# A STUDY OF THE STATE AND A LOCAL DRUG EDUCATION PROGRAM

by

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ABSTRACT

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This study consisted of an investigation of primary and secondary public school awareness of the Ohio Drug Education Program. For this study a division was made between the primary schools consisting of grades K-6 and the secondary schools consisting of grades 7-12. This study was performed by mailing two hundred questionnaires to primary and secondary schools which were randomly selected from the Ohio Educational Directory. This study yielded a 62% response from the primary schools and a 58% response from the secondary schools, for a total of 60% return of all questionnaires. The conclusions were that the majority of responding schools were aware of the Ohio program but only a small minority employed the program.

The second portion of this study evaluated the attitudes of seventh grade children concerning drug usage. An attitude instrument developed by Pennsylvania State University was administered to a treatment group of 35 students, i.e., those that had received the program within a period of 1-4 months prior to this study, and a comparison group of 35 students, i.e., those who had not gone through this program. The results of the attitude instrument indicated that there was a significant difference between these two groups at the .05 significance

level of a one tail test. These post-test scores reveal that this difference between the treatment and comparison group is due to something other than chance. This difference may be due to the treatment variable, i.e., the drug program; however, there were three threats to internal and external validity that were operative. A threat to internal validity was self-selection into the program. Threats to external validity were, (1) the interaction of testing and treatment, and (2) the interaction of selection and the treatment program. These threats may have had an effect upon the results of the attitude instrument.

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# CHAPTER I

## INTRODUCTION

In the heterogeneous society of the United States, one can observe the ever increasing problems of drug abuse. Society has long acknowledged the problem of drug abuse among the lower socio-economic strata. Recently, society has been enlightened to the facts that this abuse is not limited to any age, sex or ethnic group, nor are there any socio-economic barriers. The taking of drugs is a form of behavior in which there are any number of variables or combination of variables constituting this action.

In the past, drugs have been used for ritual and religion, but as society has grown in complexity we have observed a vast increase in drug usage. Kline purports that "It is becoming increasingly clear that the problem is not drugs, but the manner and purpose of their use."[1] The growth of society has produced new secular variables, which Kline sets forth as;[2]

> Relief of psychological discomforts, escape from emotional anaesthesia, escape into emotional anaesthesia, group pressure, pleasure seeking, search for 'meaning', and rationalization for economic, social and other forms of failure.

Today, with technology advancing at such a rapid rate, society has not been able to cope with this change. This has created a state of future

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[1]Nathan S. Kline, "The Future of Drugs and Drugs of the Future," Journal of Social Issues, XXVII, No. 3 (1971), 73.

[2]Ibid., p. 76.

shock. Some seek relief from this age of anxiety in the use of drugs and it is probable that society will continue to drift in this direction until we can re-evaluate the purpose of our individual lives.

In the past, the large metropolitan areas were our main concern for this problem; but, with the implementation of the modern highway system and the increased ability of everyone to own or have access to a car, the rural area is only minutes away from a trip into the world of drugs. We are no longer concerned just with the problems of our village, town or city. We now have had the problems of the world thrust upon us and consistently witness mans' inhumanity toward man. These enigmas, coupled with our personal problems must be faced by level headed, strong individuals if they are to be solved and cannot be masked by the use of drugs, nor will they evaporate by camouflaging them with drugs. We must decide now whether we are going to develop a future generation of drug dependent or independent individuals.

Statement of the Problem

The definition of drug abuse for the purpose of this study will consist of the ingestion of a drug or the ingestion of poly-drugs which result in damage to the human system, death, physical dependence or psychological dependency. The term drugs will refer mainly to narcotics, however alcoholism must also be considered a drug problem.

The Ohio Bureau of Drug Abuse compiled estimates for the last decade in the areas of drug related deaths, arrest and convictions.[3]

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[3]Ohio Bureau of Drug Abuse, Division of Mental Health, Department of Mental Health and Mental Retardation, "State Drug Plan of Ohio," (Ohio, 1974), p. 1.

1) The population affected by drug abuse, and the population at risk have grown consistently younger over the past decade, with the 18 to 30 year old group most affected, and the under 18 group becoming affected.

2) Total drug-related deaths, and the incidence of drug-related deaths per unit of population, have increased dramatically over the past decade, with the greatest percentage increase in the 15-24 year old group, followed by the 25-34 year old group.

3) Incarceration for drug abuse has increased 500% over the past decade, with the greatest increases in the 21-25 year old group.

The information above and the statistics which follow are only estimates, but it must be realized that this reported data, is undoubtedly an underestimation of the problem. Drug abuse among young adults, is growing by incredible leaps and bounds.[4]

1) While drug-related deaths rose 300% in the last decade for the State as a whole, in the 15-24 year old group drug related deaths increased 1300%.

2) The number of patients admitted to State hospitals with drug diagnosis increased 25% over the past decade. The increase in the adolescent and young-adult category was over 2610%.

3) The increase in commitments to correctional institutions for drug violations has been 243% over the past decade. For the 18-25 year group it has been almost 600%.

