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AUTHOR Dewalt, Mark W.
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ABSTRACT

A study was done of the relationship between the use of tobacco, alcohol, and other drugs, and participation in youth groups that emphasize moral values. The study used data from the National Education Longitudinal Study of 1988 (NELS:88) and the 1990 follow-up of the same students and parents. The NELS:88 and 1990 data contain student, school, teacher, and parent surveys and test scores of a nationally representative sample of 24,599 eighth-grade students in 1,035 schools. A null hypothesis that youth group participation, number of television viewing hours, lack of parents in the home when children return from school, knowing the parents of a child's best friend, socioeconomic status, and locus of control were not related to students' smoking behavior was tested using a multiple regression analysis with a two-stage stratified sample probability design. Results of the analysis show that participants in scouting, boys' clubs, girls' clubs, 4-H, or Young Men's Christian Association were more likely to use cigarettes than were non-participating peers, although the positive relationship was very small. In addition, the results show that participation in religious youth groups was related to lower substance abuse, and that non-participants in religious groups were more likely to smoke cigarettes. Included are 13 tables and 26 references. (JB)

The Relationship Between Youth Group Participation and Use of Tobacco and Drugs

Mark W. Dewalt
Assistant Professor of Education
Lenoir-Rhyne College

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The Relationship Between Youth Group Participation and Use of Tobacco and Drugs

Introduction

The objective of the study was to look at the relationship between participation in youth groups which emphasize moral values and use of tobacco, alcohol and other drugs. The data source was the National Educational Longitudinal Study 1988 (NELS.88) and the 1990 follow up of the same students and parents (Ingels et al., 1990). The NELS:88 and 90 data source contain student, school, teacher, and parent surveys and test scores of a nationally representative sample of 24,599 students in 1,035 schools.

Framework

One of the major concerns of public school parents in the United States is drug abuse (Elam, 1990). This concern is not without merit because the United States has the highest rates of adolescent drug abuse of any industrialized nation (American Association of School Administrators, 1985). The reasons for the drug-abuse problem are multi-facted -- peer pressure, easy availability, poor role models, and school failure to name a few. Smoking and drug abuse have been the focus of numerous studies during recent years. Several of those studies will be reviewed in the following pages.

Researchers such as Jessor and Jessor (1975); Moos, Moos and Kulik (1976) and (1977) have reported that less religiously oriented students are more likely to start drinking earlier and to drink more than their less religious counterparts. Research by

Weschler and McFadden 1979) indicated that Jewish-American college students have the highest rates of drinking but the lowest rates of alcohol abuse. The researchers theorize that the Jewish religion and culture have served to internalize norms that social drinking is permissable but abuse is not.

Cahalen (1970) indicated that those who are more religious drink less with Catholics having the highest drinking rate when one controls for church attendance. Other researchers such as Jessor (1976) and Wechshler & McFadden (1979) have shown that church going behavior is inversley related to substance abuse. Furhtermore, Gersick et al. (1981) have shown that the more religious the person is the less likely she/he will use alcohol or other drugs.

More recent research concerning the relationship between religion, alcohol and sex was conducted at the University of Maryland with a representative sample of 376 students (Patterson, and Sedlacek, 1983). Each student completed a questionnaire concerning their attitudes towards alcohol, sex, and religion. Reponses to the items were factor analyzed and produced eight factors. Factor three was named a religiousity factor. Those who scored high on the factor felt religion was important in their life and tended to not use alcohol.

Research conducted by Mills and Noyes (1984) indicated that smoking and drinking often coincide with one another. Their research also indicated that drug use is sequential and additive; once a person becomes dependent on a new drug they do not abandon the previously used drugs.

Similarly, Welt and Bonner (1987) and Yamaguchi and Kent (1984) found that alcohol use usually precedes the use of other drugs such as marijuana, cocaine, and heroin. The researchers also found that cigarette smoking often precedes the use of harder drugs.

More recent research on attittudes and peer behavior and how they impact smoking, alcohol and drug use was conducted by Grube and Morgan (1990). The sample was composed of 2,782 students in Dublin, Ireland ages 12 - 18. The researchers collected data on three different occasions over the course of one year. Results indicated that smoking, drinking and drug use were most prevalent when both the student's attitude and the student's perceived social support to that activity were favorable. The predictions were for established patterns and should not be interpreted as factors which cause drug use. Perceived behavior of peers was more predictive of behavior than perceived disapproval by parents and perceived behavior of parents. The researchers theorized that students may seek out friends with similar attitudes after they start smoking, drinking or using drugs.

