

Sex Differences in Mediating and Moderating Processes Linking Economic Stressors, Psychological Distress, and Drinking

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ABSTRACT. Objective: Given the recent downturn in the U.S. economy, we considered in this study the processes linking economic stressors, psychological distress, and two alcohol-related outcomes (past-month drinking and problematic drinking). **Method:** Data were drawn from a mail survey of a national sample of 663 respondents. Structural equation modeling was used to assess whether psychological distress mediates the associations between economic stressors and the alcohol-related outcomes considered and whether these associations varied by gender. **Results:** Controlling for correlations among the outcomes and the ef-

fects of the sociodemographic control variables, psychological distress was found to partly explain the association between economic stressors and problematic drinking. The mediating effects on problematic drinking were significantly greater for men than women. **Conclusions:** The findings demonstrate the utility of considering interrelationships among alcohol-related outcomes and, in this context, reveal the circumstances in which gender matters most for understanding the associations among economy-related stressors, psychological distress, and drinking. (*J. Stud. Alcohol Drugs*, 73, 811–819, 2012)

ACCORDING TO MANY SOURCES, the most serious economic crisis in the United States since the Great Depression occurred between December 2007 and June 2009 (Aruoba and Diebold, 2010; Cochrane, 2011; Treas, 2010). This crisis—commonly referred to as the Great Recession—has had persisting negative effects, ranging from job loss and less desirable working conditions to home loss, the loss of retirement savings, fewer health care choices, and social isolation (Richman et al., 2012).

Within this context, an important question involves the extent to which the economic downturn is associated with psychological distress and related outcomes. Prior work concerning the Great Depression and other economic downturns, for example, suggests that individuals who are unemployed or underemployed in tough economic times experience higher levels of depression and anxiety, as well as increased alcohol use, compared with those who are adequately employed (Catalano, 1991; Dooley and Prause, 1997; Elder, 1974; Kessler et al., 1988; Luoto et al., 1998; Montgomery et al., 1999). However, research in this tradition has tended to concentrate on the effects of unemployment alone, perhaps underestimating the full breadth of difficult

economic circumstances and their consequences. This is consistent with the tendency of stress research, more generally, to focus on individual-level stressors and overlook potential linkages between broader social forces and personal hardship (Galea, 2007; Richman et al., 2008; Turner and Lloyd, 2005).

Addressing this limitation, the present study applies a broader definition of economy-related strain that includes diminished quality of and compensation from employment (e.g., decreased hours, furloughs, lack of merit raises, increased responsibilities at work resulting from the layoffs of other workers, and not obtaining jobs congruent with one's education and skill level), home ownership problems and undesirable living conditions, lack of access to or inability to afford health care, social role constraints, unemployment, and underemployment. We examined how such strains influence psychological distress and alcohol-related outcomes, applying a tension-reduction or self-medication model of drinking. This perspective maintains that alcohol is often used to cope with psychological distress, as well as the stressful life experiences that elicit distress (Richman et al., 1997, 2002; Steele and Josephs, 1990).

Additionally, because men are consistently found to drink more than women and experience more alcohol-related problems (Dohrenwend and Dohrenwend, 1976; Hawkins et al., 1997; Horwitz and White, 1987) and because the associations among social stress, psychological distress, and drinking appear to vary by gender (Kessler and McLeod, 1984; Peirce et al., 1994; Richman et al., 2002; Wethington et al., 1987), we examined whether women and men differ systematically in the extent to which economy-related stress

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exposure, psychological distress, and drinking patterns are related. We extended prior research concerning the direct, indirect, and conditional effects of stressors on alcohol-related outcomes by integrating tests for both mediating and moderating processes into a parsimonious moderated mediation structural equation model.

Stressors, distress, and alcohol-related outcomes

It is now well documented that stress exposure is associated with higher levels of psychological distress (Pearlin, 1999; Pearlin et al., 1981; Thoits, 1995) and that distress, in turn, is associated with the frequency with which one drinks and the volume of alcohol consumed, as well as drinking that is defined as problematic, both cross-sectionally and over time (Colder, 2001; Cooper et al., 1992; Peirce et al., 1994; Richman et al., 1997, 2002). There is also some evidence that the associations between stress exposure and alcohol consumption and problematic drinking are partly accounted for by variation in psychological distress (Richman et al., 1997, 2001; Steele and Josephs, 1990).

