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## Family, Work, Work-Family Spillover, and Problem Drinking During Midlife

*Using ecological theory as a theoretical framework, this study systematically examined the associations between multiple dimensions of family relationship quality, work characteristics, work-family spillover, and problem drinking among a national sample of employed, midlife adults (n = 1,547). Multivariate analyses confirmed that work and family microsystem factors were associated with problem drinking above and beyond individual characteristics. Consistent with previous research, results indicated that a higher level of marital disagreement and more work-related pressure were associated with higher odds of problem drinking. Results also indicated that a higher level of positive spillover from family to work was associated with lower odds of problem drinking, whereas a higher level of positive spillover from work to family was associated with higher odds of problem drinking. Psychological well-being did not account for the association between work and family factors and problem drinking. Associations were similar for men and women.*

Problem drinking has devastating personal and family consequences. Extensive evidence indi-

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cates that problematic or chronic alcohol consumption undermines individuals' physical health (Fried et al., 1998; National Institute of Alcohol Abuse and Alcoholism [NIAAA], 1997), psychological well-being (Finney, Moos, & Mewborn, 1980; NIAAA, 1997), and social functioning (Hull & Bond, 1986; Steele & Josephs, 1990). Within families, alcohol abuse and problem drinking have been demonstrated to undermine marital satisfaction (Jacob, 1992), and parent-child interactions (Seilhamer, Jacob, & Dunn, 1993). Consequently, from both a public health and a family enhancement perspective, it is important to more fully understand the correlates and predictors of problem drinking to design targeted prevention and intervention strategies.

Empirical investigations of abusive drinking and practical interventions to change drinking habits typically assume that alcohol consumption reflects an individual's rational choice (cf. Fitzgerald, Davies, Zucker, & Klinger, 1994). The health behavior literature, for example, has been dominated by individual-level theories positing that alcohol consumption results from a logical decision-making process wherein an individual makes a choice whether to drink after considering the pros and cons of the behavior (e.g., Prochaska, DiClemente, & Norcross, 1992). Similarly, much of the clinical literature reflects the "affect regulation" model, which holds that an individual chooses to self-medicate with alcohol to cope with burdens and stresses of everyday life (Brennan &

Shaer, 1995; Cooper, Frone, Russell & Mudary, 1995; Moos, 1994).

A significant gap in our knowledge about problem drinking results from the current overemphasis on individual-level theories. These models do not give adequate attention to contextual or ecological factors that may either directly influence or moderate individual-level factors in shaping drinking behavior. Although some previous research has considered contextual correlates of problem drinking arising from work and family (Bromet, Dew, & Parkinson, 1990; Frone, Barnes, & Farrell, 1994; Frone, Russell, & Cooper, 1993, 1997), stress has served as the dominant underlying contextual construct of interest; consequently, we have a one-sided view of how work and family experiences may influence problem drinking.

The overarching goal of this research project was to use ecological theory (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998) to guide a systematic investigation of the extent to which multiple dimensions of family relationship quality, work characteristics, and work-family spillover were associated with problem drinking among a nationally representative sample of employed, middle-aged adults. We went beyond a contextual stress model by examining both positive and negative work and family factors. We also examined evidence for whether psychological well-being mediates the association between work and family factors and problem drinking.

#### THEORETICAL AND EMPIRICAL OVERVIEW

##### *Ecological Systems Theory*

Ecological theory, as explicated by Bronfenbrenner and colleagues (Bronfenbrenner, 1979; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Morris, 1998), can serve as a valuable guide for further understanding and modeling the determinants of problem drinking (Fitzgerald, Davies, Zucker, & Klinger, 1994). An ecological perspective goes further than do individual-level models of problem drinking to suggest that the interaction between the individual and persons, objects, and symbols of prominent life domains (e.g., family and work) may influence problematic drinking by altering social, psychological, and physiological processes. Ecological theory leads us to suggest that positive person-environment interactions that provide resources or incentives for development within and across domains will be associated with

better health behaviors (e.g., less problem drinking). By contrast, negative person-environment interactions, or those perceived as creating barriers to growth, might be associated with more problematic health behaviors (e.g., more problem drinking; Bronfenbrenner & Ceci, 1994; Lawton & Nahemow, 1973). In this study, we build and expand on previous research by considering the independent associations between both positive and negative work-and family-related processes and problem drinking.

