalence of HDW experiences or perceptions were observed for SH, GHD, and OHD, where, in all cases, women exhibited higher prevalence than men. In terms of gender differences in HDW within various other demographic categories, SH prevalence was significantly higher for women than men in the following groups: ages 31-60, higher levels of education, married or never married, white or Asian race/ethnicity, and blue collar jobs. Within demographic categories, gender differences in perceiving GHD were in many cases similar. Notable differences in addition to those mentioned for SH were that women aged 30 and under, who were high school graduates and in management or sales

jobs were more likely to perceive GHD than men. One unexpected finding was the significantly higher prevalence of SH experiences for black men (69%) compared to black women (53%). In fact, black men exhibited the highest prevalence of SH experiences overall. Examination of individual SH items indicated that the difference was driven by experiences of unwanted sexual attention. Among men, Black men had the highest overall prevalence of GHD (which was also significantly higher than GHD prevalence for black women), suggesting that they labeled their SH experiences as harassing or discriminatory. No gender differences were observed for GWH experiences, but women with less than high school education and Latino women were more likely than men to label their experiences as OHD. No gender differences were found for RHD.

Among women, demographic correlates of SH were being aged 31–40, having a bachelor's degree or higher, and being unmarried. Demographic correlates of labeling one's experiences as GHD for women were having a high school, bachelor's or graduate degree. Being unmarried and of younger age were the only significant correlate of GWH for women. Prevalence of HDW was not related to race for women, with the exception of RHD, which was more frequently experienced by minority women. There were no significant differences in prevalence of HDW by occupation for women.

Similar to women, younger age and unmarried status were associated with higher prevalence of SH and GWH for men. Unlike women, however, being black or of "other" race/ethnicity was also associated with higher prevalence of SH and GWH for men. Working in professional or service (female dominated) occupations was associated with higher prevalence of SH for men. Being black or in professional, service, or sales/office jobs were also significantly related to perceiving GHD for men but not women. Men in construction/ extraction and management (male dominated) occupations were least inclined to perceive GHD. Being non-white and being in service or production/transportation occupations were associated with RHD. There were no significant demographic correlates of OHD for men or women.

As found in other research comparing multi-item behavioral scales to perceptual or labeling items, we found prevalence to be higher for the multi-item SH and GWH scales compared to their single-item perceptual counterparts (GHD and OHD, respectively). (See Brown, 2001 for an exception related to lifetime racial discrimination.) Unfortunately, we were unable to compare prevalence rates by measurement strategy for RHD, as we did not have a multi-item measure of racial/ethnic harassment or discrimination in this study.

To test hypotheses 1 and 2, we examined relationships between HDW and mental health and problem drinking outcomes using ordinary least squares (OLS) regression. Because mental health (Piccinelli & Gomez Homen, 1997), alcohol use (R. W. Wilsnack et al., 2000), and harassment (United States Merit Systems Protection Board, 1995) have been found to differ by gender, we conducted separate analyses for men and women. (Low numbers of Asians and those of "other" race/ethnicity precluded us from conducting analyses separately by race/ethnicity.) Separate regression equations were conducted to examine potential differences in the effects of each type of HDW. Drinking variables were right-skewed; natural log and other transformations were attempted to normalize the distributions, but did not substantially affect the results obtained. We retained the original forms of these variables for ease of interpretation. We entered demographic variables in the first step, followed by life stressors, job pressure and threat, and finally the measures of HDW.

Table 3 displays the results of the regression analyses. Hypothesis 1 was partially supported for women, in that the labeling variables GHD and OHD exhibited higher beta weights and explained more variance in drinking to intoxication and the Brief MAST compared to their

multi-item counterparts (SH and GWH, respectively). However, for men, only SH and GWH experiences, rather than their corresponding labeling items GHD and OHD, were related to outcomes. Regarding hypothesis 2, demographics, life stressors, and job pressure and threat tended to be more strongly associated with outcomes, together explaining up to 20% of total variance, while HDW variables explained between 1 and 3% additional variance in some outcomes. SH explained additional variance in frequency of intoxication for men, while GHD and OHD explained additional variance in grequency of intoxication for women. GWH, GHD, and OHD explained additional variance in Brief MAST scores for women but not men. GWH explained additional variance in mental health for both men and women, while SH and OHD were significant only for women. Thus, hypothesis 2 was partially supported.