Although these observations provide grounds for anticipating that similar processes may link economic stressors with psychological distress and drinking-related outcomes, a possible limitation of prior research that considers the extent to which psychological distress mediates the stress–alcohol use relationship is that studies have separately modeled the effects of stress on various drinking-related outcomes. An alternate approach—and one that is increasingly becoming standard practice in research using structural equation modeling—is to examine the possibility that issues such as problematic drinking and the volume of alcohol one consumes may be interrelated. For example, it seems reasonable to

anticipate that someone whose drinking is more problematic than others would also consume more alcohol when compared with others. By not allowing for such possibilities, the direct or indirect effects of stress on any of these outcomes as a function of psychological distress may not be properly specified in prior work. Thus, although previous research provides grounds for hypothesizing that economic stressors will have direct and indirect effects on alcohol-related outcomes, we also predicted that the outcomes we considered (i.e., past-month drinking and problematic drinking) would be interrelated.

Gender as a moderator

Prior research also suggests that the effects of social stressors on alcohol-related outcomes are more pronounced among men than among women when the effects of psychological distress are controlled for (Peirce et al., 1994; Richman et al., 2002). For example, Richman et al. (2002) found that the onset of experiencing sexual harassment in the workplace is a significant predictor of problematic drinking and heavy episodic drinking only among men once the effects of psychological distress are controlled for (an exception is that abusive or harassing workplace experiences are associated with more frequent alcohol use only among women after controlling for the effects of psychological distress). This pattern of findings raises the possibility that the mediating effects of psychological distress for the stress–alcohol use relationship may vary systematically by gender. However, these potential mediating effects have not been formally investigated.

A formal test of whether the mediating effects of psychological distress for the stress–alcohol use association are

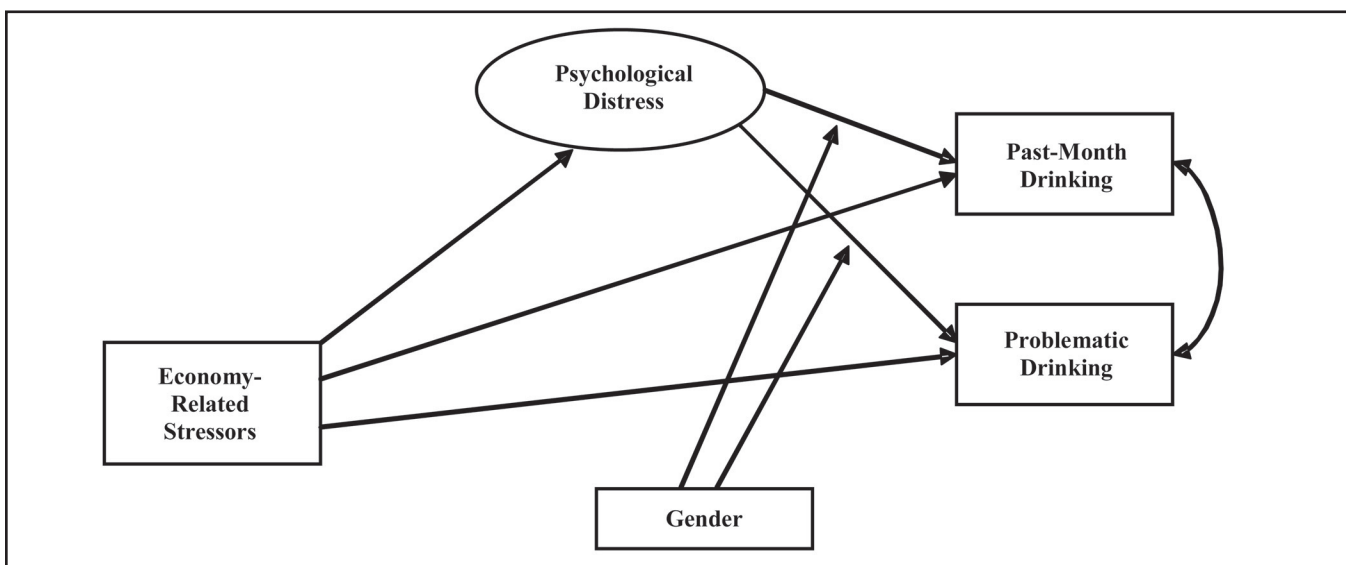


FIGURE 1A. First potential moderating effect of gender on the associations among economy-related stressors, psychological distress, and alcohol-related outcomes

