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Education and Alcohol Consumption: Investigating the Link Among Married Men

Introduction

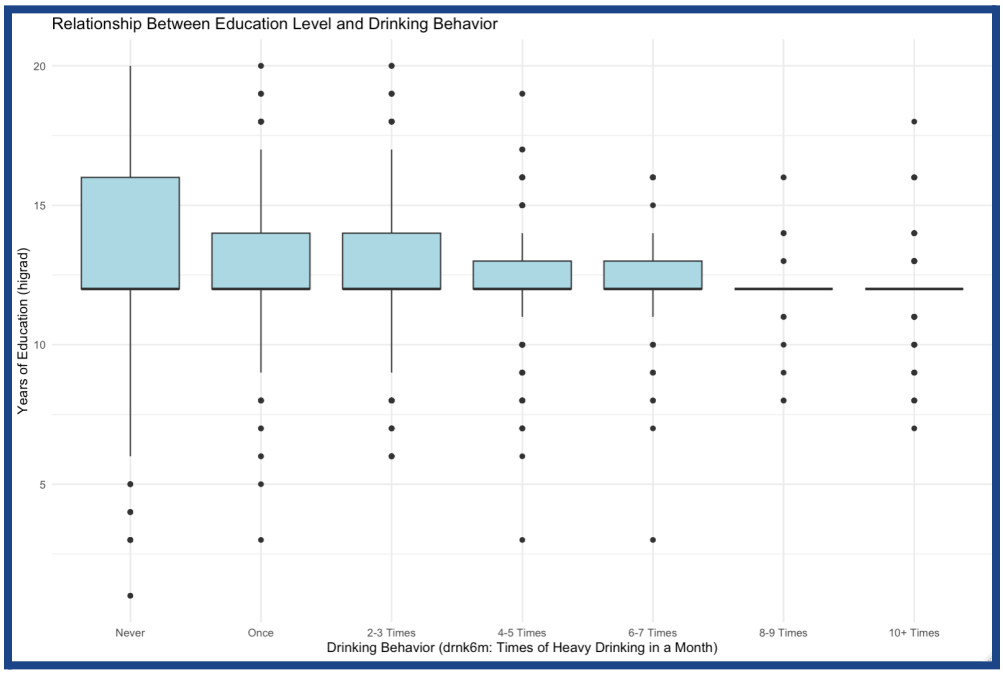
Understanding the role of education in shaping lifestyle behaviors, including alcohol consumption, is critical for developing effective public health interventions. The following study investigates whether the level of education attained by married men influences their drinking behavior, with a focus on heavy drinking. By analyzing data from 1989 and 1994, this research aims to uncover patterns that may inform policy efforts to reduce alcohol abuse. Preliminary findings suggest that higher education correlates with healthier drinking habits, underscoring the role of educational attainment in promoting better decision-making and health outcomes.

Description of the Data

The dataset examines the relationship between education and drinking behavior among married men in 1989 and 1994. The key variables include drinking behavior (drnk6m), a categorical measure of how often individuals consumed six or more drinks in one sitting, and education (higrad), the number of years of formal education completed. Additional variables capture demographic and family background factors, such as age, parental presence at age 14 (wdad14, wmom14), and parental education (dadhgc, momhgc). Socioeconomic status is represented by family income (faminc), while intelligence test scores (afqtrev) provide a cognitive ability measure. These variables collectively offer a robust framework to explore how education influences drinking patterns.

To illustrate the relationship between education and drinking behavior, the boxplot below shows the distribution of education levels across different categories of drinking behavior. It

reveals that individuals who report never engaging in heavy drinking tend to have higher levels of education, while those in higher drinking categories (e.g., 6+ times per month) tend to have lower educational attainment. This visualization provides preliminary evidence for the hypothesis that higher education is associated with healthier drinking habits.



