DOCUMENT RESUME

ED 266 351 CG 018 831

AUTHOR Crowley, Joan E.
TITLE Status Variations in Alcohol Use among Young Adults: Results from the 1984 National Longitudinal Surveys of Youth.
INSTITUTION Ohio State Univ., Columbus. Center for Human Resource Research.
SPONS AGENCY Employment and Training Administration (DOL), Washington, D.C.
PUB DATE Aug 85
NOTE 36p.; For related document, see CG 018 830.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Adolescents; *Alcoholism; *Behavior Patterns; *Drinking; Drug Use; Racial Differences; Sex Differences; *Socioeconomic Status; Surveys; Trend Analysis; *Young Adults

ABSTRACT

This document gives descriptive results on alcohol use patterns among young adults from the 1984 National Longitudinal Survey of Labor Market of Youth, a survey of a large, nationally representative sample supplemented by samples of blacks, Hispanics, and economically disadvantaged non-black, non-Hispanic youth and covering the entire range of educational levels. Those results are then extended with multivariate analyses of alcohol use patterns as they are related to indicators of socioeconomic status. Age and trends in alcohol consumption are discussed with tables illustrating the number of days on which the respondents drank in the previous week, the total number of drinks consumed, and the average number of drinks per drinking day compared for the three survey years (1982-84). Drinking and social status and problem drinking are discussed and supporting data tables are included. A major portion of the report details the patterns of reported problems within the young adult population. Several issues are raised in the conclusion of this document. It is noted that: (1) quantity and frequency should be distinguished in the interpretation of results; (2) blacks have a higher prevalence of cirrhosis than do whites, although blacks reported less alcohol consumption; and (3) alcohol related problems are not merely a function of alcohol consumption. An appendix contains the alcohol use section of the survey instrument. (ABL)

Status Variations in Alcohol Use among Young Adults: Results from the 1984 National Longitudinal Surveys of Youth

by
Joan E. Crowley

August 1985

Center for Human Resource Research

The Ohio State University

Status Variations in Alcohol Use among Young Adults: Results from the 1984 National Longitudinal Surveys of Youth

by

Joan E. Crowley

August 1985

Center for Human Resource Research

The Ohio State University

This report was prepared under a contract with the Employment and Training Administration, U.S. Department of Labor, under the authority of the Job Training Partnership Act. Researchers undertaking such projects under government sponsorship are encouraged to express their own judgments. Interpretations or viewpoints stated in this report do not necessarily represent the official position or policy of the U.S. Department of Labor.

Status Variations in Alcohol Use among Young Adults:

Results from the 1984 NLS of Youth

INTRODUCTION

Previous reports in this series have focused on descriptions of alcohol use patterns in the National Longitudinal Surveys of Labor Market Experience of Youth (NLS). This report extends the descriptive material to the 1984 data, and extends those results with multivariate anlayses of alcohol use patterns as they are related to indicators of socio-economic status. In 1984, the questions on alcohol use were supplemented for the first time with questions on problems resulting from alcohol use. A major portion of this report will detail the patterns of reported problem within the young adult population.

Concepts of Consumption.

Alcohol is unique among drugs in that its use is considered part of normal adulthood by a large majority of the population. At the same time, excessive use of alcohol is a well-documented social problem (Institute of Medicine, 1980). The boundaries between having a good time and problem drinking are blurred. Alcohol use increased substantially over the 1960's and 70's, and the trend may be continuing (Smart and Murray, 1981).

One of the problems of discussing alcohol use is the lack of consensus about the appropriate measurement of drinking behavior. Most of the epidemiological literature uses some form of quantity or quantity-frequency measure (c.f., Radosevich, et al., 1979). Quantity measures simply aggregate the reports of alcohol use into a single figure, usually given in terms of alcohol

per unit time (day, week, or month). Adding the frequency dimension to the quantity measures offers the possibility of distinguishing between people who drink regualarly but in moderation from those who drink heavily but on fewer occasions.

A major problem with the quantity-frequency approach, usually unstated, is that the typologies are generally imposed upon the data. To my own knowl-e ge, there have been no attempts to determine if the quantity-frequency categories actually identify stable, distinguishable groups of drinkers.[1] A second problem is with interpretation of results, since the dimensions of quantity and frequency are intertwined.

The previous report in this series presented a descriptive analysis of such a quantity-frequency index. Most of the significant differences in drinking behavior among various demographic groups turned out to be between drinkers and non-drinkers. In general, factors associated with higher levels of income and social status were also associated with a higher probability of drinking. The patterns of results suggested that some of the same social status factors which were associated with higher likelihood of abstention from alcohol were also associated, among those who did drink, with high quantities of alcohol per drinking occasion.

In light of these results, the current analysis will separate the quantity-frequency measure back into its components. This report will consider drinking behavior to be a function of three types of decisions, following a logical sequence. The first choice is simply whether or not the

---

[1]Repeated attempts to develop categories based on cluster analysis using the current data set failed, both because of the limitations of the cluster technology and because, perhaps, the space defined by the measures of alcohol consumption does not contain neat substructures which could be identified by clustering.

individual will consume alcohol at all, indexed by dichotomizing the respondents into drinkers vs. non-drinkers. Among drinkers, the next choice determines which occasions are appropriate for the consumption of alcohol, a choice indexed by the frequency of consumption. The final choice, for each occasion, is the quantity of alcohol desired, measured by the average quantity consumed per drinking occasion.

The quantity or frequency of alcohol consumption are of interest mainly because they are presumed to indicate the likelihood of problem drinking. The NLS is unusual in that both drinking behavior and drinking consequences are measured in the same study. In 1984, for the first time, respondents were asked whether their drinking had ever cause them to have any one of a list of possible problems. This report will look at factors which are associated with problem drinking, and contrast the results with those derived from the analysis of drinking patterns.

THE SAMPLE: THE NLS OF YOUTH.

The NLS of Youth is a panel study, initiated by the Department of Labor in 1979 with a mission of studying the transition of young people into the labor force. The initial panel included 12686 respondents between the ages of 14 and 21 as of January 1, 1979. The sample design called for a nationally representative cross-sectional base with supplemented with samples of blacks, Hispanics, non-black no Hispanic economically disadvantaged youth, and youth in the military. Members of the panel have completed hour-long face-to-face interviews each year since 1979. The retention rate has been excellent, with approximately 95 percent of the original sample remaining in the study.

ALCOHOL USE MEASURES IN THE NLS OF YOUTH

Alcohol use measures were first introduced on the NLS survey instrument in 1982, and have beer repeated and expanded in 1983 and 1984. The initial items focused on drinking patterns in the week prior to the interview. In 1983, questions were added concerning drinking quantities and frequencies in the preceding month. Since drinking is notoriously affected by situational influences, the longer period should give a better picture of the respondent's usual patterns of drinking, while keeping the reporting period short enough for accurate recall (Armor and Pollich, 1982). The items used in 1984 are shown in the appendix.