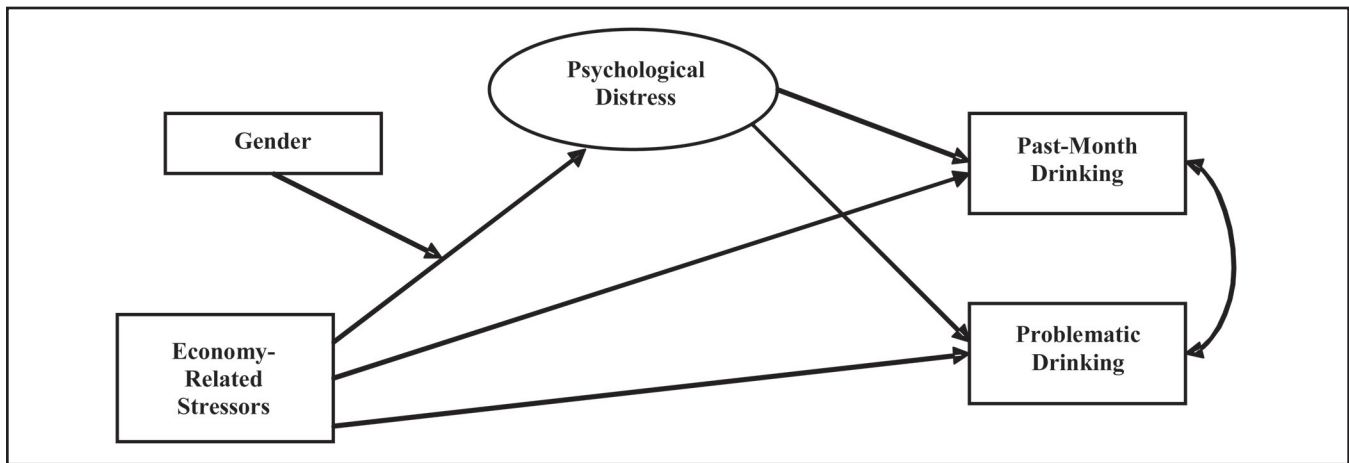


FIGURE 1b. Second potential moderating effect of gender on the associations among economy-related stressors, psychological distress, and alcohol-related outcomes

conditional based on gender—a circumstance referred to as moderated mediation (Preacher et al., 2007)—can provide information not only on whether the mediating effects of psychological distress are contingent upon gender but also why this is so. For example, moderated mediation may occur because the effect of psychological distress on past-month drinking patterns or problematic drinking, respectively, varies fundamentally by gender. This potential linkage is represented in Figure 1a. Available evidence indicating that men tend to drink both in greater quantity and more frequently, as well as more problematically, compared with women when the effects of psychological distress are accounted for (Peirce et al., 1994; Richman et al., 2002) suggests that the mediating effects of psychological distress for the association between economic stressors and alcohol-related outcomes may be more pronounced among men than among women.

Alternately, moderated mediation may occur as a function of gender differences in the effects of stress on psychological distress, as indicated in Figure 1b. There is some indication that women may experience greater psychological distress than do men because they experience greater stress exposure and/or respond more adversely to stress exposure than men (Kessler, 1979; Kessler and McLeod, 1984; Wethington et al., 1987). By extension, it seems plausible that the extent to which psychological distress accounts for the association between economy-related stressors and alcohol-related outcomes may be more pronounced among women than among men.

In summary, previous research provides grounds for anticipating that psychological distress may mediate the association between economic stressors and the alcohol-related outcomes of past-month drinking and problematic drinking. We extend prior work by considering the possibility that these outcomes may be interrelated. Additionally, there is evidence suggesting that any mediating effects observed

may be conditional because (a) the effect of economy-related stress on psychological distress is moderated by gender or (b) the effect of psychological distress on past-month drinking patterns or problematic drinking is moderated by gender. We addressed these considerations controlling for the sociodemographic characteristics of age, education, and race/ethnicity.

Method

Study procedures and sample

Data were derived from a national study conducted between June 2010 and January 2011 that was undertaken to understand life change consequences of the major downturn in the economy known as the Great Recession (Richman et al., 2012). Respondents were selected by a random-digit-dial phone survey of the continental United States, and those who consented to participate in the study were mailed questionnaires. The phone screen was conducted using computer-assisted telephone interview software. Eligibility criteria were being both age 18 or older and English speaking. Eligible respondents were selected from the households using the Troldahl–Carter–Bryant method of respondent selection (Lavrakas, 1993).