At this point a question may be formulated in the minds of many in regard to what percentage of youth under the age of 18 would be institutionalized if drug violations and prosecutions observed no age barrier for commitments.

Money allocated to the area of drug education in this State, as of 1974, totaled only $12,333 dollars of $1,294,139 total dollars allocated for the entire drug problem.[5] This is only 9% of the total amount

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[4]Ibid., p. 38.

[5]Ibid., p. 143.

of money combined through State, Federal and Local efforts to combat drug abuse. The first factor we must eliminate in education, is that of finding the cause for drug abuse. Cause implies a specific reason for a behavior; cause, however, is nothing more than a simplistic explanation for the layman and should not be accepted in the area of research. Research must acquaint itself with all the factors which constitute an action or behavior.

In a later study conducted for Ohio by Abt Associates Inc. of Cambridge, Massachusetts, abuse of drugs for the age group 14-17 ranks at 47.1% and for the age group 18-24 at 58.5%. Further, as age increases, the abuse of drugs decreases, e.g., the age group 25-34 peaked at 32.5%.[6] The characteristic of using more than one drug at a time is of major concern for the dangerous effects it may have on the human system. The Abt study had this to report on polydrug use.[7]

> Clearly, the prevalence of regular polydrug use is highest among Ohio's under 25 population, particularly among 18-24 year olds. More than one out of every five respondents age 18-24 reported regular polydrug use in the survey. About one in every six respondents age 14-17 admitted to regular polydrug use. In total, two-thirds of the estimated 585,000 poly-drug users in Ohio are under 25. While regular polydrug use is less frequent among older population groups, it is not inconsequential. An estimated 90,000 persons aged 25-34 regularly combine two or more substances, and about 75,000 Ohioans aged 35-49 are poly-drug users.

Once again the need for drug education in our school systems is obvious. The statistics reported above show a growing trend of drug abuse among

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[6]Dr. Robert Jerrett, III, "Drug Use in the State of Ohio," Report presented to the Department of Mental Health and Mental Retardation (Columbus, Ohio, 1975), p. 112.

[7]Ibid., p. 120.

adolescents and adults. We are obligated to inform our children and their parents about this problem and the hazards that are inherent in this trend. Society can no longer deny the existence of regular drug use. We must face this problem and confront it in our schools. As the Canadian Commission on drug education observes, ". . . we have more to fear from willful ignorance than we do from knowledge in this field."[8]

Myers reports on a recent drug education curriculum in which 1,655 students participated. The study covered grades K-12 and reports the effects of the drug education program. The program was based on a causal approach to human behavior. Areas studied were the students' drug knowledge, behavior knowledge and developmental attitudes, as they relate to drug use and abuse.[9] The results of the study were significant in all three areas tested. Some classes failed to meet all the standards desired. This led the researchers to conclude that, "while the curriculum has been shown to be effective, there is considerable evidence that it is not teacher-proof."[10] The recommendations of this study were improved teacher preparation and inservice training for increased success of drug education.[11] In a 2-year evaluation study in

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[8]Marc G. Kurzman, R.Ph., J.D., "Drug Education: Boom or Bust?." Contemporary Drug Problems, III, No. 1 (1974), p. 68.

[9]E. D. Myers, "The Effect of a Drug Education Curriculum Based On a Causal Approach to Human Behavior," Journal of Drug Education, IV, No. 3 (1974), p. 310.

[10]Ibid., p. 315.

[11]Ibid.

the Coronado, California schools, initiated in 1968, Carney concluded that:[12]

> The largest effects are found for males, at the earlier ages . . . Actual frequency of drug use and more dangerous behaviors tend to be less in experimental values classes than in control groups.
>
> In the absence of the drug abuse program, groups from grades 7 through 12 tend to move in attitudes toward a "drug culture" pattern and to increase their use of alcohol and marihuana.

In one Pennsylvania school and in 18 California schools a short term (4 week) program was evaluated. The findings showed that there was no decrease in drug usage, simply an increase in drug knowledge.

The number of published studies of drug education are few. The majority of these are a year or less in duration. It appears that we may have found the problem. That is, we have been seeking a short term cure for a problem that has been with us for decades. In 1972 the U.S. Department of Health Education and Welfare (DHEW) commissioned Macro Systems Inc., to evaluate drug education programs on a national and community level. Six communities were selected; Richmond, Minneapolis, East Harlem, San Diego, Chicago and Lubbock.[13] Their findings of this evaluative research were as follows,[14]

> The preliminary assessment indicated that validity and sophistication of programs and materials were entirely dependent on program context and target populations in which

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[12]Louise G. Richards, Ph.D., "Evaluation in Drug Education: Methods and Results," National Clearinghouse for Drug Abuse Information (Rockville, MD., 1972), p. 89.

[13]Michael S. Goodstadt, "Myths and Methodology in Drug Education: A Critical Review of the Research Evidence," Report presented at the International Symposia on Alcohol and Drug Research (Toronto, Canada, 1973), p. 116.

[14]Ibid.