Discussion

The data presented here derive from the first nationally-representative study to measure various forms of harassment and discrimination in the workplace (HDW) at the same time. One of its main contributions is to demonstrate the comparative prevalence of different types of HDW for different demographic groups, under different measurement conditions, in the general population. Overall, multi-item strategies for measurement produced higher prevalence rates, consistent with most prior research. Generalized workplace harassment (GWH) was the most prevalent overall, with over 60% of both men and women experiencing one or more GWH behaviors. Sexual harassment (SH) had the second highest prevalence, with over 40% of men and over 50% of women experiencing one or more SH behaviors in the past year.

Prevalence rates in this study were within the ranges found in prior research for both multiitem measures of HDW and single perceptual items. However, prevalence rates were comparatively high for gender-based HDW among men. This suggests that the gender difference in SH prevalence may not be as great as previously thought, consistent with research on university employees (e.g., Richman et al., 1999). Another possibility is that existing research in non-representative samples is biased if sexually harassed men tended to leave their jobs, thus excluding them from existing SH prevalence rates. The high prevalence of SH among black men is particularly worthy of further study. Stereotypes involving the hypersexuality of black men (Collins, 2004) may make them particularly vulnerable to this type of harassment. The high prevalence of HDW overall among blacks suggests an underlying pattern of racial discrimination not always overtly based on race. Similarly, the trend towards a higher prevalence of "other" harassment or discrimination (OHD) among women suggests a possible pattern of "disguised" gender-based harassment and discrimination. Coupled with the overlap of different types of harassment, these findings suggest that distinctions between various types of HDW may be artificial. HDW that isn't obviously based on a protected social status characteristic may nonetheless serve to create a more hostile environment for members of protected groups. The correlations between different types of HDW also suggest that an organization culture tolerant of disrespect among workers may breed multiple manifestations of harassment and discrimination.

In terms of occupation, women only experienced more SH and labeled their experiences as gender harassment/discrimination (GHD) compared to men in occupations dominated by men. Among women, however, occupation was unrelated to rates of HDW. Among men, higher prevalence of SH experiences and labeling of SH experiences as harassing or discriminatory (GHD) were observed in jobs dominated by women. Thus, same-sex-dominant occupations were protective for men but not women, making occupation a more salient correlate of gender-based HDW among men. Similarly, race was a significant correlate of gender-based and generalized HDW for men. This suggests that "visible" social

status characteristics (e.g., gender, race/ethnicity) are more likely to provoke harassment or discrimination from prejudiced individuals.

Our data show that, while HDW may not be as important as life and general job stressors in predicting health and mental health, its contribution is significant. This highlights the importance of including a wide variety of stressors in research, so as not to overstate the effects of any given source, and to better represent the reality of people's lives. Turner and colleagues (1995) have long called for more comprehensive measurement of stressors, yet to date few researchers have studied relative effects of multiple sources of strain. HDW, particularly when such experiences were labeled as harassing or discriminatory, was more consistently associated with problem drinking for women, whereas life stressors and overall job pressure were the most consistent predictors of outcomes for men. Experiences of HDW, rather than perceptions, were more important predictors for men. Perception of OHD was a consistent predictor of all outcomes for women, suggesting the importance of widening research definitions of harassment and discrimination to include **non-legally-prohibited** forms of HDW, and to better clarify the nature and meaning of such experiences.