Research by Thorlindsson and Vilhjalmsson (1991), validated previous research on individual and social factors related to both smoking and alcohol use. The study, which was conducted in Iceland, used a nationwide random sample of 1,200 9th graders to complete a questionnaire. Results were similar to previous findings; students who were interested in school, liked outdoor activities or felt emotionally supported by their parents were less likely to use alcohol or tobacco. There was also a strong

relationship between alcohol use and cigarette smolking (r=.48). It was also found that adolescent drug users almost always reported using alcohol and cigarettes; 95% of those who had used drugs had used alcohol and 92% had used cigarettes. This study gives cross-cultural validation to studies with similar findings in the United States.

Research by Johnson and Pandina (1991) also found that parental warmth was positively related to a child's choice to not use alcohol. Further, in this longitudinal study of 1,380 middle class subjects (ages 9, 12, 15) in New Jersey, the authors found that parental lack of warmth, alcohol use, and tolerance for alcohol use were predictors of drug use in their children. Finally, in most instances, the same gender parent showed the highest positive correlation for a younger child's alcohol use.

An evaluation of the Midwestern Prevention Project (MPP) as implemented with adolescents in Kansas City and Indianapolis showed that school based programs can reduce rates of cigarette smoking and marijuana use (Johnson, C., et al., 1990). The MPP is composed of (a) a 10 session program of drug-resistent skills for students, (b) a parent program, (c) training for leaders of a community task force, and (d) mass media coverage. Participants in the program were compared with a control group of students. While the project did reduce the rate of increase of tobacco and marijuana use by students in the program, it did not reduce alcohol use.

Another school based program which has shown positive results is the Life Skills Training (LST) Program as documented

by Botvin et al. (1990). The LST curriculum equips students with the skills, knowledge, attitudes and expectations to refuse substances. It also promotes the development of interpersonal characteristics associated with reduced substance abuse. The sample of students in the control and experimental condition were 4,466 students in 56 schools in the state of New York. The LST program had a positive effect on cigarette and marijuana use and frequency of drunkeness. It did not have an effect on drinking frequency. The LST program had no effect on personality variables. The authors suggested that future research addres the tendency of substance abusers to drop out of school prevention programs.

Finally, Korzenny, McClure and Rzyttki (1990) studied the effects of televiewing and drug use in different ethnic groups. They found that exposure to family-oriented shows correlated with consevative attitudes towards drug use among Whites. The exposure to certain action/adventure programs correlated with lax attitudes towards drug dealers and was associated with excperimentation in life among Blacks. Exposure to televised sports was positively related to cocaine consumption among Whites and Asians.

Methodology

The null hypothesis for the study was: Youth group participation, number of televiewing hours per weekday, no one is home when the child returns from school, parents know the parents of their child's best friend, socioeconomic status and locus of control are not related to smoking behavior. The hypothesis was tested using multiple regression analysis using the Nels.88 and

90 data as collected by the National Center for Educational Statistics (NCES) (Ingels, et al., 1990). The Nels.88 data was a profile of the nation's eighth grade population, and was composed of a student survey, school survey, parent survey, teacher survey and student academic achievement data. The Nels.90 data was a follow-up of the same students two years later.

A two-stage stratified sample probability design was used by NCES to select a nationally representative sample of schools and students. The first stage resulted in 1,734 schools being selected; 1,052 of these schools agreed to participate. The sample included 815 public schools and 237 private schools. The second stage was a random selection of 26,435 students of whom 24,599 agreed to participate. Each school was represented by about 24 students. (Ingels, et al., 1990).

The researcher used the data sets supplied by NCES to undertake the analysis of selected variables. The student sample was composed of 3.6% Asian students, 4.2% American Indian students, 10.4% Hispanic students, 13.2% Black students, and 68.6% White students. Because the data sets contain so many variables, the variables of interest were drawn from the parent and student data sets and used to create a data set which contained these variables only. The following variables from the NELS.88 Student Component Data File were selected for analysis: BYS43 Number of Cigarettes smoked per day, (b) BYS83A Participated in scouting, (c) BYS83B participated in religious youth groups, (d) BYS83E participated in boys' or girls' club, (e) BYS83G participated in 4-H, (f) BYS83H particpated in Y or

other youth groups, (g) BYSES Socio-economic status, (h) BYPARED parents' highest education, (i) BYLOCUS1 locus of control, and (j) BYS42A number of hours student watches TV on weekdays. The frequencies of each of the above variables as well as the statment from the NELS.88 Student questionnaire that elicited the response are found in Tables 3 - 8. The following variables from the NELS.88 Parent component data file were selected for analysis: (a) BYP62B1 respondent knows parent(s) of child's 1st friend, and (b) BYP72H no one is home when the child returns from school. The frequencies of each of these variables as well as the statement that elicited the response are found in Tables 1 - 2.

