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Teen Institute Effectiveness Survey

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Abstract:

This project is a survey study of the effectiveness of the Green Mountain Teen Institute program, a drug use prevention program carried out by Green Mountain Prevention Projects in Burlington, Vermont. We surveyed past participants of the Green Mountain Teen Institute to determine if the program has been achieving its goal of long term use prevention in its graduates. We then compared our findings to national usage statistics to determine if the program has had a significant impact. In general we found that the amount of substance use for program participants was at or below national use levels indicating that the Institute may indeed have a positive effect.

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Introduction

It is getting harder and harder every day to be a teenager in our society. Incidents of school violence have risen to unfathomable heights, teen pregnancy and sexuality issues have put heavy burdens on the youth generation, and family structure has deteriorated dramatically since the days of the Waltons. Substance abuse in itself has also become increasingly problematic, and it affects every other aspect of growing up. In an effort to take a step toward a healthy culture, many people seek to prevent drug and alcohol abuse before it starts. This enables people to target not only substance abuse as an isolated issue but the factors associated with drug and alcohol use. It is this belief that has brought prevention of drug and alcohol abuse together with wellness, education and a self-empowering sense of leadership. If the youth is able to obtain a positive sense of self and the knowledge to make healthy personal decisions, then s/he will be a healthy adult. In an effort to foster these healthy members of society, programs have been formed around the United States to prevent harmful substance abuse and encourage healthy living. Vermont has been on the forefront of prevention in the past two decades thanks to the efforts of non-profit organizations. One such organization, Green Mountain Prevention Projects (GMPP), is located in Burlington, Vermont. GMPP hopes to make an impact on the drug and alcohol abuse problem in the state. This is the Mission Statement of GMPP:

> The purpose of Green Mountain Prevention Projects, Inc. (GMPP) is to decrease the likelihood that people of all ages will become harmfully involved with alcohol and other drugs. This mission is accomplished by providing primary prevention programs with leadership training within the context of wellness. Through its programs, GMPP trains individuals to be leaders in prevention in its own programs and the community at large.
>
> GMPP discourages the use of tobacco, alcohol, and other drugs. Our goal is to educate Vermonters about the dangers of substance use, abuse, and addiction(Thompson, Lefebvre, 1997).

In order to accomplish this mission, GMPP started running programs in the State of Vermont nineteen years ago. Such programs include the Adult Project, the Peer Leadership Project (PLP), Community Education, the Junior High Project (JHP) and Green Mountain Teen Institute (GMTI). GMTI is the main focus of this project, but JHP also plays a significant role in the information about the participants:

> Research has shown that teens need to be given facts and figures, but they also need tactics to increase their resistance to social influences that may draw them into harmful involvement with drugs. The Junior High Project provides a program designed to help teens avoid drug involvement by enhancing general personal and social skills, developing positive social bonds, and offering opportunity for meaningful participation and increasing personal assets.(Green Mountain Prevention Projects, 1999)

The Junior High Project is a three-day residential and follow-up program for adolescents in Vermont. An important aspect of prevention is being able to educate people when they are young, and middle-school aged youth are a target population. Students attend the program with a group from their own school as well as other schools around Vermont. The workshops offered at JHP include such topics as alcohol and drug abuse and use, team-building, problem-solving skills, decision-making skills, communication skills, and diversity. There are also fun activities and games for the students to do during the session. These activities not only provide the youth with a good time, but the students also brainstorm different activities that they can bring back to friends and schools as fun and safe alternatives to drug use. Examples of such activities range from a pick-up game of capture-the-flag to mocktail parties and costume dances.

JHP participants are able to process the information and experience in the larger JHP community while they are there, as well as in small discussion groups called peer

groups. Peer groups are facilitated by staff members of the JHP and usually consist of four to five participants.

Many students who go through the Junior High Project go on to participate in Green Mountain Teen Institute, GMPP's prevention program for high school students. This program was modeled on other Teen Institutes (TI) that had shown success. The Green Mountain Teen Institute is a five-day residential and follow-up program where participants attend large group workshops and small discussion groups. Each institute is referred to as a "community," and it includes the participants, staff members, and coordinators. The participants attend TI with other students from their schools and around the state. This enables them to go back to their schools, spread the information and empower their peers with the rest of their school group. This connection allows the participants to network with other schools in Vermont in order to share information and organize activities to benefit the building and strengthening of communities around the state. This directly involves the youth in their schools and communities and gives them a leadership role that hopes to make a difference for them and the community. Participants are able to process the information they receive throughout the week in small discussion groups called Family Groups. Family Groups are facilitated by staff members and usually consist of four to six participants. Participants are put in Family Groups without other students from their schools in order to foster a larger feeling of community. The workshops are often done by outside presenters, and cover issues that are pertinent to Vermont's youth and the mission of the organization. Such workshops include Pharmacology and Natural Highs, Communications, Teambuilding, Anger Management,

Sexuality, Families, Drinking and Driving, Stress Management, Re-Entry, AIDS and HIV Prevention, Suicide, and Action Planning.

Pharmacology and Natural Highs gives an overview of the actual chemical effects of drug and alcohol use, as well as the alternatives. The Communications workshop is usually put on by the staff of GMTI through a skit using different forms of dialogue that illustrate effective methods of communication. This includes the importance of being assertive and aware of group dynamics, as well as expressing personal needs when solving problems. The participants are broken up into small groups with facilitators for the Teambuilding workshop; it consists of several low-ropes course activities in order to build trust within the group and to gain problem-solving skills to be applied in the situation as well as in everyday life. The Anger Management workshop is an interactive workshop that challenges the youth to look at their own patterns and habits of conflict and come up with resolution skills. The Sexuality workshop is also run by the staff and can be open to a great deal of interpretation, whether it is a discussion, role-play, lecture, or skit. The topics covered in this workshop include heterosexuality, homosexuality, sexual intercourse, abstinence, relationships, boundaries, as well as problems such as sexual harassment and date rape. The Families workshop can be intense for many youth. Through discussion and role-playing students learn about all of the different types of families there are, what needs come from a family, and the realities and roles of living in a dysfunctional or chemically dependent family. The Drinking and Driving workshop demonstrates the risks and repercussions of alcohol and driving. It is extremely important considering the high occurrence of alcohol-related tragedies with teens in Vermont. Stress Management is probably the most popular workshop at GMTI.

Through a facilitator-lead discussion and guided imagery session; students discover different methods to coping with their own life stresses. The Re-Entry workshop explores the impact that the TI experience will have on the student's life after the institute. The AIDS and HIV prevention workshop has been very effective for the TI; it brings both factual information and safe sex methods together with a presentation by someone who is living with the disease. The Suicide workshop offers students resources that they can use to help himself or herself or a friend who may be suicidal. It does not attempt to explain or give answers as to why so many youth attempt and commit suicide, but it does raise awareness around the issue. Action Planning is crucial to the effectiveness of the Teen Institute. Students work in their school groups to come up with activities and plans that they will use in their schools and communities to raise awareness, build leadership skills and increase healthy decision-making. Fun games and activities are put on every day to keep participants energized during the week. Many of these activities have a teamwork/community theme to them, and competitive games are discouraged to keep the feeling of community. Teens also brainstorm and learn about activities, games, and events that they can bring back to their schools and friends as fun and safe natural highs. Many of these things are as simple as hiking, going to the drive-in movies, rock climbing, or having a substance-free dance at school. There are also guidelines on how participants can host their own state-wide substance-free event at their school, which gives students from all over the state an opportunity to come together and have some fun. In the past, students have written to their local legislators about the importance of funding prevention programs such as GMTI. A recent addition to the program has been involvement with NATI, and in particular the Teen Institute of the Garden State (TIGS). GMTI and TIGS

have been doing exchanges over the past two years to have teens be able to network in other states and benefit from each other's programs. They learn about different workshops and activities to enhance the Teen Institute experience for all.

Over the past 19 years, which workshops are presented and when they are presented has changed; the above is simply a brief overview. (See appendix B) In particular, rules were added and agendas were changed. At its inception GMTI had very few rules and the participants had a great deal of freedom, but there were certainly problems within the TI community with personal boundaries that needed to be addressed. The program directors decided that rules needed to be enforced in order to further strengthen the community and to ensure that the skills being offered were effectively being communicated. Four non-negotiable rules became the norm for each TI community; no drugs, no weapons, no violence and no sex ensured the well being of each TI community. Another example of changing restrictions came with the no smoking rule at the Institute.

These rules were in an effort to promote healthy lifestyles for the participants while they were at the TI, which would hopefully carry into their daily lives. Most recently a policy of non-use for staff members was enacted. This caused an interesting fervor. Many thought that this change would add credibility to the role modeling of staff members. Others felt that as adults they should be free to make their own decisions. Many of these structural changes can be seen in the different relationships and roles in the Teen Institute. The people involved really made the structural changes meaningful.

Through the years rules were not the only thing to change. As the educational climate shifted so did the agenda of GMTI. The program was constantly evolving to

meet the needs of youth in Vermont. In the past year, GMPP decided not to offer the Green Mountain Teen Institute anymore, but the replacement program, Leaders in Action, is still, at its core, a shortened TI.

The participants are certainly the direct beneficiaries of the Institute, but there are many other people who play roles in the process. The Program Director is hired by GMPP to oversee each of the summer's Teen Institutes. This person is responsible for finding a triumvirate of people to coordinate each individual institute. The Program Director also is responsible for coordinating staff members for each of the institutes.

The staffing role is crucial to the success of GMTI. There are three staffing roles at the TI: the adult staff, the experienced staff and the first-time staff. There are approximately twenty staff people at each institute. The first-time and experienced staff members are former participants of the Teen Institute, and the adult staff are active members of the community who have a desire to make a difference with the youth of VT. Adult staff members offer a different perspective to the TI with their valuable life experience. The experienced staff folks are members of the TI community who have participated at a previous TI, and who have staffed at least one other TI. Because of their knowledge they are tremendous role models for the participants as well as the first time staff. The return of experienced staff members helps to give consistency during the changing structure in the Institute. In an ideal situation, one adult staff, one experienced staff and one first time staff member will facilitate a family group together. Before the Teen Institutes in the summer, all of the staff members attend a training session in order to prepare them for the task that is at hand for the summer and also to excite and empower them for the summer experience. (See appendix B)

Over the past 19 years, a total of 2500 people have experienced the Green Mountain Teen Institute. This is a very significant population of youth in Vermont. GMPP has modified its programs over the years in order to keep up with the changing generations of teenagers and new studies of prevention methods, and GMTI had to keep up with those changes as well. As a non-profit organization, GMPP relies on many different sources for funding in order to reach this population of youth and improve its programs. Over the past few years, there has been an increasing trend towards the funding of research-based programs in prevention. For example, New Directions grants were given to several communities in Vermont for the purposes of drug abuse prevention and overall community-based wellness education. When applying for the grants, these communities were restricted to implementing programs that had solid quantifiable data to illustrate their effectiveness (Britt, 2000). Until now, Green Mountain Prevention Projects has not conducted such a study to measure the efficacy of GMTI, and as a result the program has experienced decreasing eligibility for funding and implementation.