In this context, small effects of HDW on drinking outcomes should not be disregarded, given the multi-determined nature of mental health and drinking behavior and the high prevalence of SH and GWH experiences. HDW is more preventable (e.g., through policies prohibiting any form of harassment/discrimination, employee training) than other stressors measured in this study. Preventing HDW would eliminate at least one source of strain associated with negative outcomes. Correlations between HDW variables and other stressors (Table 1) suggest that HDW may lead to stress proliferation in one's non-work life (e.g., increased risk for illness and injury, Rospenda, Richman, Ehmke, & Zlatoper, 2005, and other stressors such as job loss, financial troubles, etc.). Thus, preventing HDW may directly affect overall mental health and problem drinking, and also indirectly affect these outcomes through decreased life stressors overall. Future longitudinal research should test these possible feedback patterns from HDW to life stressors and should continue to incorporate multiple stressors. Also, researchers should better measure appraisal of HDW experiences as stressful to enable tests of potential mediating effects of appraisal on the relationships between HDW and health outcomes such as drinking.

Several limitations of this study may affect the generalizability of the results. First, given the cross-sectional nature of the data, results can only be viewed as associations. Longitudinal research is necessary to untangle the causal direction of the relationships between HDW and outcomes. While HDW measures were correlated with life events, job pressure, and job threat, it is also unclear whether there might be causal relationships among these variables. Longitudinal research is necessary to determine if experiences of HDW may precipitate other life and job stressors (or vice versa). Alternatively, a generalized tendency to perceive events as stressful or negative may explain the correlation between different stressor domains. As such, researchers should consider controlling for negative affectivity in future studies of this type.

Additionally, future HDW prevalence research should oversample smaller minority groups (e.g., Asians) to ensure their better representation. In this study, perceived OHD was at least as prevalent (if not more so) than GHD and racial harassment/discrimination (RHD) and had stronger associations with outcomes, necessitating a better understanding of HDW that is not prohibited by law, and of other types that are legally prohibited but not as well studied, such as age and disability. Age discrimination is particularly salient, given the aging of the population. Qualitative research may be particularly useful for this purpose. Future research should also attempt to corroborate reports of HDW, or alternatively, to collect outcome data from other sources (e.g., key informants) in order to reduce self-report bias. Also, this study

lacked a multi-item measure of RHD with which to compare the results of the single-item perceptual measure, and used shortened versions of the SH and GWH measures. Future research should employ complete versions of measures to increase reliability, if possible. Because this was a telephone survey, we had to carefully weight the utility of using longer measures against non-response due to the length of the survey.

Although the sample is based on random sampling techniques and the data were weighted to adjust for factors that may have influenced selection, we cannot rule out the possibility of response bias. That is, respondents may be different from those who declined participation (e.g., more interested in the topic, more or less likely to be drinkers). If this is true, however, it is likely true of other HDW research, particularly given that the results of this national study were generally consistent with results reported in other non-representative studies.

In conclusion, given the representative nature of this sample, the results indicate that HDW is a common workplace experience affecting over one-half of the U.S. workforce, and is associated with negative mental health and problem drinking consequences. The data also suggest that HDW plays a stronger role in predicting problem drinking and mental health in women compared to men. Although demographics, life stressors and general job pressure and threat were better predictors of outcomes, the fact that HDW still had significant effects on outcomes provides compelling evidence of the harmful nature of these experiences.

Finally, our findings that more visible characteristics like race and gender were more strongly associated with HDW are consistent with social cognition theory, emphasizing perceived differences as a catalyst for intergroup hostility and prejudice (Allport, 1954). In practice, this suggests that interventions to promote minimization of perceived group differences may be the best way to prevent HDW. However, Park and Judd (2005) argue that this may be counterproductive. They propose a multicultural approach, where advocating appreciation and respect for all cultures may be more appropriate and less alienating to members of ethnic minority groups who often face the opposite struggle of maintaining a sense of ethnic heritage and pride amidst pressure for assimilation in mainstream U.S. society. From an organizational perspective, if such an approach were supported and modeled by management, it could go a long way to promoting an organizational culture of respect and decreasing the incidence of all types of HDW.

Acknowledgments

This publication was made possible by grant number AA13332 from the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of NIAAA. The data were collected by the Survey Research Laboratory at the University of Illinois at Chicago. We would like to acknowledge Jennifer Ehmke for her help with the data analysis and Harn Shiue for his help with the tables.

