Published in final edited form as:

Addiction. 2011 February ; 106(2): 324–334. doi:10.1111/j.1360-0443.2010.03115.x.

Personal, Family, and Social Functioning among Older Couples Concordant and Discordant for High-Risk Alcohol Consumption

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Abstract

Aims—This study compares the personal, family, and social functioning of older husbands and wives concordant or discordant for high-risk alcohol consumption and identifies predictors of changes in concordance and high-risk consumption.

Design, Participants, Measurements—Three groups of couples were identified at baseline and followed 10 years later: (1) concordant couples in which husbands and wives engaged in low-risk alcohol consumption ($N = 54$), (2) concordant couples in which husbands and wives engaged in high-risk alcohol consumption ($N = 38$), and (3) discordant couples in which one partner engaged in high-risk alcohol consumption and the other partner did not ($N = 75$). At each follow-up, husbands and wives completed an inventory that assessed their personal, family, and social functioning.

Findings—Compared to the low-risk concordant group, husbands and wives in the high-risk concordant group were more likely to rely on tension-reduction coping, reported more friend approval of drinking, and were less involved in religious activities; however, they did not differ in the quality of the spousal relationship. The frequency of alcohol consumption declined among husbands in discordant couples, but not among husbands in concordant couples. Predictors of high-risk drinking included tension-reduction coping, friend approval of drinking, and, for husbands, their wives' level of drinking.

Conclusions—High-risk and discordant alcohol consumption do not seem to be linked to decrements in family functioning among older couples in long-term stable marriages. The predictors of heavy alcohol consumption among older husbands and wives identify points of intervention that may help to reduce their high-risk drinking.

Keywords

alcohol consumption; husband-wife concordance; older couples

Introduction

There is considerable information about the concomitants of husband-wife concordance and discordance in alcohol consumption among young and middle-aged married couples, but these issues have not been examined in older married couples. Most studies of late-life alcohol consumption have focused on individual drinking behavior outside the marital context. We provide new information about whether concordant and discordant high-risk

drinking patterns adversely affect older couples' family and social functioning, and about predictors of changes in older husbands' and wives' concordance in drinking patterns and of their high-risk alcohol consumption. By examining predictors of high-risk alcohol consumption, we focus on older partners' influence on each other's drinking patterns and on life-span continuity in concomitants of heavy drinking.

Concordant and Discordant Heavy Drinking

Younger and middle-aged (average age 28–45) husbands' and wives' alcohol consumption is positively associated, as are their drinking problems [1–3]. There also is husband-wife concordance for alcohol use and other aspects of health-related functioning among married couples aged 65 and older [4].

Consistent with the idea of a “drinking partnership”, younger and middle-age couples who are more concordant in alcohol consumption tend to experience higher marital satisfaction. Discrepancies in married partners' heavy drinking have been associated with less marital satisfaction [5–7], perhaps because they reflect dissimilar attitudes and or less marital interaction [8].

Concordant heavy drinking tends to be associated with poorer marital functioning, perhaps because of heightened stressors when both members of a couple are heavy drinkers [9]. Nevertheless, concordant heavy drinking patterns may have relatively little effect in long-term, stable marriages in which the partners have adapted to each other [4].

Predictors of Older Husbands' and Wives' High-Risk Drinking

Several factors have been associated with heavy alcohol consumption among young and middle-aged adults. Reliance on avoidance coping, especially drinking to cope with depression and distress [10–11], weak or non-existent ties to religion [12,13], and family members and friends who approve of and model drinking behavior [14–15] predict more alcohol consumption and drinking problems. In a study of young married couples (average age about 28), a network of heavy drinking friends was linked to both partners' heavier drinking [16–18].

In contrast, there is very little information about the predictors of high-risk alcohol consumption among older adults, especially in the marital context. Adults aged 65 and older who report drinking to relieve anxiety or pain [19–20], and those whose family members and friends drink and espouse positive drinking norms [20–21], are more likely to engage in heavy alcohol consumption and incur drinking problems.

Marital partners tend to influence each other's drinking patterns through modeling and social reinforcement; thus, one partner's heavier drinking tends to raise the likelihood of the other partner's heavier drinking [4,22–23]. In addition, each partner's friends' approval of drinking may enhance the other partner's drinking [18]. These findings led us to expect that, among older couples, reliance on avoidance coping, friend approval of drinking, and less religious involvement would be associated with heavier drinking, as would each partner's heavy drinking and friends' approval of drinking.

In prior work on the cohort of married couples on which we focus here, we found that spouses of late-life problem drinkers reported poorer health, family, and social functioning at baseline. Over 1-year and 10-year follow-ups, spouses of remitted partners improved in several areas, whereas spouses of non-remitted partners continued to experience some deficits [24–25]. We extend this work here to compare couples who engage in low-risk concordant, high-risk concordant, or discordant alcohol consumption on their baseline and

10-year personal, family, and social functioning, and to examine changes in husbands' and wives' drinking pattern concordance and predictors of high-risk alcohol consumption.

Method

Participants

A sample of 266 married couples was drawn from a larger group of individuals aged 55–65 recruited for a study of late-life alcohol consumption and drinking problems [21]. By the 10-year follow-up, either the husband ($N = 54$) and/or the wife ($N = 31$) in 77 couples had died. Husbands and wives in 167 of the 189 couples who were still intact (88.4%) completed the 10-year follow-up. The baseline and follow-up surveys covered essentially the same indices and were completed by a combination of mail and telephone procedures. The project was approved by the Stanford University IRB; informed consent was obtained from all participants.