A total of 1,424 households were identified as eligible during the screening telephone calls. Of these, 1,006 agreed to have the questionnaire mailed to them, and 663 returned completed questionnaires. The cooperation rate for the telephone screening calls was 25.5%. That is, 25.5% of the eligible and assumed eligible households in the sample agreed to have the questionnaire mailed to them. Of these, 65.9% ($n = 663$) subsequently completed and returned the questionnaire. The telephone-screening cooperation rate and the mail-survey response rate were each calculated using the

TABLE 1. Characteristics of study variables ($n = 663$)

Characteristics	Range	M or %	SD
Past-month drinking patterns	0–14	5.389	2.307
Problematic drinking	0–7	0.580	1.046
Depressive symptoms	0–21	8.191	4.983
Anxiety	0–40	10.505	8.358
Economy-related stressors	0–48	13.553	9.863
Gender, % female	0,1	51.3%	–
Age	19–91	54.838	14.713
Education, %			
Less than high school	0,1	6.8%	–
High school graduate	0,1	53.4%	–
College graduate	0,1	16.8%	–
Postcollege training	0,1	23.0%	–
Race/ethnicity, %			
Non-Hispanic White	0,1	67.0%	–
African American	0,1	12.2%	–
Hispanic	0,1	13.9%	–
Asian	0,1	4.4%	–
Other	0,1	2.5%	–

Notes: If 0,1 is noted as the range, the outcomes for that variable were dummy coded such that 0 indicates no and 1 indicates yes.

conservative response rate formula 3 from the American Association for Public Opinion Research (2011).

The final sample was weighted in two ways. Selection weights were calculated for each of the cases to weight for the different probability of selection for each case. Poststratification weights were calculated for the data set to ensure that the distribution of sample cases on important demographic variables (age, race/ethnicity, and gender) conformed to the distribution of these variables in the Census Bureau's 2008 U.S. population estimates. Additional details regarding the study procedures and sample are presented by Richman et al. (2012).

Measures

Summary statistics for all study variables appear in Table 1. Two alcohol-related outcomes were considered: (a) quantity and variability of past-month drinking and (b) problematic drinking patterns. Predictor variables were psychological distress, economy-related stressors, and gender. The sociodemographic characteristics of age, education, and race/ethnicity were controlled for in all analyses.

Past-month drinking patterns. To assess past-month drinking patterns, we used the quantity–frequency–variability index developed by Calahan et al. (1969). The frequency of drinking was measured as the number of days alcoholic drinks were consumed in the past 30 days, and the quantity of drinking was measured as the number of drinks usually consumed on those days. Variability was calculated by the greatest number of drinks consumed on any 1 day in the past 30 days. Scores were calculated as the average of responses to the quantity, frequency, and variability questions ($\alpha = .87$).

Problem drinking. Our measure of problematic drinking was the 10-item Brief Michigan Alcoholism Screening Test ($\alpha = .74$), which assesses drinking patterns over the past year. This test correlates strongly with the full-length Michigan Alcoholism Screening Test (Pokorny et al., 1972) and is used as a screening tool for alcohol dependence and problems among current drinkers (Maisto et al., 1995).

Psychological distress. Two dimensions of psychological distress were considered: depressive symptoms and symptoms of anxiety. Depressive symptomatology during the past week was measured by asking respondents how often during the past week (i.e., rarely or none of the time, some or a little of the time, occasionally or a moderate amount of the time, or most or all of the time) they experienced seven items from the Center for Epidemiological Studies–Depression (CES-D) scale, for which ample evidence of validity and reliability is available (Radloff, 1977). This abbreviated index ($\alpha = .89$) is found to strongly correlate with the complete CES-D scale (Mirowsky and Ross, 1990). Anxiety during the past week was measured by gauging the extent to which (i.e., not at all, a little, moderately, quite a bit, or extremely) respondents experienced the seven tension-anxiety factor items of the Profile of Mood States (McNair et al., 1981) ($\alpha = .88$).

Economy-related stressors. The measure of economy-related stressors was the Life Change Consequences of the Great Recession instrument, for which evidence of both reliability and construct validity is available (Richman et al., 2012). The items included in this inventory were published by Richman et al. (2012) and fall into seven categories: home ownership problems, undesirable living situation, problematic employment situation, unemployment or underemployment, inadequate health insurance, social role constraints, and inadequate sick time. Consistent with common practice, each score for this measure is a straight count of the number of stressors reported.

Gender. Gender was coded 1 for women and 0 for men.

Sociodemographic control variables. Age was used as a continuous measure in years. Education was a categorical variable based on the educational attainment categories of (1) *less than high school* ($n = 45$); (2) *high school graduate* ($n = 350$); (3) *college graduate* ($n = 110$); and (4) *postcollege training* ($n = 150$). Race/ethnicity was a dummy variable including non-Hispanic Whites ($n = 436$), African Americans ($n = 80$), Hispanics ($n = 91$), Asians ($n = 29$), and individuals who identify as an “other” race/ethnicity ($n = 17$). In all analyses, non-Hispanic Whites served as the reference category.