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Descriptive Statistics and Correlations

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1. Sexual Harassment	10.85	2.84																													
2. Generalized Work Harassment	12.51	4.39 ***		8																											
	1																														
3. Gender Haras sment/Discrimination	8	ية 23 **																													
4. Racial Harassment/Discrimination	0.	.30 **		35 ** **	*																										
5. "Other" Haras sment/Discrimination	21.	.32 **			** 53 **	*																									
6. Total # Life Stressors	1.63	1.72 **				** ^{6[]}																									
7.1ob Pressure	6.14	3.18 **					k*01	10																							
8. Job Threat	4.03	3.73 **			** .13 **			** ⁽¹⁴⁾	59 [.] **	5																					
9. Mental Health Inventory	15.87	2.45 ***							** ***	**																					
10. Drinking to Intoxication	1.93	1.44 ***								** ***	* *																				
11. Brief MAST-modified	17	1.42 ************************************		** 90 [.] ** 60 [.]	**						** 23 **																				
12. Age	41.55	12.89 ***			1304 *			17 ***01	13 **			****																			
13. Sex (1=female; 0=male)	şŧ	.50 ************************************		02 **		1.04		10.		3			* * 90																		
14. Less Than High School (1=yes; 0=no)	8	60°-		.0002	2 .05 *	*04		** *** .15	** .03				** 60'-	** 50																	
15. High School Diploma (1=yes; 0=no)	15	.50 .02	.01	10	007	10.		.07 *** .09 **	10 **	10 .02	* 907	-00	** 80'-																		
16. Associate's Degree/Some College (1=yes;0=no)	01	.20	1 .03	B03	13 +05 *	* .02	202		10 (10 10		04	80	.03	** 01	-33 *	,														
17. Bachelor's Degree 1=yes; 0=no)	61		0103	03 .02		01		08 *** ***	10. **	1	03	04	* 81	01	15 **		16 **														
18. Graduate Degree (1=yes; 0=no)	Ξ	.32 .01	102	02 .03	3 .04	10. 1		** ** 60	k *	2 01	* 60'-	* -05	* * *					-,17 **													
19. Married (1=yes; 0=no)	09	** 60`- 68`		** ** ""	00" * *) *		-25 ** .09 **	01	11 ***		** 60'-	* 81 *	** *	** 90'-				** 807												
20. Widowed/Separate/Divorced (1=yes:0=no)	9I.	.36 .10 **			302			10. ** 20.	02	2 **			** 87				8	* 50		-53 **											
21. Never Married (1=yes;0=no)	5	.43 .02		.03	4	10		.12 ** **	**	3 09 * *	** **	* * 80.		10	** 80	.04	** 90'-		**		-24 **										
22. White (1=yes; 0=no)	.74	.44 08		** 60'- **	** -27 **	10 **		13 ** **	~ **	J4	.04	** ****	* sr: *	.02	-37 **	.00	* 50	.07 **	* * 807	*	80	15 **									
23. Asian (1=yes; 0=no)	8	.1404	04	04 .02		10 *	04	0403	01	10. 10	03		01	01	01	* 50'-	01	* 507	.03	20;	04		-33 **								
24. Black (1=yes; 0=no)	Ξ	.32 *** .12		** ^{60'}	** **	00 [°]		** ⁶⁰⁻ "!!	**	401	06 *	* 90.	07 **	.03	01	* * 60	02	* \$0	* 90'-	*	01	.13 **	55 **	05 *							
25. Latino (1=yes; 0=no)	80	02		.00 00.	0 ***	c*03		** ** .06 **	**	103			15 **	- 04	.38 **		04 *			05 *	03			06 **	14 *						
26. Other/Mixed (1=yes; 0=no)	9	.23 .05 *		.06 **	3 .02	.04		.07 *** .01	.03	302	03	00,	8	02	01		02		00'	03	90	00	** 87-	0306		- ** "					
27. Management/Business (1=yes; 0=no)	.14			05 *01	03	04		08 *** .13	10'- **	10 × 10	*03	01	* *	03	12 **	** 90'-	10	****	.02	** 90:	03	-:0t *	** 90			05 *04					
28. Professional (1=yes; 0=no)	24	.4201		01 02	2 .00	.04		** ^{80'} **	01		* 60'-	** 01'- *	** 10	.13 *			10		.40 * *	**	-01		.07 **	- ** ⁹⁰ .	04	09 ** .01	- 23 **				
29. Service (1=yes; 0=no)	41.	35	е	8																											