The Vermont State legislature also is concerned with funding for prevention programs. State funding is critical to this non-profit organization, and without the necessary data on the program, receiving such funding has become harder for Green Mountain Prevention Projects. This survey will enable GMPP to provide solid information on the efficacy of GMTI, improve its programs to better meet the needs of Vermont's communities, and receive the funding that is essential to the operation of the organization.

There are several parties that should be interested in the results of this survey. It includes information about GMTI and JHP as programs, as well as the changes of youth

behaviors and attitudes over the past two decades. The survey will be important to the future of prevention programs and community coalitions all over Vermont. Teen Institutes in other states will be able to find this information useful for their own programs and endeavors. State agencies will use the survey not just for funding purposes but to seek improvement in the quality of drug abuse prevention education in Vermont.

Green Mountain Prevention Projects will benefit from this survey in many different ways. It will enable them to improve the organization as a whole by presenting this concrete efficacy study for funding and education. They will have a better idea of the participants who went through GMTI and how GMPP has affected the lives of those people. They will be able to work together with other non-profit organizations, Teen Institutes around the country and the State of Vermont to provide this community-building education to those people who need it.

The United Way of Vermont and GMPP have worked closely together over the years to promote wellness in the state. Also a non-profit organization, the United Way will be able to use these data to support GMPP in its endeavors to educate youth as well as use the input in their own programs and activities.

Worcester Polytechnic Institute has sponsored this survey not only to provide a learning experience for its students, but to give them the opportunity to utilize their skills and knowledge to benefit communities and organizations.

The State of Vermont and the legislature are involved in state-run prevention programs such as Vermont Kids Against Tobacco (VKAT) and the Vermont Teen Leadership Safety Program (VTLSP). These programs do receive funding from the state and have many of the same goals as Green Mountain Prevention Projects. Many of the

same students who are involved with GMPP's programs are involved with VKAT and VTLSP, as the target population is the same. The Health and Welfare Committee of the House entertains reports on the efforts of these state programs, and since GMPP works with these folks to achieve the same goals, the results of this survey would be of importance to that committee.

The National Association of Teen Institutes (NATI) will be able to use this information to involve GMTI in the network of other Teen Institutes. Teen Institutes in other states will have access to the survey results through NATI, and may find the information about this particular program and Vermont youth useful when comparing it to their own states and programs. All members of NATI share the common goal of prevention, and GMTI plays a valuable role in that process.

There are Community Coalitions in many towns, villages and cities in Vermont. Some have received New Directions grants and others are interested in the well being of youth and the community as a whole. Members of these communities have been involved with the programs of Green Mountain Prevention Projects, so this information will be important to viewing the whole picture of prevention in any Vermont community.

Those who shared their time and thoughts in responding to the survey will also be able to see a copy of the results for their own personal interest. Some may be able to use it in their own community involvement or schools, and to see what an influence their experience had on the overall success of GMTI. Many of these participants have grown up now, and are adults ready for healthy lives as contributing members of society. Perhaps this information will also be of use for these adults when relating to youth in

their communities: they will know what kind of generation they grew up in, and will be able to identify with the issues and struggles of today's youth population in Vermont.

There are several different aspects to the hypothesis of this project, because the variable nature of substance abuse prevention issues can get rather complicated. For some of the hypotheses, the participants of this survey are compared to a national population. The national population used for comparative purposes comes from the Substance Abuse and Mental Health Services Administration (SAMHSA). They conduct the National Household Survey on Drug Abuse (NHSDA) annually, and the data used for this project came from the surveyed population in 1998. The other source for state comparison was the 1999 Vermont Youth Risk Behavior Survey (VTYRBS), which is also an annual survey administered by the Vermont Health Department's office of Alcohol and Drug Abuse Programs (ADAP). The primary hypothesis is that the surveyed population will be less likely to use substances than the national populations. Taking a more detailed look at that hypothesis, a sub-thought is that the likelihood of use will decrease with increased involvement with the program. The second hypothesis is that attitudes toward use will become more in line with the goals of GMPP with increased involvement by the surveyed population. The next hypothesis is that this population will consider use more risky than the national population. Furthermore, another hypothesis is that with increased involvement in the program, the population will report having gained more skills. Each of these hypotheses has a specific role in the interpretation of the data and understanding of the project.

The goal of the primary hypothesis is to compare the current use patterns of the surveyed population with those of the national population. To accomplish this goal a

threefold comparison must be made. First, both the surveyed population and the national population must be compared as a whole. Next, a more specific comparison of individual SAMHSA age groups with the corresponding age groups of the respondents shall be made. The use of the respondents who are 18 years of age and under shall be compared with the VTYRBS data as well. Additionally, the use of the respondents shall be compared with their participation in the programs of GMPP, specifically the GMTI staffing experience and JHP.

One of the hopes of GMPP is to make Vermont youth more conservative towards use of mind-altering substances, and they would like to know if their message is getting across. However there are no real data on national attitudes regarding use to compare with. So instead the surveyed population will again be divided into groups corresponding to involvement in GMPP programs and these sets will be analyzed for correlations to attitude.

Varying attitudes toward substance use include a perception of risk associated with use. Both SAMHSA and VTYRBS have information concerning such perceptions and these data shall be compared to the respondents. Once again these analyses will entail both an overall comparison and a detailed look at the different age groups.

Another of GMPP's concerns is the skills gained from this program. Since there are no pre-existing data about the skills that these people may or may not have had prior to attending GMTI it is predicted that those with greater involvement will indicate having gained. There are a couple reasons why this is probably the case. First if people are more involved they will have experienced more and gotten a chance to put into action the

skills being taught. Second, they will have more of an investment in the program and think more positively about it than those with less involvement.

The survey itself is comprised of five multi-part, multiple- choice questions. These questions cover attitudes towards use, personal use patterns, and the GMTI experience. The survey also has some open-ended questions for some supplemental qualitative information as well as a demographic section. The survey evolved by studying other surveys given to GMTI participants and the surveys of similar programs. The analysis will be conducted using the Statistical Package for the Social Sciences (SPSS).

The results of the survey may be used primarily by GMPP to evolve programs, acquire funding, and to increase their consumer pool. Other Teen Institutes who desire to investigate the longitudinal effectiveness of their programs may use this process. This project may serve as a tool in the future of prevention programs in communities, Vermont, and the nation.

Literature Review

There is a large base of information relevant to the programs of Green Mountain Prevention Projects and the TI format. There are many different ideas and methods of dealing with the drug problem in this country and these are all interrelated in some way. Much of the US government information was obtained directly from the on site libraries and resources of GMPP. The teen institutes of other states were also very helpful in providing data from their own programs. The methods employed in administering a Teen Institute are used for other purposes than drug prevention. Many of the ideas and exercises are developed out of ideas of team building and group dynamic theory. Many of the individuals currently or formerly associated with the program were able to provide information on these ideas and theories.

Other Anti-Drug Programs

Since drug use has reached such frightening proportions it has come to be a national health risk. As a result the United States Government has become a leading force in the fight against drugs and therefore provides funding for many anti-drug programs. These programs tend to cover a full range from prevention through intervention and interdiction. However, experience has shown various problems with each of these concepts. Interventions have proven to be marginally effective for their cost because many former abusers go back to their habits. Interdiction, which involves trying to stop the flow of drugs, tends to be very expensive. Prevention, on the other hand, requires only the investment of child and teen oriented activities, and thus appears

to be the best drug control policy. The only problem with prevention is that it is difficult to gauge its effectiveness in the short run(National Drug Control Strategy, 1999).

There are many different types of drug use prevention programs in the U.S. These programs cover a wide range of topics and ages, the earliest being elementary school education programs, such as DARE. There are also anti-drug lectures for adults held by various companies and mostly aimed at enforcing the companies' drug policies. Despite this wide spread of ages, most programs concentrate on the teen/high school years since this is the age when drug use habits tend to start (Gardner, Green, Marcus, 1994).

There are a number of strategies designed to prevent teen drug use. There are generally considered five areas in which risk exists and must be countered in order to make prevention work. These are individual risks, family risks, school risks, peer group risks and community risks (Gardner, Green, Marcus, 1994).[5] Individual risks are the individual challenges, pressures and negative feelings that teens have to overcome every day, the challenges that sometimes make drugs seem to be a good idea. Some of the solutions presented for this problem are to build support structures to help teens cope with these problems in a healthier manner and to provide alternative activities that could replace drug use as a teen pastime. These can be things like substance-free events such as dances and camping trips, or workshops on how to achieve good feelings and natural highs by doing things like yoga. The family is supposed to be a safe, supportive environment to which teens can turn to when troubled; however, at times the family can be a major source of stress for teens. The family is also a place that is hard for organizational programs to intervene. The best most organizations can provide is family

improvement programs such as family therapy sessions. Schools are also major sources of stress, and they are also one of the main sources for temptation and acquisition of drugs. School-related prevention ranges from school support and tutoring to enforcement of drug regulations and anti-drug education. Peers are one of the greatest influences on adolescents. Typically, if a child's friends use, the child will. Therefore one of the greatest prevention strategies is to have drug-free teens convince other teens that drugs are not a necessary component of the teen years. Finally, the whole community must take action to prevent drug use among its members. The main thing it must provide is support for these other programs. One strategy that has become prevalent in the national community in recent years is advertising campaigns. There are network sponsored public service announcements and ads being put out by organizations whose express intent is to prevent substance abuse, such as thetruth.com, and Partnership for a Drug Free America.

Group Theory and the TI Format

Some research has found that the best way to prevent drug use is through education. This education covers many realms, one of which is to teach life skills such as developing interpersonal relationships and so called "social resistance skills." These include resisting advertisement's and decreasing the social acceptability of drug use (Botvin, Stoil, Hill,) . Another topic of this education is a specific discussion of the dangers of drug abuse.

