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## **ABSTRACT**

The stereotype of the "drunken bum" wife abuser has a long history in American culture. U.S. population surveys document a positive correlation between alcohol consumption levels and marital violence. In this study risk factors for marital violence among treatment seeking male alcoholics were examined. Subjects were couples (N=107) who had a newly abstinent husband entering treatment in the Counseling for Alcoholics' Marriages Project. Subjects were divided into aggressive and nonaggressive categories based on responses to the Conflict Tactics Scale. Drinking patterns, drinking location, antisocial and other aggressive behavior, severity of alcohol problems, family drinking history, motivations for drinking and beliefs about alcohol, marital disharmony and conflict, and demographic variables were assessed. Results indicated maritally aggressive alcoholics (N=71) were different from nonaggressive alcoholics (N=36) in their drinking patterns (more likely to have an arrest history and higher verbal aggression levels), alcohol problem severity (earlier problem onset and greater problem severity), family history (more alcohol problems among male biological relatives and less maternal use), beliefs about alcohol (less confidence in their ability to manage interpersonal conflict without drinking and stronger beliefs that alcohol causes marital problems), and demographics (younger age and shorter length of marriage). Surprisingly, extent of marital dissatisfaction did not distinguish the two groups. (Author/ABL)

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Factors Associated with Marital Aggression in Male Alcoholics
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#### Abstract

Risk factors for marital violence among treatment seeking male alcoholics were examined. Maritally aggressive alcoholics (n=71) were different from nonaggressive alcoholics (n=36) in their drinking patterns (more episodic and out of home drinking), antisocial and aggressive behavior (more likely to have an arrest history and higher verbal aggression levels), alcohol problem severity (earlier problem onset and greater problem severity) family history (more alcohol problems among male biological relatives and less maternal alcohol use), beliefs about alcohol (less confidence in their ability to manage interpersonal conflict without drinking and stronger beliefs that alcohol causes marital problems), and demographics (younger age and shorter length of marriage). Surprisingly, extent of marital dissatisfaction did not distinguish the two groups. Discussion concerns two key risk factor patterns for marital violence among male alcoholics: (1) markers of a severe early onset alcoholism syndrome, and (2) episodic drinking associated with coercive marital conflicts.



Factors Associated with Marital Aggression in Male Alcoholics

The stereotype of the "drunken bum" wife abuser has a long history in American culture. It provided one of the rallying points for the temperance movement in the early 1800's, leading activists to address women's rights and domestic violence by appealing to the plight of the drunkard's wife (Pleck, 1987). However, the association between alcoholism and relationship violence is much more complex than the cultural images suggest. For example, less than half of the episodes of marital violence perpetrated by heavy drinkers actually occur under the influence (Kantor & Straus, 1990), and many maritally violent men have no apparent substance abuse problems (Hamberger & Hastings, 1991).

Despite such complexities, U.S. population surveys document a positive correlation between alcohol consumption levels and marital violence (Kantor & Straus, 1990). Clinical studies find that alcohol problems are common among male spouse batterers, (Hamberger & Hastings, 1991; Hotaling and Sugarman, 1986), and that spouse battery is common among male alcoholics (Gondolf & Foster, 1991). At present, relatively little is known about factors that place alcoholics at risk for marital violence. Clearer understanding of the connection between marital violence and alcoholism may promote more coherent intervention for these overlapping problem areas.

Several relevant studies have examined the effects of alcohol consumption on marital satisfaction and communication among alcoholics. In both experimental and naturalistic observation studies, alcohol consumption is more strongly associated with marital difficulties for those alcoholics whose drinking patterns are relatively unstable and unpredictable as compared to those whose drinking patterns are relatively stable and predictable (Dunn, Jacob, Hummon & Seilhamer, 1987; Jacob, Dunn & Leonard, 1983). For example, when alcohol consumption was manipulated in a laboratory study, it led to more negative marital communication for alcoholics who typically binge drink, as compared to those who drink continuously over time (Jacob & Leonard, 1988). Some evidence also suggests that out-of-home drinking is associated with more relationship distress than inhome drinking. These studies led to the hypothesis that unpredictable and unstable consumption patterns, (i.e., binge drinking and out of home drinking), would mark increased risk for marital aggression among male alcoholics.

Other relevant studies have isolated a subgroup of male alcoholics with antisocial and aggressive tendencies, and a subgroup of maritally violent men with alcohol problems. For males, the alcoholism syndrome accompanied by a history of aggressive and antisocial behavior outside the family may be associated with a distinct pattern of genetic and environmental determinants. These include a particularly severe form of alcoholism that is often treatment resistant, an early onset of problem drinking and more male-limited family histories of alcoholism (Babor, et al., 1992: Cloninger, Bohman, & Sigvardsson, 1981; Cloninger, 1987). Similarly, among men in treatment for marital violence, those with co-occurring alcohol



problems display more antisocial personality characteristics, a wider range of other psychopathology, and more violent behavior outside the family (Gondolf, 1987; Hamberger & Hastings, 1991; Saunders, 1992). The correspondence between these two literatures led us to hypothesized that factors associated with Cloninger's Type II alcoholism syndrome would predict risk for marital violence among male alcoholics. These include a history of antisocial behavior, other aggressive behavior, severity of alcohol problems (including age of onset), and more male - limited family histories of alcoholism.

Other variations in the nature of alcohol problems and relationship distress may also distinguish maritally aggressive alcoholics and their spouses from nonaggressive counterparts (Hotaling & Sugarman, 1986; Leonard & Jacob, 1988). One hypothesis was that distinct motivations for drinking and beliefs about alcohol would mark risk for marital violence among male alcoholics. These include a tendency to drink in order to cope with interpersonal problems and negative emotional states, the belief that marital problems cause drinking, and the belief that drinking causes marital problems. In addition, we predicted that marital aggression would be associated with higher levels of relationship distress, especially for the wives of aggressive alcoholics.

One previous clinical study of male alcoholics reported that those who had been physically aggressive with a female relationship partner were more likely to have arrest histories and more likely to have come from dysfunctional families than a comparison group of nonaggressive alcoholics (Gondolf and Foster, 1991). The present study was designed to provide a more comprehensive analysis of factors associated with marital aggression among a clinical sample of alcoholic males.