The reports of drinking in the last week include questions on the number of days on which the respondent drank, followed by questions on the total number of drinks of beer, wine, and liquor consumed during the week. The total number of drinks is highly correlated with the frequency of drinking. By computing the average number of drinks per drinking day, the correlation is substantially reduced, allowing quantity to be differentiated from frequency.

As has been noted, a one week period of observation is expected to be rather unstable as a measure of individual drinking behavior. In 1983 and 1984, respondents were asked the number of days out of the past month they had used alcohol. The question about frequency was followed up with questions about the number of days on which one drink was consumed, the number of days on which two drinks were consumed, and so on up to six or more drinks. Analogously with the data for the past week, the number of days and the average number of drinks per drinking day are used as indicators of frequency and quantity of alcohol use.

AGE AND TRENDS IN ALCOHOL CONSUMPTION

When the 1984 data are included, we can trace the one-month drinking patterns for two years and the one-week drinking patterns for three years. The age range of the NLS alcohol study, taken across years, spans the time when young people are making the transition from youth to adulthood. For many, this transition will involve establishing their patterns of alcohol use or non-use. Figures 1 through 3 track the patterns of alcohol use by age at the time of the interview, using the three years of observations as three replications.[2] The tables indicate separately for men and women then changes in alcohol use patterns, patterns which seem consistent and logical.

While the range of scores for men and women are quite similar, the figures show that there is no overlap at all in the mean frequency or quantity of alcohol consumed. Men report consistently higher levels of drinking, and the difference is fairly constant over ages and over time. Reported alcohol use levels are generally highest in the first year. This trend is more likely to be a function of the change in the extensiveness of the reports of alcohol years between the first and second year of data collection than it is to be a real period effect.

---

[2]All ages presented are age at the time of interview, since the alcohol questions refer to the period immediately prior to the interview date. For the purposes of the Figures, the oldest and youngest cohorts have been omitted. The interview dates span a period from January through approximately April of each year. Eligibility for inclusion for the sample was based on age on January 1, 1979. Thus, in 1982, a portion of the youth who were 24 on January 1 had turned 25 by the interview date. Note also that these 25 year olds were also more likely than other youth to have had their interview within one week of their actual birthdays. Since alcohol is associated with celebrations, including birthdays, it is not surprising that these oldest members of the youth cohort show an abnormally high amount of alcohol consumption, relative to youth in other age groups. Conversely, the very youngest age group consists disproportionately of youth who would celebrate their birthdays at a time removed from the interview date, and would thus report on average lower consumption levels.

Figure 1: Number of Days Drank in Previous Week, by Age, for Each Survey Year

Plot of Males, 1982 Symbol used is A Plot of Females, 1982 Symbol used is 1
Plot of Males, 1983 Symbol used is B Plot of Females, 1983 Symbol used is 2
Plot of Males, 1984 Symbol used is C Plot of Females, 1984 Symbol used is 3

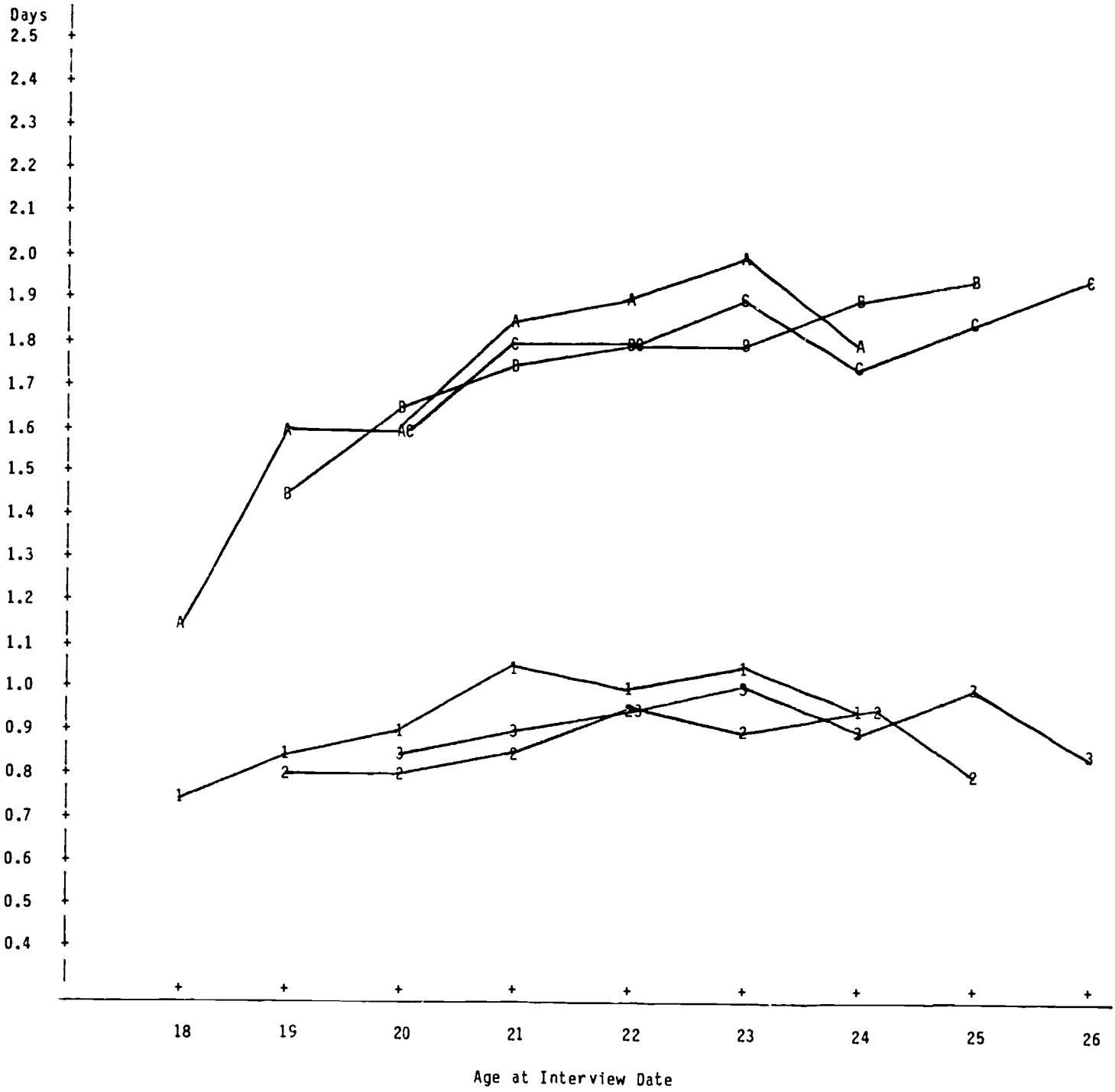


Figure 2: Total Number of Drinks Consumed in Past Week, by Age, for Each Survey Year

