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Workplace harassment, stress, and drinking behavior over time: Gender differences in a national sample

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Abstract

Research suggests that workplace harassment (WH) significantly predicts alcohol use and problem drinking behavior, but has generally failed to consider concurrent effects of other sources of stress. This two-wave study (n=1418) is the first to explore whether sexual harassment (SH) and generalized workplace harassment (GWH) predict increased drinking independently of the effects of job and life stress, and whether effects differ by gender, in a nationally representative sample. SH and GWH predicted increases in problem drinking one year later for men but not women, while life stress was associated with increased problem drinking for women but not men. This study confirms the importance of examining the associations between different types of stressors and drinking-related outcomes in gendered contexts.

Keywords

Stress; Harassment; Alcohol drinking patterns; Alcohol abuse; Human sex differences

1. Introduction

Despite the appeal of tension reduction and job stress theories of alcohol use, empirical support has been mixed (see Greeley & Oei, 1999, for a review). Consequently, researchers have called for a better understanding of the conditions under which work stress impacts drinking.

Compared to research on task-related job stressors, fewer studies have examined effects of workplace harassment (WH) on drinking behaviors. Existing research supports a link between WH and problem drinking behaviors, independent of the effects of task-related job stressors (e.g., Richman, Flaherty & Rospenda, 1996; Rospenda, Richman, Wislar, & Flaherty, 2000). However, most WH research involves non-representative samples and neglects the impact of non-work stressors on outcomes. Life stressors have been linked to alcohol use and drinking problems (e.g., Linsky, Straus & Colby, 1985) and poorer treatment outcomes among alcoholic patients (e.g., Moos, Finney & Cronkite, 1990). Thus, it is important to examine the effects of job stressors such as WH in more representative samples, while taking into account the impact of non-work stressors on drinking behaviors. Gender is also important, since women are more likely to perceive certain experiences as harassing (e.g., Rotundo, Nguyen & Sackett, 2001)

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and to suffer negative consequences of drinking (National Institute on Alcohol Abuse and Alcoholism, 1999; Nolen-Hoeksema, 2004).

We address limitations of past research by examining the effects of multiple forms of WH in the context of other sources of job and life stress, along with how gender influences these relationships. Since this study constitutes the first national longitudinal study to examine the effects of WH on problem drinking over time, we explore the following research questions: 1) Do different forms of WH predict increased problem drinking independently of the effects of job and life stress? and 2) Do the effects of WH on changes in problem drinking differ for men versus women?

2. Methods

2.1 Participants and Procedure

Data derive from 1418 respondents who completed two waves of a random digit dial telephone survey in 2003 (T1) and 2004 (T2), examining prevalence and mental health outcomes of different forms of harassment in a national sample of employed adults. Sampling, survey protocol, and sample characteristics are reported elsewhere (Shannon, Rospenda & Richman, 2007).

2.2 Measures

Measures of WH in the past 12 months included multi-item measures of sexual harassment (SH) and generalized workplace harassment (GWH), each operationalized as “0 harassment experiences” versus “1+ harassment experiences”. Job stress was measured by 7 items from the Stress-In-General scale (Stanton, Balzer, Smith, Parra, & Ironson, 2001). Stressful life events in the past 12 months were measured with the List of Threatening Experiences (Brugha, Bebbington, Tennant, & Hurry, 1985), dichotomized to indicate “0 events,” versus “1+ events.” All multi-item scales exhibited α reliabilities of .70 or higher. Drinking measures included frequency of heavy episodic drinking (5+ drinks on the same occasion) and frequency of drinking to intoxication in the past 12 months. Responses were coded on a scale from 1=“Never,” to 8=“5 times a week or more.” Further detail on measures can be found elsewhere (Shannon et al., 2007).

2.3 Data Analysis

Negative binomial regression was used to examine the relationship between harassment experiences at T1 and increased frequency of heavy episodic drinking and drinking to intoxication at T2. This strategy is appropriate for count data (Gardner, Mulvey, & Shaw, 1995) and yields the incident rate ratio (IRR). IRR indicates the change in the expected count associated with a one unit change in the independent variable. Models were adjusted for age, race/ethnicity, occupation, education, household income, and additional variables to correct sampling bias (i.e., census region, number of phone lines in the household, number of eligible individuals in the household). Each model included T1 drinking behavior, WH variables, job stress, and stressful life events, and was fit for men and women separately. Missing rates were mostly less than 1%. Listwise deletion of missing cases was used so as not to introduce unknown and unintended biases into the data (Allison, 2002).

3. Results

Table 1 presents descriptive statistics by gender for T1 and T2 stressor and drinking variables. Patterns of gender differences were similar across time. Women were more likely than men to report 1+ SH experience, 1+ stressful life event, never drinking 5+ drinks on one occasion and never drinking to intoxication.

3.1 Sexual harassment (SH)

Regression results are presented in Table 2. SH was associated with increased frequency of heavy episodic drinking at T2 for men but not women. The expected frequency of heavy episodic drinking was 41% higher for men who had 1+ SH experiences at T1 than men who did not. Likewise, SH predicted frequency of drinking to intoxication for men but not women.

3.2 Generalized workplace harassment (GWH)

T1 GWH was associated with increased frequency of heavy episodic drinking at T2 for men, with an expected frequency 17% higher for men who had 1+ GWH experiences than men who had none. GWH was not associated with frequency of drinking to intoxication for men. For women, T1 GWH was not associated with heavy episodic drinking, but it did predict **less** frequent drinking to intoxication: the expected frequency was 14% less for women who had 1+ GWH experiences than women who had none.

3.3 Perceived job stress and stressful life events

For men, perceived job stress was associated with slightly less frequent drinking to intoxication. Life stress was not associated with drinking frequencies for men. For women, perceived job stress was not associated with drinking frequencies, but experiencing at least one stressful life event was associated with heavy episodic drinking and drinking to intoxication.