Previous conceptual and empirical work supports the ecological premise that negative person-environment interactions, such as high levels of family or work stress, promote problematic alcohol behavior and undermine healthy development above and beyond individual-level factors (Bromet, Dew, & Parkinson, 1990; Frone, Barnes, & Farrell, 1994; Frone, Russell, & Cooper, 1993, 1997; Greenhaus & Parasuraman, 1986; Klitzman, House, Israel, & Mero, 1990; Voydanoff, 1990). Results from community and regional samples consistently suggest that more pressure at home, a higher level of pressure at work, and more work-family conflict are all associated with poorer health (Frone, Russell, et al., 1997; Klitzman et al., 1990), lower levels of psychological well-being (Frone, Russell, & Cooper, 1992, 1995, 1997; Higgins, Duxbury, & Irving, 1992), and more problem drinking (Bromet et al., 1990; Frone, Russell, et al., 1994, 1997).

Some previous research also supports the ecological premise that individual characteristics interact with contextual factors, further shaping developmental and behavioral outcomes (Bronfenbrenner & Morris, 1998). For example, the impact of work pressure on drinking has been found to be particularly strong for individuals who highly value their involvement in work (Frone, Russell, et al., 1995), and the impact of work-family conflict on problem drinking is particularly strong for individuals who view alcohol as an effective coping strategy (Frone, Russell, et al., 1993).

##### *Family Characteristics and Problem Drinking*

The primary limitation of previous research examining how family factors may influence problem drinking is the typical use of a unidimensional conceptualization of family influence. Family interaction patterns characterized by high levels of cohesion and lower levels of family conflict have been found to be independently associated with less problem drinking in both cross-sectional and

longitudinal research (Finney et al., 1980; Franks, Campbell, & Shields, 1992; Pratt, 1976). This evidence suggests that summing across low levels of cohesion and high levels of conflict to create a measure of family-related pressure may obscure the impact of different dimensions of family experience on individual outcomes (Rook, 1984).

Moreover, some forms of family interaction that could be perceived as family pressure may, in fact, protect individuals from problematic alcohol consumption. For example, a family culture that promotes commitment to family rules and rituals, even in the presence of alcohol abuse in the family, has been found to undermine the transmission of alcoholism from one generation to the next (Bennett & Wolin, 1990). Therefore, although commitments to the performance of family rules and obligations might create additional pressure, such commitments might also be expected to reduce the likelihood of problem drinking.

The family is an influential microsystem shaping individual behavior throughout the life course. Guided by ecological theory and previous research we hypothesized: (H1) Family processes that provide resources for growth, such as affectual support from a spouse and other family members, would be associated with lower odds of problem drinking. By contrast, we expected that family processes that create barriers to growth, such as spousal disagreement and family criticism, would be associated with higher odds of problematic drinking.

#### *Work Characteristics and Problematic Alcohol Use*

The workplace is another influential microsystem that shapes development during adulthood. Although research linking aspects of the workplace with health-related behaviors is growing, it remains limited by the same conceptual problem previously discussed for the family: Different work experiences are typically summed to create a unidimensional composite index of work pressure. Consistent with the Job Demands Model (Karasek & Theorell, 1990), work pressure is typically operationalized by summing across low levels of control or autonomy, high levels of psychological strain, and high levels of work-role ambiguity (Bromet et al., 1990; Frone, Russell, et al., 1992). Cross-sectional and longitudinal analyses of regional and population samples, however, indicate that higher levels of control and lower levels of pressure frequently exert unique effects

on health-behavior outcomes (Green & Johnson, 1990; Mensch & Kandel, 1988; Weidner, Boughal, Connor, Pieper, & Mendell, 1997; Wickrama, Conger, & Lorenz, 1995). This evidence suggests that different aspects of work may influence health and behavior in different ways; therefore, we hypothesized: (H2) A higher level of decision latitude and a higher level of support at work would be associated with lower odds of problem drinking. We also hypothesized that a higher level of pressure at work would be associated with higher odds of problem drinking.

#### *Work-Family Spillover and Problematic Alcohol Use*

Ecological theory would also posit that factors arising from the work-family mesosystem (i.e., the intersection of the family microsystem and the work microsystem) are likely to influence individual behaviors such as problem drinking. Several studies have examined the impact of work-family conflict on alcohol consumption (Bromet et al., 1990; Frone, Barnes, et al., 1994; Frone, Russell, et al., 1993, 1997), finding that negative spillover between work and family (particularly negative spillover from work to family) directly and indirectly promotes higher levels of alcohol consumption. This led us to hypothesize: (H3) Higher levels of negative spillover between work and family would be associated with higher odds of problem drinking.

