

# Gender Differences in Social Influences and Stressors Linked to Increased Drinking\*

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**ABSTRACT. Objective:** To explore reasons for gender differences in problem-drinking prevalence and to compare the experiences of problem-drinking women and men, this article examines gender differences in exposure and drinking reactivity to social influences and stressors during adulthood. **Method:** A community sample of 831 older adults (347 women and 484 men; average age = 69), comprising problem and nonproblem drinkers, provided information about their drinking histories. Respondents indicated whether they had experienced particular social influences and stressors during adulthood (exposure) and, if so, whether they had increased alcohol consumption in response (reactivity). **Results:** Overall, women were more likely than men to report exposure to a partner's drinking, family interpersonal problems, death of someone close, and emotional distress. Men reported more exposure to peers' drinking and workplace problems and were more likely to

report drinking reactivity to social influences and stressors. Among problem drinkers, gender differences in exposure to social influences and stressors paralleled those in the overall sample, but gender differences in reactivity were minimal. **Conclusions:** Gender differences in exposure to social influences and stressors generally do not help explain men's higher problem-drinking prevalence, but men's overall greater drinking reactivity corresponds with their propensity to develop problem drinking. Problem-drinking women and men tend to be exposed to somewhat different social influences and stressors but share a tendency to respond to these experiences with increased drinking. Information about experiences that may place upward pressure on drinking for men and women can inform efforts to prevent and treat alcohol-use disorders. (*J. Stud Alcohol Drugs* 69: 695-702, 2008)

RECENT REVIEWS OF GENDER AND DRINKING have highlighted two key issues: (1) identifying the factors that contribute to the consistently higher levels of alcohol consumption and problem drinking seen in men as compared with women and (2) understanding how the experiences and treatment needs of problem-drinking women may differ from those of men (Brady and Randall, 1999; Nolen-Hoeksema, 2004). The first issue concerns overall gender differences, whereas the second focuses on gender differences among problem drinkers. Better understanding of these issues has implications for targeting prevention efforts and tailoring treatment to participants' needs.

Comparisons of men's and women's drinking, both at the overall level and among problem drinkers, have examined possible differences in reasons for drinking, including social influences on drinking and drinking in response to stressors or emotional distress (e.g., Nolen-Hoeksema, 2004). In addition, our previous work (Lemke et al., 2007) has shown that it is useful to distinguish between exposure to expe-

periences that may place upward pressure on drinking and drinking reactivity, that is, the tendency to respond to social influences or stressors with increased alcohol use. Thus, gender differences in problem-drinking prevalence could be present, in part, because men are more likely to experience social influences to drink or particular stressors (exposure) or because men are more likely than women to react to these situations by increasing their alcohol use (reactivity). Among individuals who have developed problem drinking, the experiences of men and women might differ in terms of their exposure to social influences to drink or to stressors (exposure) or in their tendency to drink in response to such situations (reactivity).

The current study evaluates gender differences overall—that is, in a sample that includes both nonproblem and problem drinkers—and among problem drinkers alone. In summarizing the existing research, we therefore first focus on gender differences in general population samples or samples that include both problem and nonproblem drinkers. We then cover research that has compared problem-drinking women and men. Within each of these categories, we also distinguish between exposure and reactivity to social influences to drink and to stressors.

## *Overall gender differences*

*Exposure to social influences and stressors.* In general, drinking patterns appear to be related to the levels of alco-

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hol use of friends, coworkers, and family members (Baer, 2002; Bullers et al., 2001; Leonard and Mudar, 2000, 2003). Because men are more likely than women to drink and to drink more, men's friendships and work relationships may more often than women's expose them to peer influences to increase drinking (e.g., Leonard et al., 2000). On the other hand, women are more likely than men to have a spouse or partner who drinks more than they do (Graham and Braun, 1999; McLeod, 1993).