Plot of Males, 1982 Symbol used is A Plot of Females, 1982 Symbol used is 1
Plot of Males, 1983 Symbol used is B Plot of Females, 1983 Symbol used is 2
Plot of Males, 1984 Symbol used is C Plot of Females, 1984 Symbol used is 3

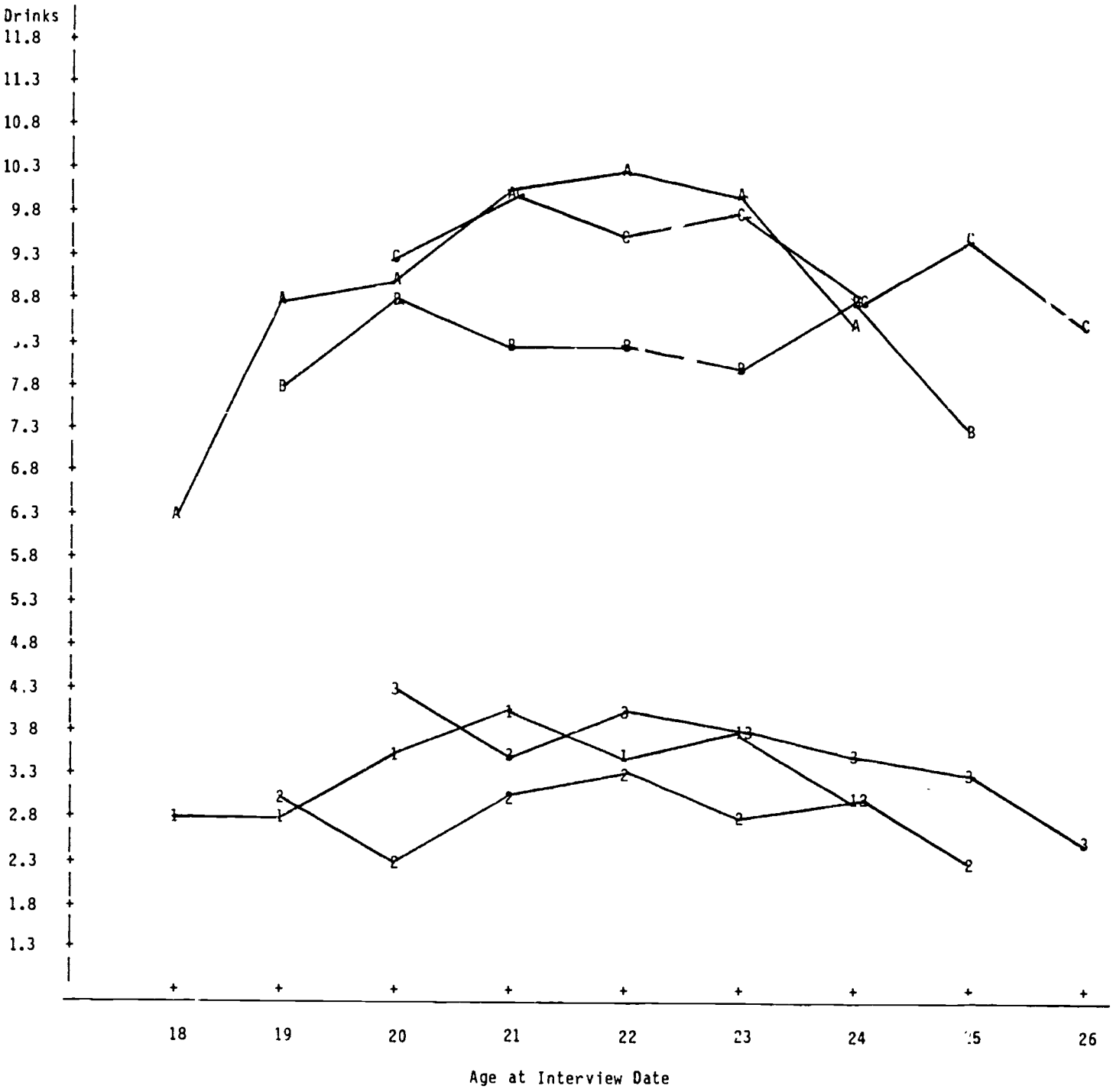
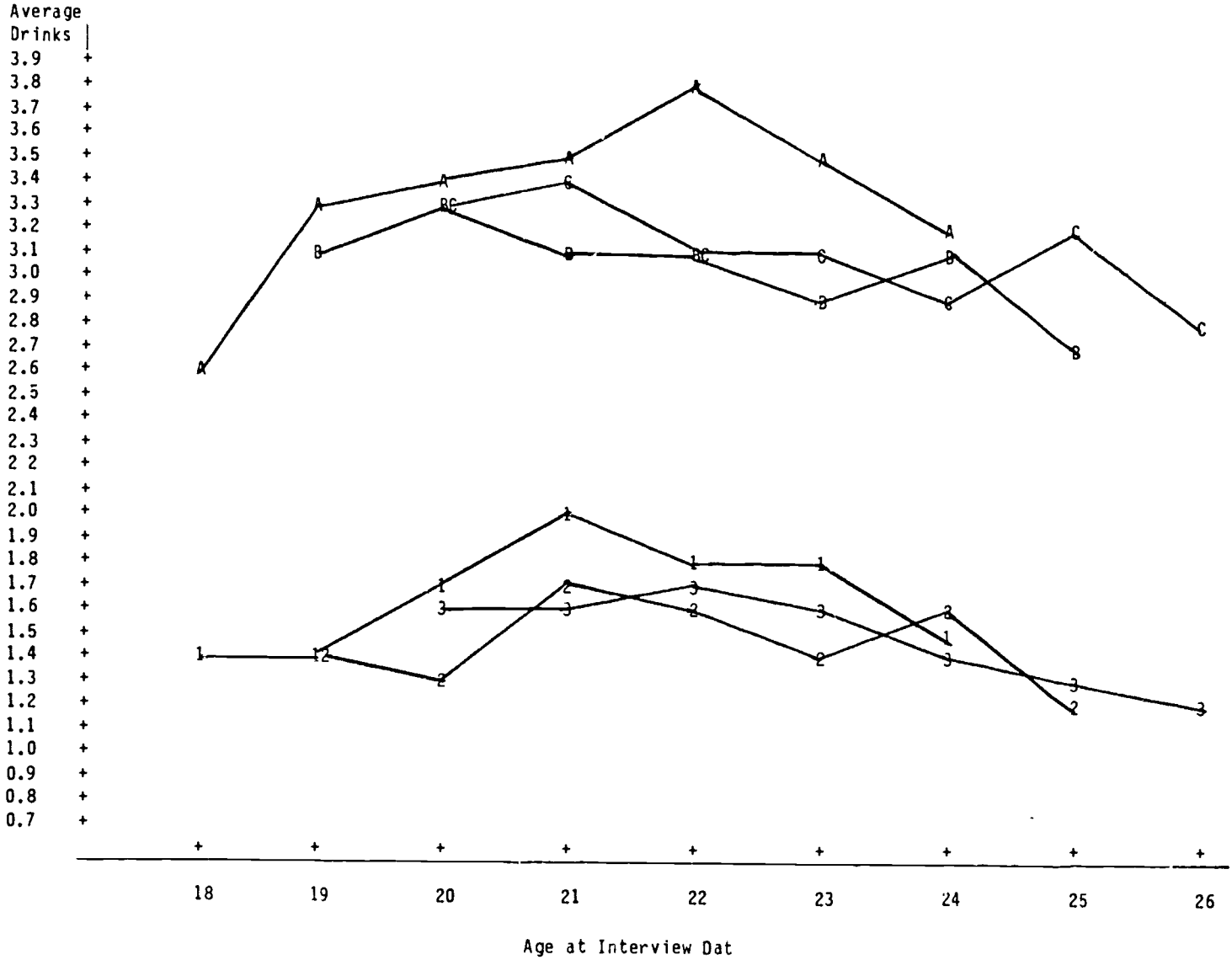