> they were used. After extensive research and careful review and examination of existing DHEW drug programs and materials no major problems of scientific validity or sophistication . . . were found when they were considered in the abstract. . . . The most glaring void is the need to develop a comprehensive drug education and innovative program development at the Federal and community levels.

## Review of the Literature

### Aspects of Drug Education

The inception of any drug education program should involve not only school administrators, but parents, teachers and students. Edwards, discussing program development, purports that:[15]

> In many cases innovative and promising programs initiated by students or community groups fail because of lack of support from faculty or administration, who perceived these developments as a threat to the existing power structure. . . . The group should develop a set of goals and objectives and then select personnel whom they feel can be effective in achieving these goals. The administration will be more receptive and supportive since it was actively involved in program development. The faculty and student body, who were involved, will also be supportive of the program. Personnel elected will then be in a position to implement constructive programs geared to meeting the goals established.

If students are involved with the inception of the program, then they will be motivated to assure the success of the program. No program, regardless of its success, can survive without community support whether in the form of participation, moral support or financial aid.[16] Therefore, it is essential to involve the community and the students in the development of a drug education program.

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[15]Gerald Edwards, ED.D., "Perspectives on Drug Education," Contemporary Drug Problems, III, No. 2 (1974), p. 523.

[16]Ibid., p. 527.

As Piorkowski notes in the development of a drug education program, the dissemination of information may cure ignorance, but it will not automatically change behavior or attitudes.[17] Further, it is the shaping, molding, and teaching of attitudes and values which are antithetical to drug use.[18] Drug information is a separate aspect of drug education, being the function of distributing factual knowledge of drugs and their effects upon people.[19] Drug education as defined by Kurzman should cover a broad range of teaching and learning situations and experiences. In the educational process the school provides a place in which to develop human intellect, emotions, psychological and physiological maturity.[20] Drug education is unsettling for many citizens because of their ignorance of the programs, their fear of promoting drug usage, etc. Some drug education programs have caused their own demise through poor organization. In a year long study conducted by the National Education Association, Hammond concluded that:[21]

> . . . the greater percentage of existing drug education programs are superficial and educationally poor. Some of the programs, because of false statements made by misinformed or uninformed educators, could very well have contributed to the increase in drug usage in this society. Much money is being wasted on poor materials and misinformation. . . . The use of false, poor, emotionally oriented, and judgemental material is more harmful than no materials at all.

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[17]Geraldine K. Piorkowski, "Drug Education at Its Best - The Shaping of Values and Anti-Drug Attitudes," Journal of Drug Education, III, No. 1 (1973), p. 34.

[18]Ibid., p. 35.

[19]Marc G. Kurzman, R.PH., J.D., "Drug Education: Boom or Bust?," Contemporary Drug Problems, III, No. 1 (1974), p. 63.

[20]Ibid., pp. 63-64.

[21]Peter G. Hammond, "Why Drug Abuse Education is Failing in America," Contemporary Drug Problems, II, No. 2 (1973), p. 249.

The existing literature in drug education was reviewed by the National Education Association; of eight hundred publications they recommended only thirty. This study also viewed more than 300 drug education films, of these only thirteen were recommended. The majority of films contained misinformation from a scientific and medical viewpoint about drugs and regarding their effects.[22] The films portray an amorphous cult found in back alleys, dirty crash pads, and wild parties. These movies picture a life style that is ugly, unhealthy and amoral.[23] The only plausible reason for this portrayal is expressed very well by Hammond:[24]

> We clearly failed to understand the nature of the problem. We saw certain drugs instead of uncertain issues. We saw pat answers instead of probing questions. We saw them instead of us. We saw a threat to our moral security instead of a challenge to our inventiveness.

Edwards notes that candor and frankness should be present in any drug education program to ensure success of that program. If a credibility gap exists then the teacher has lost his or her effectiveness not only in this program, but also quite possibly in other areas as well.[25] Edwards concludes by stating that "Students derive security from association with a stable program that can provide assurance of continuous responsiveness to their needs."[26]

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[22]Ibid., p. 249.

[23]Ibid., p. 251.

[24]Ibid.

[25]Gerald Edwards, ED.D., "Perspectives on Drug Education," Contemporary Drug Problems, III, No. 2 (1974), p. 489.

[26]Ibid., p. 528.

Drug Education Programs

The Department of Education for the State of New York developed a thirteen million dollar program to help combat drug abuse among its youth. In the guidelines of their proposal, they give attention to the following area.[27]

> For students who are addicts, and those in early stages of drug dependency, schools should accept increasing responsibility for advice to families, referrals to competent health and social agencies, and cooperation with professional and lay persons who are interested in and qualified to help such students. Negative and authoritarian approaches, question and answer recitation, and lecture methods have proved ineffective, and should be avoided. Include problem-solving techniques, independent study and group discussions and exchanges.

The final two vital points of the program that should be mentioned are, first "Early and responsible involvement of students is extremely important"[28] and finally concerning the students involvement, the area covered should contain "personality development, social and cultural influences, human motivation, and the pharmacological effects of these substances."[29] The people who developed this program at New York realized the scope of their problem and thus developed a comprehensive study plan. They further discovered that the use of scare tactics and/or an authoritarian approach to drug education is not only ineffective, but also precarious to the goals of the program.