Analytic strategy

After examining bivariate correlations to assess the basic patterns of correlation among key study variables, we performed structural equation modeling analysis using Mplus software (version 6.11; Muthén and Muthén, 1998–2010)

TABLE 2. Correlation matrix of drinking outcomes, psychological distress, economy-related stressors, and gender ($n = 663$)

	1	2	3	4	5	6
1. Past-month drinking	1.000					
2. Problematic drinking	.309***	1.000				
3. Depressive symptoms	.139***	.160***	1.000			
4. Anxiety	.156***	.146***	.777***	1.000		
5. Economy-related stressors	.138***	.128***	.369***	.417***	1.000	
6. Gender, 1 = female	-.182***	-.107*	.143***	.113**	.026	1.000

Note: The Spearman correlation coefficients are presented for gender; for all other variables, the Pearson correlation coefficients are reported.

* $p < .05$; ** $p < .01$; *** $p < .001$.

to examine the predictive significance of economy-related stressors for psychological distress and the two drinking outcomes considered (i.e., past-month drinking and problematic drinking), controlling for the effects of gender and the sociodemographic control variables. We then considered the potential for psychological distress to mediate the associations between economy-related stressors and each of the drinking outcomes assessed. We formally tested for mediation using the procedures described by Muthén and Muthén (1998–2010) for Mplus software, which apply the mediation tests described by MacKinnon et al. (1995).

In the next step in our analysis, we examined whether any significant indirect paths from economy-related stress to the drinking outcomes considered were conditional based on gender using the moderated mediation procedures for Mplus software described by Preacher et al. (2007). These tests determined whether any indirect effects observed were conditional because (a) the effect of economy-related stress on psychological distress was moderated by gender or (b) the effect of psychological distress on past-month drinking patterns or problematic drinking was moderated by gender.

Results

Table 2 presents the intercorrelations of major study variables. It is noteworthy that stressors related to the economy were associated with each of the psychological and alcohol-related factors considered: Economy-related stressors were associated with more alcohol consumption and problematic drinking, as well as higher levels of depressive symptoms and symptoms of anxiety. The significant correlations between each of the alcohol-related outcomes considered and each of the dimensions of psychological distress assessed also provide preliminary support for the hypothesis that the association between stress and alcohol use and misuse may partly derive from the association between psychological distress and alcohol-related issues. Additionally, the possibility that the effects of stress on psychological distress and/or alcohol-related outcomes may vary by gender was supported by the observation that women drank significantly less than

men in the past month and were less likely to have had problematic drinking issues in the past year but were more likely than men to have experienced symptoms of depression and anxiety.

The structural equation model testing our hypothesized model of the associations among economy-related stressors, psychological distress, and the alcohol-related outcomes is presented in Figure 2. The model fit criteria provided by Hu and Bentler (1999; comparative fit index [CFI] $> .95$; root mean square error of approximation [RMSEA] $< .06$; standardized root mean square residual [SRMR] $< .08$) were used to assess the measurement model. Based on these criteria, there was consistent evidence of good fit for this model (CFI = .993; RMSEA = .032; SRMR = .021), and the chi-square statistic for this model, $\chi^2(6) = 9.931$, $p = .128$, provided additional evidence of model fit. Significant improvements in model fit were achieved when depressive symptoms and anxiety were measured as one latent variable (i.e., psychological distress) and when the problematic drinking measure was allowed to correlate with the measure of past-month drinking, as in the present model.

The structural equation modeling results conformed to expectations based on prior research and theory. Controlling for gender and the sociodemographic control variables, increases in stressors related to the economy predicted greater psychological distress ($\beta = .542$, $SE = .046$, $p < .001$). Higher stressor exposure was also predictive of more alcohol consumption over the past month ($\beta = .021$, $SE = .010$, $p < .01$) and problematic drinking over the past year ($\beta = .017$, $SE = .005$, $p < .01$).

Mediation tests revealed that the effects of economy-related stressors on the alcohol-related outcomes assessed were partly explained by variation in psychological distress. Significant indirect effects were found for the pathway from economy-related stress to problematic drinking. The total effect of economy-related stress on problematic drinking was .024 ($SE = .005$, $p < .001$), of which .017 ($SE = .005$, $p < .01$) was explained by the direct effect of economy-related strain and .007 ($SE = .002$, $p < .01$) was accounted for by the indirect effect of economy-related stress through psychological distress.