Depending on how stressors are measured, men and women appear to have somewhat different exposure to some types of stressors. In one community sample, for instance, men reported more job-related stressors, but women reported more health-related and social stressors and a slightly higher overall level of stressors (Dawson et al., 2005, see also Kendler et al., 2001). In contrast, another community sample showed no gender differences in past-year rates of divorce and marital problems, financial problems, severe illness or injury, or death of family member or friend (Maciejewski et al., 2001). It is important to note that gender differences in exposure to stressors may in part reflect differences in participants' employment histories and in the size and composition of their social networks and may thus be expected to vary over time and across cultures. In contrast with the somewhat varied findings for stressors, women are consistently more likely than men to report experiencing emotional distress in the form of sadness or anxiety (e.g., Kendler et al., 2001).

*Reactivity to social influences and stressors.* The findings are limited and inconsistent regarding possible gender differences in reactivity to the social influences of peers' or partner's drinking. Some have suggested that women's drinking may be more "interdependent," that is, more responsive than men's to the needs and wishes of others (e.g., Leonard and Mudar, 2003). Consistent with this view, one study found that drinking norms were a stronger predictor of alcohol use for college women than men (Lewis and Neighbors, 2004). However, other research has found that social motives for drinking are more strongly endorsed by men than by women (Abbey et al., 1993) and that the predictive relationship between network drinking and alcohol consumption is similar for men and women (Bullers et al., 2001). Research on the strength of influence in the drinking of married couples has produced similarly inconsistent results (Nolen-Hoeksema, 2004).

In terms of reactivity to stressors, current theorizing posits gender differences in the *form* of men's and women's reactivity to stressors rather than an overall gender difference in reactivity. It has been suggested that men are more likely to show externalizing responses to stressors (e.g., physical aggression, substance use), whereas women are more likely to show internalizing reactions (e.g., somatization, depression) (Aneshensel et al., 1991; Conger et al., 1993; Cooper et al., 1992). Within this framework, men would be expected

to show greater drinking reactivity in response to a variety of stressors.

A number of studies support this expectation that men are more likely than women to rely on alcohol to cope with stressors and with emotional distress (Abbey et al., 1993; Park and Levenson, 2002; Peirce et al., 1994). Stressors and distress appear to more strongly predict alcohol use and problems of men than of women (Cooper et al., 1992, 1995; Dawson et al., 2005; King et al., 2003; Peirce et al., 1994), although some research indicates that depression may be a stronger risk factor for alcohol-use problems among women than among men (Kessler et al., 1997).

### *Gender differences among problem drinkers*

In a recent review, Nolen-Hoeksema (2004) noted that conclusions about gender differences in the relationship between emotional distress and drinking depended on whether the sample was a community sample or a sample of individuals with alcohol-use disorders. More generally, gender differences in experiences that place upward pressure on drinking may be different among problem drinkers than those identified in general samples. For instance, men may have greater drinking reactivity to stressors and thus be more prone to problem drinking, but men and women who become problem drinkers may be equally likely to react to stressors by drinking. In the case of such shared risk factors, gender differences identified in samples with varied alcohol use are likely to diminish or disappear when problem-drinking women and men are compared.

*Exposure to social influences and stressors.* Some gender differences in exposure to social influences and stressors found in the general population nevertheless also are apparent when problem-drinking men and women are compared. With regard to exposure to social influences among problem drinkers, men generally have a higher proportion of friends who drink (Mohr et al., 2001), and women are more likely to be exposed to a heavy-drinking spouse (e.g., Miller and Cervantes, 1997; Mohr et al., 2001). In contrast, however, a comparison of the social networks of newly married couples found that heavy drinkers, regardless of gender, reported similar levels of drinking among their peers (Leonard et al., 2000).

In terms of exposure to stressors among problem drinkers, findings are somewhat varied. Skaff and colleagues (1999) found similarities in overall levels of life events experienced by problem-drinking men and women, but men were more likely than women to report stressors related to work and less likely to report stressors related to their health or to problems with relatives. King and colleagues (2003) found similarities between problem-drinking men and women in level of overall stressful life events and stressors in the areas of family, work, and legal problems, but women tended to report more health stressors (see also Miller and Cervantes,

1997). Among problem drinkers, women generally have higher levels of depression and anxiety, even taking into account the rates of these disorders in the general population (Brady and Randall, 1999; Kessler et al., 1997; King et al. 2003).