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[27]New York State Education Department, "All-out Fight Against Drugs," Inside Education, LVII, No. 1 (1970), p. 10.

[28]Ibid., p. 9.

[29]Ibid., p. 10.

Another drug education program was developed for the State of California by Kitzinger and Hill.[30] Their program was a comprehensive approach to drug education that incorporated the areas of physical and mental health, developing new interests, a strong individual personality and a desire to work for a better understanding of humanity. The objectives for the program included the following goals:[31]

> 1) To develop respect for his body so that he will not allow it to be injured by smoking, sniffing, ingesting, or injecting into the body system any substances that have potential for damage;
> 2) To acquire reverence for his brain and the infinite possibilities inherent in its development so that he is not prone henceforth to tinker with its intricate mechanism;
> 3) To develop interest and skill in several wholesome forms of recreation so that he need not look for synthetic self-satisfaction which would only serve to make him isolated and unhappy;
> 4) To learn that zest, adventure, and meaningful experience lies within his grasp in science, books, hobbies, arts, and crafts, physical activities, and the outdoors;
> 5) To learn to take command of his own life, to assume responsibility for his own acts, and to meet his own problems squarely and courageously;
> 6) To develop sound convictions and worthwhile values as a basis upon which he can stand firm against those people who would sway him against his better judgement; and
> 7) To know his worth as a human being so that he will not willingly participate in his own destruction.

Brown and Olsen of the University of Illinois, developed a program of "soft sell" versus "hard sell" drug education for the Illinois school system. They incorporated a specific aspect in the program to help insure its' success, "The project includes an undergraduate course of study emphasizing performance-based teacher training activities and the immediate

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[30]Unpubl. diss. (Ohio State, 1971) by Gerald Loretto Ognibene, "The School Counselor in a Comprehensive Drug Education Program: A Comparative Study of the Knowledge and Attitudes of Secondary School Students and of School Counselors Toward Drugs," p. 27.

[31]Ibid.

and long range evaluation of this approach to teacher preparation."[32] This type of evaluation will allow the school system to weed out teachers who are not compatible with this type of drug education, and who would have a negative effect on any success of attaining the goals of the program. The "soft sell" drug program itself sets the goals of the program " . . . concerned about readiness, stress all drugs have side effects, seeks alternatives to drug use, supports the nonuser, maintains a K-12 drug education plan within a health context and emphasizes unbiased teaching value activities, student discussions and decisions-making."[33] This program introduces a new aspect into drug education; that is teacher preparation and training.

The Department of Health, Education and Welfare of the Federal Government developed a federal grant for the purpose of training teachers in drug education and to assist schools in developing drug education programs to meet their local needs. The components of this program include,[34]

1) counseling for students, both individually and as a group, led by trained personnel;
2) peer counseling with appropriate leadership training;
3) group experience led by trained personnel, either professional or para-professional, to clarify values, improve communication, problem solving and coping skills; and to improve understanding of the behavior of ones' self and others;
4) family education
5) alternate educational experiences;
6) alternate leisure time pursuits;
7) referral services for drug abusers; and

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[32]J. D. Brown, "Illinois Trends in Elementary School Drug Education: The Soft Sell," Journal of Drug Education, III, No. 2 (1973), p. 162.

[33]Ibid., pp. 162-163.

[34]"School Alcohol and Drug Abuse Prevention and Early Intervention Projects, Department of Health, Education and Welfare, Fiscal year 1975 (Washington, D.C.), pp. 4-5.

8) teacher in-service training and adult education; drug information service for teachers, students and parents.

The final program discussed in this section is the Ohio Drug Education Program, which uses the causal approach to problems concerning drug abuse. Its primary goal, as set forth in the teachers manual is, " . . . increasing the ability of the student to understand the causes and consequences of human behavior."[35] The basis of this concept is that the student will be more effective in selecting the alternative behaviors that are not anti-social or destructive in nature.[36] The premise upon which the program objectives were based is determined solely by the fact that the following conditions not only exist but are true:[37]

1) that behavior is caused.
2) that these causes can be discovered and understood.
3) that an understanding of the causes of drug abuse and insight into the immediate and remote consequences of such behavior both upon himself and others, will help the individual select those behaviors which will be of greatest benefit to himself and others.
4) that a program based upon a search for the understanding of the dynamics of human behavior should be of benefit to a large segment of the school population. The adoption of the causal appraoch to human behavior will provide students with a means to approach other problems resulting from behavior found ineffective in the realization of personal and societal goals.
5) that, the by products of such a program will be beneficial, creating a more fully functioning, autonomous individual.

The Ohio program issues a separate volume for each grade level from K-6; for the grade levels of 7-9 there is one volume; and for grades 10-12 there is one volume.

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[35]The Educational Research Council of America, "A World to Grow In," (prepared for the Ohio Department of Education, Teacher Manual, 1972), p. 4.

[36]Ibid.