Previous research examining the association between the work-family nexus and problem drinking has been limited by an incomplete conceptualization of the work-family interface. That is, guided by the scarcity hypothesis (e.g., Bielby & Bielby, 1989), previous research has typically operationalized the work-family interface as ranging from nonproblematic (neutral) to conflicted (negative). By contrast, the enhancement hypothesis (Sieber, 1974; Thoits, 1983), which suggests that participation in both work and family can lead to better health and well-being and possibly better functioning in the other domain (i.e., positive spillover), has not been considered (Barnett, 1996). Because positive spillover between work and family may reflect a good person-environment fit (Barnett, 1996) and provide resources for growth, we hypothesized: (H4) Higher levels of positive spillover between work and family would be associated with lower odds of problem drinking.

*Accounting for Family, Work, and Problematic Alcohol-Consumption Relationships*

Psychological well-being has been explicitly and implicitly hypothesized as the most proximal determinant of alcohol-related behavior. In the health behavior literature, several models suggest that positive social interactions undermine risk-taking behavior by reducing levels of depression or negative well-being (Franks et al., 1992; Mechanic & Cleary, 1980). Similarly, the affect regulation model used in the alcohol literature suggests that individuals self-medicate to better cope with the disappointments and stresses of everyday life (Brennan & Shaer, 1995; Cooper et al., 1995; Moos, 1994). Therefore, we hypothesized: (H5) Negative psychological well-being would account for (i.e., mediate) some of the associations between family factors, work characteristics, work-family spillover, and problem drinking.

#### METHOD

##### *Data and Sample*

The data used for this study are from the National Survey of Midlife Development in the United States (MIDUS) collected in 1995 by the John D. and Catherine T. MacArthur Foundation Research Network on Successful Midlife Development. The original purpose of the MIDUS was to examine patterns, predictors, and consequences of midlife development in the areas of physical health, psychological well-being, and social responsibility. MIDUS respondents are a nationally representative, general population sample of noninstitutionalized persons, aged 25–74, who have telephones. The sample was obtained through random-digit dialing, with an oversampling of older respondents and men made to guarantee a good distribution on the cross-classification of age and gender. Sampling weights correcting for selection probabilities and nonresponse allow this sample to match the composition of the U.S. population on age, sex, race, and education.

MIDUS respondents first participated in a telephone interview lasting approximately 40 minutes. The response rate for the telephone questionnaire was 70%. Respondents to the telephone survey were then asked to complete two self-administered mail-in questionnaires. The response rate for the mail-in questionnaires was 86.8%. This yielded an overall response rate of 60.8% ( $.70 \times .868$ ) for both parts of the survey.

The analytic sample used here ( $N = 1,547$ ) includes all part- and full-time employed respondents aged 35–65. In contrast to some work-family studies, we did not limit our sample further to married persons, parents, or individuals who were both married and parents (although we control for these statuses in our analyses). We believe such a limitation reflects too narrow a conceptualization of family because single, childless adults often carry considerable family commitments to parents, siblings, and other kin (Allen & Pickett, 1987).

Problem drinking was operationalized by considering the extent to which a respondent experienced serious consequences as a result of drinking or symptoms of alcohol dependence within the past year (Hilton, 1991a; Selzer, 1971). Respondents were asked the following five questions, expanded from the *Composite International Diagnostic Interview* (World Health Organization, 1990): "During the past 12 months, (1) did you place yourself in a situation while under the effects of alcohol or while feeling its after effects that increased your chances of getting hurt—such as driving a car or boat or using knives, guns, or machinery? (2) did you have any emotional or psychological problems from using alcohol—such as feeling depressed, being suspicious of people, or having strange ideas? (3) did you have such a strong desire or urge to use alcohol that you could not resist it or could not think of anything else? (4) did you spend a great deal of time using alcohol or getting over its effects? (5) did you find that you had to use more alcohol than usual to get the same effect or that the same amount had less effect on you than before?"

Response categories were yes and no (Cronbach's alpha for the five items was .68). The respondent was coded 1 (i.e., problem drinker) on a dichotomous variable if they answered "yes" to one or more questions. Descriptive statistics for the weighted analytic sample indicated that 12% of respondents were classified as problem drinkers, closely mirroring reports from other national samples (Centers for Disease Control, 1997; Grant et al., 1994; Hilton, 1991b; see Table 1 for descriptive statistics of all analytic variables).

