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TEACHER'S ATTITUDES AND TEACHER'S AND STUDENT'S KNOWLEDGE OF ALCOHOL AND ALCOHOLISM IN SELECTED UTAH HIGH SCHOOLS

by

LaDawn Anderson Gibbons

A thesis submitted in partial fulfillment of the requirements for the degree

of

MASTER OF SCIENCE

in

Physical Education

UTAH STATE UNIVERSITY Logan, Utah

1968

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LaDawn Anderson Gibbons

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ABSTRACT

TEACHER'S ATTITUDES AND TEACHER'S AND STUDENT'S KNOWLEDGE OF ALCOHOL AND ALCOHOLISM IN SELECTED UTAH HIGH SCHOOLS

by

LaDawn Anderson Gibbons, Master of Science
Utah State University, 1968

Major Professor: Dr. Dale O. Nelson Department: Physical Education

A comparison of teacher's attitudes and teacher's and student's knowledge of alcohol and alcoholism were studied in nine selected high schools in Utah.

It was found that some teachers knew important positive facts about alcohol and alcoholism, but when personal obligations were written into "attitude" questions, their responses changed.

Some health and driver education teachers were poorly informed on the subject of alcohol and alcoholism. Some important facts known by teachers were either being deleted from instruction on alcohol or not being communicated very well.

In some schools it appears that students are learning about alcohol and alcoholism from other sources than their health classes—even though they ranked their health classes as their best source of information about alcohol.

(40 pages)

INTRODUCTION AND STATEMENT OF PROBLEM

Introduction

Most people over 15 years of age in the United States drink alcoholic beverages. In a national survey, reported in 1963 (16), it was found that 71 percent, or 80 million Americans over the age of 21 drank alcoholic beverages. If this percentage were extended to include all the people of 15 and over, this would bring the total of people who drink to approximately 90 million people. This is a great increase over the 65 percent who indicated they drank alcoholic beverages in a similar study reported in 1946 (19).

Although most adults drink alcoholic beverages, children are generally assumed to obstain. The teen-ager, the individual between childhood and adulthood, who is learning to behave as an adult, normally has his first experience with beverage alcohol at approximately 14 years of age. Many students indicate they were introduced to alcohol before the age of twelve (8).

For most people, drinking creates very few problems, but for some the problems are of such magnitude that many other people in addition to the drinker are adversly affected.

The teen-ager, however, tends to see alcohol in it's social context. He thinks of the social pleasures and social benefits of drinking rather than of the serious problems which may result from excessive use. Usually, by the time a student has graduated from high school his attitudes toward alcohol and patterns for use or non-use are well established (9). Thus, educating teenagers about alcohol is crucial.

Although instruction about alcohol has been required by law for three quarters of a century (12), programs for teaching about alcohol vary in emphasis and effectiveness depending on the type of school, the skill of the teacher, the attitudes toward the subject displayed

by the administration and faculty, and on the relations between the school and the community (14).

Consumption of alcohol is rising in most sections of the United States, but appears to be on a decline in Utah (18). This may be due to the unique social structure here where the dominant church, the Church of Jesus Christ of Latter-day Saints, teaches total abstinence or, perhaps in some way due to effective educational procedures, or a combination of both.

Nelson (18), at Utah State University, conducted a comprehensive study, "Drinking and Student Understanding of Alcohol and Alcoholism in Selected High Schools of Utah."

Subjects for his investigation were senior students and health and Driver Education teachers from nine selected high schools along the "Wasatch Front" in Utah, from Smithfield on the north to Provo on the south. High schools included in the study were Logan High School, Skyview High School, Box Elder High School, Bear River High School, Ogden High School, West High School, Olympus High School, Jordan High School and Provo High School. Only senior students were surveyed because all of these students have had health classes and this age group is the one in which the heaviest drinking takes place.

The purposes of the complete study were to determine: (a) how much high school students know about alcohol and alcoholism, (b) their source of information, (c) the extent of their drinking and (d) attitudes, drinking history and training of the health teachers in the respective schools.

This paper is a part of the Nelson study (18), and is based primarily on the last objective.

Statement of the Problem

The purpose of this investigation was to compare teacher's attitudes as reflected by answers to certain attitudes questions to selected alcohol knowledge questions, and to compare the student's and teacher's answers, from the same schools on selected alcohol and alcoholism

knowledge questions as utilized in the Nelson (18), study.

Limitations of the Study

This study was limited to nine selected high schools along the "Wasatch Front" in Utah, from Smithfield on the north to Provo on the south, the most populated region of Utah. The high schools included Skyview High School, Cache County School District, Logan High School, Logan School District, Box Elder and Bear River High Schools, Box Elder School District, Ogden High School, Ogden School District, West High School, Salt Lake City School District, Olympus High School, Granite School District, Jordan High School District, and Provo High School, Provo School District.

This study was part of a larger study, "Drinking and Student Understanding of Alcohol and Alcoholism in Selected High Schools of Utah," conducted by Dr. Dale O. Nelson, Professor in the Department of Health, Physical Education and Recreation, at Utah State University.

There were approximately 1,950 students who completed the questionnaire concerned with knowledge of alcohol and alcoholism. Forty-four health and driver education teachers completed this knowledge questionnaire and a specially designed questionnaire for them to reflect some of their attitudes of alcohol and alcoholism. Not all students and teachers responded to every question; consequently the totals vary from question to question.

METHOD AND PROCEDURES

The purpose of this investigation was (a) to compare teachers attitudes as reflected by answers to certain attitude questions to selected alcohol knowledge questions, (b) to compare the students and teachers from the same schools on selected alcohol and alcoholism knowledge questions.

This study was a part of a larger study, "Drinking and Student Understanding of Alcohol and Alcoholism in Selected Schools of Utah," conducted by Dr. Dale O. Nelson, Professor in the Department of Health, Physical Education and Recreation, at Utah State University (18). The purposes of the complete study were to determine; (a) how much high school students know about alcohol and alcoholism, (b) their source of information, (c) the extent of their drinking and (d) attitudes, drinking history and training of health teachers in the respective schools. This paper is based primarily on the last objective.