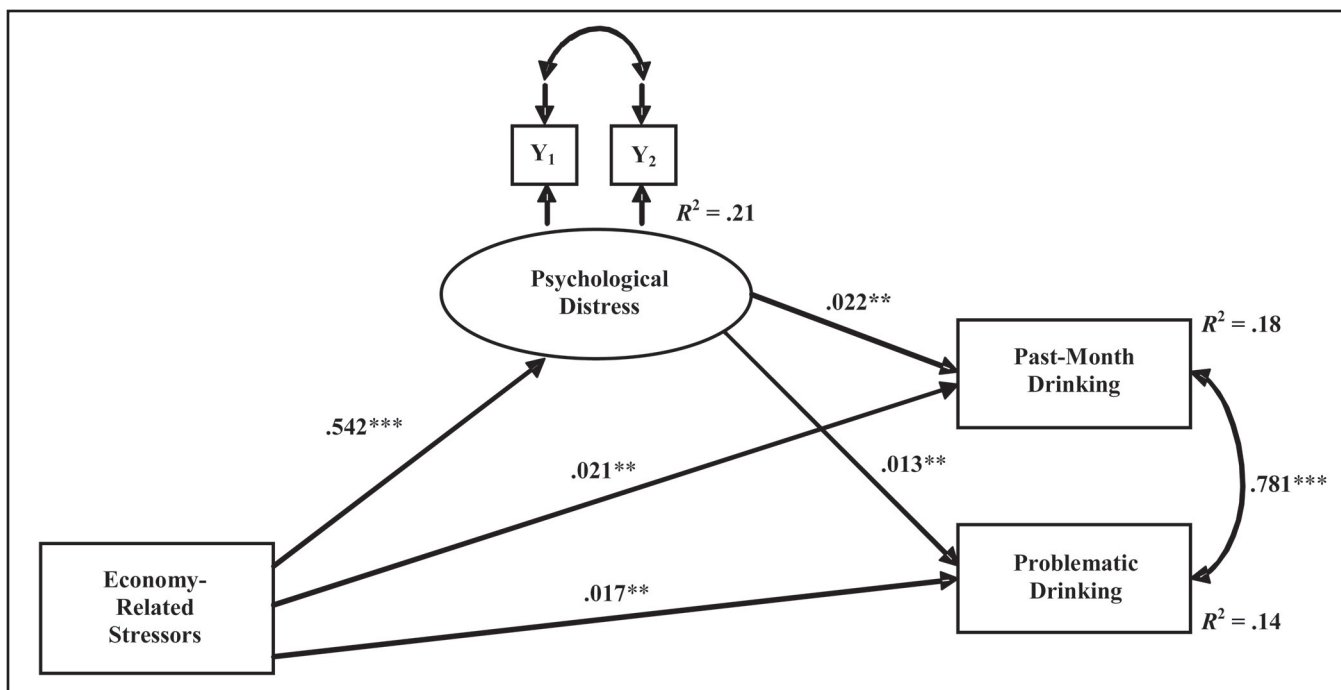


FIGURE 2. Structural equation model relating economy-related stressors to psychological distress and alcohol-related outcomes. *Notes:* Standardized parameter estimates are reported. Model controls for gender, age, education, and race/ethnicity. $**p < .01$; $***p < .001$.

It is noteworthy that these findings differed from results obtained in a model not accounting for the correlations among the three outcomes considered. When these associations were not accounted for, psychological distress was found to additionally mediate the association between economic stressors and past-month drinking patterns. However, as noted, the model presented represents an improvement on a model not allowing for problematic drinking to correlate with past-month drinking.

Moderated mediation tests next determined whether the mediating effects of psychological distress varied depending on gender. These tests added interaction terms to the path models reported in Figure 2. The first stage in this analysis considered whether moderated mediation occurs as a function of gender variation in the effect of economy-related stressors on the mediating variable (psychological distress) and each of the alcohol-related outcomes. This was expressed as an interaction between gender and the economy-related stressors measure. Separate equations considered the effect of this interaction term on the paths to psychological distress and for the direct effects of economy-related stressors on past-month drinking and problematic drinking. In none of these equations did the interaction term approach significance.

The next stage assessed whether moderated mediation occurred as a function of gender variation in the effects of psychological distress on past-month drinking or problematic drinking. For these tests, separate equations included the

interaction term for gender by psychological distress in the path models from psychological distress to each of the alcohol-related outcomes. No significant effects were observed for the pathway to past-month drinking. However, the mediating effects of psychological distress for the economy-related stressor–problematic drinking association differed for men and women in this sample. This effect is displayed in Figure 3, which presents the predicted pattern of gender contrasts in the effects of psychological distress on problematic drinking based on the mean ± 2 *SD* values of psychological distress (as displayed in Table 1). As shown in Figure 3, the mediating effects of psychological distress differed for men and women because the relationship between psychological distress and problematic drinking was significantly less strong for women compared with men ($\beta = -.031$, $SE = .006$, $p < .001$), controlling for the remaining variables. Thus, increases in psychological distress were associated with a clear increase in problematic drinking for men but not women.