The study contrasted male alcoholics who had been physically aggressive toward their partners in the year prior to treatment with male alcoholics who had not been physically aggressive toward their partners during this period. In addition to the hypotheses already described, population survey research (Kantor & Straus, 1990) suggested that maritally aggressive alcoholics would be younger and would have less social resources than nonaggressive counterparts, as indicated by income, education, occupational status, and employment status. Where possible, data from wives were used to provide an independent perspective (e.g., on marital disharmony) or to bolster the integrity of measurement (e.g., in reports of husbands' aggression and drinking habits).

#### Method

### Subjects

One-hundred and seven couples participated. Each had a newly abstinent alcoholic husband entering treatment in the Counseling for Alcoholics' Marriages (CALM) Project (described by O'Farrell, in press) at the Brockton / West Roxbury Massachusetts VA Medical Center. Inclusion criteria were: (a) husband aged 25-70; (b) married at least one year or living together in a stable



common-law relationship for at least three years; (c) husband met DSM-III-R criteria for alcohol abuse or alcohol dependence; (d) Michigan Alcohol Screening Test (Selzer, 1971) score > 7; (e) husband had consumed alcohol sometime in the 120 days prior to the initial assessment; and (f) husband agreed to remain alcohol abstinent for the duration of couples' therapy. Exclusion criteria were: (a) wife also abused alcohol and had been abstinent less than six months; (b) either spouse met DSM-III-R criteria for psychoactive substance use disorder (other than alcohol) in the past six months; (c) either spouse met the DSM-III-R criteria for diagnosis of schizophrenia, delusional disorder, bipolar disorder, major depression, other psychotic disorders or borderline personality disorder; and (d) couple separated and unwilling to reconcile for the treatment project.

### Measures

Marital Aggression. Subjects were divided into aggressive and nonaggressive categories based on responses to the Conflict Tactics Scale (CTS), a widely used measure that contains eight items to assess physical aggression in marriage (Straus, 1979). If either the husband or wife reported that the husband had engaged in any act of physical aggression toward his partner in the year prior to the assessment, he was coded as aggressive.

<u>Drinking Patterns</u>. <u>Drinking style</u> was derived from the Time Line Follow-Back Interview (Sobell, Maisto, Sobell & Cooper, 1979). During separate interviews, each partner constructed a calendar of the alcoholic's drinking and related behavior during the past twelve months. Partners later reconciled reports in a conjoint interview. Each day on the reconciled calendar was coded as heavy drinking (7 or more standard drinks), light drinking (1-6 standard drinks), abstinent, in hospital or in jail. Following Sanchez-Craig's (1980) definitions, steady drinkers (55% of the sample) were those who typically drank five or more days per week, with little variability from week to week. Binge drinkers (45%) typically drank for several consecutive days, weeks or months separated by periods of abstinence. Periods of abstinence confined solely to hospitalization or jail time were not included. Some men could not be coded due to insufficient information about drinking style (e.g., if he was abstinent and/or hospitalized for almost all of the previous year).

Drinking Location was derived from husband (and wife) responses to the interview question: "Where do you (does he) do the majority of your (his) drinking?". Men who drank primarily in the home (32% of the sample) were distinguished from those who drink primarily outside of the home (35%) or in both locations (33%). In most cases, partner reports concurred. When they did not, relative weight was given to the man's report if it implied patterns of drinking likely to be hidden from his wife (e.g., if he said he drank primarily in his car, at the local bar and at home, and she said he drank primarily at home, he would be coded into the "both" category).

Antisocial and Other Aggressive Behavior. Two antisocial



behavior indicators were derived from interviews with the husbands: history of arrest, coded yes/no for any history of arrest, either alcohol or non-alcohol related; and work problems, coded yes/no for having been fired at some time for alcohol use or having quit a job in the past year due to alcohol problems. Verbal aggression, a six-item index from the CTS, was used to assess other aggressive behavior in the marriage. Scores were derived by averaging husband and wife reports of the husbands' behavior on unweighted items from the CTS.

Severity of Alcohol Problems. Husbands provided a number of alcohol problem severity measures. Pencil and paper instruments included: the Michigan Alcoholism Screening Test (MAST), a widely used 25-item screening instrument for alcoholism (Selzer, 1971); and the Alcohol Dependence Scale (ADS), a 34-item measure of alcohol dependence symptoms (Skinner & Allen, 1982). Interview data were gathered on: the age drinking first became a problem; the number of lifetime hospitalizations for alcohol treatment; the number of years alcohol has been a problem; and the total number of days drinking in the past year (reconciled report from husband and wife Time Line Follow-Back Interviews, Sobell, et al., 1979). In addition to husband reports, each wife completed the MAST regarding the partner.

Interview data were collected on Family Drinking History. four family drinking history variables. Alcoholism in male relatives and alcoholism in female relatives were assessed using Marlatt and Miller's (1984) method, adapted to better account for family size. The presence (rather than the number) of male and female biological relatives with alcohol problems in each of five categories (parents, siblings, grandparents, uncles/aunts, and cousins) was recorded, and categories were weighted to favor first-degree relatives in the total score (Marlatt & Miller, 1984). In addition, paternal alcohol use and maternal alcohol <u>use</u> were measured separately on a six-point scale: 1 = nondrinker; 2 = occasional or light social drinker; 3 = moderate or average social drinker; 4 = frequent or heavy social drinker; 5 = problem drinker at any time in life; 6 = alcoholic at any time in life.

Motivations for Drinking and Beliefs about Alcohol. These indicators included husbands' reports on two subscales from the Inventory of Drinking Situations (IDS) (Annis, 1982), and two subscales from the Situational Confidence Questionnaire (SCO) (Annis, 1984). The subscales assess attributions about past likelihood of consuming alcohol (IDS) and perceived ability to refrain from consuming alcohol (SCQ) under conditions of Interpersonal Conflict and Negative Emotional States. In addition, both husbands and wives completed two eight-item subscales from the Alcohol Use Inventory (Wanberg, Horn & Foster, 1977) to assess the belief that alcohol causes marital difficulties, and the belief that marital difficulties cause drinking.