Green Mountain Teen Institute attempts to prevent drug use by educating teens in just such a manner. The workshops range from factual discussions of pharmacology and addiction, to interactive sessions teaching leadership and communications skills. The

ultimate hope for the program is that participants will come away from the program with a good understanding of the dangers of drugs, and the interpersonal and leadership skills to spread this information in their community. The education first happens in the workshops, but the real learning happens during smaller group processing after workshops (Thompson, Lefebvre, 1997). The format of this segment is known as group learning, which is based loosely on the group counseling style of psychotherapy.

Groups can be used for a wide range of programs and do not always involve psychological work. According to Shaffer and Galinsky (1974) a main goal of a group environment is "to create for the participant an important experience, usually involving both emotional and cognitive components that will prove instrumental in helping him/her toward some sort of new learning or change." Teen Institute accomplishes this by combining informational sessions on drug use and other teen issues in a workshop environment with smaller group processing sessions in which participants can share their thoughts and feelings on any subject.

History has shown that the teen years are the most at risk for beginning drug use habits, yet this age can also be the most difficult for adults to communicate with. Ohlsen, Horne and Lawe (1988) believe that adolescents are trying to establish themselves as individuals. Teens are changing their childhood behavior in favor of more experimental actions in an attempt to find their niche. However, when these actions are dismissed and belittled by adults as simple childishness, teens become frustrated and turn to illicit actions, which may include drug use. They then go on to suggest several skills that teens can learn in a group environment, such as mature communication, taking responsibility

for themselves, and improving self-confidence. These concepts, along with education and leadership skills, are the basic goals of GMTI.

These theories are all well and good but the practical application of these ideals can be highly problematic. One of the main stumbling blocks faced by anti-drug program is that the relationship between students and adults is one of adult and child. As a result many teens are reluctant to open up and discuss drug use or other destructive behaviors with their parents or other adults with which they have regular contact (U.S. Department of Education, 1992). This is where TI's program can have a major impact. Each processing group is made up of a number of participants, one "experienced staff" who has attended TI recently and is close in age to the participants, and one "adult staff" who may be significantly older than the participants. The goal is to get participants to open up with each other and to also have the adult there opening up with them and thus bridging the dreaded 'age gap' (Thompson, Lefebvre 1997).

Other Surveys

The United States Government has conducted the National Household Survey on Drug Abuse since 1971. Since 1992 the Department of Health and Human Services' Substance Abuse and Mental Health Services Administration has administered the survey. The NHSDA claims to be the "primary source of statistical information on the use of illegal drugs by the United States population."

The measures of use are presented in three different categories: past month use, meaning they have used in the past month; past year use, meaning that they have used in the past year; and lifetime use, meaning they have used in their lifetime. Data for use of

alcohol, tobacco, marijuana, and other drugs are presented in these categories. The population is broken down in to age groups, 12-17, 18-25, 26-34, and 35 and over. Since the oldest respondent is 30 only the first three age groups are useful. In addition to the statistics on use there is information about the perception of risk associated with the use of tobacco and alcohol.

The NHSDA is a recognized authority for providing information about the use habits of this nation. This provides a control group for the respondent population to be compared against.

Since 1993 the Vermont Department of Health in partnership with the Department of Education has conducted a survey of High School age youths. This survey seeks to gather trends in drug use within the state. The most recent results are from 1999, in which 9096 youths in grades 8 through 12 were polled.

This survey looks for information about youth's behavior in many areas. Subjects investigated include violent behavior, alcohol, tobacco and other drug use, attitudes toward drugs, sexual behavior, body weight, and physical activity. This contains a great deal of information about High School students in Vermont. For all the information there are only two sections that are of a great amount of importance to this project. The section looking at alcohol tobacco and other drug use and the section discussing attitudes and perceptions about alcohol, tobacco and other drugs are of particular interest.

The first section about use has many similar questions to the National Household Survey on Drug Abuse. These include past month use of alcohol, tobacco, and marijuana; lifetime use of those three drug categories; and binge drinking in the past month. Many of the other questions do not fit with questions we asked in our survey or it

would be a great stretch to make them fit so as to make the comparisons invalid. Among the questions involving risk only questions related to cigarettes were valid comparisons.

This survey provides data specific to Vermont high school students. This is very important because the population being surveyed is a population that at one point was Vermont youths; and some of the respondents were still Vermont youths.

Methodology

(Please turn to Appendix A for a copy of the final survey)

Subjects

A total of 2500 participants have passed through the TI program. This population spanned nineteen years of participation. Our first, albeit optimistic, plan was to send surveys to every single participant name we could find and hope for the best. However, since participants are of high school age during the program, nineteen years is awhile ago for many of those people. We figured that most of the past participants would have grown up and probably moved from the residence listed at the GMPP office. It was therefore decided to send out postcards to the last known addresses of a large number of participants. We hoped that even though the participants may have moved, the parents would still be at the same residence. We provided a change of address card for them to send in an updated address. This method ensured that we would not only have people expecting a survey but those people receiving surveys would definitely be past participants of GMTI. The best number of old addresses we could get was 1600, and in March we sent out 1600 postcards. Within three months we had received nearly 350 returned postcards. After weeding out "Return- To- Sender" mail, duplicates, and all sorts of other unusable information, we ended up with 322 viable addresses. Additionally we were able to contact a few past participants directly, bringing our final population to 325.

Of the 325 surveys sent out, a total of 116 were returned and analyzed. This population of respondents differed in some ways to the total TI graduate population, most notably in the gender category. TI populations tend to be predominantly female,

approximately 65 percent or more. However, the respondents were 80 percent female, a curious condition which caused us to not do any comparative analyses to national or state data regarding gender. Since GMTI has been operating for 19 years, an ideal sampling of the population would involve getting information equally from all age groups. But, as was mentioned earlier, many of the older participants had moved on. Furthermore, some of the older participants may not have as strong a recollection of their TI experience. As a result, only 10% of the respondents had attended TI before 1990. This situation may influence our results for those older respondents. In general, people remember enjoyable and positive experiences better than negative ones, and therefore it is expected that those respondents will report more positively on their TI experience.

The question of quality of experience plays a role in the entire population as well. Obviously GMPP tries to make every program the very best it can for every participant. Unfortunately, as with any event, there are some participants who just are not suited to the program and come away from the week without having gotten out of it all that was hoped. As a result, some of these people would be less likely to respond to either the postcard or the survey. Therefore it should be kept in mind that most of the responses were given by those with positive memories of their TI week.

Overall the majority of the population did not have much in the way of differing categories such as those used in national statistics. For example, 96% of the population fell into the 'White, non Hispanic' ethnicity category, and only 10% of the respondents were married. As a result analyses were only done comparing the overall TI populations to overall control populations

Design

The first step in creating the survey was receiving input from the GMPP administration in order to determine the type of information they wanted. Their major requirements were to have data on past and present use and an idea of what people were taking with them in the long run. For what people were getting out of the TI program they wanted to know about attitudes towards drug use, skills learned from Institute workshops and the participants' general impressions and feelings towards the program. We then researched previous surveys administered to similar populations. This included contacting other TI organizations around the country and getting the evaluation surveys they gave to their participants. Additionally GMTI sessions administer a "pre-post" survey at the beginning and end of every weeklong institute to help document any short-term effects of the program. These pre-post surveys provided a good starting point for our thought process. Furthermore, they seemed to have a format that would allow us to get the information we wanted, and would also be familiar to the past GMTI participants we would be surveying.

The two surveys we studied most intently were the Green Mountain Prevention Projects Pre/Post Test, and the Leader in Action Pre-test. The first one is a format that has been given to TI groups for the past several years, most recently at the three TI sessions in the summer of 1999. The second was administered in a similar fashion to the participants of Leaders in Action during the summer of 2000. We also borrowed styles from the National Prevention Assessment 2, and the evaluations of the Indiana Teen Institute and the Wisconsin Regional Teen Institute.

One major difference between The GMTI Effectiveness survey and all the previous surveys we were researched was the tone. The other surveys were intended to be taken by teens and were worded accordingly. For example, a section designed to establish perceived attitudes towards drug used contains phrases such as "kids who drink alcohol seem more grown up than kids who don't" or "smoking marijuana (pot) makes you look cool." Our survey, on the other hand, was intended for an audience with an expected age range of between 15 and 35, and we didn't want to turn off our older respondents since a major goal of the survey was to assess TI's long term impact. Therefore we adjusted our tone and some of our terminology accordingly.

Another change from the model surveys was that we wanted the surveys to be shorter. Most of the earlier surveys were to be administered on site to participants who had been given a block of time in which to fill it out. We, however, wanted a survey that could easily be completed in less than 10 minutes and would not go severely over budget when being copied and posted.

After much discussion and compromise we established three major sections that the questions in the survey would cover. These sections were: attitudes and opinions toward drug use and the risks associated therein, information about personal use both before and after attending TI, and finally, a brief section designed to find if the other 'life skills' TI tries to teach were in fact being learned and taking root. Additionally our survey was to include an obligatory demographics section. This was placed at the end of the survey as per the suggestion of various persons who had experience in taking and giving surveys. In general it was felt that if the main body of the survey started right

away then it would get people's attention better and they would be more likely to complete and return it.

The first section took the form of two questions. The first of these questions was aimed at eliciting an emotional opinion from the respondents regarding the appropriateness of various substance use behaviors. It covers different levels of use for different types of drugs, and asks about such use for both teens and adults. The purpose of question number two is to determine our population's perception of the risks involved with drug use and abuse. It asked respondents to indicate their general perception of risk for occasional and prolonged use of different substances.

The use section is the most important section of the survey. Its primary purpose is to establish differences between previous and current drug use patterns, if any. Furthermore, it aims to determine any correlation between use and the amount of exposure people had to GMPP programs, including TI, staffing and participation in JHP. The two questions in this section asked about the respondents' use of several different substances, both before TI and recently, and gave options as to their approximate frequency of use. The use questions were almost identical to those in the pre-post survey in order to make them familiar to the respondents. The time period definitions we used were more specific than the National Household Survey on Drug Abuse (NHSDA) definitions but we decided that they would be close enough approximations. Additionally the increased detail allowed us to compare against the Vermont Youth Risk Behavior Survey (VTYRBS).

The next section had respondents rate whether or not they felt they had come away from TI with certain key skills. It also had two open ended questions for

respondents to share any other feelings about their experience at TI. The section on skills was intended mostly for use by GMPP's programming planners to see what aspect of the programs might need emphasizing. The open-ended questions at the end were also intended to get more detailed feedback for the agency.

The final section collected demographic information to allow for more accurate comparisons against the NHSDA and VTYRBS data. The categories covered were gender, age, ethnicity, marital and parental status, occupation, income level, education level, when they participated in and if they staffed TI, if they participated in JHP, and where they lived when they attended TI.