Figure 3: Average Number of Drinks per Drinking Day for Previous Week, by Age, for Each Survey Year

Plot of Males, 1982 Symbol used is A Plot of Females, 1982 Symbol used is 1
Plot of Males, 1983 Symbol used is B Plot of Females, 1983 Symbol used is 2
Plot of Males, 1984 Symbol used is C Plot of Females, 1984 Symbol used is 3



Frequency of alcohol use increases rapidly over the late teen years, then plateaus during the early twenties. The figures for the three years are quite close The quantity of alcohol consumed is fairly flat. Indeed, there is a suggestion that the amount consumed per drinking occasion may decline with age.

Drinking and social status. Table 1 shows the patterns of alcohol consumptions as functions of education, poverty and occupational status, separately for males and females.[3] Following the three-decision strategy outlined above, the first column of each table gives the results of a logit analysis on whether alcohol was or was not used in the previous month. The figures shown in the second and third columns are based on OLS regressions of the frequency and quantity of drinking for youth who reported at least one drink within that period. One striking result of the tables is how little of the variance on each index is accounted for by these variables. Drinking is sensitive to situational factors, so that these broad cultural strata probably are best thought of as associated with constraints and incentives to drink, while the situational and dispositional factors not measured by the NLS may account for more of the actual behavior.

However, several patterns do emerge clearly. Race and dropping out of school, factors usually associated with lower social status, are associated with higher proportions of abstaining, contrary to stereotype but in keeping with previous research (Radosevich, et al., 1980). Being black, a high school dropout, or not working at the time of the interview, are all significantly associated with low probabilities of drinking. However, with the exception of

---

[3]Analyses not shown indicated that, while several of the relationships between drinking and status variables significantly interacted with sex, there were no significant interactions by race.

Table 1: Drinking Patterns for the Month Preceding Interview, Multivariate Analysis

Independent Variables	Females			Males		
	Any Drinks	Drink Frequency	Drink Quantity	Any Drinks	Drink Frequency	Drink Quantity
Race						
Black	-.557**	-1.25**	-.620**	-.342**	-1.76**	-.761*
Hispanic	-.364**	-2.02**	-.219*	-.023	-1.83**	.006
White	--	--	--	--	--	--
Age						
19-20	--	--	--	--	--	--
21-22	.151	.084	-.222**	.207*	.449	-.218*
23-24	.163	-.069	-.205**	.255*	.861*	-.258**
25-27	103	.227	-.402**	.208*	.692	-.395**
Education and Enrollment						
Less than 12 years	-.169	1.01**	.511**	-.193*	.713	.377**
12 years	--	--	--	--	--	--
13-15 years	.355**	.165	-.395**	.079	.559	-.172*
16 or more years	.692**	1.13**	-.381**	.231	.258	-.359**
Student	.578**	.057	-.306**	-.140	-1.50**	-.327**
Poverty status	.204**	.251	.139*	-.222*	-.047	.163*
Occupational Status						
White collar	--	--	--	--	--	--
Blue collar	.046	.098	-.228**	.091	.058	-.234**
Not working	-.352**	-1.26**	-.233**	-.288*	-.333	.035
Constant	.567**	5.72	3.213**	1.416**	9.63	3.676**
R^2 (adj)		.02	.08		.01	.07**
F	6.47	24.59		6.02	26.06	
N 5172	3387	3387	5352	4277	4277	
df	292			282		
X^2	401.97			296.28		
Probability	.0001			.27		

minority status, these same factors are associated with high consumption levels among drinkers.

Several factors work differently for men than for women, notably education, poverty status, and occupational status. Among males, although dropouts are less likely to be drinkers than are high school graduates, there are no large differences between men who have a terminal high school degree and those who have attended college. Among women however, higher levels of education are consistently associated with higher probabilities of alcohol use. In particular, drinking is positively associated with student status among women, while men who are students are less likely than high school graduates to drink. Inspection of the raw means for drinking levels shows less differentiation between men and women in their drinking patterns in the more highly educated groups.

For both men and women, high school dropouts who drink are likely to drink more often and in greater quantity than high school graduates. However, while male students drink less often than other men, female students drink about as frequently as do high school graduate women. For both men and women, respondents with higher levels of education tend to report lower quantities of alcohol consumption per occasion.

Poverty status strongly interacts with sex in its relationship with drinking. Poor men are less likely to drink than non-poor men, while among women, the relationship is reversed. For both men and women, persons in poverty who drink report higher quantities consumed than do the non-poor.

Occupational status was defined according to whether the occupation of the job held at the time of the interview was white collar or blue collar or whether the respondent was not working during the previous week. Contrary to the stereotype of the hard-drinking blue collar worker, it is actually the

Table 2: Reliability Analysis for Problem Drinking Scales[a]

Now I would like to ask you some questions about experiences that many people have had with drinking. During the past year . . .	Percent Reporting Problem	Item-Total Correlation	Scale Mean (Alpha)
Alcohol-related aggression[b]			.587 (.711)
Have you felt aggressive or while drinking?	18	.519	
Have you gotten into a heated argument while drinking?	17	.602	
Have you gotten into a fight while drinking?	8	.481	
Have you awakened the next day not being able to remember things you had done while drinking?	15	.397	
Loss of control[b]			.397 (.608)
Were you afraid you might be an alcoholic or that you might become one?	7	.366	
Once you started drinking, was it difficult for you to stop before you became completely intoxicated?	6	.349	
Have you often taken a drink the first thing when you got up in the morning?	3	.273	
Have your hands shaken a lot the morning after drinking?	4	.305	
Have you sometimes gotten high or tight when drinking by yourself?	12	.341	
Have you sometimes kept on drinking after promising yourself not to?	9	.421	
Alcohol-related work problems[c]			.119 (.824)
Have you stayed away from work because of a hangover?	4	.440	
Have you gotten high or tight when on the job?	4	.440	
Have you lost a job, or nearly lost one, because of drinking?	2	.684	
Has drinking led to your quitting a job?	1	.702	
Has drinking hurt your chances for promotions or raises or a better job?	1	.696	

[a] All items report problems for the past year.
[b] Universe: Respondents who drank in month prior to interview date (N=8273).
[c] Universe: Respondents who worked in past year (N=7084).

