Family violence, employment status, welfare benefits, and alcohol drinking in the United States: what is the relation?

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Abstract

Objectives—This study examined the contribution of employment status, welfare benefits, alcohol use, and other individual, and contextual factors to physical aggression during marital conflict.

Methods—Logistic regression models were used to analyse panel data collected in the National Survey of Families and Households in 1987 and 1992. A total of 4780 married or cohabiting persons re-interviewed in 1992 were included in the analysis. Domestic violence was defined as reporting that both partners were physically violent during arguments.

Results—It was found that non-employed respondents are not at greater risk of family violence in comparison with employed respondents, after controlling for alcohol misuse, income, education, age, and other factors; however, employed persons receiving welfare benefits are at significantly higher risk. Alcohol misuse, which remains a predictor of violence even after controlling for other factors, increases the risk of family violence while satisfaction with social support from family and friends decreases it.

Conclusion—These results underscore the important effect of alcohol misuse on domestic violence, and the need to monitor the potential impact of welfare reform on domestic violence.

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Family violence has been recognised as a public health problem for almost a decade, and the health care cost associated with treatment of family violence injuries in the United States has been estimated as high as $857 million annually. In analysis of 1985 National Violence Survey data, Straus and Gelles found an annual incidence of marital aggression of approximately 16%. In 1992, 12% of all homicides were the result of intrafamilial violence. Estimates are that as many as 2 to 4 million women a year are physically battered by their intimate partners. Men are as likely as women to resort to physical aggression during marital conflicts but women are more likely to report injury from such interchanges.

Family violence has been associated with gender and power issues; structural and sociodemographic characteristics such as age, socioeconomic status, unemployment, cohabiting status, and partnership stability; alcohol and drug misuse; and depression. The research on family violence has produced results that are difficult to integrate conceptually or empirically. Most of this research has been on small select samples and cross sectional.

The role of alcohol in violence is especially controversial. Studies have found that alcohol use may aggravate marital difficulties leading to separation or divorce, and alcohol problems may have an indirect effect on earnings and marriage. One longitudinal study, however, found that alcohol consumption was significantly related to physical aggression six months immediately before and after marriage, but the effects washed out at 18 months. Others have suggested that structural factors such as unemployment may disrupt community and social relationships leading to greater risk behaviour such as alcohol consumption. Unemployment, however, has been inconsistently related to both alcohol intake and violent incidents. Job loss has been found to be related to an increase of negative behaviours between partners, but again the relation between job loss and violence is not clear cut. While small increases in lay offs are associated with more violent incidents, large increases are associated with reduced incidence.

Employment in itself does not necessarily protect couples from marital violence. Stressful work experiences have also been found to be associated with wife abuse. In addition, it has been suggested that an increase of female employment and transitions towards different forms of relationships may generate tensions that could increase the likelihood of marital violence. This is particularly relevant given our fast changing economy and increasing employment demands on young parents, including those receiving welfare benefits.

There is evidence that welfare reform accounted for 44% of the employment rate gain from 1992 to 1996, and The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104–193) will force more women with young children to work. In the current policy debate, not only is there little concern with the impact of welfare reform on women’s health, but little thought has been given to a potential for increased domestic violence.

Increasingly social scientists note the importance of taking context into account when explaining outcomes and the necessity of looking at the way in which family, work, and community factors interrelate to explain attitudes and behaviours. Research on violence...
Family violence, employment status, welfare benefits, and alcohol drinking

The goal of this study is to contribute to our understanding of the complex and important issue of family violence. Using panel data from the 1987 and 1992 National Survey of Families and Households (NSFH), we attempt to disentangle the effects of employment, partnership instability, and alcohol use in the risk of domestic violence.

Figure 1 summarises our explanatory model. We take advantage of longitudinal data and controlling for individual and household characteristics and prior problems with alcohol misuse, violent arguments, and joblessness (1987 and 1991 variables), we ascertain the influence of current alcohol misuse, and employment status on current violence (1992 variable). Our explanatory model draws from a sociostructural approach, in the sense that violent arguments are seen as arising from changing and increasing demands placed on the family, and from a social learning approach that considers the influence of variables such as occupational status on the onset of violence.

We broaden the employment status variable to include working and receiving welfare.

Methods

Data

The 1987 NSFH survey consisted of interviews with 13,017 respondents, including an over-sample of minorities and households containing single parent families, stepfamilies, recently married couples, and cohabiting couples. The 1992 survey includes a reinterview of 10,008 surviving members of the original sample, which represents an attrition rate of 23%. We analysed possible differences between respondents to the 1992 survey and those who were lost to follow up after the 1987 interview. There were no significant differences in attrition rates by gender, age, ethnic group, and marital status between those who were re-interviewed and those lost to follow up. We limited our study to respondents older than 16 years of age in 1987, and who were not retired in 1992. A total of 4770 married or cohabiting individuals were included in our analyses.