Marital Disharmony and Conflict. The severity of marital problems was assessed with a set of widely used self-report instruments. Since they reflect different perspectives on the marriage, data from husbands and wives were analyzed separately.



Both partners completed the <u>Marital Adjustment Test</u> (Locke & Wallace, 1959), a 15-item inventory of general adjustment and satisfaction in marriage; the <u>Areas of Change Questionnaire</u> (Margolin, Talovic & Weinstein, 1983), a 34-item inventory that yields two indices: the amount of desired changes in the partner and the accuracy of perceived requests by the partner for change in one's self; the <u>Marital Status Inventory</u> (Weiss & Cerreto, 1980), a 14-item measure of intentions, plans, and actions to end the relationship; and the <u>Positive Feelings Questionnaire</u> (O'Leary, Fincham & Turkewitz, 1983), an 18-item measure of positive emotion toward the partner.

Demographic Variables. The following demographic variables were assessed for each partner: age, yearly income, number of days employed full-time in the past year, years of formal education, and occupational status. The following relationship demographics were also assessed: number of years married, age at marriage (husband); number of children; and previous marriage (yes/no variable for each partner).

### Results

# Sample Characteristics

Table 1 contains information about the sample. On average, the subjects were in their early forties, high school educated, and well into their second decade of marriage. Median yearly income was in the \$20,000 - \$25,000 range for husbands and \$10,000 - \$15,000 range for wives. Average marital adjustment scores fell in the distressed range. In general, the men had serious alcohol problems of longstanding duration.

Insert Tables 1 and 2 about here

### Marital Aggression Reported

To help compare levels of physical aggression in this sample with other studies, Table 2 presents data from a set of CTS items. Levels of marital aggression were quite similar to an outpatient marital therapy sample (O'Leary, Vivian & Malone, 1992), and lower than a sample of men seeking treatment specifically for spouse abuse (Murphy, Meyer & O'Leary, 1992). Using any report of husband violence by either partner as the criterion, 66% (n=71) of the sample were aggressive and 34% (n=36) were nonaggressive. These aggressive and nonaggressive groups were contrasted in the following analyses.

### Data Analytic Strategy

A Multivariate Analysis of Variance compared aggressive and nonaggressive groups on each set of related variables. Univariate tests followed only if the multivariate test was statistically significant. Due to missing or uncodable data, the



N's vary somewhat.

### Drinking Patterns

As predicted, patterns of alcohol use differed between groups (see Table 3). Nonaggressive men were more likely to drink daily over long periods of time, while aggressive men were more likely to drink episodically. Nonaggressive men were more likely to drink primarily at home, while aggressive men were more likely to drink outside of the home or in both locations. The drinking location finding was only marginally significant. Steady, in-home drinking was particularly uncharacteristic of aggressive husbands, with only 10% fitting this combined profile compared to 31% of nonaggressive husbands.

Insert Tables 3 and 4 about here

# Antisocial and Other Aggressive Behavior

The multivariate test for group differences on the three indicators of antisocial and other aggressive behavior was significant, F(3, 101) = 17.24, p < .001. As found consistently in studies of relationship violence, verbal aggression levels on the CTS were much higher for the physically aggressive group than for the nonaggressive group (see Table 4). Maritally aggressive men were more likely than nonaggressive men to have been arrested at some time. A history of alcohol related work problems was not significantly associated with marital aggression.

# Alcohol Problem Severity

In the multivariate analysis, aggressive husbands, on average, had more severe problems with alcohol than nonaggressive husbands, F(7, 93) = 3.30, p = .004. Maritally aggressive alcoholics, as compared to nonaggressive counterparts, had an earlier onset of problem drinking, greater alcohol problems as reported by wives on the MAST, and higher MAST scores as reported by the alcoholics themselves (see Table 5). This latter finding only approached statistical significance (p = .106). Results on the other measures of alcohol problem severity were in the predicted direction, but none approached statistical significance.

# Family Drinking History

The multivariate test revealed significant group differences in family drinking history, F(4, 89) = 4.37, p = .003. As displayed in table 5, the aggressive men, on average, reported significantly more alcoholism among male relatives and significantly less maternal alcohol use than their nonaggressive counterparts. There were no significant group differences in paternal alcohol use or alcoholism among female relatives.



# Motivations for Drinking and Beliefs about Alcohol

The multivariate test for group differences in motivations for drinking and beliefs about alcohol was significant,  $\underline{F}(8, 83) = 2.68$ ,  $\underline{p} = .011$ . When compared to nonaggressive counterparts, maritally aggressive alcoholics were less confident in their ability to weather interpersonal conflict without drinking, and both aggressive alcoholics and their wives more strongly endorsed the belief that alcohol causes problems in their relationships (see Table 5).

Insert Tables 5 and 6 about here

### Marital Disharmony and Conflict

Quite surprisingly, the aggressive and nonaggressive groups did not differ significantly in the intensity of marital disharmony and conflict as reported by husbands,  $\underline{F}(5, 98) = .25$ ,  $\underline{p} = .940$ , or by wives,  $\underline{F}(5, 97) = 1.63$ ,  $\underline{p} = .160$ . Limited variability, or a "floor effect", does not appear to account for the similarity between groups (see Table 6). For example, sample variance on the MAT was quite similar to population norms, and scores for 36% of husbands and 29% of wives exceeded the typical MAT cutoff of 100 for well adjusted marriages.

# Demographic Variables

Significant multivariate group differences were found for husband demographics,  $\underline{F}(5, 88) = 3.76$ ,  $\underline{p} = .004$ ; wife demographics,  $\underline{F}(5, 93) = 5.10$ ,  $\underline{p} < .001$ ; and marriage demographics,  $\underline{F}(7, 97) = 4.24$ ,  $\underline{p} = .002$ . A few variables, all apparently reflecting age, accounted for the group differences. On average, aggressive men were younger than nonaggressive men, had younger wives, and had been married for a briefer duration. When husband's age was controlled statistically, group differences in wife's age and length of marriage were no longer significant. As displayed in Table 6, none of the other demographic variables differed significantly between groups.