Discussion

The present study extends previous research by addressing the extent to which psychological distress mediates the link between social stressors and varied drinking outcomes within the context of a major economic crisis affecting American society. Our investigation used structural equation modeling to address two questions: (a) to what extent does

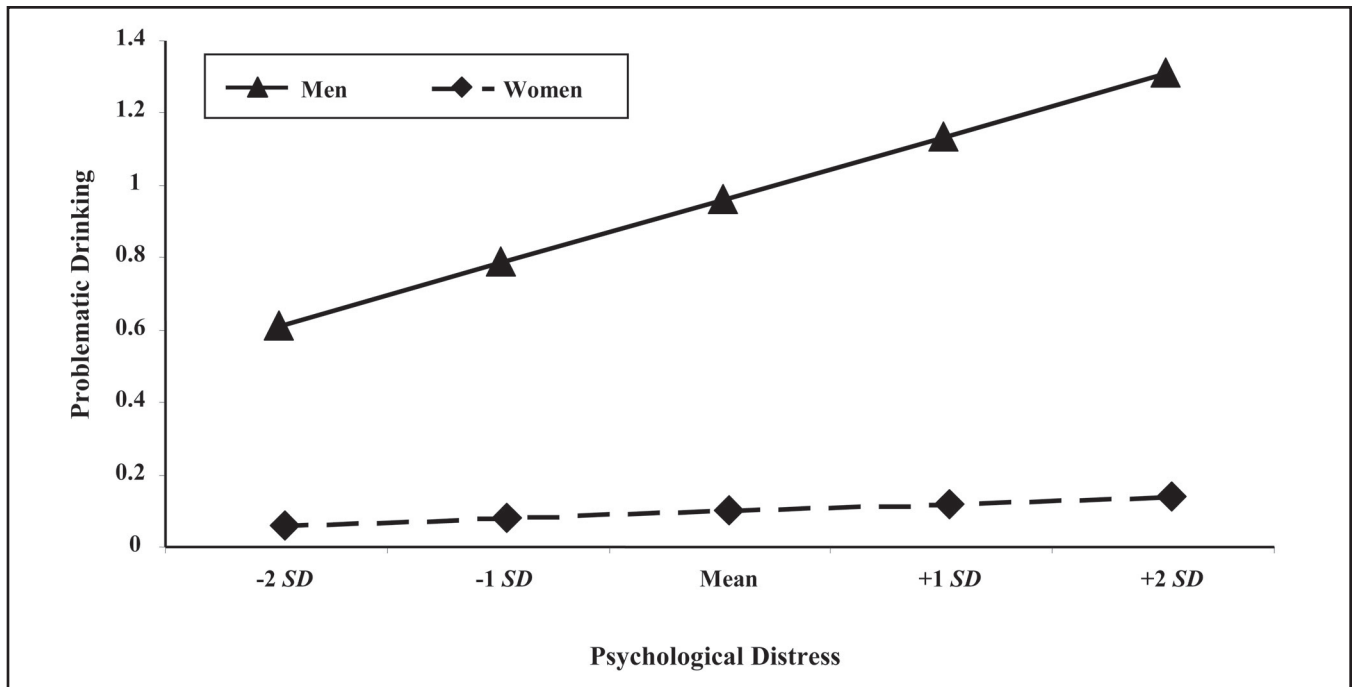


FIGURE 3. Gender contrasts in the effects of psychological distress on problematic drinking. (The score for problematic drinking was based on results from the 10-item Brief Michigan Alcoholism Screening Test. Psychological distress is a composite score of depression and anxiety measures. For scoring, see *Psychological distress* in the Method section.) Notes: Gender \times Psychological Distress ($\beta = -.031$, $SE = .006$, $p < .001$).

psychological distress influence the association between economic stressors and two potentially interrelated drinking outcomes, and (b) do any observed linkages among stressors, psychological distress, and drinking outcomes vary systematically by gender?