[37]Ibid., p. 5.

Summary

In summation, the vital point is that these programs all have outstanding and unique aspects in their plans and objectives. Teacher preparation and evaluation is one of the outstanding points from the Illinois State Program, and the aid offered by the Federal Government is another good program. The school setting is the natural atmosphere for the adolescent and young adult to examine his or her behavior, and if the schools are willing to accept this responsibility, then they can directly affect the behavior patterns of society at large.[38] Drug usage in schools is quite evident when one reviews the statistical data available, therefore "For the school to ignore this problem would be irresponsible; for the school to face it directly can, however, be very constructive."[39] The rush to develop immediate programs (consequently often haphazard) brought on by public hysteria, has given rise to the idea that drug education has not only failed but in many instances worsened the situation. Many programs, because they were rapidly thrown together coupled with the lack of trained instructors have thus failed. Hammond reports that:[40]

> Drug education need not fail. It can prevent drug misuse, but only if it is consistent with what we know about drugs, man, and the learning process. But for today, a thought from one of my favorite American folk artists, Arlo Guthrie:

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[38]Gerald Edwards, ED.D., "Perspectives on Drug Education, "Contemporary Drug Problems, III, No. 2 (1974), pp. 489-490.

[39]Ibid., p. 489.

[40]Peter G. Hammond, "Why Drug Abuse Education is Failing in America," Contemporary Drug Problems, II, No. 2 (1973), p. 249.

> The question is not what we will be doing when we get there, but rather how to go and feel good that you are going. Going there is being there or at least almost there. Knowing what to do once you get there must be something like knowing what to do when you're anywhere.

Drug education programs, therefore, must be well planned with established objectives and goals in order to successfully serve society.

As previously noted, research in this area is very limited and before we decide to vacate the area of prevention through education we must have more reliable data in order to evaluate the results. Short term projects have observed little or no change in behavior; conversely attitude and knowledge regarding drugs has increased. Long term educational programs such as the one conducted at Coronado, have demonstrated a decline in drug abuse behavior among experimental groups compared with control groups. Therefore, it is evident that we must be patient and plan carefully in order to solve the problems that face our individual communities. Kurzman, assistant director of the drug information and education program at the University of Minnesota, contends that, "It is important to remember that whatever our role and whatever our category, drug education has the potential to enable us to more intelligently, rationally, and consistently influence drug-using behavior so as to minimize abuse."[41] Society must decide today for the future, for tomorrow may be too late.

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[41]Marc G. Kurzman, R.Ph., J.D., "Drug Education: Boom or Bust?," Contemporary Drug Problems, III, No. 1 (1974), p. 65.

# CHAPTER II

## METHODOLOGY

For the purpose of this study, a questionnaire was developed to discover the awareness of the Ohio Drug Education Program among a randomly selected sample of schools. The second part of this study centered around an attitudinal instrument given to both a treatment group and a comparison group. Subjects selected for each group were from the seventh grade of a Columbiana school. This instrument was used to determine if a locally developed program would: Show a change in the attitude of the student toward the norm of today's social morality concerning drug use or abuse among the 'older generation' (30 years' and older).

### Sample

The sample selected for the first part of the study included one hundred primary schools, i.e., grades K-6 and one hundred secondary schools, i.e., grades 7-12. These schools were randomly selected from the Ohio Educational Directory 1975-75.[42] Table B of random numbers from the Educational Statistic's Book was used for this selection.[43]

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[42]Ohio Department of Education, Ohio Educational Directory, (Columbus, Ohio 1976), pp. 22-262.

[43]W. J. Popham and K. A. Sirotnik, Educational Statistics: Use and Interpretation, 2nd ed. (New York, 1973), p. 367.

The second portion of this study consisted of random selection of thirty-five students from the eighty students that were exposed to the treatment variable. The comparison group consisted of thirty-five students selected from the remaining, presumably unexposed (see limitations), seventh grade student body. Assignment into both groups was carried out by the guidance counselor.

Variables

The first portion of this study is descriptive in nature and the use of simple random selections will control any exogenous variables that may exist. The second portion of the study was concentrated in a rural area, in which the two groups consisted of white males and females at the seventh grade level. The total number of adolescents that completed the drug program, consisted of approximately 50% males and 50% females. Therefore age, sex or ethnic background should not have an effect upon the results of the instrument. The scope of the study is limited to the above conditions, i.e., seventh grade, white male or female, rural community. A threat to internal validity that is viable in this study is self-selection into the treatment program. Other threats to internal validity should not be operative in this study, e.g., see Campbell and Stanleys' Experimental and Quasi-Experimental Designs for Research.[44]

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[44]Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research, 10th ed. Chicago (1963), pp. 5-6.

Threats to external validity that may be operative here would be the interaction of testing and treatment, and the interaction of selection and the treatment program, i.e., see Campbell and Stanley.[45] Other threats to external validity should likewise not be operative within this study, e.g., see Campbell and Stanley.[46]

The questionnaire was reviewed by a panel of experts to eliminate any questions that were stated in such a manner as to bias the answers. This panel of experts consisted of three instructors at this University and the Assistant Director of the Police Hiring Requirements Project.

