

CORRELATES OF EXPECTED USE OF TOBACCO AND ALCOHOL AMONG SECONDARY SCHOOL STUDENTS: IMPLICATIONS FOR HEALTH EDUCATORS

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Abstract

The article reports the results of the study undertaken as part of a statewide drug education effort. Factors have been identified that relate to expected use of alcohol and tobacco among secondary school students. It is believed that the findings of the study lend support to the concept of drug education at the secondary school level, particularly a programme that reinforces non-abusive attitudes and develops decision making skills

In today's society, there is a growing social trend towards encouraging and rewarding mature behaviour of every younger member of the population. Our youths mature physically at a younger age and the adult populace demand corresponding matured emotional and social development and behaviour. The children are raised in a milieu of drug acceptance by society. Many young people regularly use drugs or substances containing drugs for medical or recreational purposes. The misuse and abuse of drugs is a major problem cutting across all segments of society, affecting all age groups, including the elderly and children of elementary school age. Though widely accepted, two of the most dangerous drugs in our society are tobacco and alcohol.

The chances are good that children see these products used in their homes by their parents or significant others. These same adults explain to the young that these behaviours, tobacco and alcohol use, are not to be engaged in until the children have grown up. There is evidence that these signals are not enough deterrent to stop young people from at least, trying if not starting regular use of these drugs (Young & Foulk, 2005). An example of this phenomenon is the report that 50 percent of our adolescents have indicated that they had at least one alcoholic drink in the previous year (Rachal, Williams, Brehim, 1997). The National Institute of Alcohol Abuse and Alcoholism has estimated that 19 percent of the adolescents are problem drinkers, while statistics indicate that fewer people are taking up smoking.

It is pertinent therefore, that before health professionals can cure a disease, there is need for adequate research. They must understand the relationship of the host, agent and environment, they must know the natural history of the disease, but most importantly, they must know the etiology of the disease. Once answers to these questions have been found they begin to preventively treat people for that disease. Given that tobacco and alcohol use are societal problems that are being manifested at a very younger age groups, this study attempts to identify factors related to expected use of tobacco and alcohol among secondary school students. It is hoped that some of these findings may be helpful in designing effective preventive strategies that would with alcohol and tobacco use among our youth.

Method

Subjects for the study were 756 Junior Secondary School 1 (JSS1), Junior Secondary School 11 (JSS 11) and Senior Secondary School 111 (SSS 111) students from nine different schools drawn from the three senatorial districts of Akwa Ibom State. Some senatorial districts included students from urban populations and other senatorial districts were quite rural. A few schools had students populations comprised almost entirely of students from stable backgrounds and other schools had student population that was highly transient. Of the nine schools, four were public and other five private.

Procedures

An interview schedule was prepared and made use of. Each student was interviewed individually and responses were recorded on audio-tape. In addition to general background data, and questions concerning self esteem, each student was asked questions about tobacco and alcohol products. This method was adapted from (Shute, St. Pierre, Lubell, 2001). (a) Do you recognize the items pictured? (For tobacco the students were shown a picture which includes various tobacco products such as cigarettes cigars, and pipes. For alcohol they were shown a picture which included several types of alcoholic beverages including beer, wine, and distilled spirits. (b) Do you know some one who uses these types of products? (c) Do you use or have you used these types of products? (d) Do you expect you will use these types of product in future? (e) Have you seen these types of products used at home?

In an attempt to identify the correlates of expected future use of tobacco and alcohol, the SPSS subprogram me “Crosstabs” (Nie, Hull, Jenkins, 1975) was used to analyze the data in a series of contingency tables. The alpha level was set at .05. For analysis, answers to question 4, expected use, were classified into three categories: yes, no and all other responses (e.g. “I do not know” and “maybe”). Answers to the other questions were either “yes or no”

Results

Presentation of the result is in two parts. Results concerning tobacco are presented first, followed by a presentation of results concerning alcohol.