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* * ** ** 08'-Cronbach's alpha reliability coefficient are reported in italics in the diagonal, for multi-item scales. N ranged from 2,036 to 2,146 for correlations not involving drinking outcomes (non-drinkers were not -22 ** * * * × * * * * * * ** 27 5 * 25 .03 8 5 3 ล 5 ē 8 ē * 21 8 8 ε ą * 6 8 8 * * * * * * * * -03 91 8 * * * * * * 20 * 03 7 * * * * * * 13 8 3 2 ë = 60 ** 9 03 0 8 8 g 8 8 - 03 * 9 З 3 * * * * ō * * * * 8 asked drinking-realted questions). ß 8 z 1 2 31. Contruction/E 0=no) .01. .05; 30. Sales/Offic Variable 32. Produc 0=no) Note: d d * *

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	Ser	Sexual Harassment	assment	Genera	lized H	Generalized Harassment		Gender H/D	U/H		Racial H/D	U/H		Othe	Other H/D
	1	Μ	Total(n)	ы	Μ	Total(n)	Ξ.	W	Total(n)	Ĩ.	Μ	Total(n)	Ξ.	Μ	Total(n)
Age															
30	53	47	50 (236)	68	70	69 (326)	15	4 ***	9 (43)	11	×	10 (46)	14	×	11 (51)
31-40	62	49 **	54 (257)	68	69	69 (327)	13	8	10 (45)	10	14	12 (58)	13	12	12 (57)
41-50	53	44 *	48 (278)	65	64	64 (369)	16	**	12 (69)	6	10	9 (53)	15	14	14 (82)
51-60	48	34 **	41 (159)	57	61	60 (233)	11	, *	7 (28)	6	٢	8 (32)	13	10	11 (44)
61+	28 ***	29 ***	28 (43) ***	38 ***	$^{*}_{**}$	40 (60) ***	9	ю	4 (6) **	4	6	7 (10)	×	4	6 (9)
Education															
Less than HS	51	50	50 (95)	57	64	61 (116)	4	6	7 (13)	15	14	14 (27)	13	5 *	8 (15)
HS graduate	47	42	45 (479)	61	66	64 (687)	15	4 ***	66) 6	6	11	10 (104)	13	12	12 (130)
Associates degree/some college	55	44	49 (98)	64	73	69 (137)	8	5	7 (13)	5	5	5 (10)	15	13	14 (28)
Bachelor's degree	09	42 ***	49 (191)	67	59	62 (241)	15	*	11 (41)	6	8	8 (32)	14	6	11 (43)
Graduate degree	59 *	43 **	50 (119)	63	61	62 (147)	17 *	*	12 (29)	15	11	13 (30) **	14	12	13 (30)
Marital Status															
Married	47	40 *	43 (540)	58	62	61 (764)	12	5 ***	8 (100)	10	10	10 (121)	11	10	10 (131)
Widowed/Divorced/Separated	56	50	54 (176)	69	73	71 (232)	14	٢	11 (37)	7	12	9 (28)	17	14	16 (51)
Never Married	09 ***	48 ** *	54 (266) ***	%* 86	66 *	66 (329) ***	16	**	11 (56) *	12	10	11 (54)	16	10	13 (62) *
Race/ethnicity															
White	51	39 ***	45 (662)	62	62	62 (911)	12	4 ***	8 (112)	4	5	5 (67)	13	Π	12 (174)
Asian	41	*	24 (10)	41	4	43 (18)	29	,4 *	14 (6)	33	13	21 (9)	18	4	10 (4)
Black	53	** 69	61 (138)	68	78	72 (163)	13	24 *	19 (42)	23	34	28 (63)	12	12	12 (6)
Latino	56	45	50 (134)	62	69	67 (179)	16	4 *	9 (25)	22	18	20 (54)	14	°*	19 (25)
Other/mixed	54	50 ***	52 (32) ***	71	80 ***	77 (48) ***	25	8 **	13 (8) ***	13 ***	13 **	13 (8) ***	17	21	19 (12)