Our findings strengthen earlier investigations supporting the mediating role of psychological distress in explaining the associations between social stressors and alcohol use, abuse, and dependence (Peirce et al., 1994; Richman et al., 2002). Elaborating on this work, we demonstrated that the alcohol-related outcomes of past-month drinking and problematic drinking are interrelated and that accounting for this relationship provides a clearer understanding of the ways in which stressors influence drinking behaviors. The findings reveal that psychological distress mediates the effects of economic stressors on problematic drinking. Further tests showed that significant mediating effects were observed for past-month drinking patterns only when the associations between the outcomes were not accounted for.

Together, these findings suggest that tension-reduction or self-medication models of drinking may be particularly salient in understanding the effects of social stressors on alcohol problems rather than general consumption patterns. Psychological distress is thought to influence alcohol use partly because alcohol can induce positive affect, reduce self-awareness, and alleviate tension and feelings of distress (Baumeister et al., 1994; Conger, 1956; Hull and Young, 1983; Hull et al., 1986). Tension-reduction and

self-medication theories suggest that, by extension, any issue or event that increases psychological distress also has the capacity to increase alcohol consumption patterns and related difficulties (Cooper et al., 1992; Cox and Klinger, 1988). These theories also suggest that the more reactive a person is to stress, the more he or she is likely to use alcohol to cope with stress (Cooper et al., 1992; Cox and Klinger, 1988; Steele and Josephs, 1990), particularly when stressors are coupled with the expectation that drinking will reduce the negative emotional effects of stressors (Brown et al., 1980). Although we show a clear linkage among stress, psychological distress, and problematic drinking, we were unable to explicitly address the motivations for drinking in response to economic difficulties and recommend this for further study. Further consideration of the ways in which interrelated drinking outcomes are influenced by various forms of economic stress or other social stressors might also enrich our understanding of these associations.

The present investigation also furthers our understanding of gender differences in the associations among social stressors, psychological distress, and alcohol-related outcomes. Consistent with previous research, we find that the effects of stressors on alcohol-related outcomes are more pronounced among men than among women when the effects of psychological distress are controlled for (Peirce et al., 1994; Richman et al., 2002). Our analyses further specify that this effect derives from gender differences in the relationship between psychological distress and problematic drinking.

That is, the association between psychological distress and problematic drinking is significantly less strong for women compared with men. This pattern of findings raises questions concerning the extent to which other types of stressors may have different gender-linked meanings and, thus, differing findings regarding the salience of gender. We, thus, recommend that future studies address other types of stressors in terms of the gender-linked mediation among stress, distress, and drinking.

These conclusions should be considered within the context of three methodological considerations. The first concerns the cross-sectional nature of the data we used. Longitudinal data are necessary to more clearly demonstrate the direction of causality among economy-based stressors, distress, and drinking outcomes. Although the theoretical framework of this study was premised on the notion that economic stressors affect psychological distress, which affects drinking outcomes, other longitudinal studies have demonstrated that the use of alcohol can also lead to future higher levels of psychological distress (Aneshensel and Huba, 1983; Van Gool et al., 2007), and bi-directional effects also seem plausible. It is also possible that alcohol use or psychological distress can affect exposure to economy-related stressors. Future research can more definitively address both mediating and moderating processes linking social stressors to drinking outcomes by using longitudinal data to more clearly demonstrate causality.

Second, the method for obtaining our sample and response rate should be considered in terms of our conclusions. The random-digit-dialing methodology for obtaining the sample included only individuals with landline telephone numbers. Thus, individuals relying on cell phones only, along with those households without access to any telephone, were not included in this study. This potential noncoverage error is a source of concern because comparisons of our data with the U.S. population revealed that the sample underrepresented African Americans, Latinos, and younger (<age 40) and less-educated (high school or less) persons. Our data were weighted to reflect the demographics of the overall population, and we compared the weighted and unweighted estimates of each of our dependent variables to determine if nonresponse and/or noncoverage may have introduced serious bias into one or more of them. In each instance, we found that the weighted values of each alcohol use measure fell well within 1 *SD* of the unweighted values, suggesting that the distribution of our key measures was not appreciably influenced by these processes.

Finally, the validity of self-reports of sensitive behaviors, such as alcohol consumption, may also be called into question, although there are several published studies that have generally confirmed the quality of self-reported alcohol consumption (Babor et al., 1990; Del Boca and Darkes, 2003).

With these limitations notwithstanding, this research extends previous studies by using structural equation model-

ing to examine mediating and moderating processes linking economy-related stressors, psychological distress, and both drinking patterns and problematic drinking in a national sample. Most importantly, it demonstrates that the mediating effects of economic stressors on problematic drinking are significantly greater for men compared with women. These findings suggest the importance of highlighting gender as a central factor affecting the links among economic or other types of stressors, psychological distress, and drinking outcomes.

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