Insert Table 7 about here

### <u>Underlying Factors</u>

To help clarify the differences between maritally aggressive and nonaggressive male alcoholics, variables that significantly discriminated the two groups were subjected to a principle components analysis. Based on visual analysis of the scree plot, two factors, together accounting for 39% of the variance in the set of 11 variables, were subjected to a varimax rotation.<sup>2</sup>



Table 7 contains the rotated component loadings.

The first factor seemed to reflect an association between drinking episodes and hostile marital conflicts. It was composed of both partners' belief that alcohol causes marital problems, the husband's lack of confidence in the ability to remain sober under conditions of interpersonal conflict, his verbal aggression level and a tendency to drink episodically.

The second factor seemed to reflect an early onset alcoholism syndrome with antisocial behavior. It was composed of earlier age of onset, a history of arrest, a tendency to drink outside the home, lower levels of maternal alcohol consumption, and wife's report of the husband's alcohol problem severity. Alcoholism among male relatives did not load sufficiently on either factor.

### Discussion

Maritally violent alcoholics differed from their nonviolent counterparts in the nature and severity of their alcohol problems. Episodic drinkers were over-represented in the maritally aggressive group, and steady drinkers in the nonaggressive group. Out-of-home drinking was also more common among maritally aggressive alcoholics, but this difference was only marginally significant. The combined pattern of steady, inhome drinking was particularly uncommon among maritally aggressive alcoholics. These results expand upon laboratory research with untreated alcoholics from the community in which alcohol consumption exerted strong negative effects on marital communication for episodic drinkers, but either neutral or positive effects on communication for steady drinkers (Jacob & Leonard, 1988). Although the current study used a clinical sample of alcoholics and a different method to assess drinking style, the results suggest that alcohol effects on marital communication found in laboratory research have implications for understanding aggressive conflict in the home as well.

As predicted, alcohol problem severity, family drinking history, and antisocial or other aggressive behavior indicators were also important risk factors for marital violence among In general, the maritally aggressive alcoholics alcoholics. appeared to have a more severe alcoholism syndrome than their nonaggressive counterparts, with earlier onset of problem drinking, somewhat more intense alcoholism symptoms (especially as reported by their wives), more alcoholism among male biological relatives and less maternal alcohol use. Maritally violent alcoholics were also more likely to have been arrested at some point in life and were more verbally aggressive toward their These findings, along with the factor analysis discussed below, support the prediction that marital violence is more common among male alcoholics who have an early onset, malelimited alcoholism syndrome with antisocial and aggressive behavior or personality features.

Both aggressive men and their partners believed more strongly than nonaggressive counterparts that alcohol causes difficulties in their marriage. However, the groups did not



differ significantly in the belief that marital problems cause drinking. The maritally aggressive men were also less confident in their ability to manage interpersonal conflict without drinking. However, this finding held only for confidence in future situations - the groups did not differ in their reported tendency to drink in response to interpersonal conflicts, nor in the tendency to drink under negative emotional states. In general, both husbands and wives in the maritally aggressive group perceived a stronger association between drinking and interpersonal conflict in their marriages, but the perceived association was largely one directional, i.e., that alcohol causes marital problems.

Surprisingly, measures of marital satisfaction and dysfunction did not distinguish maritally aggressive alcoholics or their spouses from nonaggressive counterparts. Restricted range on measures of marital satisfaction did not appear to explain this finding. Comparable distributions of marital aggression and marital satisfaction in marital therapy clinic samples yield strong associations between these domains (O'Leary & Vivian, 1990). An attenuated association between marital violence and marital discord among alcoholics is consistent with the idea that alcohol provides a "time out" from normal rules of conduct, allowing the drinker and other observers to disavow personal responsibility for deviant behavior (MacAndrew & Edgerton, 1969). A wife might believe that her husband is not responsible for his drunken comportment, and might dismiss his aggressive behavior as the effect of alcohol problems. such conditions, the wife might not directly connect her experience of aggression to marital unhappiness. However, this unusual result with alcoholic marriages may be sample specific, and replication is needed.

With regard to demographic factors, maritally aggressive alcoholics, on average, were younger, had younger wives, and had been married a shorter time than their nonviolent counterparts. These findings parallel population surveys that consistently document reductions in marital violence across the adult lifespan (Suitor, Pillemer & Straus, 1990). However, unlike population surveys, relationship aggression in this clinical sample was not significantly associated with indicators of social resources such as education, income, occupational status or employment status. This could reflect limited variability in social class among the VA population. Conversely, perhaps these population risk factors have low validity at the clinical problem end of the drinking continuum.

The factor analysis helped organize patterns of significant group differences. The analysis associated early onset alcoholism with a history of arrests, a tendency to drink outside the home, wives' reports of husbands' alcohol problem severity, and low levels of maternal alcohol consumption. This factor is quite consistent with the Type II alcoholism syndrome identified by Cloninger (1987; Cloninger, et al., 1981). Early problem onset and antisocial behavior, including fights and arrests while drunk, characterize the Type II syndrome. The syndrome includes spontaneous and impulsive alcohol seeking (labeled "inability to



abstain"), which may correspond to out-of-home drinking in the present study. Cloninger, et al. (1981) also found very low rates of maternal alcohol problems in the family histories of Type II alcoholics. So, in brief, markers of the Type II syndrome appear to mark elevated risk for marital violence among alcoholics as well.

The other factor suggested a prominent link between alcohol consumption and coercive relationship dynamics. This factor linked episodic drinking with both partner's belief that alcohol causes marital problems, the husband's lack of confidence in the ability to weather interpersonal conflict without drinking, and the husband's level of verbal aggressiveness. The convergence of episodic drinking and coercive relationship dynamics once again invokes prior laboratory research showing that alcohol produces negative effects on marital communication for episodic drinking alcoholics (Dunn, et al., 1987; Jacob, et al., 1983; Jacob & Leonard, 1988). Interestingly, the factor results suggest that these dynamics of alcohol consumption and coercive marital conflict are at least somewhat independent of factors that mark the Type II alcoholism syndrome. However, further studies are needed to integrate the family systems and individual difference perspectives on alcoholism as they relate to marital violence.