Data obtained from the student file and the parent file was then merged using the student identifcation variable. Frequencies and descriptive statistics were then obtained to check the accuracy of the merged data before the multiple regression analysis was completed.

As can be seen in Tables 5 - 9, when the students responded to questions that related to youth group participation, the students could respond with "did not participate," "participated as a member," or "participated as an officer." The researcher recoded the "participated as an officer" to "participated as a member" because the intent of the analysis was study the effects of membership. It should be noted that a weighting variable was used in the analysis of the NELS.88 data. The weight variable (BYQWT) is a variable which multiplies a student's response by the school's design weight.

The first multiple regression analysis used the the five participation variables, number of hours of TV watched

per day, locus of control, socioeconomic status, parent education, the respondent knows the parents of tbe child's first friend, to predict self-reported smoking behavior. Possible student responses to the question "How many cigarettes do you usually smoke a day?" were "I don't smoke," "1 to 5 cigarettes per day," about 1/2 pack a day," more than 1/2 pack but less than 2 packs per day," and "two packs a day or more."

The self-reported alcohol and drug use variable was obtained from the NELS.90 data, thus variables collected in 1988 were used in conjunction with data from 1990.

Results

The results of the forward multiple regression analysis are found in Table 12. Because of the large data set all variables entered into the prediction equation were significant however, because of the very small increase in the Multiple R after the second step, only data for the first two steps in the regression analysis was included. Hours of televiewing per weekday was sleceted by the computer for entrance into the prediction equation at the first step with a Multiple R of .27436 and R square of .07527. Participation in a religious youth group entered the equation second and increased the Multiple R to

Table 11 indicates the Crosstabs analysis of participation in a religious youth group and smoking behavior. It is important to note that the relationship is an inverse one, with those not participating more likely to smoke cigarettes. Furthermore the correlation between smoking and religious youth group

participation was -.0448 p= .000. Correlations between each youth group variable and smoking are found in Table 13.

It is interesting to note that participants in scouting, boy's clubs, girls' clubs, 4-H, or the Y were more likely to use cigarettes than their non-participating peers, however this positive relationship is very small with coefficients of determination in each case of less than .04 of 1%.

Discussion

The reults from this study are similar to those of researchers such as Jessor and Jessor (1975), Moos, Moos and Kulik, (1976) & (1977), Cahalen (1970), Wechsler & McFadden (1979) and Gersick et al., (1981). In each of these cases religious participation was related to lower substance abuse.

The findings of this research is also important because previous researchers such as Welt and Bonner (1987) and Yamuguchi and Kent (1984) have found that smoking usually precedes the use of other drugs. Thus efforts to reduce drug use will be helped by programs which reduce the incidence of smoking.

Tobacco, alcohol and drug use and abuse are prevalent in every segment of our society. The fact that reduced smoking behavior has an inverse correlation with religious youth group participation will help parents and community leaders in their efforts to reduce tobacco and drug use among youth. However, religious leaders need to be concerned about the small relationship that is represented by the above correlation. It means that religious groups must do a better job of educating their youth groups on the perils of alcohol and drug use including cigarettes.

However, religious programs are only one small part of an effective school and community prevention program. Drug abuse is a multi-faceted problem; parents, schools, and communities must include a variety of prevention programs to meet the needs of a variety of students. These programs may take the from of peer leadership programs, alternative activities, drug education, participation in youth groups that emphasize moral values, and the DARE program.

References

American Association of School Administrators. (1985). Positive prevention: Successful approaches to preventing youthful drug and alcohol use. Arlington VA: Author

Botvin, G., Baker, E., Dusenbury, L. Tortu, S., & Botvin, E. (1990). Preventing adolescent drug abuse through a multimodal cognitive-behavioral approach: Results of a 3-yea study. Journal of Consulting and Clinical Psychology 58, 437-446.

Cahalen. D. (1970). Problem Drinkers: A National Survey. San Francisco: Jossey-Bass.

Elam, S. (1990). Gallop poll of the public's attitudes toward the public schools. Phi Delta Kappan. 72(1). 41-55.

Elder, J., Molgaard, C., & Gresham, L. (1988). Smoking and the multiethnic school population. Adolescence. 23(91).

Gersick, K., Grady, K., Sexton, E., & Lyons, M. (1982). Personality and sociodemographic factors in adolescent drug use. In D. Lettieri & J. Ludford (Eds.), Drug Abuse and the American Adolescent. (Publication # (ADM) 81-1166). Rockville MD: National Institute on Drug Abuse.