Fixed personal characteristics

Other individual and household characteristics

Age

Education

Sex

Family income

Race/ethnicity

Number of children

Background risk factors

1992 risk factors

Reporting violent arguments in 1987

Employment status

Reporting having problems with alcohol in 1987

Alcohol drinking

Change of partner between 1987 and 1992

Dissatisfaction with social relationships

Length of time unemployed and looking for work in 1991

Having a mental or physical condition that could limit the ability of working for pay

In this study we focus on violent arguments in which both partners participate. About 60% of respondents who engaged in violent arguments in 1992 reported that both partners used physical violence (151 of 247). Of 247 respondents who reported having violent arguments only 25 reported being the only perpetrator of violence, and 71 said that only the spouse or partner used violence. We considered these two groups to be too small to include in our analysis and excluded them. We explored possible reporting differences between the three variants of family violence—that is, spouse/partner violent, respondent violent, and both mutually violent. In general, those who reported that only the partner used physical violence were, on average, older (mean age 35.4 versus 33.4 years) and more educated (mean of 13.6 versus 12.5 years) than those who also reported being active participants in violent arguments.

As noted in a previous analysis of the NSFH, women were as likely as men to commit violent acts, but women were more likely to report being injured than men. Here we focus on predictors of violent interchanges not on their possible consequences.

Our dependent variable, family violence, was measured by the question: In the past year, did both respondent and partner become physically violent during an argument? We investigated potential differences between respondents and non-respondents to this question in terms of gender, alcohol drinking patterns, race/ethnicity, and total number of children in the household. The number of non-respondents was small (n=171) and no significant differences were observed between groups.

We constructed an employment situation variable from several variables that asked about respondents’ employment and sources of income in 1992. Respondents were divided into four categories: (a) full time employed, (b) part time employed, (c) working while receiving welfare benefits, and (d) non-employed. Given the few episodes of violence reported by retired people (only 2 of 327 retired respond-
recently married persons. The weights were lies with step children, cohabiting couples and African American, single parent families, fami-
special populations in the survey, including responses to account for the over-sampling of In all our analyses, we weight the survey
We conducted logistic regression analyses to
STATISTICAL ANALYSIS
We conducted logistic regression analyses to examine the relations of interest using SAS.40 In all our analyses, we weight the survey responses to account for the over-sampling of special populations in the survey, including African American, single parent families, families with step children, cohabiting couples and recently married persons. The weights were prepared by the NSPH researchers.41 We used Box-Cox transformation of the income, and alcohol intake variables, a frequently used procedure that smoothes out the effect of outlier values and approximates the variables to a normal distribution. The transformations were sufficient to produce reasonable residual plots (see tables for details on the transformations used). We examined the correlations among all variables, performed diagnostic tests for co-
linearity, and no problems were found.
We did not replace any missing values of the dependent variable. For the categorical inde-
pendent variables we added an additional group of “no response or not applicable” where necessary, in order to include all respondents in

KEY POINTS
- Employed persons receiving welfare ben-
efits are at significantly higher risk of domestic violence.
- Non-employed respondents are not at greater risk of family violence relative to employed persons. However, alcohol in-
teracts with non-employment to predict violence.
- In contrast with popular perception race/ ethnicity is not a significant factor in pre-
dicting violent arguments when other factors are accounted for.
- Two factors significantly reduce the likelihood of engaging in violent argu-
ments: age and satisfaction with relationships with friends and family (other than the spouse).

Results
Table 1 presents a description of our sample. Of 4780 respondents, 151 report engaging in arguments in which both partners were physically violent toward each other. As shown in table 1, women were slightly more likely than men to report the occurrence of violent arguments.

The average household income and years of education are lower among those who report violent arguments than among those who do not report them. Respondents who engage in violent arguments have more children, and report more alcohol drinking and weeks of unemployment in 1991 than respondents who do not report violence. The average age of respondents engaging in violent arguments is 33 years (SD 6.7), while the average age of those not resorting to violence is 40 years (SD 10).

Full time employed people are less likely and those working while receiving welfare benefits are more likely to report violence relative to other employment status groups. Working part time and being non-employed does not in-
crease the risk of violence. African American
respondents report more violent arguments than white respondents or those categorised as others. Because of sample size considerations we were not able to analyse men and women separately. Table 1 includes a description of the sample by gender group, and the possible implications of not analysing them separately are considered in the discussion section.