Table 3: Correlations between Drinking Levels and Problem Drinking Scales

	1	2	3	4	5	6
1. Aggression Problems	1.00 0.00 8285	0.45 0.00 8285	0.13 0.00 6779	0.26 0.00 8285	0.36 0.00 8285	0.32 0.00 8285
2. Control Problems		1.00 0.00 8285	0.19 0.00 6779	0.22 0.00 8285	0.32 0.00 8285	0.25 0.00 8285
3. Work Problems			1.00 0.00 6780	0.05 0.00 6780	0.09 0.00 6780	0.05 0.00 6780
4. Total Number Days R Drank Alcohol In Last Month				1.00 0.00 8294	0.86 0.00 8293	0.16 0.00 8293
5. Total Number Drinks In Last Month, 1984					1.00 0.00 8293	0.48 0.00 8293
6. Average uantity Consumed per Day of Drinking						1.00 0.00 8293

Pearson Correlation Coefficients
Prob > R under HO:RHO=0
Number of Observations

Universe: Respondents reporting at least one drink in the past month.
Universe: Repondents employed during previous week, who had at least one drink in the past month.

distribution; even among youth who were employed, very few report any problems on the job due to alcohol. Fewer than six percent of all respondents reported work-related problems with alcohol. In contrast, over one fourth of the youth reported problems with aggr[illegible]eness while drinking, and another fifth report some instance of loss of control over alcohol.

While each problem area produced a multi-point scale, the distributions were quite skewed, as expected. For analysis purposes, the scales were dichotomized based on whether or not a respondent reported any problems in a given problem list. The proportions of youth reporting drinking problems are shown in Table 4, both for the entire population and for the subpopulation of people who drank in the past month. Most of the relationships are significant, although the significance levels are low relative to the sample size for reports of work problems.

In line with their higher use of alcohol, males report more problems as a result of drinking than do females. Aggressive behavior under the influence of alcohol is reported more frequently by whites, as would be expected from their higher levels of consumption. Among males, minorities, particularly blacks are more likely than whites to report problems of loss of control over drinking. Within sex group, there is little variation by race in reports of work related problems.

Age, somewhat surprisingly, shows little relationship with problem drinking, except for problems with alcohol-related aggression, which generally decline with age.

More educated respondents are less likely to report drinking problems. The most dramatic difference is between high school dropouts and high school graduates. Among drinkers, high school dropouts are 25 to 50 percent more likely to report drinking-related problems than are terminal high school graduates.

Table 4: Drinking Problems by Selected Characteristics

Characteristic	Type of Problem					
	Aggression		Loss of Control		Workplace	
	% Problem		% Problem		% Problem	
	All Respondents	Drinkers Only	All Respondents	Drinkers Only	All Respondents	Drinkers Only
Total Sample	26	3[illegible]	19	25	6	8
Sex and Race						
Hispanic Males	25**	31**	27**	34**	7**	8**
Black Males	23	31	3	42	7	10
White Males	35	42	24	29	8	9
Hispanic Females	1	18	9	15	3	5
Black Females	9	17	11	20	2	4
White Females	20	27	13	18	4	5
Age						
19	30*	39**	19	25	5	6
20	29	40	2	27	5	7
21	27	34	19	24	6	8
22	26	34	19	24	6	8
23	27	35	20	26	6	8
24	23	31	21	28	5	7
25	23	30	18	24	6	8
26	21	29	17	23	7	9
27	20	27	14	19	5	7
Education and Enrollment Status						
Less than 12 years	30**	44**	27**	39**	8**	13**
12 years	25	35	19	26	6	8
13-15 years	23	30	18	23	5	7
16 or more years	21	26	14	17	4	5
Student	26	31	16	20	4	5
Poverty Status						
Nonpoor	25	33**	18**	24**	6	8*
Poor	26	27	22	31	5	8
Occupational Status						
White Collar	30**	39**	23**	29**	7**	9**
Blue Collar	22	28	15	19	5	6
Not Employed	20	35	19	30	--	--

** Chi Square probability < .01
* Chi Square probability < .05

Poverty status shows an inconsistant relationship with drinking problems. The non-poor are more likely to report problems with aggressiveness, while the poor are more likely to report control problems. The pattern parallels the pattern for race.

Contradicting the stereotype of the hard-drinking blue collar worker, the table shows that white collar workers report higher levels of drinking problems than blue collar workers, however problems are defined.

Multivariate analysis. Of course, all of these status indicators are intercorrelated. As a first cut at untangling the knots, logit regressions were run, using two models.[5] The first used the status indicators only, the second added terms for the quantity and frequency of alcohol use. The analysis was restricted to youth who reported at least one drink in the past month, so the interpretation of the results should focus on variations in problem drinking within the drinking population.

As with the analysis of drinking patterns, contrasted with the large sample size, the results show that these status constructs account for relatively little of the variance in drinking problems. The results for problems at work, in particular, indicate that despite the significance of individual parameters, the overall result does not reach conventional levels of acceptable significance. These results are presented, but not discussed further.

As Tables 5 and 6 show, controlling on the frequency of drinking and the amount of alcohol consumed on a average drinking day does not substanatially change the results. Results for men and women are roughly similar, but only the results for aggression problems are significant for the women. Minority

---

[5] OLS regressions were also run, and showed quite similar results. Dichotomizing the variables seems not to lose much information in this case, and avoids problems with normality assumptions with clearly non-normal data.