The sample was drawn from senior students in nine selected high schools along the Wasatch Front in Utah, from Smithfield on the north to Provo on the south; this is the most highly populated area in Utah. Only senior students were surveyed because all such students have health classes, and this age group is the one in which the heaviest drinking takes place.

Two questionnaires were prepared and submitted to students at each school. There were approximately 1,325 students from seven schools who completed the questionnaire concerning drinking and sources of alcohol and approximately 1,950 students from nine schools who completed the questionnaire concerned with knowledge of alcohol and alcoholism.

Forty health and driver education teachers from all nine high schools completed the knowledge questionnaire concerned with alcohol and alcoholism, and a specially designed questionnaire which was prepared for them in an attempt to reflect their attitudes about alcohol and alcoholism, to determine their drinking history and ascertain their alcohol education training.

The first part of present study (18, pp. 79-83) compared teacher's attitudes toward alcohol as it was reflected by certain questions designed for that purpose, and their responses to selected alcohol knowledge questions. The answers to the following questions were compared:

1. Attitude Question: As an employer of a large number of people, you would

fire an employee who became an alcoholic while working

for you before trying to do something for him.

Knowledge Question: A person is delinquent if he drinks.

2. Attitude Question: Most alcoholics themselves could control their drinking if

only they wanted to.

Knowledge Question: Alcohol is habit forming.

3. Attitude Question: Please check how you feel about adults drinking the

following beverages.

APPROVE DISAPPROVE NO OPINION

Reer

Wine

Whiskey

Knowledge Question: Is the particular kind of beverage a person drinks a factor

in whether or not be or she becomes an alcoholic?

4. Attitude Question: Alcoholics should be given as much consideration and the

same quality of treatment as people with cancer or polio.

Knowledge Question: Alcoholism is classed as a disease by the American Medical

Association.

5. Attitude Question: The problem of alcoholism could probably be solved most

successfully by eliminating alcoholic beverages.

Knowledge Question: Rehabilitation and recovery of the alcoholic demands total

abstinence from alcoholic beverages.

6. Attutude Question: Most alcoholics are worth trying to help.

Knowledge Question: Which one of the following would be best able to help the

alcoholic.

Church leaders Psychiatrist Physician (M.D.) Social Worker Member of family Friend Member of AA

7. Attitude Question: The condition of alcoholism should rightly be looked upon as

a condition of sin

Knowledge Question: A person is delinquent if he or she drinks.

The second part of the study (18, pp. 84-89) compared student's and teacher's answers to selected knowledge questions. The questions were part of the knowledge questionnaire utilized in the Nelson study (18). The answers to the following questions were compared:

- In your opinion, people who have drinking problems come from what walks of life or social groups in the community.
- What percent of alcoholics are of the 'skid row' type?
 (a) I don't know; (b) 5; (c) 20; (d) 50; (e) 75; (f) 90.
- 3. Most laws say you are drunk when blood alcohol concentration is above what percent?
- Utah law permits the use of alcohol by all persons choosing to do so after attaining the age of 18.
- 5. It is unlawful to have in an automobile in Utah a bottle of distilled liquor.
- The alcohol used for all alcoholic beverages is: (a) I don't know; (b) Methyl;(c) Amul; (d) Propyl; (e) Ethyl.
- 7. One-hundred proof on distilled beverage means what percent is alcohol? (a) I don't know; (b) 25; (c) 50; (d) 75; (c) 100.
- 8. The entrance rate of alcohol into the blood stream is affected by food in the stomach.
- 9. Alcohol is a stimulant after it gets into the blood stream.
- Drinking alcoholic beverages increases body temperature.
- 11. The alcohol in alcoholic beverages destroys cells and tissues in the body.

- For young people the most immediate danger in drinking is intoxication and its subsequent dangers.
- 13. Alcoholism is classed as a disease by the American Medical Association.
- 14. A physician can tell the beginning drinker whether or not he will become an alcoholic.
- A person becomes an alcoholic when he or she develops an emotional and physical dependence on alcohol.
- Rehabilitation and recovery of the alcoholic demands total abstinence from alcoholic beverages.
- 17. A fairly large percentage of alcoholics are mentally defective.

REVIEW OF RELATED LITERATURE

There is an ever growing concern in the United States over the use of alcohol and its associated problems especially for young people. A review of related studies and literature is presented in this chapter under the following sub-headings; prevalence of drinking in the United States; knowledge and attitudes of alcohol and alcoholism, and education and prevention.

Prevalence of Drinking in the United States

In a national study reported in 1946, Riley and Marden (19) studied what and how often people drink; where they live and their social characteristics. The survey was based on a scientifically selected sample of 2,677 men and women over 21 years of age in the United States. According to this study, 65 percent of the adults of the United States drank alcoholic beverages. The proportions of drinkers increased with the size of the community from 46 percent in rural areas to 77 percent in the larger cities. It also indicated that the group who had a high school education or better had a higher percentage (70 percent) of drinkers than those with less education (62 percent).

In 1947, Staus and Bacon (22) conducted a comprehensive analysis of the use of alcohol, by America's college youth. Questionnaires were administered to 17,000 in 27 public, private and secretarial schools. Seventy-four percent of the students completing the questionnaire indicated they used alcoholic beverages to some extent, while the other 26 percent reported being total abstainers. The incidence of drinking increased from 69 percent among male freshmen to 87 percent among male seniors. For women the increase was even greater—from 46 percent among freshmen to 77 percent among seniors. Of thestudents who indicated they drank alcoholic beverages, 79 percent of the men and 65 percent of the women reported having their

first drink before entering college.