Table 2 presents the results of our first logistic regression analyses using the full model described in figure 1. Significant predictors for violent arguments include number of children in the household, alcohol drinking in 1992, and previous (1987) history of engaging in violent arguments. The risk of violence was greater for people who were working while receiving welfare relative to the referent (full time employed).

Two factors significantly reduce the likelihood of engaging in violent arguments: age and satisfaction with relationships with family (other than spouse) and friends. Higher income and education are also associated with less likelihood of reporting violence, but the confidence intervals are relatively wide.

Men and women are not significantly different in reporting having arguments in which both partners were physically violent. Other factors that are not statistically significant in predicting violence include race/ethnicity, partnership stability, having a physical or mental limitation that could restrict the ability of working for pay, the numbers of weeks of unemployment while looking for work in 1991, and previous (1987) history of having alcohol problems.

Table 3 presents the results of our reduced model where we dropped variables that did not attain significance in the full model, and three separate models that include reduced model variables and interaction effects for employment status and satisfaction with relationships or alcohol misuse or number of children. In our reduced model we find that people working while receiving welfare are almost four times more likely to report violence than other work-
### Table 3 Reduced model, and interactions. Multiple logistic regression model of association between family violence and employment status

<table>
<thead>
<tr>
<th>Factors</th>
<th>Reduced model</th>
<th>Model with interactions: employment and social relationships</th>
<th>Model with interactions: employment and alcohol</th>
<th>Model with interactions: employment and number of children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds ratio</td>
<td>95% CI Lower</td>
<td>Upper</td>
<td>Odds ratio</td>
</tr>
<tr>
<td>Employment status 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td>1.00</td>
<td>—</td>
<td>—</td>
<td>1.00</td>
</tr>
<tr>
<td>Part time</td>
<td>1.05</td>
<td>0.51</td>
<td>1.99</td>
<td>5.30</td>
</tr>
<tr>
<td>Working w/Welfare</td>
<td>3.70</td>
<td>1.27</td>
<td>9.73</td>
<td>1.79</td>
</tr>
<tr>
<td>Non-employed</td>
<td>1.01</td>
<td>0.60</td>
<td>1.65</td>
<td>2.54</td>
</tr>
<tr>
<td>Total number of children in household in 92</td>
<td>1.23</td>
<td>1.07</td>
<td>1.41</td>
<td>2.89</td>
</tr>
<tr>
<td>Satisfaction with social relationship</td>
<td>0.77</td>
<td>0.71</td>
<td>0.82</td>
<td>0.80</td>
</tr>
<tr>
<td>Total number of drinks in past 30 days</td>
<td>1.42</td>
<td>1.28</td>
<td>1.59</td>
<td>1.43</td>
</tr>
<tr>
<td>In 1987 did arguments become physical?</td>
<td>5.94</td>
<td>3.31</td>
<td>10.37</td>
<td>5.79</td>
</tr>
<tr>
<td>Interactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time work/alcohol drinks</td>
<td>1.00</td>
<td>—</td>
<td>—</td>
<td>1.00</td>
</tr>
<tr>
<td>Part time work/alcohol drinks</td>
<td>0.85</td>
<td>0.67</td>
<td>1.09</td>
<td>0.85</td>
</tr>
<tr>
<td>Working with welfare/satisfaction with relationships</td>
<td>1.07</td>
<td>0.75</td>
<td>1.54</td>
<td>0.91</td>
</tr>
<tr>
<td>Satisfaction with social relationship/alcohol drinks</td>
<td>0.92</td>
<td>0.61</td>
<td>1.46</td>
<td>0.92</td>
</tr>
<tr>
<td>Part time work/satisfaction with relationships</td>
<td>0.98</td>
<td>0.58</td>
<td>1.67</td>
<td>0.98</td>
</tr>
<tr>
<td>Full time work/satisfaction with relationships</td>
<td>1.41</td>
<td>1.11</td>
<td>1.82</td>
<td>1.41</td>
</tr>
<tr>
<td>Non-employed/number of children</td>
<td>1.00</td>
<td>—</td>
<td>—</td>
<td>1.00</td>
</tr>
<tr>
<td>Part time work/number of children</td>
<td>0.94</td>
<td>0.59</td>
<td>1.41</td>
<td>0.94</td>
</tr>
<tr>
<td>Working with welfare/number of children</td>
<td>1.03</td>
<td>0.51</td>
<td>2.18</td>
<td>1.03</td>
</tr>
<tr>
<td>Non-employed/number of children</td>
<td>0.64</td>
<td>0.45</td>
<td>0.88</td>
<td>—</td>
</tr>
</tbody>
</table>

The model controls for age, sex, income and education.