The findings also complement prior efforts to subtype maritally violent males. Dutton (1988) identified a subgroup of male spouse batterers with prominent personality disorders, substance abuse problems, and generalized (extra-relationship) aggression. The current study suggests that this subgroup may overlap considerably with the Type II alcoholism syndrome. Interestingly, the alcohol abusing, generally violent subgroup of maritally violent men report a higher incidence of experienced abuse in childhood and more extreme or more frequent violence toward their spouses when contrasted with other batterers (Dutton, 1988; Saunders, 1992). Thus, childhood abuse experiences might act in concert with a highly heritable form of alcoholism to produce a particularly dangerous spouse abuse syndrome.

Several limitations of the current findings must be considered. The first concerns possible age effects on results. As is the case in many other studies, younger men in newer marriages had a higher incidence of marital aggression (e.g., Suitor, Pillemer & Straus, 1990). Marital violence may be common at certain stages in the development of alcoholics' marriages. Thus, factors associated with violence might reflect relationship developmental norms rather than stable individual or relationship differences. This explanation merits careful attention in future research, since factors like drinking patterns and verbal accressiveness may vary across the lifespan.

In addition, a large number of correlated variables were studied, raising the specter of chance findings. While the use of multivariate analyses partially addressed this concern, the best available assurance derives from the internal coherence of the results and their correspondence with other relevant research. Finally, the sample was drawn from a Veterans Affairs Medical Center, potentially limiting generalization to other male



alcoholics.

In sum, a number of factors discriminated maritally aggressive male alcoholics from nonaggressive alcoholics. The findings suggest interesting connections between research on subtypes of alcoholics, interaction and conflict in alcoholic marriages, and subtypes of maritally violent men.



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#### Footnotes

<sup>1</sup>Some variables failed to meet the ANOVA assumption of homogeneous variance across groups. When this was the case, univariate analyses were repeated using ranks (Mann-Whitney U tests). All significance tests yielded the same conclusions.

The three demographic variables that significantly discriminated groups (husband's age, wife's age, and number of years married) were excluded from the factor results presented. When included, the factor structure changed little. These variables loaded on the factor containing age of alcohol problem onset. Although group differences were only marginally significant, drinking location was included because it was thought to reflect an important aspect of the drinking pattern construct.

When age was controlled statistically in the current study, observed group differences in drinking style and age of alcohol problem onset were rendered nonsignificant. However, the associations between age, relationship aggression and drinking style are potentially complex in this treatment seeking sample, and no plausible model can be easily ruled out. For example, age may account for the association between early onset drinking and marital violence, since early onset alcoholics may seek treatment at a younger age while more likely to be currently violent. However, some variables associated with early onset alcoholism (e.g., arrest history and relative maternal abstinence) remained significantly associated with marital aggression when age was controlled statistically.



### Author Notes

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Sample Means and Standard Deviations for Demographic Variables.

Marital Characteristics, and Husbands' Drinking History (n = 107)

| Marital Characteristics, and Husbands'           |          |               |   |
|--------------------------------------------------|----------|---------------|---|
| Characteristics                                  | <u>M</u> | ( <u>SD</u> ) |   |
| <u>Demographics</u>                              |          |               |   |
| Husbands' Age                                    | 42.9     | (9.4)         |   |
| Wives' Age                                       | 41.1     | (10.0)        |   |
| Husbands' Years of Education                     | 12.8     | (2.2)         |   |
| Wives Years' of Education                        | 13.4     | (2.0)         |   |
| Marital Characteristics                          |          |               |   |
| Years Married                                    | 12.9     | (10.2)        |   |
| Number of Children                               | 2.6      | (2.1)         |   |
| Percent of Husbands Married Previously           | 32%      |               |   |
| Percent of Wives Married Previously              | 30%      |               |   |
| Husbands' Marital Adjustment Test                | 90.3     | (26.0)        |   |
| Wives' Marital Adjustment Test                   | 85.6     | (26.9)        |   |
| Husbands' Drinking History                       |          |               |   |
| Years of Problem Drinking                        | 15.1     | (9.7)         |   |
| Michigan Alcoholism Screening Test               | 37.5     | (10.5)        |   |
| Alcohol Dependence Scale                         | 19.8     | (10.0)        | 1 |
| Number of Prior Alcohol-Related Hospitalizations | 6.1      | a (10.6)      | • |
|                                                  |          |               |   |

 $a_{median} = 2.$ 



Table 2

<u>Husband to Wife Aggression Reported by Alcoholic Husbands and Their Wives</u>

|                                     | Husba              | Husband |                    | Wife   |                      | ned                |
|-------------------------------------|--------------------|---------|--------------------|--------|----------------------|--------------------|
|                                     | Repo               | rts     | Repo               | orts   | Reports <sup>C</sup> |                    |
|                                     |                    |         |                    |        |                      |                    |
| Conflict Tactics                    | Occur <sup>a</sup> | Freq-   | 0ccur <sup>a</sup> | Freq-  | 0ccur <sup>C</sup>   | Freq-              |
| Scale Item                          |                    | uencyb  |                    | uencyb |                      | uency <sup>C</sup> |
|                                     |                    |         |                    |        |                      |                    |
| Threw object at spouse              | 27%                | 3.0     | 24%                | 4.1    | 35%                  | 3.7                |
| Pushed, grabbed, or shoved          | 47%                | 3.4     | 47%                | 4.9    | 63 <b>%</b>          | 5.2                |
| Slapped                             | 19%                | 2.6     | 24%                | 2.7    | 31%                  | 2.8                |
| Kicked, bit or hit                  | 14%                | 3.1     | 26%                | 2.7    | 29%                  | 2.8                |
| Hit, or tried to hit with something | 11%                | 3.2     | 18%                | 3.3    | 21%                  | 3.7                |
| Beat partner up                     | 88                 | 4.3     | 9%                 | 2.8    | 13%                  | 4.1                |
| Threatened with a knife or gun      | 3,8                | 3.3     | 8%                 | 2.8    | 8%                   | 3.2                |
| Used a knife or gun                 | 0%                 | -       | 0%                 | _      | 0%                   | -                  |
| Total <sup>d</sup>                  | 48%                | 8.8     | 54%                | 10.6   | 66%                  | 11.7               |
|                                     |                    |         |                    |        |                      |                    |

<sup>&</sup>lt;sup>a</sup>Percent reporting that it occurred at least once in the prior 12 months.