Procedure

After all of the postcards had been sorted and organized the data were entered into a program called File Maker Pro, the address database used by the GMPP office. We then printed out mailing labels to stick on the envelopes. By this time we had finalized the survey, and we had 350 copies made, in order to have some extras. The outgoing envelopes contained pre-addressed, stamped return envelopes, a neat little GMTI sticker and, of course the survey. Envelope stuffing was done both at the GMPP office and at a settlement house that occasionally stuffs envelops for GMPP. All of the surveys and envelopes were numbered and these numbers corresponded to a master list of names so we would know who had returned their surveys and could send reminders to those who had not. On June 29 the surveys were sent by bulk mail. Within 4 days the first responses started coming back and for the next week there was a steady flow into the office. By July 12 the flow had slowed and we sent out follow-ups to the names that had

not responded. The reminders caused a small surge in the returns but they quickly fell off again. We continued waiting until July 31, when we stopped entering data and began the analysis process. In total we received a total of 116 usable responses. The analysis was to be done using the Statistical Package for the Social Sciences (SPSS), the statistical software used at the University of Vermont.

Analysis

Before the analysis was performed, the data were double-checked for errors. This included checking for answers that did not make sense, as well as for answers that had been entered incorrectly. Many different analyses needed to be done to get a detailed picture of the respondent population. We hoped to make straight comparisons based on the age group and use categories put forth by The National Household Survey on Drug Abuse (NHSDA) and The Vermont Youth Risk Behavior Survey (VTYRBS). The two analyses that were done were Chi Squared and ANOVA. Additionally the pre and post data of the respondents use habits are compared using a correlation

Chi-Squared

The Chi-Squared test evaluates how closely a sample comes to matching an expected outcome. This test is nonparametric, which means that it is not based on a parameter of the data, such as the mean. Nonparametric tests are sometimes referred to as assumption-free tests, which in reality means these tests have fewer assumptions. The result of having fewer assumptions however is that nonparametric test tend to not be as powerful as the parametric tests. Additionally, the Chi-Squared test is non-directional,

which means that it is neither one-tail nor two tailed. The test merely evaluates whether or not the data fit the expected frequencies.

Chi-Squared is obtained by the following formula, where O is the observed frequency for the given category, and E is the expected frequency for the given category:

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

For the purposes of this study the categories were yes or no. For example, according to the NHSDA survey 69.7% of the US population reported using tobacco at some point in their lifetime. Of the survey respondents, 22.4% had smoked at some point in their life. With a sample size of 116, the expected frequency is about 81 people having smoked, while the observed number is 26 people having smoked:

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

$$\chi^2 = \frac{(O-E)^2}{E} + \frac{(O-E)^2}{E}$$

$$\chi^2 = \frac{(26-81)^2}{81} + \frac{(90-35)^2}{35}$$

$$\chi^2 = \frac{(-55)^2}{81} + \frac{(55)^2}{35}$$

$$\chi^2 = \frac{3025}{81} + \frac{3025}{35}$$

$$\chi^2 = 123.8$$

The numbers in this example have been simplified; hence the answer is subject to round off error, which is why the actual value of this Chi-Square is 122.815. The large value of this example shows that there is a large difference between the observed frequency and

the expected frequency, in this case showing that this population is less likely to smoke cigarettes.

Certain assumptions are made by the chi-squared test. First off the population ought to be randomly selected, and observations should be independent, meaning that no respondent's answers effect other's answers. Also the expected frequencies should not be too small. If expected frequencies are 5 or less a larger sample size should be obtained. Lastly, the data should be categorical.

This survey comes as close to a random sampling as could be achieved with the small size of available respondents. With a mail survey it can be assumed that the respondents do not have an impact on one another. Some of the age groups with small response rates may not meet the requirement of larger expected frequencies. The data being analyzed with the chi-squared test is categorical. So for the most part the assumptions are met to use this test.

ANOVA

A means of comparing several groups together is known as an Analysis of Variance, or an ANOVA. An ANOVA compares the means of 3 or more groups

To compare two groups a t-test could be performed, however when dealing with multiple group comparisons performing multiple t-tests increases the likelihood of error. A good solution to this is the ANOVA. The ANOVA has the added benefit over multiple t-tests that it is more powerful, which is due to including the all of the means in a singular test.

The ANOVA makes comparisons on the means of several groups and the overall population. The result of the ANOVA is the F-ratio, which is a ratio of the variance between-groups and the variance within a given group. This ratio reveals the variance of the effect of the given experiment:

$$F = \frac{\sigma^2_{Between-groups}}{\sigma^2_{Within-groups}} = \frac{\sigma^2_{Error} + \sigma^2_{Effect}}{\sigma^2_{Error}}$$

This ratio is used to evaluate the effect of the independent variable. If this ratio is small then the test determines that the two populations are the same, in other words all of the means are equal, and the independent variable has no effect. On the other hand if the ratio is large this indicates that at least 2 of the means differ significantly.

Tukey HSD

While the ANOVA merely points out that there is a difference, Tukey's Honestly Significant Difference Post hoc test reveals which of the populations have these differences. This test takes the difference of the groups' means, and based on that data, the differences are considered statistically significant.

Correlation

The correlation test evaluates how similar two groups are. The test results are a number that will range from one to negative one. A value of negative one shows that the two groups are negative of each other. A value of zero shows that the 2 populations are nothing alike. A value of one shows that the two groups are very much alike.

Test Uses

The Age groupings present by NHSDA were 12-17,18-25, 26-34 and 35+. The ages of the respondents were 16-30, so we compared each of the appropriate age groups. The NHSDA drug use data were put into 3 categories: lifetime use, meaning that one has used at some point in their life, past year use, meaning they have used in the past year, and past month use, meaning they have used in the past month. The past month use went into more detail with alcohol, specifying binge and heavy alcohol use. Binge use was defined as having 5 or more drinks on one occasion in the past month. Heavy was defined as meaning that one has binged on 5 or more occasions. Additionally, the NHSDA survey collected data on attitudes about risk; specifically it explained attitudes for the entire population and the 12-17 age group. All of these comparisons were done using Chi Squared tests. This test is designed to test the commonality of a trait between two populations. In these cases the traits were the different types of use and acquired skills.

The VTYRBS was only a survey of exactly what it says, a survey of Vermont youth. Due to this the only ages that could be compared were the group 18 and under. The VTYRBS also gave information about attitudes toward risk. So the similar questions were compared, again using Chi Squared test to determine variance and significance.

To find details about the effect of time spent with GMPP programs on use attitudes, four separate groups were created. One group who had just participated in GMTI, another group that had participated in GMTI and JHP, one that had participated in GMTI and staffed at least one GMTI, and finally a group that participated in both GMTI

and JHP as well as staffing at least one GMTI. For this analysis we performed an Analysis of Variance (ANOVA) test.

We also wanted to find any relation between the skills learned and level of involvement. This comparison was also performed using an ANOVA. In this case the mean was how well they had learned a skill and the groups were made up of differing levels of involvement. Finally, we used an ANOVA to test for connections between level of use of various drugs and the level of involvement.

Results and Discussion

The first topic to address is the use habits of the surveyed population. Addressing this gets a little complicated due to there being many categories of use as well as substances to use, not to mention having to look at individual drugs.

Drug Use

1. Tobacco

The usage of cigarettes is way down amongst all divisions of this population. Compared to national numbers (found in the National Household Survey on Drug Abuse) this population has an expected percentage, as reported by NHSDA, of past month cigarette use of 27.7%, but the actual percentage was 12.1%. This is a χ^2 (1, N=116) = 14.15, $p < 0.01$. The numbers that have smoked in the past year are expecting 30.6%, in this population actually 18.1% had smoked in the past year. This is a χ^2 (1, N=116) = 8.53, $p < 0.01$. The most drastic difference of the entire survey is that of those who have smoked a cigarette at any point in their lifetime, the expected number was 69.7% while this population had 22.4% smoking at any point in their life. This yields χ^2 (1, N=116) = 122.81, $p < 0.01$.

Within the full population NHSDA looks at smaller age groups. The youngest age group is people from 12 to 17 years old. Something to note about the members of this age group is that none of them has ever smoked a cigarette; whereas the past year and lifetime use the expected numbers are 23.8%, and 35.8% respectively. In order those come to χ^2 (1, N=17) = 5.31, $p < 0.05$, and χ^2 (1, N=17) = 9.48, $p < 0.05$.

The most complete and largest age group among respondents to this survey was in the 18-25 years old range. Similar marked differences arose in this group. The number that have smoked in the past month is 13.3% while according to NHSDA one would expect 41.6% to have smoked within a month. Those smoking in the past year total 20%, while one would expect to see 47.1% smoking at some point in the past year. An even more drastic difference is shown with those who have smoked in their lifetime being 24.4%, with the national average at 68.8%. Those are χ^2 (1, $\underline{N}$=90) = 29.60, $p < 0.01$, χ^2 (1, $\underline{N}$=90) = 26.53, $p < 0.01$, and χ^2 (1, $\underline{N}$=90) = 82.49, $p < 0.01$, respectively.

The next population of ages is those 26 and older; the differences are not as dramatic among this group, possibly due to the small sample size of only 8 people. The only significant difference is among those who have smoked in their lifetime, being 37.5% but expecting to see 71.8% smoking, χ^2 (1, $\underline{N}$=8) = 4.65, $p < 0.05$.

Vermont youth show different rates of smoking than those nationally. So it is appropriate to look at the Vermont numbers presented in the Vermont Youth Risk Behavior Survey for youth 18 and under. This group also shows a decline in cigarette use over the state's population of 13% in the past month versus 31%. This is χ^2 (1, $\underline{N}$=31) = 4.75, $p < 0.05$.

The tobacco use habits of the respondents before and after TI is very similar, the correlation coefficient is 0.423, $p<0.001$, df=115.

2. Alcohol

Alcohol use shows almost no change between this population and the national population. The results that differ are past year usage, binge drinking[1], and heavy drinking[2]. According to the national numbers one would expect to see 64.0% using alcohol at some point in the past year while of this population 74.1% have consumed alcohol during the past year. This calculates to χ^2 (1, N=116) = 5.18, $p < 0.05$. Nationally 15.6% would have binged on alcohol during the past month, but among this population 22.4% had binged. That is χ^2 (1, N=116) = 4.09, $p < 0.05$. In this population no one has been a heavy consumer of alcohol in the past 30 days, while national expectations are that 5.9% would have, χ^2 (1, N=116) = 7.27, $p < 0.05$.