*Reactivity to social influences and stressors.* Evidence regarding gender differences in reactivity to social influences among problem drinkers is sparse. In one study, social motives for drinking were stronger among men than among women (Olenick and Chalmers, 1991); this factor might contribute to men being more reactive to peer influences to increase drinking.

With respect to reactivity to stressors, some research suggests that problem-drinking women may have greater drinking reactivity than men. Compared with problem-drinking men, problem-drinking women were more likely to use alcohol to cope with stressors (Timko et al., 2005) and to use alcohol in response to marital problems (Olenick and Chalmers, 1991). Research also suggests that problem-drinking women are more likely than problem-drinking men to experience alcohol-use problems co-occurring with depression and to report that their depressive symptoms preceded alcohol-use problems (Brady and Randall, 1999; Kessler et al., 1997). In another comparison, however, men and women entering treatment offered similar reasons and triggers for drinking (Miller and Cervantes, 1997).

### *Research questions*

In a previous article, which did not consider gender differences, we reported that social influences (i.e., peers' or partner's drinking) and stressors (i.e., family interpersonal problems and emotional distress) were often linked to increases in alcohol consumption. We also reported that, compared with nonproblem drinkers, problem drinkers had higher levels of exposure to a variety of social influences, stressor situations, and emotional distress and showed higher drinking reactivity in these situations (Lemke et al., 2007).

This previous work underlined the importance of considering exposure and reactivity separately. Furthermore, as we have noted, gender differences in drinking may vary depending on whether they are based on comparisons across individuals who vary in their alcohol use and levels of problem drinking or on comparisons among problem drinkers. Accordingly, we focus here on four main questions. (1) Overall, do women and men differ in their exposure to social influences, stressors, and emotional distress? Specifically, do men experience greater exposure to these social influences or stressors, which might help explain men's higher problem-drinking prevalence? (2) Consistent with their higher problem-drinking prevalence, do men overall experience greater drinking reactivity to social influences or stressors? (3) Among problem drinkers, are there gender differences in exposure to social influences, stressors, or emotional distress

or (4) in drinking reactivity to these experiences? If present, such differences might help guide prevention and treatment planning for problem-drinking women and men and clarify differences between them in terms of response to treatment and patterns of recovery.

## **Method**

### *Participants*

A sample of late-middle-age community residents was recruited to participate in a longitudinal study of social and stress-related influences on drinking behaviors. The sample comprised individuals who had had some outpatient health care within the prior 3 years and was comparable to similar-age community samples with regard to such health characteristics as prevalence of chronic illness and hospitalization. Because of our interest in drinking behavior, abstainers and infrequent drinkers were excluded from recruitment into the study. Consequently, the proportion of problem drinkers in this sample is higher than in general community samples (Brennan et al., 1999). Informed consent was obtained from all participants; additional details about initial recruitment are available elsewhere (Brennan and Moos, 1990; Moos et al., 1990).

As part of a 10-year longitudinal study with follow-up rates of more than 90%, participants completed a life-history questionnaire (Schutte et al., 1998). The data analyzed here are cross-sectional data from this life-history questionnaire. The life-history questionnaire was part of a mailed survey, with telephone follow-up to ensure a high response rate and data quality (e.g., completing missing data or clarifying inconsistent responses). Among follow-up participants, the life-history questionnaire was completed by 347 women and 484 men. These women and men were the same age on average (69 years old, range: 62-78 years), but men were more likely than women to be married (75% vs 57%) and less likely to be widowed (7% vs 23%). Similar proportions of women and men were nonwhite (8%) and had completed some college (74%). Men were more likely than women to be employed (26% vs 17%).

*Classification as a problem drinker.* At baseline, participants were classified as nonproblem or problem drinkers based on responses to alcohol-related problem items on a screening survey and on the 17-item Drinking Problems Index ( $\alpha = .92$ ; Finney et al., 1991). This index covers general problems resulting from drinking (such as feeling confused), adverse consequences of excessive drinking, and alcohol-dependence symptoms. The 480 nonproblem drinkers (258 women and 222 men) reported drinking at least once a week but reported no drinking problems at baseline or before. The 351 problem drinkers (89 women and 262 men) had one or more drinking problems at baseline and during the period at least 2 years before baseline. We used the baseline classifica-

tion here to maintain comparability with other publications from this research.