Four measures of family relations were included in the analyses: spouse affectional support, spouse disagreement, other family affectional support, and other family criticism or burden. Spouse affectional support was assessed by items adapted from Schuster, Kessler, and Aseltine (1990), along with new items which included: "How much does

TABLE 1. DESCRIPTIVE STATISTICS FOR ANALYSIS VARIABLES

	Mean	SD	Range
Outcome measure			
Problem drinking	0.12	0.32	0-1
Family microsystem			
Spouse affectual support	3.57	0.48	1-4
Spouse disagreement	1.95	0.47	1-3
Other family affectual support	3.40	0.62	1-4
Other family criticism/burden	2.15	0.61	1-4
Work microsystem			
Decision latitude	3.66	0.92	1-5
Pressure at work	2.89	0.73	1-5
Support from coworkers/supervisor	3.67	0.76	1-5
Work-family mesosystem			
Negative spillover work to family	2.63	0.74	1-5
Positive spillover work to family	2.64	0.84	1-5
Negative spillover family to work	2.08	0.67	1-5
Positive spillover family to work	3.42	0.84	1-5
Psychological well-being			
Dysphoria	1.53	0.61	1-5
Individual characteristics			
Age	46.33	8.08	35-65
Sex (Female = 1)	0.51	0.50	0-1
Race/ethnicity (Black = 1)	0.10	0.30	0-1
Less than h.s. education	0.09	0.29	0-1
H.S. education or GED	0.38	0.49	0-1
Some college	0.25	0.44	0-1
College graduate	0.28	0.45	0-1
Household earnings	50,305	37,824	0-300,000
Parental status (has child(ren) = 1)	0.85	0.36	0-1
Marital status (married = 1)	0.72	0.45	0-1
Hours worked per week	44.77	17.09	1-126
Perceived control over health	5.43	0.67	1-6

Note: Data from National Survey of Midlife Development in the United States (MIDUS), 1995. Means for dichotomous variables are proportions. All descriptives are based on weighted data.

your spouse or partner (1) really care about you? (2) understand the way you feel about things? (3) appreciate you? How much can you (4) rely on him or her for help if you have a serious problem? (5) open up to him or her if you need to talk about your worries? (6) relax and be yourself around him or her?" Response categories were 1 = *not at all*, 2 = *a little*, 3 = *some*, and 4 = *a lot* ( $\alpha = .91$ ).

Spouse disagreement was measured with the following three items used in several national surveys (e.g., National Survey of Families and Households, National Longitudinal Survey of Labor Market Experience). "How much do you and your spouse disagree on the following issues: (1) money matters, such as how much to spend, save, or invest? (2) household tasks, such as what needs doing and who does it? (3) leisure time activities, such as what to do and with whom?" Response

categories were the same as those described for spouse affectual solidarity ( $\alpha = .67$ ). Preliminary analyses indicated that spouse affectual solidarity and spouse disagreement were only moderately correlated ( $r = -.35$ ) and that both aspects of the marital relationship added significantly to explaining overall self-reported marital quality; therefore, both measures were examined separately in our analyses.

Other family affectual support was assessed with questions adapted from Schuster and colleagues (1990): "Not including your spouse or partner, how much do members of your family (1) really care about you? (2) understand the way you feel about things? How much can you (3) rely on them for help if you have a serious problem? (4) open up to them if you need to talk about your worries?" Response categories ranged from 1 = *not at all* to 4 = *a lot* ( $\alpha = .83$ ).

Other family criticism or burden also was measured with items adapted from Schuster and colleagues (1990): (1) Not including your spouse or partner, how often do members of your family make too many demands on you? (2) How often do they criticize you? (3) How often do they let you down when you are counting on them? (4) How often do they get on your nerves?" The response categories for the family criticism or burden items were the same as those described for family affectual support ( $\alpha = .79$ ). Family affectual support and family criticism or burden were only moderately correlated ( $r = -.33$ ).

The work microsystem was operationalized by constructing three work characteristic measures: decision latitude, job pressure, and support at work. Decision latitude was measured using responses to four items adapted from the Whitehall Health Survey (1989): "How often do you have a (1) choice in deciding how you do your tasks at work? (2) choice in deciding what tasks you do at work? (3) say in decisions about your work? (4) say in planning your work environment—that is, how your workplace is arranged or how things are organized?" Response categories for each item in this index (as well as the indices for job pressure and support at work described) were 1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *most of the time*, and 5 = *all of the time* ( $\alpha = .87$ ).

Job pressure, assessing the amount of psychological strain associated with working, was measured with four questions that were new to the MIDUS survey. "How often in the past year (1) did different people or groups at work demand things from you that you think are hard to combine? (2) have you had too many demands made on you at your job? (3) have you had enough time to get everything done at your job? (4) have you had a lot of interruptions at your job?" ( $\alpha = .73$ ).