Table 2 (Continued)

Husband to Wife Aggression Reported by Alcoholic Husbands and Their Wives

bMean number of occurrences in the prior 12 months among those who reported each behavior (CTS items weighted by mean category frequency, Straus, 1979).

 $c_{\mathrm{Using}}$  the greater of the two spouses reports for each item.  $d_{\mathrm{Percentage}}$  who engaged in at least one of the violent acts, and total frequency of violent behaviors reported.



Table 3

<u>Drinking Style and Location for Maritally Aggressive and Nonaggressive Male Alcoholics</u>

| Drinking Pattern                        | Nonaggressive | Aggressive | <u>x</u> 2 | p    |
|-----------------------------------------|---------------|------------|------------|------|
|                                         | (n=33)        | (n=69)     |            |      |
|                                         |               |            |            |      |
| Drinking Style                          |               |            |            |      |
| Steady                                  | 72.4%         | 47.8%      | 4.05       | .044 |
| Episodic                                | 27.6%         | 52.2%      |            |      |
| Primary Drinking Locat                  | ion           |            |            |      |
| In Home                                 | 45.5%         | 26.1%      | 2.99       | .084 |
| Out of Home or Both                     | 54.5%         | 73.9%      |            |      |
| ======================================= |               |            |            |      |



Antisocial and Other Aggressive Behavior Indicators for Maritally

Aggressive and Nonaggressive Male Alcoholics

Nonaggressive Aggressive

|                                                           | (n=36)                 | (n=71)                 |                               |                    |          |
|-----------------------------------------------------------|------------------------|------------------------|-------------------------------|--------------------|----------|
| Indicator                                                 | <u>M</u> ( <u>SD</u> ) | <u>M</u> ( <u>SD</u> ) | <u>F</u>                      | df                 | <u>p</u> |
| Verhal Aggression                                         | 11.2 (5.1)             | 17.2 (5.7)             | 33.6<br><u>x</u> <sup>2</sup> | 1,105<br><u>df</u> | .001     |
| History of Arrest <sup>a</sup> Work Problems <sup>b</sup> | 51.4%<br>31.4%         | 87.3%<br>45.7%         | 14.44                         |                    | .001     |

<sup>&</sup>lt;sup>a</sup>Any reported history of arrest, either alcohol or non-alcohol related.

bEver fired from a job due to alcohol use or quit a job within the last year due to alcohol problems.

Nature and Severity of Alcohol Problems for Maritally Aggressive

and Nonaggressive Male Alcoholics

|                                                   | ( n=:    |               | (n=7     | Aggressive<br>(n=71) |          |           |          |
|---------------------------------------------------|----------|---------------|----------|----------------------|----------|-----------|----------|
| Measure                                           | <u>M</u> | ( <u>SD</u> ) | <u>M</u> | ( <u>SD</u> )        | <u>F</u> | <u>df</u> | <u>g</u> |
| Family Drinki                                     | ng His   | tory          |          |                      |          |           |          |
| Alcoholism<br>in Male<br>Relatives                | 3.7      | (2.6)         | 5.3      | (3.3)                | 5.65     | 1,99      | .019     |
| Alcoholism<br>in Female<br>Relatives              | 1.9      | (2.4)         | 1.8      | (2.0)                | .07      | 1,99      | .788     |
| Paternal<br>Alcohol Use                           | 3.9      | (1.9)         | 4.2      | (1.8)                | .60      | 1,93      | .440     |
| Maternal<br>Alcohol Use                           | 3.3      | (1.9)         | 2.2      | (1.5)                | 10.82    | 1,97      | .001     |
| Alcohol Probl                                     | em Sev   | verity        |          |                      |          |           |          |
| ADS                                               | 18.5     | (10.0)        | 20.3     | (10.0)               | .78      | 1,104     | .380     |
| MAST (Self)                                       | 35.0     | (11.4)        | 38.6     | (10.0)               | 2.66     | 1,103     | .106     |
| MAST (Spouse)                                     | 34.3     | (10.9)        | 39.3     | (8.2)                | 6.81     | 1,104     | .010     |
| Days<br>Drinking<br>in Past Year                  | 200.0    | (132.3)       | 204.4    | (96.4)               | .04      | 1,104     | .844     |
| Number of<br>Hospital-<br>izations<br>for Alcohol | 4.3      | (6.8)         | 7.0      | (12.1)               | 1.51     | 1,104     | .222     |



Table 5 (Continued)

Nature and Severity of Alcohol Problems for Maritally Aggressive and Nonaggressive Male Alcoholics

|                                                         | Nonaggressive (n=36) |           |              |           |          |          |               |
|---------------------------------------------------------|----------------------|-----------|--------------|-----------|----------|----------|---------------|
| Measure                                                 |                      |           |              |           |          |          |               |
| Years of<br>Problem<br>Drinking                         |                      |           |              |           |          |          |               |
| Age of Onset<br>Problem<br>Drinking                     | 33.2                 | (13.7)    | 25.1         | (11.0)    | 10.64    | 1,102    | .002          |
| Motivations f                                           | or Dri               | nking and | <u>Belie</u> | fs About  | Alcohol  |          |               |
| Husband AUI:<br>Marital Prob-<br>lems Cause<br>Drinking |                      | (18.3)    | 27.1         | (19.1)    | .28      | 1,104    | .598          |
| Wife AUI:<br>Marital Prob-<br>lems Cause<br>Drinking    |                      | (17.4)    | 28.7         | (21.9)    | 1.57     | 1,103    | .213          |
| Husband AUI:<br>Alcohol Cause<br>Marital<br>Problems    |                      | (24.8)    | 62.6         | (21.8)    | 11.51    | 1,104    | .001          |
| Wife AUI:<br>Alcohol Cause<br>Marital<br>Problems       |                      | (26.7)    | 68.6         | (18.1)    | 13.92    | 1,103    | .001          |
| IDS: Inter-<br>personal<br>Conflict<br>Table 5 (Conf    |                      |           | 48.8         | (20.3)    | 2.38     | 1,93     | .126          |
| Nature and So                                           | everity              | of Alcoh  | nol Pro      | oblems fo | r Marita | lly Aggr | <u>essive</u> |