Alcohol Consumption and Group Composition

Alcohol consumption was assessed by items adapted from the Health and Daily Living Form [HDL; 26] that tapped the frequency and amount of consumption of wine, beer, and hard liquor in the last month. Frequency of alcohol consumption was assessed by how often per week participants reported consuming typical amounts of wine, beer, and hard liquor. Amount of alcohol consumption was assessed by the typical amount of wine, beer, and hard liquor participants reported consuming on the days on which they drank. The number of drinks consumed per day and per week was obtained by combining information about the frequency and amount of consumption of each beverage. There is evidence to support the validity of these self-report measures of alcohol consumption [27–29].

We used this information to classify husbands and wives into whether or not they consumed 3 or more drinks per day or 14 or more drinks per week. We designate these levels as high-risk consumption because they are beyond the standard suggested guidelines for older adults, which are no more than 2 drinks per day or 7 drinks per week [30–31]. Older adults who consume alcohol at these levels are more likely to experience depression and anxiety, poor health, and functional impairment [32–34].

We identified three groups of couples on the basis of their alcohol consumption at baseline : (1) low-risk concordant couples ($N = 54$) in which both husband and wife consumed fewer than 3 drinks per day and fewer than 14 drinks per week; (2) high-risk concordant couples ($N = 38$) in which both husband and wife consumed 3 drinks or more per day or 14 drinks or more per week; and (3) discordant couples ($N = 75$) in which one partner engaged in high-risk alcohol consumption but the other partner did not. Current guidelines suggest that high-risk consumption for older women may be lower than that for older men [30–31]. However, given comparable levels of alcohol consumption, older men may be more likely to develop drinking problems than are older women [34]. Accordingly, we defined high-risk drinking similarly for women and men.

There were no significant differences at baseline among the three groups of couples in age (husbands' mean = 62.4 years; $SD = 4.4$; wives' mean = 58.7 years; $SD = 6.1$), education (84.4% of husbands and 73.7% of wives had a high school education or more), ethnic/racial background (96% of husbands and 97% of wives were Caucasian), employment (64.1% of husbands and 43.7% of wives were employed), or annual family income (mean = US\$51,300; $SD = US\$17,100$). On average, these couples had been married for 31 years ($SD = 11.7$).

There were no demographic differences between wives who died or were not followed ($N = 99$) and those who were followed ($N = 167$) at 10 years. Compared to husbands who died or were not followed ($N = 99$), husbands who were followed ($N = 167$) were slightly younger (62.4 versus 63.8 years; $t = 2.41$; $p < .05$) and more likely to have been employed at baseline (64.1% versus 49.0%; chi square = 5.79; $p < .05$). There were no significant differences between followed and non-followed husbands or wives on baseline indices of alcohol consumption.

Measures of Drinking Problems and Personal Functioning

Drinking problems in the last 12 months were assessed with 12 items rated on 5-point scales varying from never (0) to often (4) drawn from the Drinking Problems Index ($\alpha = .92$) [35–37]. The items tapped functioning problems, such as whether the individual skipped meals or had a fall or accident due to drinking; and interpersonal problems, such as whether family members or friends expressed worries about the respondent's drinking. Individuals who endorsed one or more items were considered to have a drinking problem.

Depressive Symptoms ($\alpha = .94$) were assessed by the sum of 18 items (such as feeling sad or blue, loss of interest in activities) drawn from the HDL [26] rated on 5-point scales reflecting how often the individual had the experience in the past month (never = 0; very often = 4). Medical Conditions was an index adapted from the Life Stressors and Social Resources Inventory (LISRES); [38] that assessed whether or not the individual currently had one or more of 13 diagnosed medical conditions (such as arthritis, cancer, diabetes, and ulcer). Tension-Reduction Coping was assessed by two items that tapped whether or not the individual used substances, such as alcohol or tranquilizers, to reduce distress or pain in the past month. Religious Participation was assessed by whether or not the individual attended religious services at least several times a year as rated on a 5-point item drawn from the HDL [26] varying from never (0) to every week (4).

Measures of Family Functioning

The quality of family relationships was assessed with indices drawn from the LISRES [38]. Current Partner Support ($\alpha = .90$) was assessed by the percent of six items rated often on a 5-point scale ranging from never (0) to often (4). Item examples are "Can you count on him/her to help you when you need it?" and "Does he/she cheer you up when you are sad or worried?" Domestic Tasks ($\alpha = .71$) was measured by the percent of 7 items drawn from the HDL [26], rated fairly often or often on the same 5-point scale asking about the individual's participation in such household tasks as shopping for groceries and cleaning the house in the last month.

Current Extended Family Support ($\alpha = .90$) was assessed by the percent of six items answered fairly often or often that were drawn from the LISRES [38] and were parallel to those used to assess partner support. Extended Family Activities was a 5-point item drawn from the HDL [26] that asked individuals how often they had gotten together with relatives in the past month (0 = never; 4 = several times a week).

Measures of Social Functioning

Current Friend Support ($\alpha = .87$) was assessed by the percent of six items answered fairly often or often that were drawn from the LISRES [38] and were parallel to those used to assess partner support. Activities with Friends was a 5-point item drawn from the HDL [26] that asked individuals how often they had been in touch with close friends in the past month (0 = never; 4 = several times a week). Current Friend Approval of Drinking was measured by four items rated on 4-point scales varying from none or few (0) to almost all

(3) assessing how many of the individual's friends were drinkers and/or approved of heavy drinking.