**Discussion**

In this study we focus on arguments in which both partners engage in physical violence, which represent about 60% of cases of family violence in the NSFV. People who are only recipients of violence by their partners may have different characteristics than those who react violently, and should be studied separately. In addition, it should be noted that our sample included respondents who were in a stable relationship between 1987 and 1992, and those who were in a new or different relationship in 1992. Respondents that were not in a relationship in 1992 could not be included in the analysis. Generalisations to the whole US population should be made cautiously.

The greatest strength of this study is that it is based on a national probability sample thereby reducing sample selection bias and includes a rich set of important variables to permit examination of potential confounders. Our study presents a number of important findings. In contrast with popular perception we find that race/ethnicity is not a significant factor in predicting violent arguments when other factors are accounted for. Partnership instability has not been controlled for in previous studies of alcohol and family violence; however, we find partnership instability to not be a risk factor for violence, after controlling for other factors.

As previously reported in the literature, alcohol use is positively associated with violent arguments in the same year. Alcohol use five years earlier seems not to affect current violence. Prior research has not clarified the modifying effect of alcohol misuse on the relationship between unemployment and violence. We do find that alcohol interacts with non-employment to predict violence; alcohol use, moreover, does not increase the risk of violence among other employed groups in relation to the full time employed. It should be noted that we used a measure of alcohol intake widely used in the alcohol research literature (that is, number of drinks in the past 30 days). Many of our other variables of interest report events in the past 6 or 12 months, which may possibly limit the usefulness of the alcohol variable. We
were constrained in our choice of this variable because the NSFH does not provide information on whether the alcohol drinking pattern of respondents was any different during the rest of the year.

This study has certain limitations. Our exclusion criteria, and the factors we control for in our model, should eliminate most of the differences among the various groups of people included in our model, but uncontrolled variables determining both resources and outcomes may still exist. People who have anti-social personality characteristics are also likely to drink in large amounts; making causal interpretations difficult because of potential confounding of characteristics of people most likely to be violent with the circumstances under which they drink and become violent.

Neither personality characteristics nor circumstances can explain alcohol related violence without consideration of the purposes served by drinking and the properties of alcohol in relation to violence. Personality characteristics are not included as variables in our study, but we control for previous history of both violence and alcohol problems. Those who reported violent arguments in 1987 are almost six times more likely to report violence in 1992.

Under-reporting is an additional limitation of most studies of family violence because it is a sensitive issue about which people may be hesitant to speak openly. The possible reasons for under-reporting in the NSFH data have been previously discussed. The NSFH placed the violence questions in the middle of a lengthy interview, and kept the questions general rather than specific. In addition, the questions referred to violence only in the context of disagreements, while violent abuse could occur without being prompted by a disagreement, and sexual violence was not included in the definition. When we analysed the small number of missing responses to the violence questions we did not find evidence of differences between respondents and non-respondents regarding, age, sex or marital status.

Sample size considerations did not allow us to run models separately for men and women taking into account who was the perpetrator of the violence. In future research it would be useful to study men and women separately to better understand the possible relation between women employment patterns, age of children in the household, and other determinants that could influence the permanence of women in violent relationships. In future studies it would also be useful to include additional information on partners’ characteristics. Larger sample sizes, new methods of diminishing underreporting, and different methodological approaches will be necessary to build on this line of research.

In conclusion, perhaps the most important findings of this study are the increased risk of violence if working and receiving welfare and the inhibiting effect of satisfaction with social relationships on violence. In view of recent welfare reform strategies our findings are particularly relevant. Our results indicate that, relative to the employed, people working while receiving welfare could be at greater risk for violence.

One plausible explanation for the increased risk for respondents receiving welfare while working is that the additional stress associated with working in low skills jobs when coping with poverty and child care issues puts people at a higher risk of family violence. Recent research shows that working couples with small children tend to work more hours than others, and they report the lowest quality of life among working couples (P Moen et al, Annual Meeting of the American Association of Science, Anaheim, California, January 1999). However, we find that more children slightly increases the risk of violence only for the unemployed relative to full time workers. This suggests that job conditions, for example, low skill or less secure; personality characteristics; stigma related to receiving welfare; or some other unmeasured characteristic may explain this very intriguing result.

At any rate, this study suggests we should continue to take a comprehensive approach to problems of domestic violence. We have identified a group who is particularly at risk for family violence, which makes it critical to monitor the impact of welfare reform on family violence.

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Conflicts of interest: none.


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