# and Nonaggressive Male Alcoholics

|                                     | -        |               | Aggr     | essive<br>71) |          |           |          |
|-------------------------------------|----------|---------------|----------|---------------|----------|-----------|----------|
| Measure                             | <u>M</u> | ( <u>SD</u> ) | <u>M</u> | ( <u>SD</u> ) | <u>F</u> | <u>df</u> | <b>g</b> |
| IDS: Negative<br>Emotions           | 50.9     | (25.3)        | 58.4     | (22.3)        | 2.22     | 1,93      | .140     |
| SCQ: Inter-<br>personal<br>Conflict | 86.2     | (18.1)        | 76.7     | (22.4)        | 4.42     | 1,93      | .038     |
| SCQ: Negative<br>Emotions           | 77.7     | (24.7)        | 68.8     | (26.5)        | 2.51     | 1,93      | .117     |

Note. ADS = Alcohol Dependence Scale; MAST = Michigan Alcoholism Screening Test; AUI = Alcohol Use Inventory (Scale 15 = Marital Problems Cause Drinking; Scale 16 = Alcohol Causes Marital Problems); IDS = Inventory of Drinking Situations; SCQ = Situational Confidence Questionnaire.



Table 6

Marital Disharmony and Demographic Variables by Group

| DISHALMON                               | A aud F  | emograph                               | 1C Vari  | <u>ables</u> <u>t</u> | y Grou   | ā         |       |  |
|-----------------------------------------|----------|----------------------------------------|----------|-----------------------|----------|-----------|-------|--|
|                                         |          | Nonaggressive Aggressive (n=36) (n=71) |          | :                     |          |           |       |  |
| Measure                                 | <u>M</u> | ( <u>SD</u> )                          | <u>M</u> | ( <u>SD</u> )         | <u>F</u> | <u>df</u> | ā     |  |
| Marital Disharmony                      |          |                                        |          |                       |          |           |       |  |
| <u>Husband</u>                          |          |                                        |          | - <del></del>         |          |           |       |  |
| MAT                                     | 92.4     | (25.6)                                 | 89.1     | (26.5)                | <b>\</b> |           |       |  |
| MSI                                     |          | (2.4)                                  |          |                       |          |           |       |  |
| AOC                                     |          | (5.8)                                  |          |                       |          |           |       |  |
| AOC Desired Change                      |          |                                        |          |                       |          |           |       |  |
| PFQ                                     |          | (11.5)                                 |          |                       |          |           |       |  |
| <u>Wife</u>                             |          | •                                      |          | (11.7)                |          |           |       |  |
| MAT                                     | 86.2     | (33.4)                                 | 85.1     | (23.5)                |          |           |       |  |
| MSI                                     |          | (3.8)                                  |          |                       |          |           |       |  |
| AOC                                     |          | (7.5)                                  |          |                       |          |           |       |  |
| AOC Desired Change                      |          |                                        |          |                       |          |           |       |  |
| PFQ                                     |          | (16.9)                                 |          |                       |          |           |       |  |
|                                         |          | ographic                               |          | •                     |          |           |       |  |
| <u>Husband</u>                          |          |                                        |          | <u></u>               |          |           |       |  |
| Age                                     | 48.2     | (9.1)                                  | 40.6     | (8.7)                 | 16.55    | 1,102     | . 001 |  |
| Years of Education                      |          | •                                      | 12.7     | (2.1)                 |          |           |       |  |
| Occupational Status Table 6 (Continued) | 4.8      | (2.6)                                  | 5.0      | (2.4)                 |          | ,         |       |  |