At baseline, problem drinkers on average endorsed 4.7 of the 17 drinking problem items. About one half reported being confused after drinking or that a family member had complained about their drinking, and slightly smaller numbers reported that they had skipped meals because of drinking or had a friend express concern about their drinking. When they drank, problem drinkers' alcohol consumption was about twice that of nonproblem drinkers: 3.3 oz of ethanol on a typical drinking day versus 1.6 oz for nonproblem drinkers (see Brennan and Moos, 1991). When they completed the life-history questionnaire, problem drinkers endorsed an average of 3.5 lifetime symptoms of alcohol dependence and abuse (Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised; American Psychiatric Association, 1987), with the most common symptoms being loss of control, role interference, tolerance, and drinking despite social or health problems. About one quarter of problem drinkers reported withdrawal symptoms or being unable to cut down on their consumption. Thus, the problem-drinking group comprised individuals whose problem drinking ranged from moderate misuse for the majority to serious dependence for a minority. Nonproblem drinkers were free of alcohol-related problems until age 55 and essentially free of such problems up to the time they completed the life-history questionnaire.

### Measures

The life-history questionnaire included identical items to be completed for each of three life periods: early adulthood (ages 20-35), early middle age (ages 36-50), and late middle age (ages 51-65). For each life period, participants were asked to respond to a set of items representing a variety of social influences (e.g., coworkers drank), stressors (e.g., problems at work), and emotional distress (e.g., feeling sad or anxious) that the literature suggests may be linked to alcohol consumption. Respondents indicated whether they had experienced the situation (yes/no) and, if so, whether they drank more, drank less, or had no change in drinking in response to the experience or situation. Two of these items measured social influences on drinking: peers' drinking ("friends drank" or "coworkers drank") and partner's drinking ("spouse or partner drank"). The remaining items measured stressors: family interpersonal problems ("problems with spouse or partner," "problems with children," or "problems with other relatives"), financial or legal problems, workplace problems, health problems, the death of someone close, and emotional distress ("felt sad or depressed" or "felt tense").

Some participants (14%) had not reached the end of the late-middle-age period (i.e., they were between 62 and 65 years of age) when they completed the life-history ques-

tionnaire, but these participants were no less likely to have experienced any of the social influence or stressor situations during that period than were participants who had reached age 65. All participants and all three life periods were therefore included in the present analyses. Because preliminary analyses indicated that findings regarding gender differences were similar when life periods were combined and when life periods were analyzed separately, and because there were no life-period by gender interactions, we opted to carry out gender comparisons using data summarized across adulthood.

Accordingly, two variables were computed for each type of situation or experience: Exposure was a dichotomous variable that indicated whether the respondent had ever experienced the situation, and reactivity was a dichotomous variable that indicated whether the respondent had ever increased drinking in response to the situation. Reactivity was measured only among those who had been exposed to the experience or situation.

### Analyses

We used chi-square analyses to compare women and men on their exposure (the proportion of individuals who experienced the situation) and drinking reactivity (the proportion who drank more among those who experienced the situation). To identify factors that might help account for men's higher problem-drinking prevalence, we first carried out these comparisons for the overall sample, which comprised both problem and nonproblem drinkers. To explore the shared and unique factors that may characterize the experiences of problem drinking for women and men, we then compared problem- and nonproblem-drinking women and men separately. To shed further light on the shared and unique factors that may be related to problem drinking, we assessed whether the experiences that distinguish problem from nonproblem drinkers were similar or different for women and men, using chi-square analyses to compare nonproblem and problem drinkers separately for women and men.

## Results

### Overall gender differences

*Exposure.* In the overall sample, men were more likely than women to report exposure to peers' drinking and to workplace problems but less likely than women to experience a partner's drinking, family interpersonal problems, death of someone close, and emotional distress (Table 1). Men and women were comparable to one another in their levels of exposure to financial or legal problems and to health problems.