Support at work, assessing the extent to which relationships with coworkers and supervisors are perceived as supportive, was measured by five items adapted from the Whitehall Health Survey (1989) ( $\alpha = .84$ ): "How often (1) do you get help and support from your coworkers? (2) are your coworkers willing to listen to your work-related problems? (3) do you get the information you need from your supervisor or superiors? (4) do you get help and support from your immediate supervisor? (5) is your immediate supervisor willing to listen to your work-related problems?"

Preliminary factor analytic work evaluating 16 items new to the MIDUS survey that were designed to assess the work-family interface sug-

gested four distinct work-family spillover dimensions (correlations between these four factors ranged from  $r = -.08$  to  $r = .49$ ). Negative spillover from work to family was assessed with four items ( $\alpha = .82$ ): "How often have you experienced each of the following in the past year? (1) Your job reduces the effort you can give to activities at home. (2) Stress at work makes your irritable at home. (3) Your job makes you feel too tired to do the things that need attention at home. (4) Job worries or problems distract you when you are at home." Response categories for each of these items and each of the subsequently described work-family spillover indices were 1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *most of the time*, and 5 = *all of the time*.

Positive spillover from work to family was assessed with responses to three questions ( $\alpha = .73$ ): "How often have you experienced each of the following in the past year? (1) The things you do at work help you deal with personal and practical issues at home. (2) The things you do at work make you a more interesting person at home. (3) The skills you use on your job are useful for things you have to do at home."

Negative spillover from family to work was measured by responses to four questions ( $\alpha = .80$ ): "How often have you experienced each of the following in the past year? (1) Responsibilities at home reduce the effort you can devote to your job. (2) Personal or family worries and problems distract you when you are at work. (3) Activities and chores at home prevent you from getting the amount of sleep you need to do your job well. (4) Stress at home makes you irritable at work."

Positive spillover from family to work was measured by respondents' answers to three questions ( $\alpha = .70$ ): "How often have you experienced each of the following in the past year? (1) Talking with someone at home helps you deal with problems at work. (2) The love and respect you get at home makes you feel confident about yourself at work. (3) Your home life helps you relax and feel ready for the next day's work."

The dysphoria scale included six items new to the MIDUS survey that ask the respondent, "During the past 30 days, how often did you feel so sad nothing could cheer you up? nervous? restless or fidgety? hopeless? that everything was an effort? and worthless?" Response categories for each item included 5 = *all the time*, 4 = *most of the time*, 3 = *some of the time*, 2 = *a little of the time*, and 1 = *none of the time* ( $\alpha = .86$ ).

Each of the latent constructs described was

constructed using the mean of the valid responses, provided the respondent answered more than half of the items in the scale. Separate indicator variables were created for respondents missing data for half or more items on each scale. Respondents classified as missing for a scale were recoded to the series mean for the variable, and the missing flag variables were then included in the analyses to retain as many cases as possible and to provide more reliable parameter estimates (Orme & Reis, 1991).

Several individual characteristics are typically associated with health behaviors, including age, sex, race, education, and income (Hilton, 1991b; NIAAA, 1997). Therefore, we controlled for age (years), sex (*female* = 1), race (*Black* = 1), education (less than high school, high school or GED, some college, college graduate), and household earnings in all analyses. Additionally, the family literature indicates that individuals who are married and who have children are less likely to engage in health-risk behaviors (Ross, Mirowsky, & Goldstein, 1990; Umberson, 1987); therefore, marital status (*married* = 1) and parental status (*has child(ren)* = 1) were also controlled to better isolate the independent effects of work and family variables on health behaviors.

Time constraints resulting from employment are often conjectured to influence health behaviors and potentially may be confounded with other work-related factors. Consequently, the number of hours the respondent reported working (i.e., sum of responses to two questions regarding hours worked last week in primary and additional jobs) was also controlled in all analyses.

Much health behavior research has indicated that an individual's sense of control over their own health is an important predictor of health-related behaviors (e.g., Strickland, 1978); therefore, perceived control over health was also controlled in all analyses. Control over health was constructed by summing responses to the following items adapted from the Whitehall Health Survey (1989) ( $\alpha = .72$ ): (1) "Keeping healthy depends on things that I can do. (2) There are certain things that I can do for myself to reduce the risk of a heart attack. (3) There are certain things I can do for myself to reduce the risk of getting cancer."

#### *Analytic Sequence*

Hypotheses regarding the association between work and family factors and problem drinking were tested using separate multivariate logistic re-

gression models, where problem drinking was regressed on each block of variables (i.e., family, work, and work-family). A final model examined the independent (unique) associations between all of the work and family variables, the control variables, and problem drinking. We considered the possibility that gender moderated the association between work and family factors and problem drinking by including gender interaction terms in preliminary analyses. None of the interaction terms was found to be robustly significant; therefore, we proceeded with models that examined men and women together.