4. Discussion

This study revealed gender differences in the relationship between WH and problem drinking over time, in the context of other sources of job and life stress. Increased problem drinking was predicted by WH for men and life stress for women. Research shows that men report stronger motives to drink in order to cope with distress (Nolen-Hoeksema & Harrell, 2002) and more tension reduction expectancies related to alcohol use (Armeli et al., 2000). Also, when men perceive problems to be non-normative (as they may with sexual harassment), they are less likely to seek help (Addis & Mahalik, 2003), and thus may be more at risk for problem drinking related to WH. Although women perceive more negative consequences for heavy drinking (Nolen-Hoeksema, 2004), have larger social support networks (Thoits, 1995), and use more active coping strategies to deal with stress (Green & Pope, 1999), they are still at risk for heavy drinking as a result of stressful life events. It is possible that men experience more distress from work stressors, while women experience life events as more distressing. Future research should examine how gender conditions distress and coping strategies in response to WH and other stressors over time.

Study limitations study should be noted. Potential non-response and selection biases may limit generalizability of the results. Also, all measures were self-reported. Finally, shortened versions of WH and job stress measures were used to accommodate the telephone survey methodology. Although measure reliabilities were acceptable, future research should replicate these results using full length versions of measures. In conclusion, WH and overall job stress levels are predictive of problem drinking for men, whereas stressful life events are more salient predictors for women. Thus, the associations between different types of stressors and drinking-related outcomes should be examined in gendered contexts.

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Table 1
Descriptive statistics for harassment, stress, and drinking variables at T1 by gender.

Variable	T1		T2		Gender comparison T1	Gender comparison T2
	Men (n = 733)	Women (n = 722)	Men (n = 733)	Women (n = 722)		
Sexual harassment At least once (score ≥ 10)	272 39.7%	369 51.8%	255 37.8%	420 49.2%	$X^2 = 20.86$ df = 1 p < .001	$X^2 = 18.04$ df = 1 p < .001
Generalized workplace harassment At least once (score ≥ 10)	404 58.7%	454 63.2%	385 57.5%	419 61.4%	$X^2 = .00$ df = 1 p = .954	$X^2 = 2.12$ df = 1 p = .145
Stressful life events At least one event	440 63.6%	512 71.2%	420 63.9%	488 71.1%	$X^2 = 9.34$ df = 1 p = .002	$X^2 = 7.98$ df = 1 p = .005
Perceived job stress (range 0–21) Mean (SD)	10.2 (5.5)	10.6 (6.0)	9.65 (5.58)	9.97 (5.84)	t = 1.29 p = .198	t = 1.05 p = .296
More than 5 drinks in one occasion in the past 12 months	432 62.2%	578 80.4%	403 58.2%	575 80.1%	Z = 7.97 p < .001	Z = 9.12 p < .001
Never	115 16.5%	82 11.4%	134 19.3%	78 10.9%		
1 to 3 times	52 7.5%	24 3.3%	51 7.4%	24 3.3%		
4 to 7 times	17 2.4%	7 1.0%	19 2.7%	14 1.9%		
8 to 11 times	31 4.5%	15 2.1%	35 5.1%	12 1.7%		
1 to 3 times a month	29 4.2%	7 1.0%	37 5.3%	9 1.3%		
Once or twice a week	12 1.7%	3 0.4%	7 1.0%	4 0.6%		
3 to 4 times a week	7 1.0%	3 0.4%	7 1.0%	2 0.3%		
5 times a week or more						
Drinking to feel drunk in the past 12 months	451 65.0%	528 73.4%	425 61.4%	523 72.7%	Z = 3.80 p < .001	Z = 4.82 p < .001
Never	132 19.0%	125 17.4%	142 20.5%	121 16.8%		
1 to 3 times	45 6.5%	27 3.8%	45 6.5%	32 4.5%		
4 to 7 times	17 2.4%	12 1.7%	24 3.5%	11 1.5%		
8 to 11 times	25 3.6%	13 1.8%	29 4.2%	19 2.6%		
1 to 3 times a month	17 2.4%	8 1.1%	23 3.3%	9 1.3%		
Once or twice a week	5 0.7%	4 0.6%	3 0.4%	3 0.4%		
3 to 4 times a week	2 0.3%	2 0.3%	1 0.1%	1 0.1%		
5 times a week or more						

Table 2

Negative binomial regression coefficients associated with sexual harassment, generalized workplace harassment, stressful life events, and perceived job stress by gender.

Predictor	T2 Frequency of heavy episodic drinking ¹			T2 Frequency of drinking to intoxication ¹		
	IRR	p	95% Confidence Interval	IRR	p	95% Confidence Interval
Men						
Sexual harassment T1	1.41	.002	1.10 1.57	1.21	.033	1.02 1.45
Generalized Workplace Harassment T1	1.17	.038	1.01 1.35	.87	.255	.68 1.11
Perceived job stress T1	1.01	.316	.99 1.03	.99	.043	.98 1.00
Stressful life events T1	.81	.088	.63 1.03	.94	.608	.73 1.20
Women						
Sexual harassment T1	1.13	.226	.93 1.37	1.07	.272	.95 1.21
Generalized Workplace Harassment T1	1.02	.855	.84 1.23	.86	.014	.77 .97
Perceived job stress T1	.99	.144	.97 1.01	1.01	.283	1.00 1.01
Stressful life events T1	1.41	.002	1.13 1.77	1.23	.004	1.07 1.43

The model was adjusted for age, race, education, household income, occupation, census region, number of phone lines in the household, number of eligible individuals in the household and T1 level of the dependent variable. T1=time 1; T2=time 2.