Amongst the age group of people younger than 17 none of the differences are significant. In the 18 to 25 year old age group the only significant difference is in heavy use of alcohol. Expecting to see 13.8% heavily using alcohol no one in this population has been a heavy consumer of alcohol in the past month. This comes to χ^2 (1, N=90) = 14.41, $p < 0.01$. Again in the 26 and older group there are no significant differences when it comes to the consumption of alcohol.

To look at the Vermont numbers for youth an expected 72% would have consumed alcohol in their life, while only 52% have. That comes to χ^2 (1, N=31) = 6.39, $p < 0.05$. Binge drinking in the past month for this group is are 10% while there is statewide prediction of 29% binging. That is a χ^2 (1, N=31) = 5.62,

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[1] Binge drinking is defined within the NHSDA as drinking five or more drinks on the same occasion, on at least one day in the past 30 days. By "occasion" is meant at the same time or within a couple of hours of each other

[2] Heavy drinking is defined within the NHSDA as drinking five or more drinks on each of five or more days in the past 30 days; all Heavy Alcohol Users are also Binge Alcohol Users.

$p < 0.05$.

The alcohol use correlation of pre GMTI and current habits yields 0.321, $p<0.001$, df=115.

3. Marijuana

Amongst the total population there is a significant increase in past year marijuana usage from the expected 8.6% nationally to 20.7%. That is χ^2 (1, N=116) = 21.57, $p < 0.01$.

In the 17 and under age group there are no significant differences with marijuana use. For those aged 18 to 25 the national expectation is that 44.6 % of the population has smoked marijuana in their lifetime; however, in this population 30.0% have used marijuana. This is χ^2 (1, N=90) = 7.86, $p < 0.01$. In the group of 26 and older there are no significant differences in marijuana use.

The Vermont youth projections are that 30% have smoked marijuana in the past month, while in this population 6% have. This is χ^2 (1, N=31) = 8.19, $p < 0.01$. The expected number of youths to have smoked during their lifetime in Vermont is 47%, however 19% of this population has smoked marijuana. That is χ^2 (1, N=31) = 8.19, $p < 0.01$.

Marijuana use comparisons over time has a correlation value of 0.206,$p<0.05$, and df=115.

4. Other Drugs

In the whole population the lifetime use of other illicit drugs is down to 9.5% from the 18.9% of the national population. This is χ^2 (1, N=116) = 6.71, $p < 0.05$. The group of people under the age of 17 shows no significant differences from the national population in terms of use of other illicit drugs. Of the people aged 18 to 25 the national expectation is that 6.5% would have used other illicit drugs in the past month, while no one in the surveyed population had. The expectation for past year usage is 13.4%, but in this population 3.3% have used other illicit drugs during the past year. Those who have used other illicit drugs in their lifetime would be expected to be 26.4%, however in this population only 10% have used other illicit drugs at some point in their life. These are χ^2 (1, N=90) = 6.26, $p < 0.05$, χ^2 (1, N=90) = 7.91, $p < 0.01$, χ^2 (1, N=90) = 12.51, $p < 0.01$ respectively. Amongst the population aged 26 and over there are no significant differences. To take a closer look at the effect level of involvement had on drug use an ANOVA was done, but there were no significant effects.

The correlation of use of other drugs between pre GMTI and current habits is 0.571, $p<0.001$, df=116

Summary of X^2 Statistics by age group

Reported and Expected Statistics
Table 1

Drug Use	Actual Number	Expected Number (according to NHSDA)	Percent Of Respondents	Expected Percent	sig	N	df	X^2
Past Month Tobacco	14	32.132	12.06897	27.7	0	116	1	14.152
Past Year Tobacco	21	35.496	18.10345	30.6	0.003	116	1	8.53
Life Time Tobacco	26	80.852	22.41379	69.7	0	116	1	122.815
Past Month Alcohol	62	59.972	53.44828	51.7	0.706	116	1	0.142
Past Year Alcohol	86	74.24	74.13793	64	0.023	116	1	5.175
Life Time Alcohol	88	94.308	75.86207	81.3	0.133	116	1	2.256
Binge Drinking	26	18.096	22.41379	15.6	0.043	116	1	4.086
Heavy Drinking	0	6.844	0	5.9		116	1	7.273
Past Month Marijuana	10	5.8	8.62069	5	0.074	116	1	3.201
Past Year Marijuana	24	9.976	20.68966	8.6	0	116	1	21.57
Life Time Marijuana	33	38.28	28.44828	33	0.297	116	1	1.087
Past Month Other Drugs	1	7.192	0.862069	6.2	0.259	116	1	5.683
Past Year Other Drugs	5	12.296	4.310345	10.6	0.769	116	1	4.842
Life Time Other Drugs	11	41.528	9.482759	35.8	0.01	116	1	34.956

Ages 17 and Under
Table 2

Drug Use	Actual Number	Expected Number (according to NHSDA)	Percent Of Respondents	Expected Percent	sig	N	df	X^2
Past Month Tobacco	0	3.094	0	18.2		17	1	3.782
Past Year Tobacco	0	4.046	0	23.8		17	1	5.31
Life Time Tobacco	0	6.086	0	35.8		17	1	9.48
Past Month Alcohol	5	3.196	29.41176	18.8	0.279	17	1	1.17
Past Year Alcohol	7	5.202	41.17647	30.6	0.406	17	1	0.689
Life Time Alcohol	7	6.307	41.17647	37.1	0.741	17	1	0.109
Binge Drinking	2	1.292	11.76471	7.6	0.53	17	1	0.395
Heavy Drinking	0	0.493	0	2.9		17	1	0.508
Past Month Marijuana	1	1.394	5.882353	8.2	0.718	17	1	0.131
Past Year Marijuana	2	2.397	11.76471	14.1	0.778	17	1	0.079
Life Time Marijuana	2	2.907	11.76471	17.1	0.566	17	1	0.33
Past Month Other Drugs	1	0.697	5.882353	4.1	0.692	17	1	0.157
Past Year Other Drugs	1	1.292	5.882353	7.6	0.8	17	1	0.064
Life Time Other Drugs	1	2.006	5.882353	11.8	0.438	17	1	0.602

Ages 18-25
Table 3

Drug Use	Actual Number	Expected Number (according to NHSDA)	Percent Of Respondents	Expected Percent	sig	N	df	X^2
Past Month Tobacco	12	37.4	13.33333	41.55556	0	90	1	29.6
Past Year Tobacco	18	42.4	20	47.11111	0	90	1	26.528
Life Time Tobacco	22	61.9	24.44444	68.77778	0	90	1	82.489
Past Month Alcohol	49	54	54.44444	60	0.282	90	1	1.157
Past Year Alcohol	70	66.8	77.77778	74.22222	0.438	90	1	0.602
Life Time Alcohol	72	74.9	80	83.22222	0.417	90	1	0.659
Binge Drinking	21	28.5	23.33333	31.66667	0.088	90	1	2.91
Heavy Drinking	0	12.42	0	13.8	0	90	1	14.408
Past Month Marijuana	7	12.4	7.777778	13.77778	0.098	90	1	2.744
Past Year Marijuana	19	21.7	21.11111	24.11111	0.507	90	1	0.44
Life Time Marijuana	27	40.1	30	44.55556	0.005	90	1	7.764
Past Month Other Drugs	0	5.85	0	6.5		90	1	6.257
Past Year Other Drugs	3	12.1	3.333333	13.44444	0.005	90	1	7.859
Life Time Other Drugs	9	23.8	10	26.44444	0	90	1	12.458

Ages 26 and over
Table 4

Drug Use	Actual Number	Expected Number (according to NHSDA)	Percent Of Respondents	Expected Percent	sig	N	df	X^2
Past Month Tobacco	1	2.6	12.5	32.5	0.227	8	1	1.459
Past Year Tobacco	2	2.9	25	36.25	0.496	8	1	0.464
Life Time Tobacco	3	5.7	37.5	71.25	0.031	8	1	4.648
Past Month Alcohol	7	4.9	87.5	61.25	0.123	8	1	2.377
Past Year Alcohol	8	5.96	100	74.5		8	1	2.738
Life Time Alcohol	8	7.056	100	88.2		8	1	1.07
Binge Drinking	3	1.6	37.5	20	0.216	8	1	1.531
Heavy Drinking	0	0.576	0	7.2		8	1	0.621
Past Month Marijuana	1	0.4	12.5	5	0.385	8	1	0.754
Past Year Marijuana	2	0.8	25	10	0.144	8	1	2.138
Life Time Marijuana	3	3.8	37.5	47.5	0.556	8	1	0.347
Past Month Other Drugs	0	0.224	0	2.8		8	1	0.23
Past Year Other Drugs	1	0.5	12.5	6.25	0.449	8	1	0.572
Life Time Other Drugs	1	2.2	12.5	27.5	0.35	8	1	0.873

Attitudes

When the attitudes of the surveyed population were analyzed no correlation was found between the level of involvement and the attitudes of the individual. But it was found that there was a strong correlation between the attitudes toward teens using and the attitudes towards adults using, of $\underline{r}(116)= 0.72, p < 0.01$

Risk

Common sense would lead one to believe that if someone has a high perception of risk then the likelihood of them using will decrease. In the surveyed population 94.8% of the people thought that there was great risk involved with smoking a pack of cigarettes or more a day, compared to the 67.9% of the national population. That is $\chi^2 (1, \underline{N}=116) = 38.59, p < 0.01$. There is no difference in the perception for use of marijuana.

For the ages 17 and under the expected perception of risk is that 54.1% would find smoking a pack of cigarettes or more a day to have great risk, but of the survey respondents of this age group 100% of them thought there was great risk involved with smoking that much. That is $\chi^2 (1, \underline{N}=17) = 14.42, p < 0.01$. Again there is no significant difference in the perception of risk involved with marijuana use.

The VTYRBS shows that 61% of Vermont youth are predicted to find great risk in smoking a pack or more of cigarettes a day, while 97% of this population in that age range did. This is $\chi^2 (1, \underline{N}=31) = 16.67, p < 0.01$. When it comes to the risk associated with alcohol use there is no significant difference of perception.

Skills

Since there were no data in any of the national or statewide surveys on the skills that GMTI hopes to teach, the comparison was made between different levels of involvement.