Tobacco

Of the 748 students for whom data concerning expected future use were available, 42 (5.60%) indicated they plan to use tobacco in future. 36 (5.20%) were unsure and 667 (89.20%) did not expect they would use tobacco in future. There was near universal recognition of tobacco products (735 or 98.30%). Even among JSSI more than 96% of them recognized tobacco products. Only 33 students (4.40%) indicated that they currently use or had used this type of product and 443 (60.40%) indicated they had seen tobacco products used in their homes. Find summary on table 1 below

Table 1

Summary of Findings Concerning Tobacco by Grade Level

Variable	JSS1	JSS3	SSS111
Product recognition	201/210 (95.70%)	226/229(98.70%)	260/261(99.60%)

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Knows a user	171/209(81.80%)	176/228(77.20%)	231/261(88.50%)
Uses or has used	13/207 (6.30%)	6/228 (2.60%)	11/261(4.20%)
Expects to use (or is unsure)	36/207 (17.40%)	11/228(4.80%)	27/261(10.30%)
Have seen used at home	135/206 (65.50%)	123/221(55.70%)	151/257(58.80%)

Reasons for Expected Use

Of the students who indicated they were unsure or expected to use tobacco, most (75% and 78.80% respectively) indicated they did not know why they expected to use (or why they might use) tobacco. The second most frequent response given by those who expected to smoke as a modeling type of reason. (Example: “It’s okay when you grow up” and “Dad smoke”). Among those who said they did not expect to use tobacco (12.50%), the most frequently given reason for non use were: (a) health reasons (64.20%) such as “ It will give you cancer”, “It’s bad for your health”, (b) could not give a reason “I don’t know” or “I do not want to” (16.70%), (c) aesthetic reasons (10.30%) such as “It stinks”, “Its really unpleasant”, (d) moral reasons (4.60%) such as “It’s wrong”, “God doesn’t want me to”, or (e) modeling (2.80%) “My parents do not smoke”.

Table 2
Association between Expected Use of Tobacco and Relevant Factors

Factor	Chi-square	df	Probability	N
Class Level	29.45	4	<.001	697
Whether student lives with both parents	15.33	2	<.001	548
Personal use	25.04	2	<.001	746
Have seen used in the home	18.51	2	<.001	733
Expected use of alcohol	143.73	4	<.001	729

Correlates for Expected Use

Data on table 2 shows that the result of the contingency table analysis yielded significant (p <.05) chi-square values for expected use of tobacco and (a) grade in school (b) personal use, (c) having seen the product used at home and (d) expected use of alcohol. “One of the strongest influences on teenage smoking is the family’s smoking habits. Adolescents are most likely to start smoking if one or both parents or an older brother or sister smokes. The chances are great that that an adolescent will smoke if one or both parents do not live at home”. (Smoking Tobacco and Health, 1997). Data were further analyzed controlling first for class level and then for whether the child lived with both parents. The following were the significant correlates of expected use of tobacco: (a) Class level in school was significant when the student did not live with both parents, (b) Personal use was found to be significant at JSS1 and SS11 levels and also when the child did not live with both parents, (c) having seen the product at home was significant at JSS1 and SS11 class levels, and, (d) expected use of alcohol was significant regardless of whether the child lived with both parents.

Alcohol

Of the 730 students for whom data concerning expected use of alcohol were available, 63 (8.60%) indicated they plan to use alcohol in the future, 32 (16.10%) were unsure, and 625 (85.60%) did not expect that they would use alcohol. Alcohol was recognized by 676 (92.60%) of the students, and 438 (60.10%) of the students indicated they knew someone who used alcohol. 69 students or (9.50%) indicated that they currently use or have used this type of product; 267 (37.10%) indicated they had seen alcoholic beverages used in their home. Table 3 below shows a summary of the findings by class level.

Table 3

Summary of Findings Concerning Alcohol by Class Level

Variable	JSS1	JSS3	SSS111
Product recognition	169/199(84.90%)	215/244(96.00%)	241/253(95.30%)
Knows a user	124/199(62.30%)	123/266(50.00%)	156/252(61.90%)
Uses or has used	30/197(15.30%)	16/233(7.20%)	14/251(5.60%)
Expects to use (or is unsure)	47/199(23.60%)	29/226(12.90%)	16/254(6.30%)
Have seen used at home	99/195(50.80%)	70/219(32.00%)	74/254(29.10%)

Reasons for Expected Use

Of the students who indicated they expected to use alcohol, or were unsure, more than half of each case (0.80% and 5.7% respectively) indicated they did not know why they expected to use (or why they might use) alcohol. The second most frequent response given by those who expected to drink was modeling reason (32.80%). The expression of modeling as a motivation for use is not unexpected given the findings of Hennecke and Gitlow, 1993). This literature shows that the abstaining teenager comes from an abstaining home, the moderate drinking teenager from a home of moderate drinking parents, while the heavy drinker teenager most often, come from homes with parents who are heavy drinkers.