Analytic Plan

We used repeated measures analyses of variance to contrast the three groups of husbands and the three groups of wives on their drinking behavior, and personal, family, and social functioning at baseline and follow-up. We used planned orthogonal contrasts to identify significant differences between husbands (and wives) in low-risk concordant couples and husbands (and wives) in (a) high-risk concordant couples and (b) discordant couples. Then, we conducted logistic regression analyses to identify predictors of changes in husband-wife drinking pattern concordance and of their high-risk alcohol consumption.

Results

Concordant and Discordant High-Risk Drinking

Compared to husbands and wives in the low-risk concordant group, husbands and wives in the high-risk concordant and discordant groups consumed alcohol more frequently and in larger amounts and were more likely to have drinking problems (Table 1). Significant group $\times$ time interactions showed that husbands in the discordant group and wives in the high-risk concordant group were especially likely to reduce their alcohol consumption between baseline and follow-up.

Personal Functioning—Husbands in the high-risk concordant group relied more on tension-reduction coping and reported less religious involvement than husbands in the low-risk concordant group (Table 2). The findings were similar for wives.

Family and Social Functioning—Compared to husbands in the low-risk concordant group, husbands in the high-risk concordant and discordant groups reported less support from extended family members at follow-up. In contrast, husbands in the discordant group reported more involvement in domestic tasks (Table 3). Husbands reported an increase in involvement in domestic tasks, and both husbands and wives reported a decline in extended family support.

Compared to husbands in the low-risk concordant group, husbands in the high-risk concordant and discordant groups reported more friend approval of drinking (Table 4). Wives in the high-risk concordant group also reported more friend approval of drinking than wives in the low-risk concordant group. Both husbands and wives experienced declines in friend support and friend approval of drinking.

Predicting Change in Concordance Groups

We conducted logistic regression analyses using the baseline variables shown in Tables 1–4 to predict the two most prevalent transitions in concordance between baseline and follow-up; that is, from (1) the high-risk concordant to discordant group (1 = change; 0 = stable; $N_s = 16$ and 116, respectively) and (2) the discordant to low-risk concordant group ($N_s = 21$ and 116, respectively). Three variables predicted change from the high-risk concordant to the discordant group: the husband's and wife's alcohol consumption (drinks per week; odds ratios = 1.05 and 1.08, respectively) and the husband's domestic task involvement (odds ratio = 1.02; $R^2 = .22$; $p < .01$). Two variables predicted change from the discordant to the low-risk concordant group: the husband's alcohol consumption and domestic task involvement (odds ratios = 1.03 and 1.02, respectively; $R^2 = .10$; $p < .05$).

Predicting High-Risk Drinking

We conducted logistic regression analyses to predict husbands' and wives' high-risk drinking, controlling for baseline concordance (1 = concordant; 0 = discordant). Baseline concordance was associated with less high-risk drinking among husbands, due to low-risk concordant husbands' lower levels of drinking, and with more high-risk drinking among wives, due to high-risk concordant wives' higher levels of drinking. At baseline, husbands who relied more on tension-reduction coping and had more friend approval of drinking were more likely to engage in high-risk alcohol consumption, as were husbands whose wives drank more and whose friends approved more of drinking (Table 5). The findings were comparable at the 10-year follow-up.

At baseline, wives who relied more on tension-reduction coping, reported more friend approval of drinking, and were less involved in religious activities were more likely to engage in high-risk alcohol consumption, as were wives whose husbands drank more and whose friends approved more of drinking (Table 5). At the 10-year follow-up, wives' friend approval of drinking marginally predicted their likelihood of high-risk drinking.

We developed a risk score composed of these predictors; that is, tension-reduction coping, friend approval of drinking, low religious participation, and the partner's drinking and friend approval of drinking. We added one point to an individual's risk score when a predictor was above the mean and two points when it was one standard deviation or more above the mean. The risk score was significantly associated with the likelihood of high-risk drinking. For example, at baseline, 28% of husbands with no risk factors engaged in high-risk drinking, whereas 68–80% of husbands with three or more risk factors did so (Figure 1). Among wives, 20% of those with no risk factors engaged in high-risk drinking compared with 48% of those with five or more risk factors.

Discussion

Concordant and Discordant Heavy Drinking

Husbands and wives in high-risk concordant couples, and husbands in discordant couples, consumed more alcohol and were more likely to incur drinking problems than were husbands and wives in low-risk concordant couples. However, there was some moderation of drinking with age, especially among husbands in discordant couples and wives in high-risk concordant couples. This process of moderation largely accounted for the changes in couples' drinking patterns from high-risk concordant to discordant and discordant to low-risk concordant. These findings are consistent with a trend toward lower alcohol consumption in later life [39–41]. Compared to older men, older women are somewhat more likely to reduce their alcohol consumption, perhaps because they are less responsive to social influences, such as their husband's and friend's drinking, and because they obtain smaller drinks with less alcohol content and consume less of the drinks served to them [42].

In one finding that suggested a negative effect of heavy drinking, husbands in the high-risk concordant and discordant groups reported less extended family support at follow-up than husbands in the low-risk concordant group. Similarly, Brennan and Moos [43] identified a connection between heightened conflicts with extended family members and older adults' drinking problems. Continued high-risk alcohol consumption may lead to conflict and withdrawal of extended family members [44].