Table 5: Drinking Problems by Socioeconomic Status for Males

	Aggression		Control		Work	
	Drinking Controls	Status Indexes Only	Drinking Controls	Status Indexes Only	Drinking Controls	Status Indexes Only
Constant	-2.14**	-.111	-2.47**	-.828**	-3.69**	-2.50**
Race						
Black	-.309**	-.613**	.721**	.391**	.131	-.090
Hispanic	-.420**	-.487**	.123	.052	-.167	-.201
White	--	--	--	--	--	--
Age						
19-20	--	--	--	--	--	--
21-22	-.192	-.669	-.21[illegible]	-.187	.346	.346
23-24	-.229*	-.185	.0[illegible]2	.078	.322	.363
25-27	-.298**	-.333**	-.003	-.039	.424*	.421*
Education and Enrollment						
Less than 12 years	.136	.281**	.469**	.563**	.304*	.404
12 years	--	--	--	--	--	--
13-15 years	-.056	-.112	-.019	-.070	-.134	-.187
16 or more years	-.186	-.300*	-.263	-.359*	-.460	-.551*
Student	-.047	-.242*	-.342**	-.488**	-.581**	-.700**
Poverty Status	.260*	.259*	.337**	.332**	.[illegible]34	.162
Occupational Status						
White Collar	--	--	--	--	--	--
Blue Collar	-.103	-.192*	-.050	-.128	.043	-.015
Not Working	.151	.100	.200*	.165	--	--
Alcohol Use						
Quantity	.397**		.307**		.217**	
Frequency	.063**		.051**		.037**	
N 4275	4275	4275	4275	3593	3593	
df	3183	272	3183	272	2580	189
X^2	3809	312	3741	308	1680	185
Probability	.00**	.05*	.00**	.07	1.00	.57

Table 6: Drinking Problems by Socioeconomic Status for Females

	Aggression		Control		Work	
	Drinking Controls	Status Indexes Only	Drinking Controls	Status Indexes Only	Drinking Controls	Status Indexes Only
Constant	-2.31	-.665**	-3.11**	-1.45**	-4.36	-2.78**
Race						
Black	-.550**	-.795**	.259*	-.055	-.001	-.295
Hispanic	-.411**	-.570**	-.185	-.361*	.170	-.011
White	--	--	--	--	--	--
Age						
19-20	--	--	--	--	--	--
21-22	-.190	-.215	.079	.032	.150	.075
23-24	-.053	-.098	.205	.143	.127	.063
25-27	-.258	-.315*	.176	.086	.280	.171
Education and Enrollment						
Less than 12 years	.059	.259*	.201	.395**	-.304	-.075
12 years	--	--	--	--	--	--
13-15 years	.087	-.022	-.084	-.180	-.447	-.562
16 or more years	-.159	-.233	-.388*	-.446*	-.300	-.411
Student	-.055	-.195	-.048	-.209	-.022	-.196
Poverty Status	.140	.181	.276*	.305**	.025	.086
Occupational Status						
White Collar	--	--	--	--	--	--
Blue Collar	-.180	-.208*	-.219	-.242	.001	-.056
Not Working	-.123	-.187	-.034	-.093	--	--
Alcohol Use						
Quantity	.362**		.351**		.341**	
Frequency	.083**		.087**		.059**	
N 3383	3383	3383	3383	2704	2704	
df	2329	276	2329	276	1777	186
X^2	2507	270	2219	309	815	165
Probability	.005*	.586	.948	.086	1.000	.86

youth are less likely than whites to report aggressive episodes while drinking, but more likely to report a loss of control over their alcohol use. Actually, since blacks drink less than whites, controlling for alcohol consumption levels actually increases the association between race and control problems.

As observed in the descriptive table, alcohol-related aggression reduces with age. On the other hand, work problems are significantly positively associated with age, a result which was not indicated earlier. The age result may be affected by the inclusion of educational status, since the upper levels of education are out of reach of most of the younger members of the sample.

By and large, the pattern of declining alcohol problems with higher levels of education holds for the multivariate analysis as well as the cross-tabular table. Adding the drinking measures makes a substantive difference in results only for aggression problems, which are no longer strongly differentiated by educational status.

Contrary to the bivariate results, poverty is positively associated with drinking problems, once other factors, including drinking levels, are controlled. At least for aggression, the overrepresentation of blacks among the poor may suppress the relationship between poverty and drinking related problems, since relatively few blacks report such problems.[6]

---

[6]This interpretation is supported by analyses not show here which demonstrate that the coefficient for poverty is much smaller when race is omitted from the model.

CONCLUSIONS

Clearly, alcohol use is not well accounted for by broad socioeconomic categories. Several issues are suggested by the analysis. The first is th problem of refining the measure of drinking behavior. The categorical approach presented in the previous report (Crowley, 1985) have the advantage of describing variations in quantity and frequency of use simultaneously. On the negative side, there is little basis for external validation of the selected categories, and interpretation of appropriate multivariate statistics such as multinomial regression and log linear analysis can be tortuous.

Conversely, the individual quantity and frequency indexes used in this report can be analysed using a variety of well-established techniques. The disadvantage is that the multiple analyses are not really independent, and given the differences in scaling and measurement properties contrasts between effect sizes may be difficult to interpret with confidence.

Whichever strategy is used, clearly both quantity and frequency of drinking are distinct dimensions of drinking behavior, and the distinction must be respected in the interpretation of results.

Substantively, perhaps the most important result is the relationship between race and drinking problems. Blacks have a higher prevalence of cirrhosis than do whites, and yet among the NLS respondents they report lower levels of alcohol consumption by any measure used. At the same time, blacks are significantly more likely than whites to report problems with control over drinking behavior. Whether the lack of control indicates socially learned behavior or some differential distribution of physical response to alcohol as a drug is, of course, impossible to determine from the available information.

Beyond the issues of measurement and analysis of drinking behavior, this analysis points up the importance of going beyond consumption measures to

include measures of the consequences of alcohol use. Drinking quantity and frequency are, of course, almost tautologically related to drinking problems, and any results which suggested the contrary would have to be considered suspect. However, few conclusions regarding the patterns which were observed in the relationship between status variables and drinking problems were affected by the inclusion of drinking behavior in the models. Even with these fairly weak predictors, it is clear that alcohol related problems are not simply a function of alcohol consumption. Continued assessment of both drinking behavior and drinking consequences will produce a more sophisticated grasp of the functions of alcohol use than could be obtained with either alone.

References

Armor, David J.; and J. Michael Pollich, "Measurement of Alcohol Consumption," Encyclopedic Handbook of Alcoholism, edited by E. Mansell Pattison and Edward Kaufman. New York: Gardner Press, 1982: 72-80.

Clark, Walter B. and Don Cahalan. "Changes in Problem Drinking Over a Four Year Span," Emerging Concepts of Alcohol Dependence, edited by E. Mansell Pattison, Mark B. Sobell, and Linda C. Sobell. New York: Springer Publishing Company, 1977: 70-185.

Crowley, Joan E. "Demographics of Alcohol Use Among Respondents of the 1982 National Longitudinal Survey of Labor Market Experience of Youth Panel." Mimeo, Center for Human Resource Research, 1984.

_____. "The Demographics of Alcohol Use Among Young Americans: Results from the 1983 National Longitudinal Survey of Labor Market Experience of Youth." Mimeo, Center for Human Resource Research, 1985.

Institute of Medicine. Alcoholism, Alcohol Abuse, and Related Problems: Opportunities for Research. Washington, DC: National Academy Press, 1980.