The mediating hypothesis was assessed using the guidelines established by Baron and Kenny (1986); that is, after examining whether the hypothesized independent variables were associated with problem drinking, we identified whether the independent variables were associated with the mediating variable (i.e., dysphoria). Finally, we included the potential mediating variable in the unique effects model. Significant main effects for the proposed mediator and attenuation of previously significant associations between problem drinking and work variables, family variables, or both would provide support for the mediation hypothesis.

## RESULTS

### *Family-Relationship Quality and Problem Drinking*

The overall pattern of results (described in Table 2, Model 1) provides only partial support for Hypothesis 1 regarding the association between family relationships and problem drinking. Consistent with our expectation, the odds of reporting problem drinking change by 66% for each unit change in spouse disagreement. Although being married is associated with lower odds of problem drinking (Odds Ratio = .54: 1.00), the "benefit" of marriage can be undermined by higher levels of disagreement in the marriage. It is also important to note that the odds of reporting problem drinking is lower among married individuals, even after controlling for the quality of the marital relationship, suggesting that other factors arising from marriage may help deter problem drinking (e.g., Umberson, 1987).

### *Work Characteristics and Problem Drinking*

Perceived pressure on the job was the solitary work characteristic we found to be robustly as-

TABLE 2. ESTIMATED ODDS RATIOS FOR THE ASSOCIATIONS BETWEEN FAMILY RELATIONS, WORK CHARACTERISTICS, WORK-FAMILY SPILLOVER, PSYCHOLOGICAL WELL-BEING AND PROBLEM DRINKING AMONG MIDLIFE ADULTS, AGE 35-65

Independent Variables	Model 1	Model 2	Model 3	Model 4	Model 5
	O.R.	O.R.	O.R.	O.R.	O.R.
<b>Family microsystem</b>					
Spouse affectual support	0.80			1.11	1.12
Spouse disagreement	1.66**			1.45†	1.47†
Other family affectual support	0.96			1.07	1.10
Other family criticism/burden	1.24			1.11	1.08
<b>Work microsystem</b>					
Decision latitude		0.86		0.86	0.87
Pressure at work		1.45**		1.25†	1.26†
Support at work		0.91		0.97	0.97
<b>Work-family mesosystem</b>					
Negative work to family			1.35*	1.18	1.09
Negative family to work			1.25	1.18	1.14
Positive work to family			1.24†	1.28*	1.30*
Positive family to work			0.65***	0.67***	0.69***
<b>Psychological well-being</b>					
Dysphoria					1.38*
<b>Individual characteristics</b>					
Age	0.95***	0.95***	0.95***	0.95***	0.95***
Sex (female = 1)	0.28***	0.28***	0.27***	0.26***	0.25***
Race/ethnicity (Black = 1)	0.39*	0.42†	0.48	0.45†	0.47
Less than h.s. educ.	1.22	1.26	1.38	1.50	1.36
H.S. educ. or GED	0.73	0.76	0.77	0.81	0.78
Some college	0.67*	0.71†	0.70†	0.71†	0.69†
College graduate <sup>a</sup>	1.00	1.00	1.00	1.00	1.00
Household earnings <sup>b</sup>	1.05**	1.05**	1.04*	1.05*	1.05**
Marital status (married = 1)	0.54***	0.54***	0.63*	0.63*	0.60**
Parental status (has child(ren) = 1)	1.07	1.21	1.13	1.12	1.15
Hours worked per week	0.99	0.99†	0.99*	0.99*	0.99†
Control over health	0.75**	0.75**	0.74**	0.75**	0.76*
Log likelihood	1,030.49	1,031.83	1,011.37	1,003.2	998.76
df	1,512	1,513	1,512	1,505	1,504

Note: Data from National Survey of Midlife development in the United States (MIDUS), 1995. Unweighted data (N = 1,547, women n = 742; men n = 805). All models also included missing flag variables as appropriate. O.R. = Odds Ratio  
<sup>a</sup>Reference group is college graduate. <sup>b</sup>Each unit of household earnings represents \$10,000.  
 †p ≤ .001. \*p ≤ .05. \*\*p ≤ .01. \*\*\*p ≤ .001 (two tailed).



sociated with problem drinking among these midlife adults (Table 2, Model 2). The odds of reporting problem drinking increased by 45% for every unit increase in the amount of pressure on the job. In the context of this sample, these results indicate that midlife employees who report the highest level of pressure at work are over four times more likely to report problem drinking in contrast with individuals in the least demanding jobs (i.e.,  $-.37 \times 1 = -.37$ ;  $-.37 \times 5 = -1.85$ ;  $\exp[-.37 - (-1.85)] = \exp [1.48] = 4.39$ ; Kleinbaum, Kupper, Muller, Nizam, 1998). In contrast with previous research using other health-related outcomes, supplementary analyses (not shown) indicated that the combination of low decision latitude and high pressure was not associated with problem drinking. We found no evidence that a higher level support from coworkers and supervisors was independently associated with lower odds of problem drinking.