Grube, J. & Morgan, M. (1990). Attitude-social support interactions: Contingent consistency efforts in the prediction of adolescent smoking, drinking, and drug use. Social Psychology Quarterly, 53(4) 329-339.

Hyphantis, T. et. al. (1991). Alcohol and drug use, family situation and school performance in adolescent children of alcoholics. International Journal of Social Psychiatry. 37 35-42.

Ingels, S., Abraham, S., Rasinski, K., Karr, R., Spencer, B., Frankel M., & Owings, J. (1990). National Education Longitudinal Study of 1988 [Machine-readable data file]. Washington DC: U.S. Department of Education, Office of Educational Research and Improvement.

Ingels, S., Abraham, S., Rasinski, K., Karr, R., Spencer, B., Frankel M., & Owings, J. (1990). National Education Longitudinal Study of 1988 User's Manual. Washington DC: U.S. Department of Education, Office of Educational Research and Improvement.

Johnson, C., Pentz, M., Weber, M., Dwyer, J., Baer, N., MacKinnon, D., Hanson, W. & Flay, B. (1990). Relative effectiveness of comprehrnsive community programming for drug abuse prevention with high-risk and low-risk adolescents. Journal of Consulting and Clinical Psychology, 58, 447-456.

Johnson, V. & Pandina, R. (1991). Effects of the family environment on adolescent substance use, delinquency, and coping styles. American Journal of Drug and Alcohol Abuse, 17, 71-88.

Jessor, R. & Jessor, S. (1975). Adolescent development and the onset of drinking: A longitudinal study. Quarterly Journal of Studies on Alcohol, 36, 27-51.

Jessor, R. (1976). Predicting time of onset of marijuana use: A developmental study of high school youth. Journal of Consulting and Clinical Psychology, 44, 1125-1134.

Korzenny, F., McClure, J., & Rzyttki, B. (1990). Ethnicity, communication, and drugs. The Journal of Drug Issues, 20, 87-98.

Mills, C. & Noyes, H. (1984). Patterns and correlates of initial and subsequent drug use among adolescents. Journal of Consulting and Clinical Psychology, 52, 231-243.

Moss, R., Moss, B., & Kulik, J. (1976). College student abstainers, moderate drinkers and heavy drinkers: A comparative analysis. Journal of Youth and Adolescence, 5, 345-360.

Moss, R., Moss, B., & Kulik, J. (1977). Behavioral and self-concept antecedents and correlates of college student drinking patterns. Journal of Addictions, 12, 603-615.

Patterson, A. & Sedlacek, W. (1983). Dimensions underlying student perceptions of religion, sex, and alcohol: Male and female differences. (Report No. 5-83). College Park MD: U. of Maryland, Counseling Center. (ERIC Document Reproduction Service No. ED 248 441).

Rhodes, J., & Jason., L. (1990). A social stress model of substance abuse. Journal of Consulting and Clinical Psychology, 58, 395-401.

Sarvella, P. & McClendon, E. (1985). Correlates of youth drug use in rural northern Michigan and northeastern Wisconsin. Paper presented at the Annual Meeting of the American Public Health Association. Washington D.C. (ERIC Document Reproduction Service No. ED 270 702)

Thorlindsson, T. & Vilhjalmsson, R. (1991). Factors related to cigarette smoking and alcohol use among adolescents. Adolescence, 26(102), 399-419.

Welte, J. & Barnes, G. (1987). Youthful smoking: Patterns and relationships to alcohol and other drug use. Journal of Adolescence, 10, 327-340.

Weschler, H. & Mcfadden, M. (1979). Drinking among college students in New England. Journal of Studies on Alcoholism, 40, 969-996.

Yamaguchi, K. & Kandel, D. (1984). Patterns of drug use from adolescence to young adulthood: III Predictors of progression, American Journal of Public Health, 74, 673-681.

Yamaguchi, K. & Kandel, D. (1985). On the resolution of role incompatibility: A life event history analysis of family roles and marijuana use. American Journal of Sociology. 90. 1283-1325.

Table 1

BYP62B, Respondents' answers to the question, I know the parents of my child's first friend.

Response	Frequency	%	Weighted %
Yes	16326	72.1%	84.2%
No	3128	13.8%	15.8%
Missing	1098	4.8%	(MISS)
Legitimate skip	2099	9.3%	(MISS)

Table 2

BYP72H, Responses to the statement, No one is home when child returns from school.