In a representative national study in 1963, Mulford (16) studied the prevalence of drinkers, ex-drinkers and "deviant drinkers." The total population over 21 years of age in the United States was represented by 1,515 respondents chosen by a modified random sampling procedure. The study reported that 71 percent of 80 million American adults drank alcoholic beverages. This is a big increase over the 65 percent reported in 1946 (19). The greatest increase in drinking was found in the youngest age group (21–25 years) where it increased from 63 percent. It appears that the greatest increase in drinking percentages occured in the youngest age groups. One might expect this same trend to have begun in the teenage groups had they been studied.

Maddox and McCall (9) in 1964 compared not merely boys and girls who do and do not drink, but also a third class—those who say they drink but choose not to call themselves drinkers. This study reported on drinking practices of 1,962 adolescents in midwestern American community.

Ninety-two percent of the teen-agers studied had tested beverage: alcohol at some time.

Twenty-three percent reported they were not abstainers and that they drink some alcoholic beverages at least occasionally. Frequent consumption of alcohol was reported by six percent of the teen-agers who participated in the study.

Sower (21) conducted a study in three Michigan communities, which included 2,000 junior and senior students from six high schools. Ninety percent of the students indicated they had tasted beverage alcohol; (about one-half of these tasted if for the first time with consent and in the presence of their parents). Approximately, one-third of these young people reported they drank with some degree of regularity, either sometimes or often. About one student in ten considered himself to be "a person who drinks." In this "drinker" category, there were higher proportions of males, of older students, of those from highest and those from the lowest social classes and of those whose parents spoke a European languages. The "drinker"

performed more adult roles than the "non drinker"; they were older and earned more of their own spending money.

Sower claimed (21), that two characteristics of teenage drinking were of particular importance: (a) for at least some young men, drinking shows a distinct relationship to the passage from youth into young male roles in our society; and (b) teenage drinking is not only a culturally patterned and socially controlled behavior but is almost entirely a group act.

In May of 1951, Maxwell, (11) through the help of the Washington Public Opinion

Laboratory, tried to determine the actual drinking behavior of the adults of the state of Washington. He also tried to determine their reasons for drinking or abstaining, and their knowledge about alcohol, alcoholics and rehabilitation. Four hundred and seventy-eight responded to the poll.

Sixty-three percent of the sample (21 years of age and over) reported drinking alcoholic beverages—some only five times a year or fewer and others indicated they drank daily. Of the drinkers, 67 percent indicated they drank to relax after a hard day. Sixty-two percent of the respondents said they approved of drinking alcoholic beverages but closer analysis revealed that 15.9 percent of those who approved of drinking were abstainers and 23.4 percent of those who disapproved, drank.

A survey of drinking behavior of 1,185 persons representing the adult population (21 and over) of Iowa, conducted by Mulford and Miller, (17) revealed approximately 60 percent drank alcoholic beverages. Of the nearly one million drinkers in the State, 47 percent were classed as light drinkers, 36 per cent moderate and 16 percent heavy drinkers. Twenty-two percent of the male drinkers were classed as heavy drinkers while only eight percent of the women were classed in this category. Forty-three percent of the farm residents were moderate or heavy drinkers, compared to 58 percent of the city dwellers. The proportion of heavy drinkers increased with the level of education among the drinkers residing in the city—15 percent of the

least educated to 22 percent of the most educated; but the proportion of drinkers decreased among rural residents from 17 percent of the least educated to four percent of the most educated.

In 1951, Slater (20) surveyed 1,177 sophomore and senior students in five Utah high schools. The high schools included two small schools from rural areas, one school from a mining district, one larger school which served both a rural and urban area and one large school serving children of bussinessmen, laborers and professional people.

The results indicated that the mean age for the first drink was 14.5 years and many students reported their first experience with beverage alcohol was before the age of twelve. Sixty-eight percent indicated they never drank, 30 percent drank occasionally and one percent drank frequently. Seventy percent of the seniors never indulged while only 65 percent of the sophomores never used alcoholic beverages.

A survey of 19 high schools in Utah completed in 1957, by Jones (50), found that 71.4 percent of the students had tested alcoholic beverages. Of the 8,517 students involved in the survey, 59 percent classified themselves as "never drinking," while 23.5 percent drank "very seldom," 10.8 percent drank "only on special occasions," and 319 percent "drank once a week" or more often. Twenty-four students indicated they drank nearly every day.

When classes were compared in the Jones' (5) study it was found that 62.2 percent of the sophomores never drank and that 56.1 juniors and 55.3 percent of the seniors never drank. Fourteen and one-half percent of the sophomores, 21.0 of the juniors and 25.2 percent of the seniors had been intoxicated. About one percent of the juniors and seniors drank nearly every day compared to 0.6 per cent of the sophomores.

In a study of the use of alcohol among northern Utah high school students, Hanna (4) found that 64.2 percent of the 534 seniors surveyed had tasted alcoholic beverages. The average age for the first drink was 14.3 years; however 26.3 percent had tasted alcoholic beverage

before reaching the age of fourteen. Forty-three percent of the students indicated they continued to drink with some frequency after their first drink; 31 percent drank once or twice a year, while 15.3 percent drank at least once a week (14.1 percent boys and 2.4 percent girls).

"Drinking and Student Understanding of Alcohol and Alcoholism in Selected Schools in Utah" was a study conducted by Nelson (18) in 1966. Of the 1325 seniors who completed the questionaire concerned with drinking and sources of alcohol, 65 percent indicated they had drunk alcoholic beverages. The average age for the first drink was 14.5 years. Fifty-five percent indicated they did not drink presently. Of the remaining 45 percent, who indicated they drank, 21 percent drank once every two or three months. Five percent, however, drank once a week or more.

The second questionaire on knowledge about alcohol and alcoholism was completed by 1925 seniors. Ninety-two percent recognized the correct definition of an alcoholic. Eighty-nine percent knew the American Medical Association classed alcoholism as a disease. Students answered an average of 57 percent of these knowledge questions correctly.

The students ranked their health classes as the best source of information about alcohol and alcoholism. Religion teachers and church leaders were ranked as the second best source of information.