#### *Work-Family Spillover and Problem Drinking*

The overall pattern of results reported in Table 2, Model 3, suggests that both positive and negative spillover between work and family were independently associated with problem drinking. Consistent with our hypothesis, more negative spillover from work to family was associated with greater odds of reporting problem drinking, whereas a higher level of positive spillover from family to work were associated with lower odds of problem drinking. Contrary to expectation, however, more positive spillover from work to family was associated with higher odds rather than lower odds of reporting problem drinking (trend level).

#### *Unique Effects of Family, Work, and Work-Family Spillover on Problem Drinking*

Multivariate analysis estimating the unique associations between family relationship quality, work characteristics, work-family spillover, and problem drinking provided additional support for an ecological perspective on health behavior. A lower level of spouse disagreement (trend level), low reports of work related pressure (trend level), and more positive spillover from family to work were independently associated with lower odds of problem drinking. Interestingly, however, results from the "unique effects" model indicated that less positive spillover from work to family, rather than more, was associated with lower odds of problem drinking. Notably, these associations exist above

and beyond several individual-level characteristics controlled in the analyses.

Among the individual characteristics, we also found that the odds of reporting problem drinking decreased with age and were lower for women compared with men, consistent with previous research (Centers for Disease Control, 1997; Hilton, 1991b; NIAAA, 1997). Inconsistent with previous research indicating no association between the number of hours worked per week and health outcomes (Frone, Russell, & Barnes, 1996), these analyses indicated a modest association between working more hours and lower odds of problem drinking. Finally, analyses also provided some evidence that the odds of reporting problems with alcohol increased slightly for college graduates in contrast with persons with only some college (trend level) and persons with higher household earnings (Marks, 1996).

#### *Psychological Well-being and Problem Drinking*

Results reported in Table 2 Model 5 provide limited support for our mediational hypothesis anticipating that negative psychological well-being would help account for the associations between work and family factors and problem drinking. Comparing Model 5 with Model 4, there is only modest evidence at best that parameter estimates were attenuated upon entering the well-being measures into the equations. For example, the estimated odds of problem drinking associated with positive spillover from family to work and marital status were modestly attenuated, suggesting that part of the influence between work-family fit and marital status occurs through reductions in negative well-being (Table 3).

#### DISCUSSION

The overarching goal of this research project was to examine the ecological theory association between family relationship factors, work characteristics, and work-family spillover and problem drinking during midlife. Results generally support the usefulness of an ecological perspective by showing that processes within prominent life settings, such as work and family, are associated with problem drinking above and beyond the effects of individual factors. The general pattern of findings suggests that negative person-environment interactions, such as spouse disagreement and pressure at work, are associated with greater odds of problem drinking. Additionally, positive person-environment

TABLE 3. UNSTANDARDIZED OLS ESTIMATES OF THE ASSOCIATIONS BETWEEN FAMILY RELATIONS, WORK CHARACTERISTICS, WORK-FAMILY SPILLOVER, AND NEGATIVE PSYCHOLOGICAL WELL-BEING AMONG MIDLIFE ADULTS AGE 35-65

	Dysphoria
Family microsystem	
Spouse affectual support	-0.08*
Spouse disagreement	-0.04
Other family affectual support	-0.08***
Other family criticism/burden	0.10***
Work microsystem	
Decision latitude	-0.01
Pressure at work	-0.02
Support at work	-0.004
Work-family mesosystem	
Negative work to family	0.21***
Negative family to work	0.09***
Positive work to family	-0.04*
Positive family to work	-0.06***
Constant	2.12***
Adjusted R <sup>2</sup>	0.227

Note: Data from National Survey of Midlife Development in the United States (MIDUS), 1995. Model controls for the affects of Age, Sex, Race/Ethnicity, Education, Household Earnings, Marital Status, Parental Status, Hours Worked/Week, and Perceived Control Over Health. Unweighted data ( $N = 1,547$ ; women  $n = 742$ ; men  $n = 805$ ). \* $p \leq .05$ . \*\*\* $p \leq .001$  (two-tailed).

ronment interactions, such as more positive spillover from family to work, are associated with lower odds of problem drinking. Contradictory to expectation, we found little evidence indicating that psychological well-being mediated the association between work and family factors and problem drinking.