*Reactivity.* Comparisons in the overall sample indicated that men had greater drinking reactivity in most of the social

TABLE 1. Overall differences between women and men in the percentages reporting exposure and drinking reactivity to social influences and stressors

Situation	Exposure			Drinking reactivity		
	Women %	Men %	$\chi^2$	Women % (n)	Men % (n)	$\chi^2$
<b>Social influences</b>						
Peers' drinking	74	80	4.40*	52 (253)	65 (384)	10.19‡
Partner's drinking	61	42	29.62‡	49 (211)	47 (203)	0.10
<b>Stressors and emotional distress</b>						
Family interpersonal problems	64	52	12.40‡	42 (220)	55 (250)	7.83†
Financial, legal problems	42	42	0.01	24 (146)	47 (203)	18.93‡
Workplace problems	21	34	14.30‡	41 (74)	49 (162)	1.60
Health problems	61	60	0.06	13 (209)	23 (288)	8.45†
Death of someone close	70	56	16.15‡	10 (240)	21 (270)	12.08‡
Emotional distress	60	43	22.77‡	41 (205)	62 (206)	18.42‡

Notes: For exposure, n's are 347 for women and 484 for men. For drinking reactivity, n's vary; n's (in parentheses) indicate the number of respondents who had experienced the particular social influence or stressor situation.

\* $p < .05$ ; † $p < .01$ ; ‡ $p < .001$ .

influence or stressors situations that we assessed (Table 1). For example, among those whose peers drank, men were more likely than women to report that they had increased their drinking in response. No significant gender difference was found in drinking reactivity to partner's drinking among those who were exposed to this situation. Except in the case of workplace problems, men reported more drinking reactivity than did women in the stressor and emotional distress situations they experienced.

*Gender differences among problem drinkers*

*Exposure.* In terms of exposure, comparisons of women and men within each of the drinking subgroups generally produced results similar to those found overall. Among problem drinkers, men were less likely than women to experience a partner's drinking, family interpersonal problems, the death of someone close, and emotional distress (see Table 2). In contrast, men were more likely than women to report

exposure to workplace problems. Although men overall reported greater exposure to peers' drinking than did women, this gender difference was not statistically significant among either nonproblem or problem drinkers. Both for men and for women, problem drinkers had significantly more exposure to each of the social influence and stressor situations except health problems and death of someone close.

*Reactivity.* Among problem drinkers, there were no significant gender differences in drinking reactivity in these situations (Table 3). Nonproblem drinkers tended to show a similar pattern of gender differences in drinking reactivity to that found in the overall sample, with men showing greater drinking reactivity to financial/legal problems, death of someone close, and emotional distress. The chi-square analyses comparing nonproblem and problem drinkers separately for men and for women indicated that, for both men and women, problem drinkers reported significantly greater reactivity to each of the social influence and stressor situations.

TABLE 2. Differences between women and men problem and nonproblem drinkers in the percentages reporting exposure to social influences and stressors

Situation	Problem-drinking group			Nonproblem-drinking group			Problem vs nonproblem	
	Women (n = 89)	Men (n = 262)	$\chi^2$	Women (n = 258)	Men (n = 222)	$\chi^2$	Women $\chi^2$	Men $\chi^2$
<b>Social influences</b>								
Peers' drinking	87	90	0.87	69	68	0.12	10.38‡	37.70‡
Partner's drinking	81	52	23.69‡	55	31	26.49‡	19.37‡	20.60‡
<b>Stressors and emotional distress</b>								
Family interpersonal problems	80	64	7.49†	58	37	21.95‡	13.04‡	35.56‡
Financial, legal problems	53	54	0.05	39	28	6.30*	5.28*	34.01‡
Workplace problems	29	41	4.06*	19	24	2.20	4.29*	15.41‡
Health problems	54	63	2.28	63	56	2.44	2.22	2.53
Death of someone close	75	59	7.76†	68	53	11.41‡	1.73	1.80
Emotional distress	82	52	25.01‡	52	32	18.99‡	25.08‡	19.49‡

\* $p < .05$ ; † $p < .01$ ; ‡ $p < .001$ .