Forty-six percent of the students considered their two best sources of information about alcohol to be "extremely reliable." Thirty-four percent considered them as having "good reliability."

Knowledge and Attitudes of Alcohol and Alcoholism

MaCarthy and Fain (15), in 1959, attempted to measure knowledge about alcoholism in three communities, Hartford, Bridgeport, and New London, Connecticut. The communities were divided into four socio-economic strata, and two blocks were chosen at random from each

of the four areas as typical blocks to represent that stratum. Personal interviews were conducted with 120 persons in an attempt to determine if these people considered alcoholism to be an illness; and if so, to be treatable. They were also asked for an opinion concerning who could best help the alcoholic and where in the community an alcoholic could go for help.

A frequency distribution was used to compare the data. The upper class (or class I) knew the most about alcohol. However, instead of running in descending order from there, the highest percentage of correct responses went from class I, to III, to II to IV.

Other data collected in this study suggested that those people who had not yet had any personal encounter with a problem drinker, and also the lower socio-economic strata, were the most deficient in the kind of understanding of alcoholism taught by most community education progams. Also, the middle aged groups were relatively well informed in contrast to the older and younger people.

In 1955, Christensen (2) conducted a community study in Logan, Utah, to supply answers to the following questions: What did the residents of the community know about alcohol problems? What were the attitudes of these residents in relation to these problems? And, if possible, What economic factors were influencing their knowledge and attitudes?

He found that residents who had at least a high school education knew significantly more about the alcohol problems than residents who had less education. Young people knew significantly more than their elders. Christensen concluded that it appeared that there was something either in the educational process or in education itself which tended to stimulate the development of a greater willingness to help the alcoholic overcome his problems.

Residents who were less than 50 years of age were more understanding and tolerant of alcoholics than residents who were over fifty. Apparently young people were not adopting the negative attitudes of their elders. Young people honestly believed that alcoholism was a disease and should be treated as such; their elders still clung to the idea that alcoholism is a moral

weak ness

The residents who were the most tolerant and understanding of alcoholics and the most willing to do something for them were the best informed residents. There is then, a high degree of correlation between knowledge of the problems, and attitudes toward the same. Thus of the factors considered in this study, the one that is of greatest significance in influencing attitudes about alcoholism is the factor of knowledge.

In 1957, Keller (6) conducted the same study in St. George, Utah, and presented a comparison of the two studies at the 1957 Session of the Utah School of Alcohol Studies. Forty-three percent of Logan's respondents answered the knowledge questions correctly, while 39 percent of St. George's respondents knew the correct answers. Forty-three percent of Logan's participants had positive attitudes, while 70 percent of St. George's respondents had positive attitudes.

Keller said that in the St. George area, successful educational programs had been carried out which led to a community awareness of the overall problems of alcohol. He found, as had Christensen, that a definite correlation existed between knowledge and attitudes—more knowledge of the subject resulted in a more positive attitude.

Teaching About Alcohol

Maddox (8) stated that the adolescent's expectations, attitudes, and behavior are developed through contact with adult members of the society. In the process of becoming an adult, he is permitted and increasingly required, with age, to play at roles associated with adulthood. The adolescent's attitudes toward, and patterns of use of beverage alcohol became a simple mold of the adult world he has come to understand. When adolescents are asked why they drink, they offer motives similar to that of adults.

Maddox also says, however, that some drinking by adolescents undoubtedly reflects

hostility toward adult authority and goals. Drinking has been used as a test of loyalty to peer groups precisely because it was discouraged by adults (9).

At the Utah School of Alcohol, 1965 session, Maddox outlined these four immediate goals designed to change teenage drinking behavior and attitudes:

- The achievement of consensus among relevant groups and organizations within given communities about what teen-agers should know about beverage alcohol and the potential consequences of its use.
- The interpretation to teen-agers of the potential dangers inherent in the use of alcohol within a complex society such as ours.
- The establishment of total and permanent abstinence as a live option within a society in which a majority of adults drink.
- The presentation or information and the encouragment of attitudes which contribute to the early identification of the problem drinker and community concern and support for his reorientation or rehabilitation. (7,p.6)

In the past decade, teaching about alcohol and alcoholism in the secondary schools has not been an error of commission but one of omission—omission of certain important physiological as well as psychological principles, states M. Block in his book on alcoholism (1). For example, he believes that such areas as rate of alcohol absorbtion by body tissues, drinking versus excessive drinking, and the communities responsibility to the alcoholic, have often been completely overlooked. He feels these omissions have occurred because much of the teaching on alcohol and alcoholism has been a reflection of the emotional reaction of the people teaching it. Teachers who have prejudice regarding drinking can rarely present the subject objectively; they can only convey their prejudices. Hence, important objective information has been deleted in favor of emotional sermonizing.

Block concludes that if the truth is taught about alcohol and alcoholism, and the child is given a sense of responsibilty, his own judgement will serve him well.

According to Dimas (3), if the instructor teaching about alcohol and alcoholism is to succeed, he must resist the temptation to become a reformer, a dictator of normal behavior,

or an authority on what he deems to be the proper ends for a good life. The pupil needs to be informed, not threatened. He needs to be aided in the solution of his problem, not forced to accept an imposed solution. Dimas believes that if a person is not given such opportunities to make up his own mind, he may revolt or become apathetic. The instructor's teaching attitude in alcohol education, Dimas believes, must have a central emphasis of fostering the individual's ability to think independently.

In the 1954 session of the Utah School of Alcohol Studies, Mrs. Marty Mann (10) discussed "Education as a preventitive measure." She claimed, education of the general public was the place to begin in preventing alcoholism. No matter what profession a person is in, he is still part of the public, he reads the same newspapers, sees the same movies, reads the same books, and he can be reached by the same media.

As more facts become known, as clinics and information centers become established more people will go for information and help. More young people will seek information. Young people are rarely as prejudiced as their elders; they are much more open minded, and are more willing to come and find out. As more and more young people are reached, more and more problems with alcohol are prevented.