There was a significant effect of level of involvement on communication skills, $\underline{F}\ (3,111) = 3.14$, $p < 0.05$. The post hoc analysis showed a significant difference between those who staffed and attended a JHP in addition to participating over those who only participated. Level of involvement showed an effect on people's understanding of substance abuse issues, $\underline{F}\ (3,111) = 3.64$, $p < 0.05$. The post hoc revealed the significance was between the group that staffed and attended JHP and the least involved group. This also showed an effect on leadership skills of, $\underline{F}\ (3,111) = 4.84$, $p < 0.05$. The post hoc showed that both groups that staffed (only staffing, and staffing and JHP) showed significant differences over the participate only group. Also level of involvement showed an influence on decision making and problem solving skills of $\underline{F}\ (3,110) = 2.74$, $p < 0.05$. The post hoc failed to give additional information. Finally the level of involvement showed an effect on team building skills of $\underline{F}\ (3,111) = 2.99$, $p < 0.05$. The post hoc showed significant differences between the group that staffed and attended JHP, and the group that only participated in GMTI.

Open Ended Discussion

GMPP is a place that deals with people not numbers. Therefore, in addition to all of the quantitative data gathered by this survey, they also wanted some sort of personal, qualitative feedback from the respondents. This took the form of three open-ended

questions concerning skills, life impact, and any additional comments. Of course the qualitative nature of these sections makes them susceptible to overlapping, and some of the responses do. Statements made by some of the respondents in some of the sections would be more applicable to another section. However for the sake of simplicity we have tried as best we can to separate the responses into these sections. It is interesting to note that of the 116 surveys analyzed, 95, that is 82%, had responses to the open ended questions. It is also interesting that of these written responses, most of them had positive comments regarding their experience with the program.

After the quantitative skills section there was an open-ended question asking if participants felt they had acquired any skills, other than those listed, while attending GMTI. In total 55% of respondents filled out this section. Though there were a couple of people who responded negatively to this question, and a few who said they simply didn't remember that far back, in general respondents felt they had gotten something better than the categorized skills from their TI week. About half of the comments indicated an improvement of interactive abilities, these people feeling more comfortable making new friends and meeting new people. Some people, about 20%, applauded the program for introducing then to a statewide network of substance free people and resources that they could turn to individually or as a community. The skill cited in over two thirds of the comments was an improved ability to understand and deal with the general problems and challenges faced in adolescence and in life.

Regardless of what the numbers say, TI seems to have had a great and long lasting emotional impact on its participants. The largest number, 73%, of respondents answered this section. The responses are nearly all positive and cover a wide range of topics, but

after a while a few themes start to emerge. First off, the impact on substance use attitudes is immediately apparent. Nearly a quarter of the younger people said that TI gave them support and confidence in choosing a substance free life, something they could not find in their own community. Meanwhile about 12% of the older respondents, while not remaining substance free, did credit their TI experience with helping them make healthy and educated decisions regarding use, and to be confident in those decisions. Confidence was a term respondents used to describe their feelings in other areas, specifically in social and leadership positions. Approximately 23% of the comments expressed better friend making abilities and more openness learned from their TI week, not to mention the great bonds of friendship made at TI. Furthermore, 18% of these responses said that after TI they returned to their school or community to be a leader in substance free activities and in the community in general. Perhaps the greatest impact is on those participants who, after many years out of the TI program, have gone on to careers inspired by their TI experience. In the responses there were several community service workers, including social workers and teen counselors, who said that TI was a part of their decision to serve their community, and that the skills they learned in that week are continually useful in their daily work.

The last open-ended question asked for any additional comments or suggestions for GMPP. With only a 40% response it was the least answered question on the survey. However what was said by these people spoke volumes. Those that chose to respond did so profusely, some going so far as to attach another page of writing. Though, as always, there were those responses with negative feelings, the overwhelming majority of the large notes were positive, sometimes gushingly so. The responses in this section are more

emotional than those in the previous sections. Here people tended to share their positive feelings towards and memories of their TI week. Many people asked about future staffing opportunities and the possibility of helping or working with GMPP. On the other hand, those that had heard about the end of the TI program expressed much regret and sorrow over the loss of a program that affected their lives so much. Some people also had ideas and suggestions to share with GMPP. One thing that people thought could be changed were the zero use ideals presented at TI. They viewed them as unrealistic and thought that the program should instead try to concentrate on education regarding drug issues instead of concentrating on the "Just say No" aspect. The greatest request though, was for an improvement of post TI communication and support. There is interaction between participants after the week is over but many felt the program was so influential that they wanted to continue to relate with the people they had met at TI. One of the greatest regrets expressed by the respondents was that they had not been able to go back to a GMPP sponsored event.

Conclusions

This survey is the first long-term quantitative study of effectiveness of Green Mountain Teen Institute. As a program that depends on state funding there must be some sort of hard evidence supporting the need for GMPP. This survey set out to determine if there is a measurable difference in drug and alcohol use for TI graduates as compared to national and Vermont populations.

These numbers tell a mixed story. While there is a huge across the board decrease in cigarette usage, there is little to no effect on the use of anything else. This may mean that there is a need to look at prevention of use of each drug differently, or a revamping of the programs.

The rate of response was about 36.3 % is a possible source of non-response error. The other source of error is coverage error, in that the surveys were sent only to those who returned an address correction card. The 116 respondents allow for ±5% sampling error.

The drastic decrease in cigarette use would indicate a success. There was a 67.8% decrease in the number of people to ever start smoking compared to the national data. This in itself is a success of the program.

To look at alcohol there is either no effect or an adverse one. There are several possible explanations for the adverse effect on binge drinking of the overall population. The first possibility is that there is not a perfect mesh between the definition of binge in the administered survey, and the NHSDA. Another possibility that ought to have more in depth research is that someone not using while in high school may grow up and lose the support group they had in high school upon entering new situations with new friends.

The next possible cause is that the ages of the respondents did not span as wide a range as the NHSDA had in their definition of overall respondents. Another possibility is due to inaccuracy of the results due to coverage error, and non-response error. Yet another cause of error is that it was collected in a self-report manner. This "self-report" error may be a large contributor to error due to the sensitive nature of the questions that were asked.

Marijuana use shows an increase for the overall national population, yet it is possible that the degree to which people in Vermont use marijuana is higher than the national numbers. This seems to be the case since the rate of youth using marijuana in Vermont is higher than the rate of 18-25 year olds using nationally. The numbers compared to Vermont youth tell a story of reduction of the use of marijuana by a great deal. This should also be considered a success.

The number of people who have started to use any other illicit drug is down 50% additionally, the other age groups are down or show no difference. Particularly the most represented age group shows an even more drastic decrease in illicit drug use.

So it would seem that while there are possible adverse effects on alcohol use, there is a beneficial change in the use of other substances.

Attitude formation is complex and there are many influences on this process that lasts a lifetime. So to think that a weeklong program during one or two summers would have a drastic effect on people's attitudes in hindsight would be silly. It is interesting to note that the attitudes toward teen use and adult use do not vary that much.

There are a greater number of people considering smoking very risky. This is probably related to the low number of people smoking. Conversely there is no change in

the perception of risk involved with alcohol, again not much change in the alcohol consumption patterns of this group over that of national population.

For gaining skills from GMTI the mean indicates the population is between agreeing and strongly agreeing with every asset GMTI hopes to bestow on its participants. This shows that GMTI has been a successful program that could use some evolution and change. All and all it has achieved what it set out to achieve, possibly not to the degree that has been hoped, but change has been observed.

Based on several comments in this vein as well as the data of how level of involvement effected the degree to which people took skills away from the program GMTI ought to look into finding ways to prolong involvement. This could take several forms. One method could be to merely extend the number of days that the program occurs on, this however may not elicit the same effect as is seen by people being involved with the program for an extended number of years, as they would by returning to staff. Probably what would work better is to keep people involved, by operating many programs within a year to attend. One problem with this would be the commitment required by the staff, and making sure it does not conflict with other obligations.

As far as improving the impact on drug use, the program does not seem to be having much effect on alcohol and marijuana use, so those would be the areas on which to apply a concentrated effort. It is tough to say make program suggestions that would have a good impact. One possible program change may be to have more events to attend through out the year to bolster the attitude of prevention.

The social dynamic of the Teen Institute is lacking in this research. This contributes to the difficulty in making program suggestions. In this case some research

into effective means of conveying messages to teenagers would be of great benefit to not only GMTI, but also the field of secondary education.

The Teen Institute is comprised of many workshops. However there is not necessarily data on each individual workshop. It would be a great benefit to the program to investigate which workshops perform the intended task.

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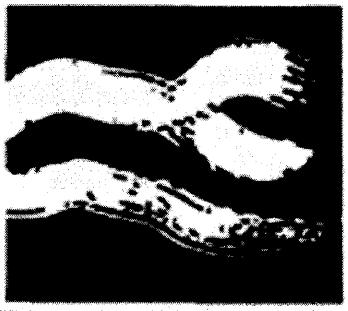
Appendix A
GMTI Effectiveness survey



GREEN MOUNTAIN PREVENTION PROJECTS

presents

GMTI Effectiveness Survey

We need your help!

Remember that week you spent at the Teen Institute in high school? We at Green Mtn Prevention Projects would like to know how well you remember it.

In the eighteen years that we have provided the TI we have never been able to fully evaluate the lasting impact of the program. You have been carefuly selected from almost 2500 TI graduates to respond to the enclosed survey and your response is extremely important.

The Teen Institute is at a critical point. As we make changes we must know what worked and what didn't in the Teen Institute. You are the one who has that information. Please take ten minutes and complete this anonymous survey. Try to send it back to us by July fifth.

Green Mountain Prevention Projects

Directions: Please circle the number that most appropriately answers each question. Feel free to omit any question for any reason. **Remember, only the researchers will know how you answered these questions.**

First, we would like to know your general feelings about substance use and abuse.

1. It is OK for:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a. adults to drink once a day	1	2	3	4	5
b. teens to drink once a day	1	2	3	4	5
c. adults to get drunk occasionally	1	2	3	4	5
d. teens to get drunk occasionally	1	2	3	4	5
e. adults to smoke cigarettes occasionally	1	2	3	4	5
f. teens to smoke cigarettes occasionally	1	2	3	4	5
g. adults to smoke cigarettes every day	1	2	3	4	5
h. teens to smoke cigarettes every day	1	2	3	4	5
i. adults to smoke marijuana occasionally	1	2	3	4	5
j. teens to smoke marijuana occasionally	1	2	3	4	5
k. adults to use other illicit drugs	1	2	3	4	5
l. teens to use other illicit drugs	1	2	3	4	5

. How risky are the following?

	not at all risky				has risk				very risky
a. smoking cigarettes	0	1	2	3	4	5	6	7	8
b. smoking a pack or more of cigarettes a day	0	1	2	3	4	5	6	7	8
c. having one drink of alcohol a day	0	1	2	3	4	5	6	7	8
d. drinking 5 or more drinks of alcohol at a time	0	1	2	3	4	5	6	7	8
e. smoking marijuana once a month	0	1	2	3	4	5	6	7	8
f. smoking marijuana every day	0	1	2	3	4	5	6	7	8
g. trying other illicit drugs only once	0	1	2	3	4	5	6	7	8
h. using other illicit drugs on a regular basis	0	1	2	3	4	5	6	7	8

Now we would like to know about your own use patterns.