TABLE 3. Differences between women and men problem and nonproblem drinkers in the percentages reporting drinking reactivity to social influences and stressors

Situation	Problem-drinking group			Nonproblem-drinking group			Problem vs nonproblem	
	Women % (n)	Men % (n)	$\chi^2$	Women % (n)	Men % (n)	$\chi^2$	Women $\chi^2$	Men $\chi^2$
Social influences								
Peers' drinking	70 (77)	72 (235)	0.05	44 (176)	54 (149)	3.26	14.30 <sup>‡</sup>	11.73 <sup>‡</sup>
Partner's drinking	69 (72)	59 (135)	2.39	38 (139)	25 (68)	3.52	18.62 <sup>‡</sup>	20.38 <sup>‡</sup>
Stressors and emotional distress								
Family interpersonal problems	69 (71)	68 (168)	0.03	30 (149)	29 (82)	0.00	30.72 <sup>‡</sup>	33.18 <sup>‡</sup>
Financial, legal problems	49 (47)	57 (141)	0.87	12 (99)	24 (62)	3.98*	23.70 <sup>‡</sup>	18.32 <sup>‡</sup>
Workplace problems	62 (26)	60 (108)	0.02	29 (48)	28 (54)	0.02	7.33*	15.13 <sup>‡</sup>
Health problems	25 (48)	34 (164)	1.43	9 (161)	9 (124)	0.02	8.08 <sup>‡</sup>	25.27 <sup>‡</sup>
Death of someone close	27 (67)	30 (153)	0.23	3 (173)	9 (117)	4.55*	32.04 <sup>‡</sup>	18.68 <sup>‡</sup>
Emotional distress	73 (73)	75 (135)	0.12	24 (132)	38 (71)	4.79*	46.89 <sup>‡</sup>	26.76 <sup>‡</sup>

Notes: *n*'s (in parentheses) indicate the number of respondents who had experienced the particular social influence or stressor situation.

\* $p < .05$ ; <sup>‡</sup> $p < .01$ ; <sup>‡</sup> $p < .001$ .

### Discussion

One aim of this research was to explore possible reasons for the higher prevalence of alcohol-use problems among men, an issue addressed in the analyses of the overall sample. In terms of overall differences in exposure, we found that men had higher exposure to peers' drinking and women had higher exposure to partner's drinking. This pattern is consistent with expectations based on the heavier alcohol consumption of men as manifested in men's friendships and work relationships and in their partner relationships. Overall results for exposure to stressors also were consistent with prior research (Dawson et al., 2005; Kendler et al., 2001) and traditional gender roles in showing that men were more likely to have experienced workplace problems, whereas women were more likely to have experienced family interpersonal problems, the death of someone close, and emotional distress.

We previously reported that exposure to social influences and stressors was generally higher among problem drinkers than among nonproblem drinkers (Lemke et al., 2007), a finding confirmed here for both men and women. Exposure to social influences and stressors may thus play a role in the development of problem drinking, but, with the possible exceptions of peers' drinking and workplace problems, differential exposure to these social influences or stressors is not a good explanation of the higher prevalence of drinking problems among men than among women. That is, men were more likely to be problem drinkers, but they reported equivalent or lower rates of exposure to most stressors.

In contrast, gender differences in drinking reactivity may help to explain differences in problem-drinking prevalence between men and women. Greater drinking reactivity was associated with problem drinking among both men and women, and men were more likely than women to report drinking reactivity to social influences and stressors. For

instance, among individuals who reported being exposed to peers' drinking, men reported more drinking reactivity to this social situation than did women. Results for stressors were consistent with the expectation that men are more prone than are women to respond to stressors by externalizing in the form of increased drinking.

To better understand the unique experiences and treatment needs of men and women, we also focused on gender differences in exposure and reactivity among problem drinkers. We found evidence that men and women with drinking problems experienced differential exposure to social influences or stressors that paralleled the differences found in the overall sample. That is, problem-drinking men had greater exposure to workplace problems, whereas problem-drinking women had more exposure to partner's drinking, family problems, death of someone close, and emotional distress.