Radosevich, Marcia; Lonn Lanza-Kaduce; Ronald L. Akers; and Marvin D. Krohn. "The Sociology of Adolescent Drug and Drinking Behavior: A Review of the State of the Field: Part I." Deviant Behavior 1 (1979): 15-35.

_____. "The Sociology of Adolescent Drug and Drinking Behavior: A Review of the State of the Field: Part II." Deviant Behavior 1 (1980): 145-169.

Smart, R.G.; and G.F. Murray. "A Review of Trends in Alcohol and Canabis Use Among Young People." Bulletin on Narcotics 33,4 (1981): 77-90.

Appendix I: Mean Characteristics by Sex, Age and Interview Year

Table A1: Mean Number of Days Drank in the Previous Week, by Sex, Age and Interview Year

Age	Males			Females		
	1982	1983	1984	1982	1983	1984
17	0.79		--	0.43	--	--
18	1.15	1.11	--	0.77	0.74	--
19	1.60	.144	1.54	0.86	0.81	0.91
20	1.60	1.67	1.59	0.91	0.78	0.87
21	1.86	1.77	1.81	1.06	0.87	0.90
22	1.92	1.78	1.79	0.99	0.97	0.95
23	2.02	1.81	1.90	1.04	0.91	1.00
24	1.81	2.06	1.77	0.97	0.96	0.90
25	2.42	1.78	1.84	0.81	0.82	0.99
26	--	1.93	1.85	--	0.54	0.87
27	--	--	1.94	--	--	0.65

Table A2: Mean Number of Drinks in the Previous Week, by Sex, Age, and Interview Year

Age	Males			Females		
	1982	1983	1984	1982	1983	1984
17	4.42	--	--	1.34	--	--
18	6.29	5.80	--	2.82	2.92	--
19	8.70	7.81	9.24	2.88	2.93	3.99
20	9.04	8.79	9.42	3.54	2.36	4.19
21	10.06	8.30	10.06	3.95	3.05	3.51
22	10.36	8.33	9.65	3.48	3.41	4.00
23	10.01	8.10	9.78	3.72	2.87	3.83
24	8.44	8.73	8.71	2.97	2.93	3.48
25	12.10	7.26	9.45	2.28	2.25	3.28
26	--	9.84	8.63	--	1.49	2.64
27	--	--	8.87	--	--	1.75

Table A3: Mean Number of Drinks Per Day in the Previous Week, by Sex, Age and Interview Year

Age	Males			Females		
	1982	1983	1984	1982	1983	1984
17	2.21	--	--	0.80	--	--
18	2.55	2.61	--	1.37	1.42	--
19	3.33	3.07	3.10	1.44	1.36	1.71
20	3.41	3.28	3.29	1.73	1.35	1.63
21	3.51	3.06	3.37	2.03	1.73	1.61
22	3.80	3.08	3.08	1.78	1.62	1.72
23	3.53	2.89	3.14	1.79	1.41	1.57
24	3.22	3.11	2.95	1.48	1.56	1.38
25	3.84	2.70	3.18	1.13	1.19	1.27
26	--	3.11	2.82	--	0.79	1.18
27	--	--	3.10	--	--	0.93

APPENDIX 2

1984 Survey Instrument: Alcohol Use Section

SECTION 13: ALCOHOL USE

1. Next I'd like to ask you some questions about drinking alcoholic beverages, including beer, wine, and liquor. Have you ever had a drink of an alcoholic beverage?

Yes	1	41/
No ..... (SKIP TO Q.15)	0	

---

2. Have you had any alcoholic beverages, including beer, wine, or liquor, during the last 30 days?

Yes ..... (GO TO Q.3).....	1	42/
No ..... (ASK A AND B)	0	

A. Has drinking ever interfered with your school work?

Yes	1	43/
No	0	

B. Has drinking ever interfered with your work on a job?

Yes	1	44/
No	0	

SKIP TO Q.15

---

3. How often have you had 6 or more drinks on one occasion during the last 30 days? Would you say it was .... (READ CATEGORIES) .....?

HAND CARD JJ

10 or more times	6	45/
8 or 9 times	5	
6 or 7 times	4	
4 or 5 times	3	
2 or 3 times	2	
Once	1	
Never	0	

4. During the last 30 days, on how many days did you drink any alcoholic beverages, including beer, wine, or liquor?

ENTER # OF DAYS: |__|__| 46-47/

5. Of the (NUMBER OF DAYS IN Q. 4) days you mentioned, on how many of those days did you have only 1 drink? On how many of those days did you have only 2 drinks? (REPEAT QUESTION FOR ALL CATEGORIES AS NECESSARY)

HAND CARD KK

. . .only 1 drink?	ENTER # OF DAYS: |__|__|	48-49/
. . .only 2 drinks?	ENTER # OF DAYS: |__|__|	50-51/
. . .only 3 drinks?	ENTER # OF DAYS: |__|__|	52-53/
. . .only 4 drinks?	ENTER # OF DAYS: |__|__|	54-55/
. . .only 5 drinks?	ENTER # OF DAYS: |__|__|	56-57/
. . .6 or more drinks?	ENTER # OF DAYS: |__|__|	58-59/
	+	
TOTAL # OF DAYS =	|__|__|	60-61/

A. INTERVIEWER: DOES TOTAL # OF DAYS OF Q. 5 = # OF DAYS IN Q. 4?

YES..... 1

NO...(RECHECK Q.4 AND Q.5 WITH R).... 0

6. How often in the last 30 days did you go to bars, taverns, or cocktail lounges? Did you go ... (READ CATEGORIES) ...? (INTERVIEWER: DO NOT INCLUDE RESTAURANTS)

HAND CARD LL

Almost every day	5	62/
Several times a week	4	
Once or twice a week	3	
2-3 times during the month	2	
Once this month	1	
Never	0	

7. During the last 30 days, on how many days have you had a hangover that interfered with your activities the next day?

ENTER # OF DAYS: |__|__| 63-64/

Never 00

Next, I'd like some information about drinking alcoholic beverages, including beer, wine, and liquor, during the past week.

8. During the last seven days ending with yesterday, on how many days did you drink alcoholic beverages?

1 day	01	65-66/
2 days	02	
3 days	03	
4 days	04	
5 days	05	
6 days	06	
7 days	07	
None (SKIP TO Q. 12)	00	

---

9. During the last seven days, how many cans or bottles of beer did you have?

ENTER NUMBER OF CANS OR BOTTLES: |__|__| 67-68/

None 00

---

10. During the last seven days, how many glasses of wine did you have?

ENTER NUMBER OF GLASSES: |__|__| 69-70/

None 00

---

11. During the last seven days, how many drinks did you have containing liquor, such as whiskey, vodka, gin, brandy, etc.?