Compared to husbands and wives in low-risk concordant couples, husbands and wives in high-risk concordant and discordant couples reported more friend approval of drinking. Friend approval of drinking declined among both husbands and wives and, consistent with their sharper drop in alcohol consumption, this decline was more pronounced among wives

in the high-risk concordant group. These findings support prior studies showing that more friend approval of drinking is associated with heavier alcohol consumption, and that there are concomitant declines in heavy drinking and friend approval of drinking [14,16,20].

High-risk concordant or discordant alcohol consumption did not appear to have detrimental consequences for couples' family functioning. These findings are consistent with socio-emotional selectivity theory, which posits that older individuals are motivated to maintain good interpersonal relationships, in part because they are aware of the relatively short life span remaining to them [45–48]. Moreover, some husbands and wives point to positive aspects of their family members' moderate to heavy drinking, including benefits for the marital relationship and social life [49].

Some couples transitioned from the high-risk concordant to the discordant group, due primarily to the wife's transition from high-risk to low-risk consumption. In contrast, the transition from the discordant to the low-risk concordant group was almost entirely due to the husband's transition from high-risk to low-risk consumption. These transitions were predicted by the husband's participation in domestic tasks at baseline, which may foreshadow a closer spousal relationship and less need for either partner to engage in high-risk alcohol consumption.

Predictors of Husbands' and Wives' High-Risk Drinking

Reliance on tension-reduction coping and friend approval of drinking were associated with high-risk alcohol consumption among both husbands and wives. These findings highlight developmental continuity in the concomitants of heavy drinking. Reliance on drinking to cope with distress [10–11] and friends' approval of drinking [14–15] have been associated with heavier alcohol consumption among young and middle-age adults. These associations may be especially strong among older individuals who experience cognitive impairment, which may heighten the influence of social factors on alcohol consumption [50].

Studies of younger couples have noted that each partner's friend approval of drinking is associated with the other partner's heavier drinking [18]. Similarly, in this study of older adults, when a wife consumed more alcohol and had friends who approved more of drinking, her husband was more likely to engage in high-risk alcohol consumption. A husband's drinking appeared to have less influence on his wife.

Together with earlier results indicating that the influence of a partner's drinking on a spouse's alcohol use was stronger for men than for women [25,51], these findings suggest that older men may be more reactive to social modeling influences on drinking than are older women. More generally, with increasing age, women tend to become more assertive and independent, whereas men become more responsive to the interpersonal and social context [52–53].

Limitations and Conclusions

Our findings are of interest, but several limitations must be noted. We recruited a community sample of stably married couples who may have experienced fewer negative effects than might be identified among newly married older couples. Moreover, the sample was composed primarily of Caucasian and relatively well-educated individuals; the findings need to be replicated on more diverse groups of older adults.

We identified some concordance between husbands' and wives' alcohol consumption; however, there likely are short-term changes in husband and wife drinking patterns. Future attempts to understand changes in older individual's reactions to their partner's drinking

patterns should include more frequent assessments and obtain information about the social context of the husband's and wife's drinking patterns.

Nevertheless, our findings suggest that high-risk and discordant alcohol consumption may not be associated with decrements in family functioning among older couples. We also identified developmental continuity in the predictors of heavy drinking and noted that older husbands may be more responsive to their wives' drinking than older wives are to that of their husbands.

Importantly, the predictors of high-risk drinking can help health care providers identify older individuals who may incur alcohol-related problems and select effective interventions for those who need help. Interventions may involve educating older adults about how to avoid "triggers", such as specific social activities or interactions with friends associated with heavy drinking, and about how to handle urges and refuse drinks when "triggers" cannot be avoided. These procedures, which can be employed in the context of brief interventions in primary care settings [54], may help reduce the likelihood of older adults' excessive alcohol consumption.

Acknowledgments

This research was supported by National Institute on Alcohol Abuse and Alcoholism grants AA06699 and AA15685 and by Department of Veterans Affairs Health Services Research and Development Service research funds. The authors thank Carrie Brecht, Lucy Horton, and Sarah Strite for their help in data collection. The views expressed in this article are the authors and do not necessarily represent those of the Department of Veterans Affairs.

References

1. Corbett K, Moan J, Ames G. Drinking patterns and drinking-related problems of Mexican-American husbands and wives. *J Stud Alcohol*. 1991; 52:215–223. [PubMed: 2046371]
2. Livingston M. Effects of alcohol consumption in spousal relationships on health-related quality of life and life satisfaction. *J Stud Alcohol*. 2009; 70:383–390.
3. Leonard KE, Homish GG. Predictors of heavy drinking and drinking problems over the first 4 years of marriage. *Psychol Addict Behav*. 2008; 22:25–35. [PubMed: 18298228]
4. Graham K, Braun K. Concordance of use of alcohol and other substances among older adult couples. *Addict Behav*. 1999; 24:839–856. [PubMed: 10628517]
5. Demers A, Bisson J, Palluy J. Wives' convergence with their husbands' alcohol use: Social conditions as mediators. *J Stud Alcohol*. 1999; 60:368–377. [PubMed: 10371265]
6. Floyd FJ, Cranford JA, Daugherty M, Fitzgerald HE, Zucker RA. Marital interaction in alcoholic and nonalcoholic couples: Alcoholic subtype variations and wives alcoholism status. *J Abnorm Psychol*. 2006; 115:121–130. [PubMed: 16492103]
7. Mudar P, Leonard KE, Soltysinski K. Discrepant substance use and marital functioning in newlywed couples. *J Consult Clin Psychol*. 2001; 69:130–134. [PubMed: 11302271]
8. Homish GG, Leonard KE. The drinking partnership and marital satisfaction: The longitudinal influence of discrepant drinking. *J Clin Consult Psychol*. 2007; 75:43–51.
9. Marshal MP. For better or for worse? The effects of alcohol use on marital functioning. *Clin Psych Rev*. 2003; 23:959–997.
10. Carpenter KM, Hasin DS. Drinking to cope with negative affect and DSM-IV alcohol use disorders: A test of three alternative explanations. *J Stud Alcohol*. 1999; 60:694–704. [PubMed: 10487740]
11. Holahan CJ, Moos R, Holahan CK, Cronkite R, Randall PK. Drinking to cope and alcohol use and abuse in unipolar depression: A 10-year model. *J Abnorm Psychol*. 2003; 112:159–165. [PubMed: 12653424]