		Devnal 11al assillent	Cellel al		Generalized Harassment		Gender H/D	H/D	-	Varial	Kacial H/D		Other H/D	
Ł	М	Total(n)	Ĩ4	Μ	Total(n)	Έ	W	Total(n)	ίΞι	M	M Total(n)	ы	М	Total(n)
Occupation														
Management/Bus. 52	45	48 (145)	60	99	63 (192)	14	5 **	9 (26)	10	9	8 (23)	12	٢	9 (27)
Professional 52	49	51 (252)	99	68	67 (331)	13	٢	11 (52)	11	~	10 (48)	16	12	14 (71)
Service 50	50	50 (150)	60	69	64 (194)	Π	11	11 (32)	6	15	12 (36)	6	10	10 (29)
Sales/Office 51	44	49 (230)	61	99	62 (294)	13	7 *	11 (51)	٢	~	8 (35)	12	10	11 (53)
Construct/Extract. 63	35 *	36 (92)	47	61	60 (154)	25	2^{***}	4 (9)	13	6	9 (24)	9	12	11 (29)
Prod/Transport. 58	44 *	47 (135) **	65	99	66 (190)	24	*** 9	10 (29) *	15	15 *	15 (42) *	19	15	15 (44)
Total 52 ,	43 ***	471012	62	65	63(1364) 13		** 9	9 (199)	10	10	10 10 (208) 13 11 * 12 (255)	13	11 *	12 (255)

F=female; M=male. Data presented are percentages, unless otherwise indicated. Percentages are rounded to the nearest whole number for visual clarity. Percentages may not add to 100 due to missing data. Significance levels are for two-tailed chi-square tests. Asterisks within rows indicate significant differences between men and women. Asterisks at the bottom of columns indicate significant differences between rates within that column.

Table 3

Life Stressors, Job Stress, and Workplace Harassment and Discrimination as Predictors of Problem Drinking and Global Mental Health: Betas for Women and Men, Controlling for Race/ethnicity, Age, Marital Status, Education, and Occupation.