Among those who said they did not expect to use alcohol, the most frequently given reasons for nonuse were: (a) health reasons (51.5%) (b) could give no reason (19.90%), (c) aesthetic reasons (19.10%), (d) moral reasons (5.80%), and (e) modeling reasons (3.4%)

Correlates of Expected Use

Results of the contingency table analysis yielded significant($p < .05$) chi-square values for expected use of alcohol and (a) class leveling school, (b) whether the student lived with both parents, (c) personal use, (d) whether the student knew a user, and (e) whether the student had seen alcohol used at home. These results are presented in table 4 below

Table 4
Association between Expected Use of Alcohol and Relevant Factors

Factor	Chi-square	df	Probability	N
Class Level	28.88	4	<.001	679
Whether student lives with both parents 1	6.73	2	.035	530
Knows a user	36.47	2	<.001	729
Personal use	132.77	2	<.001	723
Have seen used in the home	80.63	2	<.001	720

With regards to these findings, the data were further analyzed first for class level and then for whether the student lived with both parents. The following were found significant correlates for alcohol: (a) class level was significant when the student did not live with both parents, (b) knowing a user was significant regardless of either class level or whether the student lived with both parents, (c) personal use was significant at JSS1 and JSS111 and regardless of whether the student lived with both parents, (d) whether the student had seen the product used at home was significant at JSS1 and JSS111 (nearly so at SS 11, $p = .058$) and regardless of whether the student lived with both parents.

Discussion

The results of the study raised a number of interesting points. Those having the greatest relevance for health education seem to be the following:

- a) There was universal product recognition. Even among JSS1 students 98.30% of the students indicated recognition of tobacco and 84.90% recognized alcohol.
- b) A significant number of children (60.40% for tobacco and 37.10% for alcohol) reported seeing these products used at home. Having seen the products used at home was a statistically significant factor in the expected use of tobacco and alcohol. This result seem to point out what we really knew already, modelling in the home does not play a major role in determination of tobacco and alcohol use.
- c) Are these types of self-report data concerning expected use valid with young students? If these data are valid, what do the results mean? Work by Shute, Pierre and Lubell (1981) with young children seems to indicate that self-reported data is valid. Students stating their expectations concerning use of tobacco and alcohol were, in all probability, responding honestly to the interviewers questions. Additionally, Fishbein (1966) behavioural intentions, as those expressed by the students in this study can be viewed as determinants of an individual's future behaviour

It is accepted that the data do reflect the students expectations, what do the results mean concerning expected use? Estimates of alcohol and tobacco use among general adult populations are 70% and 40% respectively. Among our sample, only 8.60% indicated expectations of using alcohol and only 5.60% indicated they expected to use tobacco. How can these figures be reconciled? The data support the contention, which we have made previously (Fouk and Young, 1993), that most children start out with a non-use orientation. It may be that lack of positive reinforcement of this attitude allows them to alter their perspective as they are exposed to the substances. With positive

reinforcement of non-abusive attitudes, there will be reinforcement for misuse and abuse in the form of peer pressure and advertising.

Additionally, this study shows that a significant number of students who indicated no expectation of future use but could give no reasons for their expected non-use. It may be these will be those most easily swayed from their original non-user orientation.

Implications for Health Educators

Clearly, children of secondary school age are exposed to tobacco and alcohol products. Exposure may come from association with person who use these products or from advertising. Often, exposure to information about tobacco and alcohol in educational settings is quite limited. Health educators can serve as resource persons to secondary classroom teachers and suggest appropriate materials and activities for classroom use.

Because large numbers of students reported seeing tobacco and alcohol used at home, and a significant number of students reported a modeling reason for their expected use of these products, it seems that health educators might wish to involve parents in educational programmes. This involvement could take the form of (a) information sent home to parents, (b) educational activities to be completed at home jointly by parents and child, (c) programmes sponsored by parent – teacher associations and other efforts to involve the whole family in the educational process.

Finally, based on the results of the study, it seems that there is support for the idea of a health educator assisting the students and teachers in developing activities designed to promote decision making skills, help children resist peer pressure and reinforce non-abusive attitudes. It is in this development of health skills emphasized by Green, Kreuter, Deeds, (1993) that health educators can perform a unique and important roles.

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