12. Pardini D, Plante T, Sherman A, Stump J. Religious faith and spirituality in substance abuse recovery: Determining the mental health benefits. *J Subst Abuse Treat.* 2000; 19:347–354. [PubMed: 11166499]
13. Windle M, Mun EY, Windle RC. Adolescent to young adulthood heavy drinking trajectories and their prospective predictors. *J Stud Alcohol.* 2005; 66:313–322. [PubMed: 16047520]
14. Bullers S, Cooper ML, Russell M. Social network drinking and adult alcohol involvement: a longitudinal exploration of the direction of influence. *Addict Behav.* 2001; 26:181–199. [PubMed: 11316376]
15. Mohr CD, Avera S, Kenny DA, Del Boca FK. “Getting by (or getting high) with a little help from my friends”: An examination of adult alcoholics’ friendships. *J Stud Alcohol.* 2001; 62:637–645. [PubMed: 11702803]
16. Homish GG, Leonard KE. The social network and alcohol use. *J Stud Alcohol Drug.* 2008; 69:906–914.
17. Leonard KE, Kearns J, Mudar P. Peer networks among heavy, regular, and infrequent drinkers prior to marriage. *J Stud Alcohol.* 2000; 61:669–673. [PubMed: 11022805]
18. Leonard KE, Mudar PJ. Alcohol use in the year before marriage: alcohol expectancies and peer drinking as proximal influences on husband and wife alcohol involvement. *Alcohol Clin Exp Res.* 2000; 24:1666–1679. [PubMed: 11104114]
19. Brennan P, Schutte K, Moos R. Pain and the use of alcohol to manage pain: Prevalence and 3-year outcomes among older problem and nonproblem drinkers. *Addiction.* 2005; 100:788–797.
20. Graham K, Clarke D, Bois C, Carver V, Dolinki L, Smythe C, et al. Addictive behavior of older adults. *Addict Behav.* 1996; 21:331–348. [PubMed: 8883484]
21. Moos R, Schutte K, Brennan P, Moos B. Ten-year patterns of alcohol consumption and drinking problems among older women and men. *Addiction.* 2004; 99:829–838. [PubMed: 15200578]
22. Leonard KE, Mudar P. Peer and partner drinking and the transition to marriage: A longitudinal examination of selection and influence processes. *Psychol Addict Behav.* 2003; 17:115–125. [PubMed: 12814275]
23. Leonard KE, Mudar P. Husbands’ influence on wives’ drinking: Testing a relationship motivation model in the early years of marriage. *Psychol Addict Behav.* 2004; 18:340–349. [PubMed: 15631606]
24. Brennan P, Moos R, Kelly K. Spouses of late-life problem drinkers: Functioning, coping responses, and family contexts. *J Fam Psychol.* 1994; 8:447–457.
25. Moos R, Brennan P, Schutte K, Moos B. Spouses of older adults with late-life drinking problems: Personal, health, and social functioning. *J Stud Alcohol Drug.* in press.
26. Moos, R.; Cronkite, R.; Finney, J. *Health and Daily Living Form manual.* 2. Palo Alto, CA: Mind Garden; 1992.
27. Babor T, Stephens R, Marlatt A. Verbal reports in clinical research on alcoholism: Response bias and its minimization. *J Stud Alcohol.* 1987; 48:410–424. [PubMed: 3312821]
28. Sobell LC, Ellingstad TP, Sobell MB. Natural recovery from alcohol and drug problems: Methodological review of the research with suggestions for future directions. *Addiction.* 2000; 95:749–764. [PubMed: 10885050]
29. Stacy AW, Widaman KF, Hays R, DiMatteo MR. Validity of self-reports of alcohol and other drug use: A multitrait multimethod assessment. *J Pers Soc Psychol.* 1985; 49:219–232. [PubMed: 4020615]
30. American Geriatrics Society. Clinical guidelines for alcohol use disorders in older adults. 2003 [(accessed on April 16, 2009)]. Available at: www.americangeriatrics.org/products/positionpapers/alcohol.shtml
31. National Institute on Alcohol Abuse and Alcoholism. NIH Publication No. 07-3769. Bethesda, MD: US Department of Health and Human Services, US Government Printing Office; 2005. Helping patients who drink too much. A clinician’s guide.
32. Kirchner JE, Zubritsky C, Cody M, Coakley E, Chen H, Ware JH, et al. Alcohol consumption among older adults in primary care. *J Gen Intern Med.* 2007; 22:92–97. [PubMed: 17351846]
33. Moore AA, Endo JO, Carter MK. Is there a functional relationship between excessive drinking and functional impairment in older persons? *J Am Geriatr Soc.* 2003; 51:44–49. [PubMed: 12534844]