Sexual Harassment Step 1 Demographics 2 Life Stressors 3 Job Pressure Job Threat 4 SH 4 SH 6 M 6 M 6 M 6 M 8 M 8 M 8 M 7 M 6 M 8	Beta .04 01 .08 .07 .07 .05	<i>Women</i> .097 *** .004 .008 .008 .004 .004	A Beta 02 09 * .09 * .04 .08 * 812	Men ΔR ² .179 ***	Woi Beta	Women a <u>A</u> R ²	M Beta	Men ΔR ²	<i>Women</i> Beta	nen Δ R2	<i>Men</i> Beta	en AR2
Sezual Harassment Step 1 Demograph 2 Life Stresse 3 Job Pressu 4 SH 4 SH 6 neralized Harassm Step 1 Demograpt 2 Life Stresse		ΔR ² .097 *** .004 .008 .004		ΔR ² .179 *** .000	Beta	ΔR^2	Beta	ΔR^2	Beta	ΔR2	Beta	∆R2
Sexual Harassment Step 1 Demograph 2 Life Stresso 3 Job Pressu Job Threat 4 SH 4 SH N Generalized Harassm Step 1 Demograph 2 Life Stresso		.097 *** .004 .008 .008 .004		.179 *** .000								
Step 1 Demograph 2 Life Stresso 3 Job Pressuu Job Threat 4 SH 8 N Generalized Harassm Step 1 Demograph 2 Life Stresso		.097 *** .004 .008 .008 .004		.179 ^{***} .000								
2 Life Stresso 3 Job Pressuu Job Threat 4 SH N Generalized Harassm Step 1 Demograph 2 Life Stresso		.004 .008 .004 .103 ***		000.		.016		.062 ***		.042 ***		.059 ***
3 Job Pressur Job Threat 4 SH N Generalized Harassm Step 1 Demograph 2 Life Stresse		.008 .004 .103 ***			.07	.004	.21 ***	.033 ***	24 ***	.086 ***	33 ***	.116 ***
Job Threat 4 SH 8 N <i>Generalized Harassm</i> 5tep 1 Demograph 2 Life Stresse		.008 .004 .103 ***			$.10^{*}$.05		05		14 ***	
4 SH N <i>Generalized Harassm</i> Step 1 Demograph 2 Life Stresse		.103 ***	.08 * 812	.014 ***	08	.008	07	.003	30 ***	.112 ***		*** 660.
N Generalized Harassm Step 1 Demograph 2 Life Stresse		.103 ***	812	.005 *	.04	.001	.02	000.	07 *			000.
Generalized Harassm Step 1 Demograph 2 Life Stresse		.103 ***			644		813		890		1081	
		.103 ***										
				.175 ***		.020		.062 ***		.042 **		.065 ***
		.003	00.	000.	90.	.003	.20 ***	.033 ***	24 ***		30 ***	.111 ***
3 Job Pressure	re –.01		* 80.		.11 *		.04					
Job Threat	.05	.005	90.	.014 ***	14 **	$.010^{*}$	08	.004	25 ***	.110 ***		.097 ***
4 GWH	.06	.003	.01	000.	.11 *	* 600.	.05	.002	15 ***			.008 ***
Z	646		813		649		813		895		1085	
Gender Harass/Discrim	im											
Step 1 Demographics	nics	*** 7 <u>0</u> 0.		.181 ***		.016		.062 ***		.042 ***		.063 ***
2 Life Stressors	Jrs .05	.004	01	000.	.07	.004	.21 ***	.032 ***	25 ***		32 ***	.110 ***
3 Job Pressure	re –.01		* 60.		$.10^{*}$.05		05		14 ***	
Job Threat	.08	* 800.	.05	.014 ***	-00	.008	07	.003	31 ***	.112 ***		.098 ***
4 GHD	.10 **	** 600.	00.	000.	.10 **	.010 **	.02	000.	04	.002	.01	000.
Z	647		821		651		821		006		1098	

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NIH-PA Author Manuscript

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Drinking to Intoxication

Brief MAST

Mental Health

		Beta	ΔR^2	Beta	$\Delta \mathbf{R}^2$	Beta	ΔR^2	Beta	ΔR^2	Beta	ΔR2	Beta	ΔR2
Step 1	Step 1 Demographics		.102 ***		.181 ***		.020		.062 ***		.043 ***		.065 ***
2	Life Stressors	.05	.003	01	000.	.07	.003	.21 ***	.032 ***	26 ***	.087 ***	32 ***	.109 ***
3	Job Pressure	00.		* 60.		.11 *		.05		05		14 ***	
	Job Threat	.08	.006	.05	.014 ***	10 *	$.010^{*}$	06	.003	31 ***	.111 ***	23 ***	.096 ***
4	RHD	.04	.002	.03	.001	.02	000.	03	.001	03	.001	02	.001
N		644		821		648		821		897		1096	
Other H	Other Harass/Discrim												
Step 1	Step 1 Demographics		.097 ***		.183 ***		.016		.062 ***		.042 ***		.065 ***
7	Life Stressors	.04	.004	01	000.	90.	.004	.20 ***	.032 ***	24 ***	.085 ***	31 ***	.109 ***
с	Job Pressure	00 [.]		* 60.		.11 *		.05		06		14 ***	
	Job Threat	90.	.008	.05	.014 ***	12 **	.008	07	.003	29 ***	.112 ***	22 ***	.098 ***
4	OHD	.14 ***	.019 ***	.01	000.	.18 ***	.030 ***	.04	.002	10^{***}	.010 ***	05	.002
Z		647		819		651		819		006		1095	
* p < .05;													
** p < .01:													
* *													
p < .001.	01.												

SH=sexual harassment; GWH=generalized workplace harassment; GHD=gender RHD=racial harassment/discrimination; OHD=other harassment/harassment/discrimination;

Age, race/ethnicity, education, occupation, marital status, life stressors, job stress were controlled in OLS regressions at Step 1. Betas are from the final model.