ENTER NUMBER OR DRINKS: |__|__| 71-72/

None 00

12. A. Has drinking ever interfered with your school work?

Yes 1 73/

No 0

B. Has drinking ever interfered with your work on a job?

Yes 1 74/

No 0

13. Now I would like to ask you some questions about experiences that many people have had with drinking. During the past year . . .

		YES	NO	
A.	Have you felt aggressive or cross while drinking?	1	0	75/
B.	Have you gotten into a heated argument while drinking?	1	0	76/
C.	Have you gotten into a fight while drinking?	1	0	77/
D.	Have you deliberately tried to cut down or quit drinking, but didn't manage to do so?	1	0	78/
E.	Were you afraid you might be an alcoholic or that you might become one?	1	0	79/
F.	Once you started drinking, was it difficult for you to stop before you became completely intoxicated?	1	BEGIN DECK 53 0	10/
G.	Have you awakened the next day not being able to remember things you had done while drinking?	1	0	11/
H.	Have you often taken a drink the first thing when you got up in the morning?	1	0	12/
I.	Have your hands shaken a lot the morning after drinking?	1	0	13/
J.	Have you sometimes gotten high or tight when drinking by yourself?	1	0	14/
K.	Have you sometimes kept on drinking after promising yourself not to?	1	0	15/

4. INTERVIEWER: HAS R WORKED IN THE PAST YEAR (HAVE LINES BEEN DRAWN IN ROWS A OR B OF THE CALENDAR)?

Yes ..... (ASK A-E) 1 16/

No ..... (GO TO Q.15) 0

A.	Have you stayed away from work because of a hangover?	1	0	17/
B.	Have you gotten high or tight when on the job?	1	0	18/
C.	Have you lost a job, or nearly lost one, because of drinking?	1	0	19/
D.	Has drinking led to your quitting a job?	1	0	20/
E.	Has drinking hurt your chances for promotion or raises or a better job?	1	0	21/

5. INTERVIEWER: WAS ANYONE ELSE PRESENT OTHER THAN SMALL CHILDREN WHEN YOU ASKED THE QUESTIONS IN SECTION 13?

YES 1 22/

NO 0

PHONE INTERVIEW 2

The Center has also been active in manpower planning both in the U.S. and in the developing countries. A project for the Ohio Advisory Council for Vocational Education identified the highly fragmented institutions and agencies which supply vocational and technical training in Ohio. Subsequent projects for the Ohio Occupational Information Coordinating Committee have followed graduates of these programs. These data and information on occupational distributions of employers collected for the Occupational Employment Statistics Program are being integrated into a comprehensive planning model which will be accessible to trainees and employers and linked to a national network.

Another focus of the Center's research is industrial relations and collective bargaining. In a project for the U.S. Department of Labor, staff members are working with unions and management in a variety of industries to evaluate several current experiments for expedited grievance procedures. The procedural adequacies, safeguards for due process, and cost and timing of the new procedure are being weighed against traditional arbitration techniques.

Senior staff also serve as consultants to many boards and commissions at the national and state level. Recently the Center's staff have produced papers and prepared testimony for the Department of Labor, the Vice President's Task Force on Youth Unemployment, the Joint Economic Committee of Congress, the National Commission for Employment and Unemployment Statistics, the National Commission for Employment Policy, the White House Conference on the Family, the Ohio Department of Corrections, the Ohio Board of Regents, the Ohio Governor's Task Force on Health, and the Ohio Governor's Task Force on Welfare.

The Center maintains a working library of approximately 10,000 titles, including a wide range of reference works and current periodicals, as well as an extensive microfilm and microfiche collection. Through their facilities linked to the University computer, the Center's data processing staff provide statistical, technical, and programming support both for in-house researchers and the over 250 users of the National Longitudinal Surveys data tapes. They maintain the NLS tapes, data base, documentation, and associated software.

For information on specific Center activities, write: Director, Center for Human Resource Research, 5701 North High Street, Worthington, Ohio 43085.

OSU

The Ohio State University

The Center for Human Resource Research
5701 North High Street
Worthington, Ohio 43085

Center for Human Resource Research

The Center for Human Resource Research is a policy-oriented multidisciplinary research organization affiliated with The Ohio State University. Established in 1965, the Center is concerned with a wide range of contemporary problems related to developing and conserving human resources. Its more than thirty senior staff members come from disciplines including economics, education, English, health sciences, industrial relations, management science, psychology, public administration, social work, and sociology. This multidisciplinary team is supported by approximately 70 graduate research associates, full-time research assistants, computer programmers, and other personnel.

The Center has become preeminent in the fields of labor market research and manpower planning. With continuing support from the United States Department of Labor, the Center has been responsible since 1965 for the National Longitudinal Surveys of Labor Market Experience. Staff have assisted in population and human resource planning throughout the world, having conducted major studies in Bolivia, Ecuador, Kenya, Sierra Leone, Venezuela, and Zaire. At the request of the National Science Foundation, a review of the state of the art in human resource planning was conducted. Other studies have assessed the impact of labor and education policy on labor supply and evaluated employment statistics collection methods. Senior personnel are also engaged in several other areas of research—collective bargaining and labor relations, evaluation and monitoring of the operation of government employment and training programs, and the projection of health education and facility needs.

The Center for Human Resource Research has received over two million dollars annually from government agencies and private foundations to support its research in recent years. Providing support have been the U.S. Departments of Labor, State, Defense, Education, Health and Human Services; Ohio's Health and Education Departments and Bureau of Employment Services; the Ohio cities of Columbus and Springfield; the Ohio AFL-CIO; the George Gund Foundation; the Rockefeller Foundation; and the Ford Foundation. The breadth of the Center's research interests is best illustrated by a brief review of a few of its current projects.

The Center's largest project is the National Longitudinal Surveys of Labor Market Experience. This project has involved repeated interviews over a fifteen-year period with four groups of the United States population: older men, middle-aged women, and young men and women. The data are collected for 20,000 individuals by the U.S. Bureau of the Census, and the center is responsible for data analysis. Since 1979, the NLS has followed an additional cohort of 13,000 young men and women between the ages of 14 and 21. This cohort includes for the first time those serving in the armed forces at the time of the initial interview. In addition to being the definitive U.S. national data set on the labor market activities of young adults, this continuing survey includes unique batteries of questions on such socially important issues as delinquency, alcohol and drug use, fertility, and prenatal care. For this cohort, field work is handled by the National Opinion Research Center. To date the Center's staff have prepared dozens of research monographs, special reports, and books on the NLS, and they also prepare and distribute data tapes for public use.

The Quality of Work Life Project, another ongoing study, began in 1975 as an attempt to improve the productivity and the meaningfulness of work for public employees in the cities of Springfield and Columbus. Center staff also served as third party advisers and researchers exploring new techniques for attainment of management-worker cooperation and worker health in a number of central Ohio private sector industries.

(Continued on inside back cover)