Marital Disharmony and Demographic Variables by Group



| Nonaggressive      |                                                    | Aggressive                                                                                                                       |                                                                                                                                                                                             |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (n                 | =36)                                               | (n                                                                                                                               | (n=71)                                                                                                                                                                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                    |                                                    |                                                                                                                                  |                                                                                                                                                                                             |                                                                                                                                                                                                                                                     | <u>df</u>                                                                                                                                                                                                                                                                                                                                              | <b>g</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                    |                                                    |                                                                                                                                  |                                                                                                                                                                                             |                                                                                                                                                                                                                                                     | 1,103                                                                                                                                                                                                                                                                                                                                                  | .320                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 5.5                | (2.5)                                              | 6.1                                                                                                                              | (2.1)                                                                                                                                                                                       | 1.66                                                                                                                                                                                                                                                | 1,102                                                                                                                                                                                                                                                                                                                                                  | .201                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                    |                                                    |                                                                                                                                  |                                                                                                                                                                                             |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 47.2               | (9.6)                                              | 38.2                                                                                                                             | (9.0)                                                                                                                                                                                       | 21.02                                                                                                                                                                                                                                               | 1,101                                                                                                                                                                                                                                                                                                                                                  | .001                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 13.8               | (2.2)                                              | 13.2                                                                                                                             | (1.9)                                                                                                                                                                                       | 1.95                                                                                                                                                                                                                                                | 1,98                                                                                                                                                                                                                                                                                                                                                   | .166                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| s <sup>a</sup> 4.3 | (2.2)                                              | 4.2                                                                                                                              | (2.3)                                                                                                                                                                                       | .07                                                                                                                                                                                                                                                 | 1,102                                                                                                                                                                                                                                                                                                                                                  | .794                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 210.2              | (180.1)                                            | 229.7                                                                                                                            | (168.5)                                                                                                                                                                                     | .29                                                                                                                                                                                                                                                 | 1,103                                                                                                                                                                                                                                                                                                                                                  | .589                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 3.6                | (2.7)                                              | 4.4                                                                                                                              | (2.0)                                                                                                                                                                                       | 2.64                                                                                                                                                                                                                                                | 1,103                                                                                                                                                                                                                                                                                                                                                  | .107                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ma                 | rriage <u>De</u>                                   | mograp                                                                                                                           | nics                                                                                                                                                                                        |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 18.4               | (11.3)                                             | 10.4                                                                                                                             | (8.5)                                                                                                                                                                                       | 16.04                                                                                                                                                                                                                                               | 1,103                                                                                                                                                                                                                                                                                                                                                  | .001                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 29.5               | (8.0)                                              | 30.2                                                                                                                             | (8.5)                                                                                                                                                                                       | .13                                                                                                                                                                                                                                                 | 1,102                                                                                                                                                                                                                                                                                                                                                  | .717                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                    |                                                    |                                                                                                                                  |                                                                                                                                                                                             | <u>x</u> <sup>2</sup>                                                                                                                                                                                                                               | <u>df</u>                                                                                                                                                                                                                                                                                                                                              | g                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                    |                                                    |                                                                                                                                  |                                                                                                                                                                                             |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 23.5               | 8                                                  | 36.6                                                                                                                             | *                                                                                                                                                                                           | 1.25                                                                                                                                                                                                                                                | 1                                                                                                                                                                                                                                                                                                                                                      | .263                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 29.4               | *                                                  | 31.0                                                                                                                             | *                                                                                                                                                                                           | .00                                                                                                                                                                                                                                                 | 1                                                                                                                                                                                                                                                                                                                                                      | 1. 00                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                    | 267.9 5.5 47.2 13.8 sa 4.3 210.2 3.6 Man 18.4 29.5 | (n=36)  M (SD)  267.9 (147.6)  5.5 (2.5)  47.2 (9.6)  13.8 (2.2)  210.2 (180.1)  3.6 (2.7)  Marriage De  18.4 (11.3)  29.5 (8.0) | M (SD) M  267.9 (147.6) 294.6  5.5 (2.5) 6.1  47.2 (9.6) 38.2  13.8 (2.2) 13.2  sa 4.3 (2.2) 4.2  210.2 (180.1) 229.7  3.6 (2.7) 4.4  Marriage Demograph  18.4 (11.3) 10.4  29.5 (8.0) 30.2 | 267.9 (147.6) 294.6 (117.5) 5.5 (2.5) 6.1 (2.1)  47.2 (9.6) 38.2 (9.0) 13.8 (2.2) 13.2 (1.9) s <sup>a</sup> 4.3 (2.2) 4.2 (2.3) 210.2 (180.1) 229.7 (168.5) 3.6 (2.7) 4.4 (2.0)  Marriage Demographics 18.4 (11.3) 10.4 (8.5) 29.5 (8.0) 30.2 (8.5) | (n=36) (n=71)  (n=36) M (SD) F  267.9 (147.6) 294.6 (117.5) 1.00 5.5 (2.5) 6.1 (2.1) 1.66  47.2 (9.6) 38.2 (9.0) 21.02 13.8 (2.2) 13.2 (1.9) 1.95 sa 4.3 (2.2) 4.2 (2.3) .07 210.2 (180.1) 229.7 (168.5) .29 3.6 (2.7) 4.4 (2.0) 2.64  Marriage Demographics  18.4 (11.3) 10.4 (8.5) 16.04 29.5 (8.0) 30.2 (8.5) .13   X <sup>2</sup> 23.5% 36.6% 1.25 | (n=36) (n=71)  (n=36) (n=71)  (n=36) M (SD) F df  267.9 (147.6) 294.6 (117.5) 1.00 1,103  5.5 (2.5) 6.1 (2.1) 1.66 1,102  47.2 (9.6) 38.2 (9.0) 21.02 1,101  13.8 (2.2) 13.2 (1.9) 1.95 1,98  sa 4.3 (2.2) 4.2 (2.3) .07 1,102  210.2 (180.1) 229.7 (168.5) .29 1,103  3.6 (2.7) 4.4 (2.0) 2.64 1,103  Marriage Demographics  18.4 (11.3) 10.4 (8.5) 16.04 1,103  29.5 (8.0) 30.2 (8.5) .13 1,102  X <sup>2</sup> df   23.5% 36.6% 1.25 1 |



Table 6 (Continued)

Marital Disharmony and Demographic Variables by Group

Note. MAT = Marital Adjustment Test; MSI = Marital Status
Inventory; AOC = Areas of Change Questionnaire; PFQ = Positive
Feelings Questionnaire.

<sup>a</sup>Hollinshead categories for usual occupation.

bNumber of days employed full-time in the past year.

Code (in thousands of U.S. dollars) 0=0; 1=0-3; 2=3-5; 3=5-10; 4=10-15; 5=15-20; 6=20-25; 7=25-30; 8=30-35; 9=35-40; 10= >40.



Table 7

<u>Principle Component Loadings for Variables Associated with Marital Violence</u>

| Variable                                |        | Factor 2 |
|-----------------------------------------|--------|----------|
|                                         |        |          |
| Husband: Alcohol Causes Marital Problem | as .84 | .10      |
| Wife: Alcohol Causes Marital Problems   | .76    | 11       |
| Husband's Verbal Aggression             | .68    | .11      |
| Binge Drinking Style                    | .55    | .21      |
| SCQ: Interpersonal Conflict             | 31     | 17       |
| Age Drinking Became a Problem           | 01     | 83       |
| Ever Arrested                           | .32    | .67      |
| Out of Home Drinking                    | 16     | .58      |
| Wife MAST re: Husband                   | .22    | .49      |
| Maternal Alcohol Use                    | 08     | 30       |
| Alcoholism in Male Relatives            | .14    | .17      |
|                                         |        |          |

Note. SCQ = Situational Confidence Questionnaire; MAST =
Michigan Alcoholism Screening Test.