A COMPARISON OF TEACHER'S ATTITUDES AS REFLECTED BY ANSWERS TO CERTAIN ATTITUDE QUESTIONS TO ANSWERS TO SELECTED ALCOHOL KNOWLEDGE QUESTIONS

Analysis of Data

Forty-three health and driver education teachers from all of the nine high schools, in the Nelson study (18), completed a special questionnaire designed for them in addition to answering the same knowledge questionnaire as the students.

Fourteen true—false questions were included in their questionnaire for the purpose of reflecting the attitudes the teachers might have about alcohol and alcoholism. The answers to seven of these attituds were compared with responses from selected knowledge questions to determine the relationship between teachers' feelings and their knowledge about alcohol and alcoholism.

Not all teachers responded to every question, so the totals vary from question to question.

Attitude Question:

"As an employer of a large number of people, you would fire an employee who became an alcoholic while working for you before trying to do something for him."

Thirty-three teachers marked the statement false, indicating that they would help an employee; four were undecided, and seven said they would fire an employee who became an alcoholic before trying to do something for him. On the knowledge questionnaire, when asked if "A person is delinquent if he or she drinks," 33 teachers checked the statement false, and seven said it was true. Three of the seven indicating "true" also said they would fire an employee if he became an alcoholic. These three teachers showed a negative attitude toward people

who drink, since they would "fire an employee" and they said "A person is delinquent if he drinks. "The other four who thought a person was delinquent if he drank indicated they were either undecided or that they would help an employee who became an alcoholic. (Most teachers agreed, however, that they would help the employee, and a person is not delinquent if he or she drinks.)

Every teacher indicated that "An alcoholic can be helped and is worth helping," but when a personal obligation was written into the statement, some teachers' attitudes changed—they agreed that alcoholics can be helped and are worth helping, but as an employer they would fire the individual before trying to do something for him.

Attitude Question: "Most alcoholics themselves could control their drinking if only they wanted to."

Thirty-seven teachers said the statement was false; five answered it true; and one was undecided. Most of the definitions of an alcoholic indicate that the alcoholic is a person who drinks so much and so often that he gets into trouble physically, economically or socially and still continues to drink. This person has lost control because he continues to drink in spite of his problems.

When asked on the knowledge questionnaire if "Alcohol is habit forming," 28 teachers said it was, 10 indicated the statement was false, and two were undecided. Alcohol is not habit forming in the usual description of the term. If it were, approximately 90,000,000 United States citizens would have developed the habit and be addicted.

Four of the five teachers, above, who indicated that "The alcoholic could control his drinking if only he wanted to" also indicated that "Alcohol is habit forming." If a teacher thought an alcoholic could control his drinking, how could he be consistent in thinking alcohol was habit forming?

Drinkers become alcoholics when they lose control of their drinking—and alcohol as defined in this context is not habit forming.

The following attitude question has the tabulation of the teachers answers.

Attitude Question: Please check how you feel about adults drinking the following beverages.

	APPROVE	DISAPPROVE	NO OPINION
Beer	7	23	11
Wine	7	26	9
Whiskey	7	28	7

The same teachers who approved adults drinking beer also approved adults drinking wine and whiskey. More teachers disapproved drinking wine than beer and more disapproved drinking whiskey than wine. The higher the alcohol content of the beverages the greater was the disapproval of drinking the beverage.

In order to assess some of the teachers' knowledge of alcohol and alcoholism, the following question was asked: "Is the particular kind of beverage a person drinks a factor in whether or not he or she becomes an alcoholic?" Thirty-three teachers answered it correctly (false), one was undecided, and five said yes, that a particular beverage was a factor in making a person an alcoholic. Four of the five teachers who indicated that the kind of beverage was a factor in developing alcoholism also suggested that distilled beverages (whiskey, vodka, rum, etc.) were the beverages that contributed most.

It should be recognized that the intoxicating substance in all alcoholic beverages is the same, ethyl alcohol. Only one teacher who approved adults drinking indicated that he believed the type of beverage was not a factor in becoming an alcoholic.

Attitude Question: "Alcoholics should be given as much consideration and the same quality of treatment as people with cancer or polio."

Thirty-five teachers agreed that the alcoholic should be given the same quality of treatment; three indicated the alcoholic should not be given this consideration, and six were undecided.

All 44 teachers answering the above question agreed that "Alcoholism is classed as a

disease by the American Medical Association." It is considered by many as the third major health problem in the United States, ranking only behind cancer and heart disease. Prior to 1956, the medical profession did not officially recognize it as a disease.

When the teachers were asked "Do you consider alcoholism to be a kind of illness?", every teacher answered in the affirmative. Each apparently knew that the American Medical Association considers alcoholism as a disease and each one also considered it an illness. Yet, three teachers indicated that the alcoholic should not be given the same consideration as patients with cancer or polio and six more were undecided. This is an indication of very inconsistent thinking, and a sign of the great emotional involvement that some people have with the subject of alcohol.

Attitude Question: "The problem of alcoholism could probably be solved most successfully by eliminating alcoholic beverages."

The correct answer (false) was given by 35 teachers, two were undecided and seven indicated that elimination of alcoholic beverages would solve the problem of alcoholism.

On the knowledge questionnaire only one teacher answered that "Rehabilitation and recovery of the alcoholic demands tatal abstinence from alcoholic beverages," was a false statement. This person also said that elimination of alcoholic beverages could solve the problem of alcoholism. The others who agreed alcohol elimination was not a good way to solve the problem understood that rehabilitation and recovery demand total abstinence. They also answered that prohibition was not the correct approach in eradicating the problem.

Attitude Question: "Most alcoholics are worth trying to help."