Summary Statistics	Drinking Behavior (drnk6m)	Education (higrad)	Age	Family Income (faminc)	Intelligence Test Scores (afqtrev)	Father's Education (dadhgc)	Mother's Education (momhgc)
Mean	0.60 (about once in the past month)	12.4 years	30.2 years	$56,602	45.1 percentile	9.93 years	10.42 years
Median	0 (most reported never engaging in heavy drinking)	12 years	30 years	$39,000	42 percentile	12 years	12 years
Standard Deviation (SD)	1.24	2.8	2.1	$114,413	23.7	5.05	3.95

Minimum	0 (never)	0 years	24 years	$0	1 percentile	0 years	0 years
Maximum	6 (10+ times in the past month)	20 years	37 years	$1,057,448	99 percentile	20 years	20 years

Empirical Section

This study explores whether education influences drinking behavior among married men by examining how the number of years of education completed (higrad) impacts the frequency of heavy drinking (drnk6m). The dependent variable, drnk6m, categorizes drinking behavior from 0 (never) to 6 (10 or more times in a month), making an ordered logistic regression model appropriate. The key independent variable is education (higrad), based on the hypothesis that higher education reduces heavy drinking through better decision-making and health awareness. To isolate the effect of education, the model controls for demographic factors such as age and sex, family background variables like parental presence at age 14 (wdad14, wmom14) and parental education (dadhgc, momhgc), socioeconomic status (faminc), and cognitive ability (afqtrev). These controls ensure the relationship between education and drinking behavior is not confounded by other factors, providing a robust analysis of how education shapes lifestyle choices.

Variables	Estimated Coefficients	SD of Coefficients	z-value	p-value	95% Confidence Interval	Significance
higrad	-0.144	0.015	-9.724	0.000	[-0.173, -0.115]	Significant at 1%
age	0.025	0.008	3.020	0.003	[0.009, 0.041]	Significant at 5%
dadhgc	0.021	0.007	3.019	0.003	[0.007, 0.035]	Significant at 5%
momhgc	-0.013	0.008	-1.605	0.110	[-0.030, 0.004]	Not Significant

faminc	-0.015	0.030	-0.511	0.610	[-0.076, 0.046]	Not Significant
afqtrev	0.001	0.001	0.650	0.516	[-0.002, 0.003]	Not Significant
wdad14	-0.029	0.067	-0.428	0.685	[-0.159, 0.103]	Not Significant
wmom14	0.010	0.115	0.083	0.934	[-0.212, 0.238]	Not Significant

The ordered logistic regression model used in this study examines the likelihood of a respondent's drinking behavior (drnk6m) as a function of their years of education (higrad) and other control variables. The model is specified as follows:

$$drnk6mi = \ -0.144 \cdot higrad_i + 0.025 \cdot age_i + 0.021 \cdot dadhgc_i - 0.013 \cdot momhgc_i -$$

$$0.015 \cdot faminc_i + 0.001 \cdot afqtrev_i - 0.029 \cdot wdad14_i + 0.010 wmom\,14_i + 0.010 + \varepsilon_i$$

Each coefficient represents the marginal effect of the corresponding variable on the probability of being in a higher drinking category, holding other variables constant. For instance, the coefficient for higrad (-0.144) indicates that an additional year of education is associated with a significant reduction in the frequency of heavy drinking. Similarly, age (0.025) and dadhgc (0.021) have significant positive effects, reflecting a slight increase in heavy drinking behavior with age and paternal education.

The results of the regression provide valuable insights into how various factors, particularly education, influence heavy drinking behavior. The negative and statistically significant coefficient for education (higrad) suggests that higher levels of schooling are associated with reduced frequency of heavy drinking. This supports the hypothesis that education fosters healthier behaviors, potentially through better decision-making and greater awareness of the long-term consequences of excessive alcohol consumption. Additionally, paternal education (dadhgc) shows a surprising positive relationship with heavy drinking, possibly reflecting

cultural or social norms in higher-educated households. While some variables, such as family income (faminc) and maternal education (momhgc), were not statistically significant, the model explains 12.3% of the variation in drinking behavior (R-squared = 0.123). These findings imply that policies aimed at improving educational attainment could indirectly mitigate heavy drinking, with potential positive spillover effects on labor market outcomes by fostering a healthier, more productive workforce.

Conclusion

This paper examined the impact of education on heavy drinking behavior among married men, with a focus on understanding how drinking habits might influence labor market outcomes. The regression analysis revealed that higher levels of education are significantly associated with a reduced frequency of heavy drinking, highlighting the protective role of education in fostering healthier lifestyle choices. These findings suggest that improving educational attainment could indirectly benefit labor market productivity by reducing the prevalence of behaviors that negatively affect workforce participation and efficiency.