In contrast, gender differences in drinking reactivity among problem drinkers were negligible. That is, men and women with problem drinking appear to share an elevated tendency to drink more in response to social influences, stressors, and emotional distress. In summarizing the literature on gender differences in drinking, Nolen-Hoeksema (2004) noted that "predictors of heavy drinking and alcohol use disorders are more similar than different in women and men, but women may be less likely than men to carry certain of these risk factors" (p. 982). Our findings are generally consistent with this summary statement and highlight the fact that conclusions about gender differences in drinking are likely to vary depending on whether analyses focus on general population samples or exclusively on problem drinkers.

Moreover, our findings illustrate the importance of examining exposure to social influences or stressors and drinking reactivity separately. For example, studies that do not distinguish between exposure and reactivity may find that problem-drinking women are more likely than problem-drinking

men to state that partner's drinking, family stressors, and emotional distress contribute to increases in their alcohol consumption. However, our findings indicate that this difference reflects mainly a difference between women and men in their likelihood of experiencing these situations rather than in their susceptibility to drinking when these situations occur.

In sum, exposure to social influences to drink and to stressors provides an opportunity for elicitation of drinking reactivity. To the extent that they occupy different social roles, men and women are likely to experience different mixes of these social influences and stressors, but gender differences in these exposures do not appear to explain gender differences in problem-drinking prevalence. However, it appears that men are more likely than women, and problem-drinking men and women are more likely than nonproblem drinkers, to respond to such opportunities with increased alcohol use.

#### *Limitations and future directions*

A number of limitations apply to the present study. For instance, overall comparisons between men and women are likely to be sensitive to the prevalence of drinking problems in the sample. Because our comparisons included approximately equal representation of problem and nonproblem drinkers, some of the gender differences we identified are larger than what is likely to be the case in a representative community sample, where problem-drinking prevalence is much lower. Furthermore, the low level of exposure to some stressors and the low rate of problem drinking among the women in this sample resulted in small samples for analyses of reactivity to some stressors, particularly financial/legal problems and workplace problems. Although the findings for these situations were generally consistent with findings for other stressors, replication with larger samples would be useful.

These analyses are based on cross-sectional, retrospective data that cover a period from early adulthood to the recent past and on broadly summarized social influences and stressors. Further research will be needed to determine whether the findings apply to smaller time increments, such as the past month or past year. It is also possible that, in participants' recollections, exposure and reactivity are not as distinct as implied here. Reporting that an event has occurred may be related to the salience of the situation and is itself a form of reactivity. For example, women may be more aware of interpersonal issues or may have a lower threshold than men for reporting interpersonal problems. Similarly, individuals who increased their drinking in response to an experience may be more likely to recall that experience. Furthermore, problem-drinking women and men might share a tendency to report drinking in response to social influences and stressors to explain their drinking problems.

These results also may reflect the particular birth cohort and social milieu of respondents from whom results were obtained. For example, this age cohort may have had more traditional gender roles than a younger cohort might, and this may in turn affect their exposure to stressors in the areas of work and family. Additional research will be needed to ascertain which conclusions generalize to other birth cohorts and social groups as well as cross-culturally.

Despite its limitations, this study contributes important new information about gender differences in social influences or stressors that may place upward pressures on alcohol consumption. The findings illustrate the conceptual and methodological importance of distinguishing between individuals' exposure to, and their reactivity to, social influences and stressors. This study highlights the broad utility of using life history of drinking information to obtain insights into factors that may help explain differences in men's and women's paths to drinking problems. It may guide future prospective research designed to clarify causal pathways to problem drinking. For example, the findings suggest that differential reactivity to stressors may help explain the development and stabilization of drinking problems in adulthood.

Our findings point to a need for early detection of drinking reactivity and prevention efforts specifically focusing on reducing drinking reactivity. Treatment programs for women and men may need to be tailored to the different stressors they tend to face but may include common ground with respect to shared, high levels of drinking reactivity. More broadly, findings of such research can potentially inform public health policy and clinical efforts to more effectively prevent, detect, and treat men's and women's problems with alcohol.

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