All 44 teachers completing this question answered in the affirmative. On the knowledge questionnaire, they were asked to check "Which one of the following would be best able to help the alcoholic?" (Answers were)

	BEST	SECOND BEST
Church leaders	5	12
Psychiatrist	7	9
Physician (general)	2.,	10
Social Worker	3	5
Member of family	2	7
Friend	4	7
Member of AA	26	5
Other	1 (all of the above)	

The treatment of alcoholism has at least three main objectives (a) to help the alcoholic recognize and accept the need for treatment, (b) to help him stop drinking completely and (c) to make it possible to be reinstated and maintained in his family, job, and community.

Treatment may be divided into catergories such as medical, psychiatric, or spiritual, but in most cases several types of treatment, not just one, are needed. It is possible that members of Alcoholics Anonymous could supply these therapies, but not likely in all cases.

Twenty-six alcohol education teachers said that a member of Alcoholics Anonymous would best be able to help, and a majority thought either the church leaders or a psychiatrist would be second best in helping the alcoholic. Treatment is ordinarily a long, expensive, and difficult process. To be effective, it requires the cooperation of a team, composed of the patient, his family, associates, and specialists in many theraputic ways.

Most of the teachers seemed to reflect the feeling that fellow alcoholics are the best able to help other alcoholics, which appears to be true, but there is evidence by the few who said "friend", "member of family", "social worker", and "general physician" of either not knowing much about the treatment of alcoholism or reflecting some personal feelings.

Attitude Question: "The condition of alcoholism should rightly be looked upon as a condition of sin."

Forty teachers indicated that this statement was false and three said it was true. The three who considered alcoholism a condition of sin, also said they felt alcoholism was a kind of illness (along with all of the other teachers). Two of these three also indicated that they felt "A person was delinquent if he or she drank." This thinking is obviously very inconsistent.

One of the teachers who looked upon alcoholism as a condition of sin and felt one is delinquent if he drinks, indicated earlier in the questionnaire that he approved of adults drinking. This is even greater inconsistency.

Another teacher who looked upon the condition of alcoholism as a sin and said a person is delinquent if he drinks also stated that he would fire an employee if he became an alcoholic. He was at least consistently negative. This same teacher indicated that he felt "A respectable family background, good education, and success in business would keep a drinker from becoming an alcoholic," and "A larger percentage of alcoholics are mentally defective," yet he, along with all of the other teachers, agreed that alcoholism was a disease. Not only was he consistently negative, but apparently uninformed about alcoholism. It is highly questionable whether these people should be allowed to teach in this area of instruction.

Summary

Every teacher indicated that "an alcoholic can be helped and is worth helping," but when a personal obligation was involved some teachers' attitudes changed. Seven teachers indicated that "as an employer they would fire the individual who became an alcoholic while working for them before trying to do something for him."

Five teachers indicated that "most alcoholics themselves could control their drinking if only they wanted to." Four of these five along with 24 other teachers indicated that

"alcohol is habit forming." If one thought an alcoholic could control his drinking, it is not consistent to think alcohol is habit forming.

The same seven teachers approved of drinking beer, wine and whiskey, but the higher the alcohol content of the beverage the greater the disapproval of drinking by the other teachers. Five teachers indicated "a particular kind of beverage was a factor in developing alcoholism," and four of these teachers suggested distilled beverages contributed most to alcoholism.

All teachers knew the "American Medical Association considered alcoholism as a disease," but when asked "if an alcoholic should be given as much consideration and same quality of treatment as people with cancer and polio" three indicated they should not, and six other teachers were undecided.

Thirty-five teachers said that "the problem of alcoholism could not be solved by eliminating alcoholic beverages," and all but one answered that "rehabilitation and recovery of the alcoholic demands total abstinence from alcoholic beverages."

All 44 teachers completing the questionnaire thought "most alcoholics were worth trying to help." When asked "who could best help the alcoholic" most teachers seemed to reflect the feeling that a fellow alcoholic was the best to help.

Three teachers indicated they "considered alcoholism a condition of sin," yet these three with all the other teachers felt "alcoholism was a kind of illness."

A COMPARISON OF STUDENT AND TEACHER ANSWERS ON SELECTED ALCOHOL AND ALCOHOLISM KNOWLEDGE QUESTIONS

Analysis of Data

Forty-three health and driver education teachers and 1,950 students from the same nine high schools completed a questionnaire to determine their knowledge of alcohol and alcoholism (18).

Forty-six true—false, and multiple choice questions were included in the questionnaire. Seventeen of these questions were analyzed in an attempt to determine the relationship between teacher's knowledge and student's knowledge of the subject.

The schools were designated by alphabet letters to disguise their idenity.

Question: "In your opinion, people who have drinking problems come from what walks of life or social groups in the community?"

All nine teachers from school "I" were correct when they said that problem drinkers come from all walks of life and social groups. Ninety-two percent of the seniors at this school also answered correctly. When every teacher in a school is well informed on a particular fact and 92 percent of their students also are well informed, it appears that the teachers are doing an excellent job, or at least the information is readily avilable elsewhere. It is hoped the information is being disseminated to the students by the teachers.

At school "F" three of the five health teachers answered the question correctly. One of the incorrect answers said problem drinkers come from labor classes, and the other answered professional groups as being the main source. Eighty-five percent of their senior class answered correctly. A smaller percentage of students and teachers in school "F" knew the correct answer than in school "I". There could be a significant relationship, although this cannot be accurately ascertained at this time.

Two teachers at school "D" checked the correct answer, and one said problem drinkers come from low levels of society. Only 75 percent of their students said that problem drinkers come from all walks of life and social groups.

These examples seem to reflect some alcohol studies teaching since the students said their best sources of information were health classes and that they have good reliability in their sources of alcohol and alcoholism knowledge.

Question: "What percent of alcoholics are of the skid row type?"
(a) I don't know: (b) 5: (c) 20: (d) 50: (e) 75: (f) 90.

Seven of the nine teachers at school "I" answered correctly that "five percent of all alcoholics are of the skid row type." Fifty percent of the students from the same school indicated they didn't know; 34 percent selected the wrong answer, and only 16 percent answered correctly. It appears obvious that the students are not being taught the information found to be possessed by the large proportion of the teachers.