The attitudinal instrument administered in order to determine the social attitude of the treatment and comparison groups was adopted from the Drug Abuse Education and Community Involvement survey.[47] The drug attitude scale used was developed at Pennsylvania State University by Swisher and Horan. Reliability co-efficients were established for this scale of .84 and .87 on two separate tests.

Limitations

The major concern here lies within the second part of the study, in which it was not possible to randomly assign subjects to the treatment group and comparison group. In addition, there was a time lag of

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[45]Ibid., pp. 16-22.

[46]Ibid.

[47]A. A. Latell, Frank Yannucci and G. Compton, Ashtabula Mahoning Trumbull County Drug Education Service, (July, 1974), p. 40.

one to four months between the completion of the program and the administration of this instrument. It is possible that within this time period the subjects available for selection into the comparison group were contaminated.

The limitations of the first part of this study are obvious. The return rate was 60 percent, thus the effects of the other 40 percent upon the calculated data is unknown.

Method of Data Analysis

Questions that could be answered by a response of yes or no were placed into a frequency distribution. Opinion questions were also grouped into categories and placed in frequency distributions. (See CHAPTER III.)

The attitudinal instrument is a Likert scale ranging from one to five points. One point is a negative response toward drug usage while five is a positive response toward drug usage. Because of the nature of the evenly numbered questions, the scale had to be reversed in order to ensure proper results (see APPENDIX B).

# CHAPTER III

## RESULTS OF THE STATEWIDE SURVEY

The following data reveal the information obtained via the questionnaires mailed February, 1976. As previously noted, the purpose of the questionnaire was to determine the awareness and use of the Ohio State Drug Education Program by the public primary and secondary schools within Ohio. Two hundred questionnaires were mailed; one hundred to primary and one hundred to secondary schools which were randomly selected from the Educational Directory.[48] One hundred twenty-one questionnaires were returned yielding a 60 percent response. Response from primary schools was 62 questionnaires (62 percent). Response from secondary schools was 58 questionnaires (58 percent).

The tables below present the distribution of responses to each question as answered by the primary and secondary schools.

TABLE 1

DISTRIBUTION OF SCHOOLS AWARE
OF THE STATE DRUG EDUCATION PROGRAM

| Response | Primary Schools | Secondary Schools |
|---|---|---|
| Yes | 51 - 82% | 44 - 76% |
| No | 11 - 17% | 14 - 24% |
| Total | 62 - 100% | 58 - 100% |

[48]Ohio Department of Education, Ohio Educational Directory, (Columbus, Ohio 1976), pp. 22-262.

The above table shows that the majority of schools which responded to the questionnaire are aware of the program.

TABLE 2

DISTRIBUTION OF SCHOOLS THAT
USE THE STATE DRUG EDUCATION PROGRAM

| Response | Primary Schools | Secondary Schools |
|---|---|---|
| Yes | 21 - 34% | 11 - 19% |
| No | 41 - 66% | 47 - 81% |
| Total | 62 - 100% | 58 - 100% |

Response to this question varies with response to the first question. Results of the first question showed that the majority of schools know of the Ohio program, yet responses to this second query demonstrate that the majority of schools do not use the program.

Responses to question number three were grouped into four categories: no opinion, good, average, not effective. If the question was not answered it was placed under the heading no opinion.

TABLE 3

DISTRIBUTION OF THE
EFFECTIVENESS OF THE STATE PROGRAM

| Response | Primary Schools | Secondary Schools |
|---|---|---|
| No opinion | 37 - 60% | 32 - 55% |
| Good | 11 - 18% | 9 - 15.5% |
| Average | 9 - 14% | 9 - 15.5% |
| Not Effective | 5 - 8% | 8 - 14% |
| Total | 62 - 100% | 58 - 100% |

Responses presented in TABLE 3 demonstrate that the range between the categories 'good' and 'not effective' is not great. The majority of the respondents expressed no opinion to this question, therefore, any conclusions regarding this particular query would be purely speculative.

Again, for this analysis, responses were grouped into four categories: developed own program, developed by an outside agency, modification or partial use of the Ohio program, and no response.

TABLE 4

DISTRIBUTION OF DRUG PROGRAMS OTHER THAN THE STATE PROGRAM

| Response | Primary Schools | Secondary Schools |
|---|---|---|
| Developed Own | 20 - 32% | 27 - 47% |
| Outside Agency | 16 - 26% | 8 - 14% |
| Part of Modification | 5 - 8% | 7 - 12% |
| NR[a] | 20 - 32% | 16 - 27% |
| Total | 61 - 98%[b] | 58 - 100% |

[a]NR represents 'No Response.'

[b]One school reported they had no drug problem, therefore they did not feel it was necessary to have a program (1 - 2%).

The general conclusion for this query is in support of satisfaction by the respondents to the Ohio program. The consideration must be kept in mind that there were many non-respondents to this question which may have altered the general conclusions regarding this question.