3. BEFORE YOU ATTENDED TEEN INSTITUTE, about how often (if ever) did you

	never	more than a year before TI	a few times a year	once a month	a few times a month	once a week	a few times a week	once a day	more than once a day
a. smoke cigarettes	0	1	2	3	4	5	6	7	8
b. drink beer, wine or liquor (except for religious reasons)	0	1	2	3	4	5	6	7	8
c. drink until you got drunk	0	1	2	3	4	5	6	7	8
d. smoke marijuana or hashish	0	1	2	3	4	5	6	7	8
e. use other illicit drugs	0	1	2	3	4	5	6	7	8

4. About how often (if ever) do you CURRENTLY

		rarely							more

	never	(NOT in the past year)	a few times a year	once a month	a few times a month	once a week	a few times a week	once a day	than once a day
a. smoke cigarettes	0	1	2	3	4	5	6	7	8
b. drink beer, wine or liquor (except for religious reasons)	0	1	2	3	4	5	6	7	8
c. drink until you get drunk	0	1	2	3	4	5	6	7	8
d. smoke marijuana or hashish	0	1	2	3	4	5	6	7	8
e. use other illicit drugs	0	1	2	3	4	5	6	7	8

Next we would like to know what life skills you learned at GMTI.

5. GMTI helped me improve my:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a. communication skills	1	2	3	4	5
b. assertiveness skills	1	2	3	4	5
c. self concept	1	2	3	4	5
d. understanding of substance abuse issues	1	2	3	4	5
e. leadership skills	1	2	3	4	5
f. decision making/ problem solving skills	1	2	3	4	5
g. team building skills	1	2	3	4	5

6. Do you feel that GMTI provided you with any other skills? If so what?

_____

_____

_____

_____

7. What impact, if any, did GMTI have on you?

_____

_____

_____

_____

Finally, we just want to know who you are.

8. What is your gender? ___Female ___Male

9. What is your age? _____

10. What is your ethnicity? (check all that apply)
___White, non Hispanic ___Asian/Pacific Islander ___Black, non Hispanic ___Hispanic
___Native American ___Other_____

11. What is your marital status?
___single ___married ___widowed ___divorced/separated
___co-habitating/civily united

12. Do you have any children? ___Yes___No **If yes, how many?** _____
What are their ages? _____

13. What is your occupation? _____

14. What approximately is your annual household income, before taxes?
___below 20,000 ___20,000-30,000 ___30,000-50,000 ___50,000-75,000
___75,000-100,000 ___100,000-150,000 ___ above 150,000

15. What is your current or highest level of education?
___some high school ___finished high school ___trade school ___some college
___4 year college degree ___other_____

16. What year did you participate in TI? _____

17. Did you staff TI? ___Yes___No **If yes how many years?** _____

18. Did you participate in Junior High Project? ___Yes___No

19. When you attended GMTI what County did you live in?
_____

20. Would you describe your area of residence growing up as...
___Rural ___Suburban ___Urban

If you have any other questions, comments or suggestions please share them.

_____
_____
_____
_____
_____
_____

If you would like a copy of the results of the survey please write your name and address below:

_____
_____
_____
_____

GMPP would again like to thank you for your time and participation. The results of this survey are important to the future of GMTI and your input is a valuable part of that future.

P.S. We would also like to hear from you non anonymously! Call or write any time!

(802) 863-8451

GMPP c/o Survey Results
109 So. Winooski Ave. #201
Burlington, VT 05401

Appendix B

Sample Agendas From Various Teen Institutes

1989 Agenda

Monday:

7:30-8:30	Breakfast
8:30-9:00	Setup for registration
9:00-10:00	Registration
10:00-11:30	Opening meeting
11:30-11:45	Break
11:45-12:30	Lunch
12:30-1:30	Testing
1:30-3:30	Pharmacology
3:30-3:45	Break
3:45-5:45	Sexuality and Relationships: Connections with Alcohol and Other Drugs
6:00-7:00	Dinner
7:00-8:00	Active Listening Skills
8:00-9:00	Family Group
9:00-10:00	Community Meeting, Journaling

Tuesday

7:30-8:30	Breakfast
8:30-9:00	Community Meeting
9:00-11:00	Drugs in Society
11:00-12:00	Physical Activity/Break
12:00-1:00	Lunch
1:00-5:00	Ropes Course
5:00-6:00	Free Time
6:00-7:00	Dinner
7:00-8:00	Family Group
8:00-9:00	Art Therapy
9:00-10:00	Community Meeting, Journaling

Wednesday

7:30-8:30	Breakfast
8:30-9:00	Community Meeting
9:00-11:00	Sexuality and Relationships: Connections with Alcohol and other Drugs
11:00-12:00	Physical Activity/Break
12:00-1:00	Lunch
1:00-2:00	Relaxation
2:00-3:00	Family Group
3:00-4:00	Physical Activity
4:00-5:00	Dysfunctional Family
5:00-6:00	Family Group
6:00-7:00	Dinner

7:00-8:00	COA Group/Alternate Activity
8:00-9:00	Community Meeting, Journaling

Thursday

7:30-8:30	Breakfast
8:30-9:00	Community Meeting
9:00-10:15	Action Planning/Local Resources
10:15-10:30	Break
10:30-11:00	Personal Story
11:00-12:00	Family Group
12:00-1:00	Lunch
1:00-2:30	Improvisational Theatre
2:30-3:00	Break
3:00-5:00	Reentry
5:00-6:00	Family Group
6:00-7:00	Dinner
7:00-8:00	Skit Preparation
8:00-9:00	Community Meeting
9:00-	Party

Friday

7:30-8:30	Breakfast
8:30-9:00	Community Meeting
9:00-10:00	Clean-up
10:00-11:00	Family Group
11:00-11:15	Break
11:15-12:30	Closing
12:30-1:30	Lunch
1:30-3:00	Family Group Theatre
3:00-3:30	Family Group
3:30-3:45	Closing
4:00-5:30	Staff Meeting

1994 Agenda

Wednesday	
8:30-9:30	Arrival, Registration, New Games
9:30-10:00	National Prevention Study Testing
10:00-12:00	Opening Community Meeting
12:00-1:00	Lunch
1:00-2:30	Workshop – Drugs in Society / Media Influences
2:30-3:00	Workshop – New Games
3:00-4:00	Family Groups
4:00-5:00	Workshop – Drinking and Driving
5:00-6:00	Free Time
6:00-7:00	Dinner
7:00-7:45	Workshop – Communication Skills
7:45-8:45	Family Group
9:00-10:00	Handbooks and Journaling/Community Meeting
10:00-11:00	Free Time/Optional Activity
11:00	Quiet Time
12:00	Lights Out and Quiet
Thursday	
7:30-8:30	Breakfast
8:30-9:00	Community Meeting
9:00-10:30	Workshop – Pharmacology: Tobacco, Alcohol, and Other Drugs
10:30-10:45	Break
10:45-12:00	Workshop – Use, Abuse and Addiction
12:00-1:00	Lunch
1:00-5:00	Teambuilding and Trust
5:00-6:00	Free Time
6:00-7:00	Dinner
7:00-7:45	Workshop – Assertiveness
7:45-9:00	Family Groups – Personal Use Survey
9:00-10:00	Journaling/Community Meeting/Warm Fuzzy Tale
10:00-11:00	Free Time/Optional Activity
11:00	Quiet Time
12:00	Lights Out and Quiet
Friday	
7:30-8:30	Breakfast
8:30-9:00	Opening Community Meeting
9:00-10:45	Workshop – Sexuality, Alcohol and Other Drugs
10:45-11:00	Break
11:00-12:00	Workshop – AIDS and HIV Prevention
12:00-1:00	Lunch
1:00-2:00	Family Groups
2:00-3:15	Workshop – Stress Management and Relaxation

3:15-3:30	Break
3:30-5:00	Workshop – Families
5:00-6:00	Free Time
6:00-7:00	Dinner
7:00-8:00	Family Groups
8:00-9:00	Workshop – Headband Activity
9:00-10:00	Journaling/Community Meeting
10:00-11:00	Free Time/Optional Activity
11:00	Quiet Time
12:00	Lights Out and Quiet

Saturday

7:30-8:30	Breakfast
8:30-9:00	Opening Community Meeting
9:00-11:00	Workshop – Action Planning & School Team Meetings
11:00-11:15	Break
11:15-12:00	Workshop – What is Teen Institute All About?
12:00-1:00	Lunch
1:00-1:45	Workshop – Re-entry
1:45-2:45	Family Groups
2:45-3:00	Break & Snack
3:00-4:30	Workshop – Teen/Adult Dialogue
4:30-5:00	Workshop – Introduction to Family Group Theatre
5:00-5:45	Family Group Theatre Skit Planning
5:45-6:30	Workshop – Role Modeling & Leadership
6:30-7:30	Dinner
7:30-9:00	Community Meeting/Closure Circle
9:00-11:30	Dance/Party
11:30-12:30	Quiet & Affirmation signing
12:30	Lights Out and Quiet

Sunday

7:30-8:30	Breakfast
8:30-9:15	Community Meeting/Evaluations
9:15-10:00	Community Clean Up and Set Up For Family Group Theatre
10:00-11:00	Family Group/Skit Practice
11:00-12:30	Institute Closure
12:30-1:30	Picnic Lunch
1:30-3:00	Family Group Theatre
3:00-3:30	Open Family Groups
3:30-4:00	Community Closing
4:00	Participants Departure
4:00-5:00	Clean Up
5:00-6:00	Staff Meeting/Staff Closing

1999 Agenda

Monday

1:00-1:30	Participants Arrive/Check-in/New Games
1:30-3:00	Opening Community Meeting
3:00-5:00	Workshop – Pharmacology & Natural Highs
5:00-5:45	Dinner
5:45-6:45	Workshop – Communication
6:45-8:00	Family Groups
8:00-9:00	Journaling/Personal Living Plan
9:00-9:30	Community building games
9:30-10:30	Community Meeting
10:30-10:45	Participant evaluation
10:45-11:45	Quiet Time
11:45	Lights Out