34. Moos R, Brennan P, Schutte K, Moos B. High-risk alcohol consumption and late-life alcohol use problems. *Am J Public Health*. 2004; 94:1985–1991. [PubMed: 15514241]
35. Finney J, Moos R, Brennan P. The Drinking Problems Index: A measure to assess alcohol-related problems among older adults. *J Subst Abuse*. 1991; 3:431–440.
36. Bamberger PA, Sonnenstuhl WJ, Vashdi D. Screening older, blue-collar workers for drinking problems: An assessment of the efficacy of the Drinking Problems Index. *J Occupat Health Psychol*. 2006; 11:119–134.
37. Kopera-Frye K, Wiscott R, Sterans HL. Can the Drinking Problems Index provide valuable therapeutic information for recovering alcoholic adults? *Aging Ment Health*. 1999; 3:246–256.
38. Moos, R.; Moos, B. *Life Stressors and Social Resources Inventory: Adult Form manual*. Odessa, FL: Psychological Assessment Resources; 1994.
39. Brennan PL, Schutte KK, Moos R. Late-life drinking trajectories: Patterns and predictors over a 10-year interval. *Psychol Addict Behav*. in press.
40. Karlamangla A, Zhou K, Reuben D, Greendale G, Moore A. Longitudinal trajectories of heavy drinking in adults in the United States of America. *Addiction*. 2006; 101:91–99. [PubMed: 16393195]
41. Moore AA, Gould R, Reuben DB, Greendale GA, Carter MK, et al. Longitudinal patterns and predictors of alcohol consumption in the United States. *Am J Public Health*. 2003; 95:458–465. [PubMed: 15727977]
42. Graham K, Wilsnack R, Dawson D, Vogeltanz N. Should alcohol consumption measures be adjusted for gender differences? *Addiction*. 1998; 93:1137–1147. [PubMed: 9813895]
43. Brennan P, Moos R. Life stressors, social resources, and late-life problem drinking. *Psychol Aging*. 1990; 5:491–501. [PubMed: 2278671]
44. Cicirelli VG. Feelings of attachment to siblings and well-being in later life. *Psychol Aging*. 1989; 4:211–216. [PubMed: 2789748]
45. Carstensen LL, Isaacowitz DM, Charles ST. Taking time seriously: A theory of socioemotional selectivity. *Am Psychol*. 1999; 54:165–181. [PubMed: 10199217]
46. Henry N, Berg CA, Smith TW, Florsheim P. Positive and negative characteristics of marital interaction and their association with marital satisfaction in middle-aged and older couples. *Psychol Aging*. 2007; 22:428–441. [PubMed: 17874945]
47. Smith T, Berg C, Florsheim P, Uchino B, Pearce G, Hawkins M, et al. Conflict and collaboration in middle-aged and older couples: I. Age differences in agency and communion during marital interaction. *Psychol Aging*. 2009; 24:259–273. [PubMed: 19485646]
48. Gagnon MD, Hersen M, Kabacoff RI, Van Hasselt VB. Interpersonal and psychological correlates of marital dissatisfaction in late life: A review. *Clin Psychol Review*. 1999; 19:359–378.
49. Orford J, Dalton S, Hartney E, Ferrins-Brown M, Kerr C, Maslin J. The close relatives of untreated heavy drinkers: Perspectives on heavy drinking and its effects. *Addiction Res Theory*. 2002; 10:439–463.
50. Buckman JF, Bates ME, Cisler RA. Social networks and their influence on drinking behaviors: Differences related to cognitive impairment in clients receiving alcoholism treatment. *J Stud Alcohol Drugs*. 2007; 68:738–747. [PubMed: 17690808]
51. Lemke S, Schutte K, Brennan P, Moos R. Gender differences in upward pressures on drinking: Situations linked to increased drinking for women and men. *J Stud Alcohol Drug*. 2008; 69:695–702.
52. Baltes, MM.; Freund, AM.; Horgas, AL. Men and women in the Berlin Aging Study. In: Baltes, PB.; Mayer, KU., editors. *The Berlin Aging Study from 70 to 100*. Cambridge, UK: Cambridge University Press; 2001. p. 259–281.
53. Wink P, Helson R. Personality change in women and their partners. *J Pers Soc Psychol*. 1993; 65:587–605.
54. Whitlock EP, Polen MR, Green CA, Orleans T, Klein J. Behavioral counseling interventions in primary care to reduce risky/harmful alcohol use by adults. *Annals Intern Med*. 2004; 140:557–568.