TABLE 5

DISTRIBUTION OF PROGRAMS EVALUATED

| Response | Primary Schools | Secondary Schools |
|---|---|---|
| Yes | 12 - 19% | 20 - 34% |
| No | 46 - 74% | 34 - 59% |
| NR | 4 - 7% | 4 - 7% |
| Total | 62 - 100% | 58 - 100% |

Responses in TABLE 5 clearly demonstrate a lack of evaluations which are needed in order to determine the effects of the drug program administered in the schools. Without any evaluation, schools cannot determine weaknesses in their present programs. I conclude that these schools have little concern regarding the effects of their program.

TABLE 6

DISTRIBUTION OF INSTRUCTORS FOR DRUG EDUCATION CLASSES

| Response | Primary Schools | Secondary Schools |
|---|---|---|
| A[a] | 39 - 63% | 36 - 62% |
| B[b] | 2 - 3% | 1 - 2% |
| A & B[c] | 19 - 31% | 19 - 33% |
| NR | 2 - 3% | 2 - 3% |
| Total | 62 - 100% | 58 - 100% |

[a]A represents 'classroom teachers.'

[b]B represents 'outside instructors.'

[c]A & B is a combination of classroom teachers and outside instructors.

The majority of responses in TABLE 6 place administration of the program in the hands of the classroom teacher. A study of the training provided for these teachers would seem to be appropriate, since they have a definite input into the programs. Chapters I and II covered this topic in some depth.

Again, for the purpose of analysis, opinions were grouped into four categories: high, average, minimal and none.

TABLE 7

DISTRIBUTION OF DRUG ABUSE THAT EXISTS
IN THE ADMINISTRATOR'S OPINION WITHIN HIS SCHOOL

| Response | Primary Schools | Secondary Schools |
|---|---|---|
| High | 0 - 0% | 0 - 0% |
| Average | 3 - 5% | 23 - 40% |
| Low | 27 - 43% | 31 - 53% |
| None[a] | 32 - 52% | 4 - 7% |
| Total | 62 - 100% | 58 - 100% |

[a]If the question was not answered, it was classified as none.

Responses in TABLE 7 demonstrate that a problem does exist among the schools that were surveyed. To what extent these percentages really describe the problem accurately is dependent upon faith in an administrator's willingness to report or knowledge of the extent of the problem.

The information gathered in this survey suggests the following conclusions: (1) The majority of schools surveyed do have knowledge of the existing Ohio educational drug program, (2) The majority of these schools do not use the program, (3) The majority have developed their own programs, but have often failed to evaluate the effects of their

programs, (4) The majority of drug programs were handled by the classroom teachers. Further, the impact the teacher has on the program can be a major contributor to the programs' success or failure. (5) School officials are beginning to realize that a problem does exist and they are willing to report their knowledge of it. Finally, this is the first step in combating the problem of drug abuse.

## Recommendations

There is a need for improved communication between the State Board of Education and schools throughout the State in order to enhance the fight against drug abuse. There is a need for evaluation of programs developed either by outside agencies or by the schools to determine the deficiencies in the programs and/or effects upon the students. There is a need for evaluation of instructors of the programs in order to reduce any existing bias, to insure success of the program. Lastly, there is a need for inclusion of the community and students in development or reorganization of the program, not only for moral support by parents, but also for the interest and support which students will give to the program.

## Results of the Attitude Instrument

The following data were gathered from a school in Columbiana County. The subjects in group A (those that have had the treatment variable) and group B (those that have not) were in the seventh grade. This is a rural community with very conservative social attitudes toward drugs, i.e., marihuana, heroin, barbituates, amphetamines, etc. There was no hypothesis stated, rather the question: "Will a locally developed

drug education program alter the attitudes of the subjects toward the conservative social moralities of drugs?"

The instrument was composed of fourteen questions measuring this attitude. The instrument and list of scores are in APPENDIX B. The first statistical test run upon these scores was the Pearson product-moment correlation.[49]

$$r = \frac{\Sigma XY - \frac{(\Sigma X)(\Sigma Y)}{N}}{\left(\Sigma X^2 - \frac{(\Sigma X)^2}{N}\right)\left(\Sigma Y^2 - \frac{(\Sigma Y)^2}{N}\right)}$$

The value recorded from this formula, with the data presented in APPENDIX B, yielded a correlation of .006. This value represents a very low relationship between group A and group B. This suggests that the subjects were selected from two separate populations. Therefore, something had an effect upon one of these groups which caused this difference via the treatment variable. Therefore, a second test was employed to ensure that this difference was not due to chance alone. A t-test of separate variance was used, with a one-tailed test and an alpha level set at .05.[50]

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

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[49] W. J. Popham and K. A. Sirotnik, Educational Statistics: Use and Interpretation, 2nd ed. (New York, 1973), p. 85.

[50] Ibid., p. 139.

The value needed to reject the question stated above lies between 1.697 and 1.684. When the data were computed using this formula, a t-value of 2.17 was calculated. This suggests that the $p<.05$ of this difference between the groups was not due to chance alone. The probability that this t-value is due to chance alone is $p<.018$. The values established by these two statistical tests leads me to believe that the difference between these two groups has been caused by the treatment variable, i.e., the drug education program.