At school "C" three teachers said 20 percent of all alcoholics are skid row type, one said "I don't know", and only one answered correctly. Fifty-seven percent of their students indicated they didn't know, 29 percent guessed wrong, and 14 percent answered the question correctly. It is evident that both students and teachers at this school lack adequate information on this subject.

Question: "Most laws say you are drunk when blood alcohol concentration is above what percent?"

All five teachers at school "C" said that to be drunk by law, blood alcohol concentration must be 0.15 percent, which is correct. Yet, only twenty-one percent of their students knew this fact.

All of the school "D" teachers gave the correct answer, and only 22 percent of their students answered correctly.

Neither teacher at school "E" gave the correct answer; yet, 33 percent of their students answered correctly. Obviously these students were taught by other "teachers" or were informed in spite of the two present teachers.

Question: "Utah laws permit the use of alcohol by all persons choosing to do so after attaining the age of 18."

This statement was marked "false" by all eight health teachers from school "I". Ninetytwo percent of their students also answered correctly.

At school "B" three of five teachers answered correctly, and 75 percent of their students gave the correct answer. Twenty-five percent of school "B's" seniors are poorly informed on this law, while only eight percent of school "I's" seniors were incorrect.

There are differences from school to school and the reasons might not always be the poorly informed teachers. This may be the case in the schools cited because there were some other likely reasons such as not all teachers of alcohol studies completed the question and not all teachers teach the same things in a given course. In addition, other sources of information exist besides the health and driver education teachers, even though this is the source of information listed most by the students.

Question: "It is unlawful to have in an automobile in Utah a bottle of distilled liquor which has had the seal broken."

Both teachers at school "E" answered correctly (true). Seventy-nine percent of their students were also cognizant of the correct answer. At school "B" four of the five teachers said true, and only 59 percent of their students answered correctly.

It is difficult to assess the relationship between teachers'and students'knowledge, even when the information is taught. Not all alcohol education teachers were examined at school "E", which makes the relationship even more difficult to establish. Yet, teachers have the responsibility to teach the subject if they know it, and students should reflect some of the teaching if it is being done.

Question: "The alcohol used for all alcoholic beverages is: (a) I don't know, (b) Methyl, (c) Amyl, (d) Propyl, (e) Ethyl."

Three teachers at school "H" said ethyl alcohol, which is correct. The other two teachers indicated they didn't know. Thirty-two percent of the seniors at this school answered correctly. Only one teacher of three at school "B" said ethyl alcohol, and only six percent of the students were correct. There appears to be some relationship to teachers' and students' lack of knowledge on this question.

Question: "One hundred proof" on a distilled beverage means what percent is alcohol? (a) I don't know, (b) 25, (c) 50, (d) 75, (e) 100.

Both teachers at school "E" gave the correct answer (50 percent). Forty-five percent of their students answered correctly.

At school "A" one teacher answered correctly and the other two teachers indicated they did not know. Thirty-nine percent of their students gave the correct answer.

A larger percentage of students at school "E" were correct than at school "A". There seems to be a relationship to the teachers' knowledge or lack of it.

Question: "The entrance rate of alcohol into the blood stream is affected by food in the

Thirty-six of the 40 teachers answering the question said "true," which is correct. One teacher from each of school A, C, and H answered incorrectly. Sixty-two percent of the students in school "A," 53 percent in school "C," and 64 percent in school "H" answered correctly. All of the teachers at schools "I" and "F" answered correctly, yet there was a 25 percent difference in the percentage of correct answers from the two schools. There is great discrepancy from school to school, which appears to be a chance difference. Yet, if teachers were effective in their teaching of the facts, this could conceivably be eliminated.

Question: "Alcohol is a stimulant after it gets into the blood stream."

Three teachers, one each from schools "D," "F," and "I" answered incorrectly. All others were correct (false). The percentage of students answered correctly from school to school was very inconsistent and showed wide discrepancy. This, again, indicates the lack of effective teaching, since in some schools where teachers were well informed students answered the question poorly, and in other schools where some of the teachers were poorly informed the students were quite accurate with their answer, i.e. school "A," 46 percent of the students and 100 percent of the teachers were correct. At school "F," 56 percent of the students were correct and only four of the five teachers answered correctly.

Question: "Drinking alcoholic beverages increases body temperature."

Four of the five teachers at school "B" said "false," which is correct. Thirty-five percent of their seniors answered correctly.

At school "A" one teacher answered correctly, and two were incorrect. Only 22 percent of their seniors gave the correct answer.

Alcohol causes the blood vessels to dilate creating a false sense of warmth; it does not, however, increase the body's temperature.

From 22 to 35 percent of the various senior classes answered this statement correctly. Apparently, teachers are not teaching this information, and in some cases, they are poorly informed themselves.

Question: "The alcohol in alcoholic beverages destroys cells and tissues in the body."

Every teacher at school "B" gave the right answer (false). Yet, only 33 percent of their students answered false.

Four of school "H's" teachers said false; the other answered incorrectly. Thirty-five percent of their students claimed it was false.

The teachers in "B" and "H" schools knew that alcohol does not destroy the cells and tissues of the body; yet, most of their students were poorly informed.

All three of school "A's" teachers were incorrect when they said it was true, and 72 percent of their students also were incorrect. Teachers and students were obviously poorly informed on this question.

Question: "For young people the most immediate danger in drinking is intoxication and its subsequent dangers."

Eighty-four percent of the seniors and four of the five teachers at school "H" checked this statement "true." Three teachers at school "B" said "true," while the other two said it was false. Seventy percent of their seniors said "true," which is considered to be correct.

This seems to be another example of a student, teacher relationship.

Question: "Alcoholism is classed as a disease by the American Medical Association."