Figure 1.
Percent of Husbands and Wives Engaged in High-Risk Drinking by Overall Risk Score
(numbers with the same superscript are significantly different)

Table 1

Alcohol Consumption and Drinking Problems of Husbands and Wives in Concordant Low-Risk Consumption, Concordant High-Risk Consumption, and Discordant Consumption Couples

Index	Type of Couple at Baseline				
	Concord Low-Risk (N = 54)	Concord High-Risk (N = 38)	Discordant (N = 75)	Group	Time
Husbands					
Alcohol Consumption (Days/Week)				25.39**	< 1
Baseline	2.02 ^{ab} (2.15)	5.00 ^a (1.76)	4.68 ^b (2.42)		3.68*
Follow Up	2.44 ^{ab} (2.52)	5.11 ^a (1.95)	4.15 ^b (2.57)		
Alcohol Consumption (Drinks/Week)				31.46**	1.18
Baseline	3.02 ^{ab} (3.74)	19.22 ^a (14.11)	17.34 ^b (15.66)		2.94
Follow Up	4.24 ^{ab} (6.21)	18.82 ^a (13.38)	13.05 ^b (13.16)		
Drinking Problems (%)				19.00**	< 1
Baseline	5.6 ^{ab}	44.7 ^a	52.0 ^b		2.88
Follow Up	11.1 ^{ab}	52.6 ^a	42.7 ^b		
Wives					
Alcohol Consumption (Days/Week)				12.28**	4.89*
Baseline	2.10 ^a (2.33)	4.63 ^a (2.12)	2.74 (2.38)		1.13
Follow Up	2.04 ^a (2.33)	3.92 ^a (2.63)	2.42 (2.50)		
Alcohol Consumption (Drinks/Week)				41.52**	25.36**
Baseline	3.06 ^a (3.94)	14.68 ^a (8.42)	4.72 (4.84)		13.61**
Follow Up	2.86 ^a (3.85)	9.89 ^a (8.16)	4.16 (5.02)		
Drinking Problems (%)				17.20**	4.63*
Baseline	5.6 ^a	47.4 ^a	14.7		2.17
Follow Up	5.6 ^a	28.9 ^a	10.7		

*
p < .05;

**
p < .01;

means with the same superscript are significantly different; standard deviations for continuous variables are in parentheses.

Table 2

Personal Functioning of Husbands and Wives in Concordant Low-Risk Consumption, Concordant High-Risk Consumption, and Discordant Consumption Couples

Index	Type of Couple at Baseline					
	Concord Low-Risk (N = 54)	Concord High-Risk (N = 38)	Discordant (N = 75)	Group	Time	Group × Time
Husbands						
Depression (0–72)				1.62	< 1	< 1
Baseline		13.9 (9.1)	16.7 (11.3)			
Follow Up	12.7 (10.5) 13.7 (11.0)	14.5 (12.4)	15.7 (10.2)			
Medical Conditions (% 1+)				< 1	3.35	< 1
Baseline	68.5	68.4	66.7			
Follow-Up	77.8	71.1	76.0			
Tension Reduction Coping (% yes)				6.26**	1.16	< 1
Baseline	7.4 ^{ab}	36.8 ^a	30.7 ^b			
Follow Up	20.4	34.2	34.7			
Religious Participation (% several times/year)				5.52**	2.36	2.51
Baseline	31.5 ^a	10.5 ^a	33.3			
Follow Up	44.4 ^a	10.5 ^a	33.3			
Wives						
Depression (0–72)				< 1	< 1	< 1
Baseline	18.7 (14.0)	22.0 (14.1)	21.3 (12.8)			
Follow Up	19.6 (12.0)	20.1 (12.7)	21.8 (14.9)			
Medical Conditions (% 1+)				< 1	9.74**	< 1
Baseline	61.1	52.6	57.3			
Follow-Up	72.2	63.2	73.3			
Tension Reduction Coping (% yes)				19.94**	1.99	< 1
Baseline	20.8 ^a	63.2 ^a	20.3			
Follow Up	15.1 ^a	50.0 ^a	20.3			
Religious Participation (% several times/year)				3.57*	< 1	2.66
Baseline	38.9 ^a	15.8 ^a	45.3			

Index	Type of Couple at Baseline				
	Concord Low-Risk (N = 54)	Concord High-Risk (N = 38)	Discordant (N = 75)	Group	Time
Follow Up	42.6	23.7	36.0		Group × Time

* p < .05;
 ** p < .01;

Ns are 53 and 74 for tension reduction coping for low-risk concordant and discordant wives, respectively, due to missing data. Means that share a superscript are significantly different; standard deviations for continuous variables are in parentheses.

Table 3

Family Functioning of Husbands and Wives in Concordant Low-Risk Consumption, Concordant High-Risk Consumption, and Discordant Consumption Couples

Index	Type of Couple at Baseline				
	Concord Low-Risk (N = 54)	Concord High-Risk (N = 38)	Discordant (N = 75)	Group	Time
Husbands					
Partner Support (% often)				2.19	2.71
Baseline	55.9 (33.4)	49.6 (36.9)	48.7 (35.0)		1.81
Follow Up	61.1 (31.2)	59.2 (33.3)	46.7 (33.0)		
Domestic Tasks (% fairly often)				3.90*	5.78*
Baseline	37.5 ^b (24.5)	42.5 (29.6)	47.8 ^b (23.0)		< 1
Follow Up	41.8 ^b (21.1)	44.7 (30.1)	53.4 ^b (22.5)		
Extended Family Support (% fairly often)				2.39 [†]	14.61***
Baseline	45.1 (37.3)	39.9 (31.8)	41.3 (32.6)		1.53
Follow Up	41.0 ^{ab} (35.9)	24.1 ^a (26.5)	27.8 ^b (27.0)		
Extended Family Activities (0–4)				1.27	< 1
Baseline	0.9 (1.2)	1.1 (1.1)	1.4 (1.0)		1.78
Follow Up	1.2 (1.2)	1.3 (1.3)	1.3 (1.1)		
Wives					
Partner Support (% often)				< 1	< 1
Baseline	50.6 (38.4)	48.7 (33.9)	46.4 (34.6)		
Follow Up	49.1 (32.8)	50.4 (34.3)	45.7 (34.0)		
Domestic Tasks (% fairly often)				2.30	< 1
Baseline	65.0 (23.2)	59.5 (23.9)	55.9 (23.8)		< 1
Follow Up	62.5 (24.6)	61.4 (25.8)	54.3 (26.6)		
Extended Family Support (% fairly often)				< 1	11.61***
Baseline	56.2 (33.8)	50.4 (43.2)	53.1 (34.4)		1.19
Follow Up	41.4 (36.4)	40.4 (39.8)	48.2 (37.1)		
Extended Family Activities (0–4)				< 1	1.91
Baseline	1.0 (1.0)	1.3 (1.2)	1.3 (1.0)		< 1
Follow Up	1.2 (1.2)	1.4 (1.3)	1.3 (1.2)		