## Recommendations

The effective duration of this program on the subjects within the treatment group cannot be established at this time. The subjects have only been away from the program for a period of 1-4 months. Since this project is in its infancy, and has been shown to produce a change in social attitudes concerning drug abuse, it would be beneficial for the school to incorporate a complete program for grades K-12. A program of this nature would allow for a formative evaluation, which would continually update and upgrade the efficiency of the program.

This research has shown that a drug education program will change social attitudes toward drug abuse. However, its exact extent is unknown and should be considered in future studies. With enhanced cooperation between the State Board of Education, the local school districts, students and the community, Ohio will be headed toward an efficient program to help combat the growing problem of drug abuse among our adolescents and young adults. It is our duty, not only as educators, but as a society, to develop and implement an educational program that

will inform our youth of the physical dangers involved in drug use and help them develop the ability to face problems head on and without drugs.

# APPENDIX A

## Questionnaire

# QUESTIONNAIRE

Identification Number

1. Are you aware of the Ohio State Drug Education Program?

   Yes _____ No _____

2. Do you use the Ohio State Drug Education Program?

   Yes _____ No _____

3. How effective do you believe the State Program is?

4. If the State Program is not used, what type of drug educational program do you use and for what grades is it applicable?

5. Have you evaluated your program? Yes _____ No _____

6. Who instructs your drug education classes?

   a. Classroom Teachers _____

   b. Outside instructors _____

      From what agency do the instructors come _____

7. In your opinion, how would you describe the problem of drug abuse in your school?

8. Your comments of this survey are welcome at this point.

# APPENDIX B

## Attitudinal Instrument and Data

# ATTITUDINAL INSTRUMENT AND DATA

## Attitude

For questions 1 through 14, please indicate by letter which of the following is your honest opinion of each statement below,

a. I strongly agree
b. I agree
c. I have no opinion
d. I disagree
e. I strongly disagree

_____ 1. Drugs are basically an unnatural way to enjoy life.

_____ 2. I see nothing wrong with taking an LSD trip.

_____ 3. I'd have to be pretty sick before I'd take any drug including an aspirin.

_____ 4. Teachers ought to encourage their students to experiment with drugs.

_____ 5. Pep pills are a stupid way of keeping alert when there is important work to be done.

_____ 6. I wish I could get ahold of some pills to calm me down whenever I get "up-tight."

_____ 7. Students should be told about the harmful side effects of certain drugs.

_____ 8. All drugs should be made legal and freely available.

_____ 9. Even if my best friend gave me some hash, I probably wouldn't use it.

_____10. In spite of what the establishment says, the drug scene is really where it's at.

_____11. As a general rule of thumb, most drugs are dangerous and should be taken only with medical authorization.

_____12. I admire people who like to get "Stoned".

_____13. Taking any kind of "dope" is a pretty dumb idea.

_____14. I would welcome the opportunity to get "high" on drugs.

## Data

| TREATMENT GROUP | | COMPARISON GROUP | |
|---|---|---|---|
| Subject | Score | Subject | Score |
| 1 | 2.07 | 1 | 2.64 |
| 2 | 2.07 | 2 | 1.50 |
| 3 | 3.43 | 3 | 1.78 |
| 4 | 2.43 | 4 | 2.14 |
| 5 | 2.36 | 5 | 1.71 |
| 6 | 2.64 | 6 | 1.07 |
| 7 | 3.43 | 7 | 2.86 |
| 8 | 1.14 | 8 | 2.50 |
| 9 | 1.86 | 9 | 2.28 |
| 10 | 1.78 | 10 | 1.57 |
| 11 | 2.00 | 11 | 2.07 |
| 12 | 1.71 | 12 | 2.28 |
| 13 | 3.07 | 13 | 1.93 |
| 14 | 2.64 | 14 | 2.14 |
| 15 | 1.71 | 15 | 1.57 |
| 16 | 2.36 | 16 | 2.28 |
| 17 | 3.00 | 17 | 2.00 |
| 18 | 2.14 | 18 | 1.86 |
| 19 | 1.43 | 19 | 2.00 |
| 20 | 2.21 | 20 | 2.00 |
| 21 | 2.00 | 21 | 2.14 |
| 22 | 3.21 | 22 | 1.50 |
| 23 | 1.93 | 23 | 2.43 |
| 24 | 1.36 | 24 | 2.07 |
| 25 | 1.50 | 25 | 1.71 |
| 26 | 2.50 | 26 | 1.86 |
| 27 | 2.57 | 27 | 1.71 |
| 28 | 2.36 | 28 | 1.64 |
| 29 | 1.21 | 29 | 1.78 |
| 30 | 2.07 | 30 | 1.28 |
| 31 | 2.07 | 31 | 2.07 |
| 32 | 2.21 | 32 | 1.71 |
| 33 | 1.57 | 33 | 1.64 |
| 34 | 2.21 | 34 | 1.43 |
| 35 | 1.36 | 35 | 1.57 |

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