Response	Frequency	%	Weighted %
Usually	2063	9.1%	10.2%
Sometimes	2936	13.0%	14.3%
Rarely	6909	30.5%	33.9%
Never	8973	39.2%	41.6%
Missing	1860	8.2%	(MISS)

Table 3

BYS42A, Replies to the question, During the school year, how many hours a day do you USUALLY watch TV on weekdays?

Response	Frequency	%	Weighted %
Dont't watch TV	825	3.4%	3.0%
Less than 1 hour a day	2016	8.2%	8.2%
1-2 hours	5067	20.6%	22.4%
2-3 hours	4940	20.1%	23.0%
3-4	3826	15.6%	18.0%
4-5	2529	10.3%	11.8%
over 5 hours a day	2837	11.5%	13.6%
Multiple response	1786	7.3%	(MISS)
Missing	771	3.1%	(MISS)

Table 4

BYS43, Responses to the question, How many cigarettes do you usually smoke a day?

Response	Frequency	%	Weighted %
I don't smoke	22547	91.7%	93.3%
1 to 5 cigarettes	916	3.7%	3.9%
About 1/2 pack	345	1.4%	1.6%
1/2 to les than 2 packs	182	.7%	.8%
2 packs or more	90	.4%	.4%
Missing	519	2.1%	(MISS)

Tables 5-9 are student responses to the question: "Have you or will you have participated in any of the following outside-school activities thie year, either as a member or as an officer?

Table 5

BYS83A, Participated in scouting

Response	Frequency	%	Weighted %
Did not participate	19147	77.8%	85.8%
As a member	2614	10.6%	11.9%
As an officer	492	2.0%	2.3%
Multiple response	20	.1%	(MISS)
Missing	2326	9.5%	(MISS)

Table 6

BYS83B, Participated in religious youth group

Response	Frequency	%	Weighted %
Did not participate	14898	60.6%	66.2%
As a member	6747	27.4%	31.2%
As an officer	568	2.3%	2.6%
Multiple response	35	.1%	(MISS)
Missing	2351	9.6%	(MISS)

Table 7

BYS83E, Participated in boys' or girls' clubs

Response	Frequency	%	Weighted %
Did not participate	19744	80.3%	89.3%
As a member	2090	8.5%	9.6%
As an officer	232	.9%	1.1%
Multiple response	49	.2%	(MISS)
Missing	2484	10.1%	(MISS)

Table 8

BYS83G, Participated in 4-H

Response	Frequency	%	Weighted %
Did not participate	20116	81.8%	90.7%
As a member	1470	6.0%	7.4%
As an officer	376	1.5%	1.9%
Multiple response	54	.2%	(MISS)
Missing	2583	10.5%	(MISS)

Table 9

BYS83H, Participated in Y or other youth groups

Response	Frequency	%	Weighted %
Did not participate	18509	75.2%	84.7%
As a member	3091	12.6%	14.1%
As an officer	241	1.0%	1.2%
Multiple response	25	.1%	(MISS)
Missing	2733	11.1%	(MISS)

Table 10

BYPARED, Parents' highest education level

Response	Frequency	%	Weighted %
Did not finish H.S.	2537	10.3%	10.4%
H.S. grad or GED	4625	18.8%	20.6%
H.S. grad less than 4 year degree	9586	39.0%	41.4%
College Grad	3654	14.9%	14.0%
M.A. or eqyivalent	2254	9.2%	8.1%
Ph.D. or M.D.	1432	5.8%	4.0%
Don't know	478	1.9%	1.5%

Table 11

Crosstabulation of participation in a religious youth group and smoking behavior

Number of cigarettes per day	No Participation %	Participated %
None	90.5%	94.7%
1 to 5	4.4%	2.7%
6 to 1/2 pack	2.0%	.4%
1/2 pack to 2 packs	1.0%	.4%
More than 2 packs	.4%	.2%

Table 12

Regression analysis predicting smoking behavior after step 2 using for the forward method

Multiple R	.27643	Adjusted R square	.07641
R Square	.07641	Standard Error	1.01285

Analysis of Variance Signif. F= .0000

Variables in the Equation

Variable	B	SE B	Beta	T	Sig. T
BYS42A	.010567	2.3828E-05	.272137	443.459	.0000
BYS83B	-.075124	.001364	-.033795	-55.082	.0000
(Constant)	.193847	.001975		98.167	.0000

BYS42A= Number of hour of TV watched during a weekday
BYS83B= Participation in a religious youth group

Table 13

Correlations between Youth Group Variables and Smoking

Participation in	Correlation	p
Scouting	.0220	.000
Religious	-.0448	.000
Boy's/Girls' Club	.0267	.000
4-H	.0150	.000
Y or other youth group	.0136	.000