Every teacher involved in the study answered correctly (true). All schools had a high percentage of students with the correct answer, but there were differences from school to school. Only 78 percent at school "D" were correct, while 96 percent of the school "A" seniors recognized it to be true.

Every teacher considered alcoholism a disease and knew that the American Medical Association classed it as such; and a great percentage of the students considered it a disease, yet, fewer students indicated they knew the American Medical Association classed it as such. The teaching should be better in some of the schools.

Question: "A physician can tell the beginning drinker whether or not he will become an alcoholic."

Only one teacher of nine at school "I" was incorrect. Sevently-seven percent of this school's students were correct in their answers. Two of three teachers at school "D" answered correctly, while 90 percent of their students also gave the right answer.

Apparently the students at school "D" understood this information better than those at school "I" even though a greater percentage of the teachers do not.

Question: "A person becomes an alcoholic when he or she develops an emotional and physical dependence on alcohol."

Only three of the total teacher group answered incorrectly (from schools "B," "D,"

and "H"). Eighty-nine percent of school "B's" seniors, 96 percent from school "H," and 82 percent from school "C" answered correctly.

Even though "B," "D," and "H" schools had teachers who did not recognize this definition, their seniors were as high or higher percentage-wise than those high schools where all teachers were correct.

Question: "Rehabilitation and recovery of the alcoholic demands total abstinence from

All but one of the 40 teachers (from school "A") said "true." Seventy-eight percent of school "A's" seniors recognized this fact, while only 63 percent of school "D's" seniors understood this to be true. Yet, at school "I" 92 percent of their seniors answered correctly. The knowledge of the teachers seems to have little relationship to the knowledge of the students on this question.

Question: "A fairly large percentage of alcoholics are mentally defective."

Two of the three teachers at school "D" said "true," which is incorrect. Fifty-six percent of their students answered correctly. At school "C" three teachers answered correctly, and two teachers were incorrect in their response. Only 43 percent of their students gave the correct answer.

Each teacher at school "A" marked a different answer. One indicated that a large percentage of alcoholics were mentally defective, one claimed they were not, and the other questioned the statement. Forty-six percent of their students answered correctly. There appears to be some relationship between the teachers' and the students' lack of knowledge on this question.

Summary

One school had nine teachers who indicated that "problem drinkers come from all walks of life and social groups." Ninety-two percent of the seniors at this school also knew

this to be true. At another school three of the five health teachers and 85 percent of their students answered this question correctly.

Seven of the nine teachers at one high school knew that "five percent of all alcoholics are of the skid row type," while only 16 percent of their students knew this for a fact. At another high school three of the five teachers and 14 percent of the students knew this.

All five teachers at one high school knew "to be drunk by law, blood alcohol concentration must be 0.15 percent," yet only 21 percent of their students knew it. Both teachers surveyed at another school did not give the correct answer, but 33 percent of their students answered this question correctly.

"Utah law permits the use of alcohol by all persons choosing to do so after attaining the age of eighteen," was marked as a false statement by all eight teachers from one high school. Ninety-two percent of their students also answered correctly. Yet another school had three of five teachers in their survey who answered correctly and 75 percent of their students gave the correct answer.

Both teachers at one school knew "it is unlawful to have in an automobile in Utah, a bottle of distilled liquor which has the seal broken," and 79 percent of their students knew the correct answer. At another school four of the five teachers knew the correct answer and only 59 percent of their students answered correctly.

Three teachers out of five at one high school knew ethyl alcohol was the "alcohol used for all alcoholic beverages," and 32 percent of the seniors at this school also knew the correct form of alcohol. Only one teacher of the three at another school and six percent of their students knew the correct answer.

Only three teachers, each from different schools did not know that "the entrance rate of alcohol into the blood stream is affected by the food in the stomach." Percentages of correct student answers in the same three schools ranged from 53 to 64 percent.

All but three teachers, each from different schools knew this statement "alcohol is a stimulant after it gets into the blood stream," to be false. The percentage of students answering correctly from school to school was very inconsistent and showed wide variation.

Four of the five teachers at one school knew that "drinking alcoholic beverages does not increase body temperature," but only 35 percent of their seniors understood this. At another school one teacher, out of the three answered correctly, while only 22 percent of their seniors gave the correct answer.

All teachers in two particular schools knew that "alcohol does not destroy the cells and tissues of the body," yet most of their students were poorly informed.

Every teacher involved in the study knew that "alcoholism was classed as a disease by The American Medical Association." The percentage of students who knew this to be true ranged from 78 percent at one school to 96 percent at another.

Only one teacher of the nine at one school did not know that a "physician can not tell the beginning drinker whether or not he will become an alcoholic." Seventy-seven percent of this school's seniors knew the physician could not tell. Two of the three teachers at another school answered this question correctly, while 90 percent of their students gave the correct answer.

Only three teachers, at different schools in the study, did not recognize the definition of an alcoholic to be, "a person becomes an alcoholic when he or she develops an emotional and physical dependence on alcohol." Even though the teachers did not recognize this definition, their students were as high or higher percentage-wise than those schools where all teachers knew the definition.

All but one teacher knew that "rehabilitation and recovery of the alcoholic demands total abstinence from alcoholic beverages." Students' answers to this true—false question ranged from 63 percent correct to 92 percent.

Only one teacher of the three at one school knew this statement to be false: "a fairly large percentage of alcoholics are mentally defective." Fifty-six percent of their students knew the correct answer. At another school, three of the five teachers answered correctly while only 43 percent of their students gave the correct response.

CONCLUSIONS

Within the limitations of the study the following conclusions seem justified.

- In some schools it appears that students are learning about alcohol and alcoholism from other sources than their health classes—even though they ranked their health classes as their best source of information about alcohol.
- Some important facts known by teachers are either being deleted from instruction on alcohol or are not being communicated very well.
 - 3. Some teachers were poorly informed on the subject of alcohol and alcoholism.
- Some teachers knew important positive facts about alcohol and alcoholism, but when personal obligations were written into "attitude" question, their responses changed.

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