Results from this study extend our understanding of problem drinking among midlife adults in several important ways. Analyses from this study provide nationally representative evidence replicating previous research from more restricted samples indicating that family strain, work pressure, and a less-than-optimal work-family interface are all independently associated with problem drinking (Bromet et al., 1990; Frone, Barnes, et al., 1994; Frone, Russell, et al., 1993, 1997). This study also extends previous research by specifying the distinct work and family experiences associated with problem drinking. Specifically, we unpacked some of the typical composite indices of work and family pressure (cf. Bromet et al., 1990; Frone, Russell, et al., 1993) and found that only spousal disagreements within the family micro-

system and job pressure within the work microsystem were associated with problem drinking.

We add new evidence to the literature indicating that positive spillover between work and family is associated with problem drinking. Indeed, results from the unique effects model suggest that even after controlling for the level of negative spillover between work and family, a low level of positive spillover from family to work was associated with greater odds of reporting problem drinking. These findings suggest that a unidimensional conceptualization of the work-family interface (i.e., no conflict to much conflict) is incomplete; that is, combining work and family roles can result in both positive and negative dimensions of spillover, each with distinct associations with various aspects of individual wellbeing.

Counter to our expectation, our results suggest that more positive spillover from work to family, rather than less, is associated with higher odds of problem drinking. Moreover, the association between positive spillover from work to family and problem drinking became even more pronounced once the individual's level of psychological wellbeing was controlled. One possible explanation for this might be that some work environments that promote satisfying experiences and rewards also include an element of socializing that might include alcohol and could lead to problem drinking (e.g., business parties and lunches). Another possible explanation for these counter-intuitive findings from an ecological perspective is that some person-level characteristic (e.g., alcohol-related expectancies) may moderate the association between work-to-family spillover and problem drinking (Frone, Russell, et al., 1993). That is, it is possible positive spillover from work to family is only associated with problem drinking for individuals who view alcohol as an appropriate and important way of expressing feelings of good fortune. Unfortunately, our data do not include alcohol expectancy measures; consequently, this hypothesis cannot be explored.

The ecological perspective on alcohol consumption provides one potential explanation for the common finding that marital relationship quality is associated with more healthy drinking habits. In the restricted model estimating the association between family factors and problem drinking, more spouse disagreement was found to be associated with higher odds of problem drinking. Once the work and work-family spillover variables were entered into the model, however, the association between spouse disagreement and

problem drinking was attenuated to trend significance. Additional analyses (not shown) indicated that positive spillover from family to work completely mediated the association between spouse disagreement and problem drinking. These results suggest that disagreement per se is not associated with problem drinking; rather, it is the extent to which spousal conflict reduces the experience of positive spillover from family to work that is associated with more problem drinking (Frone, Russell, et al., 1992; Frone, Yardley, & Markel, 1997).

There are a number of limitations to this study. First, our data are cross-sectional, and therefore, any inferences of causality are tenuous. Longitudinal research examining the effects of family, work, and work-family spillover is necessary to more fully understand the temporal sequence of effects (e.g., Frone, Russell, et al., 1997). Next, the alcohol-related measure used in this study reflects only one dimension of alcohol consumption (i.e., problems related to alcohol). The lack of robust findings in the present study regarding decision latitude, in contrast with previous work (Green & Johnson, 1990; Weidner et al., 1997; Wickrama et al., 1995) suggests that decision latitude may influence more subtle aspects of drinking behavior, such as frequency of drinking or quantity of alcohol typically consumed on a single occasion. Therefore, future research needs to examine the extent to which work and family factors influence other dimensions of alcohol use (e.g., amount of consumption and patterns of drinking) not captured by our measure, as well as how these factors influence attempted behavior change.

Nonetheless, these results provide additional evidence for the value of employing an ecological perspective in contrast to a purely individual-level model for understanding problem drinking. Our results indicate that aspects of the work and family microsystem, along with positive and negative experiences of the work-family mesosystem, are independently associated with problematic alcohol consumption among employed, midlife adults. The associations between work and family factors and problematic alcohol consumption are, at best, only modestly mediated by psychological well-being. It is therefore important that future health behavior research continue to recognize and explore the direct and indirect effects of ecological factors, such as family relationships and employment characteristics, while remaining attentive to individual-level factors to more accurately understand the etiology of alcohol-related behavior and its effects on individual and family well-being.

## NOTE

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