Tuesday

7:30-8:30	Breakfast
8:30-9:00	Community Meeting
9:00-12:00	Teambuilding and Low Ropes
12:00-12:45	Lunch
12:45-2:00	Workshop – Teen Recovery Panel discussion
2:00-3:00	Family Group
3:00-4:00	Free Time
4:00-5:00	New Games
5:00-5:45	Dinner
5:45-6:30	Workshop – Action Planning
6:30-8:00	Workshop – Anger Management
8:00-8:45	Living Theater
8:45-9:15	Journaling/Personal Living Plan
9:15-10:00	Community Meeting
10:00-10:15	Evaluations
10:15-11:45	Structured Free Time
11:45	Lights Out

Wednesday

7:30-8:30	Breakfast
8:30-9:00	Community Meeting
9:00-10:30	Workshop – Sexuality
10:30-12:00	Family Groups
12:00-12:45	Lunch
12:45-1:30	New Games
1:30-3:00	Workshop – Sexual Harassment

3:00-4:00	Family Group
4:00-5:00	Action Planning
5:00-5:45	Dinner
5:45-6:45	Workshop – Date Rape
6:45-7:15	Living Theater
7:15-8:00	Journaling/Personal Living Plan
8:00-9:00	Evaluations
8:15-9:15	Community Meeting
9:15-9:30	Break
9:30-10:30	Warm Fuzzy Tale
10:30-11:45	Structured Free Time
11:45	Lights Out

Thursday

7:30-8:30	Breakfast
8:30-9:00	Community Meeting
9:00-10:30	Workshop – Families
10:30-11:30	Family Groups
11:30-12:00	Fun & Games
12:00-12:45	Lunch
12:45-1:45	Workshop – Suicide
1:45-2:00	Family Group Check in, or energizers
2:00-3:00	Workshop – Eating Disorders
3:00-4:00	Family Group
4:00-5:00	Structured Free Time
5:00-5:45	Dinner
5:45-6:45	Action Planning
6:45-8:00	Workshop – Stress Management
8:00-8:30	Living Theater
8:30-8:45	Free Time
8:45-9:15	Journaling/Personal Living Plan
9:15-10:30	Community Meeting
10:30-10:45	Evaluations
10:45-11:45	Quiet Time
11:45	Lights Out

Friday

8:00-9:00	Breakfast
9:00-10:00	Community Meeting
10:00-10:30	Introduction to Family Group Theater
10:30-12:00	Family Groups
11:30-12:00	Fun & Games
12:00-1:00	Lunch
1:00-2:00	Action Planning

2:00-2:30	Fun & Games
2:30-3:30	Workshop –Re-entry
3:30-4:30	Family Group
4:30-5:00	Evaluations
5:00-6:00	Dinner
6:00-6:30	Fun & Games
6:30-9:00	Community Meeting
9:00-11:45	Party/Affirmation Sheets
11:45-12:00	Clean up
12:00	Lights Out

Saturday

7:30-8:30	Breakfast
8:30-9:15	Community Meeting
9:15-10:00	Community Clean-up and Set-up for Theater
10:00-11:00	Family Group skit practice
11:00-12:30	Institute Closing
12:30-1:30	Picnic Lunch
1:30-3:00	Family Group Theater
3:00-3:30	Open Family Group
3:30-4:00	Community Closing
4:00	Participants Depart
4:00-4:30	Staff Closing
4:30	Last minute cleanup and Staff Depart

1999 On-Site Staff Training Agenda

Saturday night: play time, Bugs Bunny thing, *re-grouping activity

Sunday:

9:00am	arrival at Police Academy
9:30-10:30	Welcome, overview of weekend, expectations/goals for training rules and standards review of All-Staff (from them) • role-modeling, intimacy, YOU ME WE (segways), SRS
10:30-10:45	Human Knot (w/ropes)
10:45-12:00	Facilitation Skills workshop 1) skit- Tana, facilitate; J, bring it up; Marcia, counterpoint interruptions, side conversations, etc. 2) Purpose of family groups (diff't types of groups, get to know them 1st, discussion, feelings, play!) 3) Process (what if's possible situations, etc.) 4) What you can do to make a family group run smoothly 5) Confidentiality-maintaining and breaking, how to let someone know 6) **** know that we (M, T, J) are here for them!! 7) announce triad/diad and send them to lunch with them & conversation topics
12:00-1:00	Lunch
1:00-1:15	Feed the birds
1:15-2:15	Problems/puzzle/Community song activity (see scenarios)
2:15-2:30	Break
2:30-3:30	Teambuilding 1) Clothespin Tag 2) Sharks/lifeboats 3) Marcia's obstacle course w/ partners
3:30-4:00	Committees
4:00-5:30	Triad time (decorate room, name, bedroom signs, plan 1st few activities)
5:30-6:30	Dinner**********
6:30-8:30	committee time
8:30-9:30	Community meeting
9:30-11:45	hallway decorate, bedtime

Monday

7:30-8:30	breakfast
8:30-9:00	community meeting
9:00-9:30	tying up loose ends, asking questions
9:30-10:30	Triad time!!! Finish all that stuff
10:30-11:30	RELAX (tell stories ****Precious Present)
11:30-12:15	Lunch
12:15-on	et up for participant arrival!!!!

Appendix C
Data Tables

Past Month Usage by Age

	12 to 17		18 to 25		26 to 34		Overall	
	GMTI (%)	NHSDA (%)	GMTI (%)	NHSDA (%)	GMTI (%)	NHSDA (%)	GMTI (%)	NHSDA (%)
Cigarettes	***	18.2	13.3	41.6	***	32.5	12.1	27.7
Alcohol	***	18.8	***	60	***	61.2	***	51.7
Binge	***	7.6	***	31.7	***	20	22.4	15.6
Heavy	***	2.9	0	13.8	***	7.2	0	5.9
Marijuana	***	8.2	***	13.8	***	5	***	5
Other Drugs	***	4.1	0	6.5	***	2.8	***	2.5

Past Year Usage by Age

	12 to 17		18 to 25		26 to 34		Overall	
	GMTI (%)	NHSDA (%)	GMTI (%)	NHSDA (%)	GMTI (%)	NHSDA (%)	GMTI (%)	NHSDA (%)
Cigarettes	0	23.8	20	47.1	***	36.3	18.1	30.6
Alcohol	***	30.6	***	74.2	***	74.5	74.1	64
Binge	----	----	----	----	----	----	----	----
Heavy	----	----	----	----	----	----	----	----
Marijuana	***	14.1	***	24.1	***	10	20.7	8.6
Other Drugs	***	7.6	3.3	13.4	***	6.3	***	4.9

Lifetime Usage by Age

	12 to 17		18 to 25		26 to 34		Overall	
	GMTI (%)	NHSDA (%)	GMTI (%)	NHSDA (%)	GMTI (%)	NHSDA (%)	GMTI (%)	NHSDA (%)
Cigarettes	0	35.8	24.4	68.8	37.5	71.3	22.4	69.7
Alcohol	***	37.1	***	83.2	***	88.2	***	81.3
Binge	----	----	----	----	----	----	----	----
Heavy	----	----	----	----	----	----	----	----
Marijuana	***	17.1	30	44.6	***	47.5	***	33
Other Drugs	***	11.8	10	26.4	***	27.5	9.5	18.9

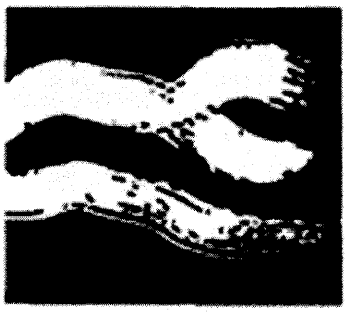
*** lack significance
---- no data

Vermont Youth

	Past Month		Lifetime	
	GMTI (%)	VTYRBS (%)	GMTI (%)	VTYRBS (%)
Cigarettes	12.9	31	***	----
Alcohol	***	46	51.6	72
Binge	9.7	29	----	----
Marijuana	6.5	30	19.4	47

*** lack significance
---- no data

Appendix D
Results summary



GREEN MOUNTAIN
PREVENTION
PROJECTS

presents

GMTI Effectiveness Survey Response

Thanks for your help!

Dear GMTI graduate,
In the Recent GMTI effectiveness survey you indicated that you would like a summary of the results of that survey. Well the data are finally available for your perusal, Thank you again for your participation in this important project. If you have any questions about this survey and its results or would just like to get in touch with the folks at GMPP please give us a call at,
(802) 863-8451

or write to us at,
GMPP c/o Survey Results
109 So. Winooski Ave. #201
Burlington, VT 05401

We set out to quantify the success of GMTI. Now that all the numbers are in and have been dissected we are happy to share our results with you. The numbers show that GMTI is not quite as successful as hoped but not as ineffective as feared. So without any further ado lets get into the nitty gritty. Out of the 320 surveys mailed out 116 came back completed and her are the highlights of what could be gleaned from those respondents.

- Tobacco
  - The number of people who smoke is drastically smaller than the national and statewide expectations. (22.4% vs.69.7%)
- Alcohol
  - The number of people who binge drinking is up over the national statistics,(22.4% vs 15.6%) however compared to statewide numbers TI grads are less likely to have tried alcohol.(9.7% vs 29.0% for vermont youth)
- Marijuana
  - There is an increase over national statistics of those who have used marijuana in the past year, (20.7% vs 8.6%)but again the statewide numbers show a lower likelihood of smoking pot (19.3% vs 47.1% for vermont youth)
- Other Drugs
  - The TI population exhibits a decrease in ever trying other drugs. (9.5% vs 18.9%)

- Perception of Risk
  - A much larger group perceives smoking a pack of cigarettes a day as risky than the rest of the country, and state.
  - The perceived risk involved with alcohol and marijuana use showed no difference with state or national expectations.

- Skills
  - The degree to which people where involved positively effected the skills people felt they took away from TI.

When given the opportunity to share their own thoughts on the program, people had all sorts of good things to say about GMTI. Many graduates said that they had learned a lot of problem solving and adaptation skills and thanked TI with introducing them to a statewide network of drug free friends and resources. There were also many people who got long-term benefits from TI, these included support for substance free decisions or at least information leading to educated decisions regarding substances. The program was also widely credited with fostering socializing abilities and many participants felt inspired to return to their communities and share what they had learned. This type of long term, wide reaching impact is just the thing GMPP is trying to accomplish and is great news for the program.