† $p < .10$;
 * $p < .05$;
 ** $p < .01$;

Ns vary from 50–54, 36–38, and 72–75 for the low-risk concordant, high-risk concordant, and discordant groups, respectively, due to missing data. Means with the same superscript are significantly different; standard deviations for continuous variables are in parentheses.

Table 4

Social Functioning of Husbands and Wives in Concordant Low-Risk Consumption, Concordant High-Risk Consumption, and Discordant Consumption Couples

Index	Type of Couple at Baseline				
	Concord Low-Risk (N = 54)	Concord High-Risk (N = 38)	Discordant (N = 75)	Group	Time
Husbands					
Friend Support (% fairly often)				<1	6.83**
Baseline	59.3 (30.9)	58.3 (30.2)	58.3 (31.0)		1.12
Follow Up	57.7 (30.7)	50.0 (31.0)	48.2 (31.9)		
Activities with Friends (0–4)				<1	<1
Baseline	2.2 (1.1)	2.2 (1.0)	2.3 (1.1)		
Follow Up	2.2 (1.1)	2.3 (1.0)	2.3 (0.9)		
Friend Approval of Drinking (0–16)				15.78**	8.17**
Baseline	5.2 ^{ab} (1.8)	6.6 ^a (1.8)	6.3 ^b (1.5)		1.75
Follow Up	4.4 ^{ab} (2.4)	6.6 ^a (1.9)	5.5 ^b (2.0)		
Wives					
Friend Support (% fairly often)				<1	4.32*
Baseline	71.6 (32.6)	76.8 (30.9)	73.3 (26.3)		
Follow Up	65.7 (34.5)	71.9 (34.0)	66.7 (34.9)		
Activities with Friends (0–4)				<1	1.60
Baseline	2.7 (1.2)	2.8 (1.1)	2.7 (1.0)		
Follow Up	2.8 (1.2)	2.5 (1.1)	2.5 (1.0)		
Friend Approval of Drinking (0–16)				4.94**	11.29**
Baseline	5.1 ^a (2.1)	6.5 ^a (1.9)	5.6 (2.1)		1.43
Follow Up	4.6 ^{ab} (2.3)	5.5 ^a (1.7)	5.3 ^b (2.0)		

*
p < .05;

**
p < .01;

Ns vary from 50–54, 37–38, and 74–75 for the low-risk concordant, high-risk concordant, and discordant groups, respectively, due to missing data. Means with the same superscript are significantly different; standard deviations for continuous variables are in parentheses.

Table 5

Predictors of Husbands' and Wives' High-Risk Drinking at Baseline and Ten Years

Predictors	Husbands		Wives	
	Baseline (N = 167)	Ten Years (N = 167)	Baseline (N = 167)	Ten Years (N = 167)
Step 1. Covariates				
Baseline Concordance (1 = Concordant)	0.14 ** (0.06–0.31)	1.62 (0.61–4.29)	2.66 ** (1.21–5.84)	0.50 (0.17–1.49)
Baseline Value of High-Risk Drinking	—	19.23 ** (6.79–54.47)	—	24.13 ** (7.69–75.73)
Step 2. Personal Indices				
Tension Reduction Coping	2.16 * (1.18–3.94)	2.02 ** (1.23–3.29)	1.88 ** (1.26–2.79)	1.34 (0.86–2.09)
Friends Approval of Drinking	1.47 ** (1.18–1.83)	1.37 ** (1.11–1.68)	1.24 * (1.04–1.47)	1.27 † (0.99–1.62)
Religious Participation	0.75 * (0.60–0.95)	0.88 (0.69–1.13)	0.72 ** (0.57–0.91)	0.80 (0.59–1.08)
Step 3. Partner Indices				
Drinks/Week	1.11 ** (1.05–1.17)	1.09 * (1.01–1.17)	1.02 † (1.00–1.05)	1.03 (0.99–1.06)
Friends' Approval of Drinking	1.25 * (1.05–1.48)	1.31 * (1.07–1.61)	1.23 * (1.02–1.50)	1.10 (0.88–1.37)
Constant	–.63	4.70	–2.46	–3.75
Nagelkerke R ²	.40	.55	.22	.47

† p < .10,

* p < .05,

** p < .01;

steps 2 and 3 show odds ratios for variables to enter; 95% confidence intervals are shown in parentheses.