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## ABSTRACT

The Community Youth Activity Program (CYAP) was the first Center for Substance Abuse Prevention grantee demonstration project with a community prevention emphasis mandated by Congress under the Anti-Drug Abuse Act of 1988. One of the goals of the national evaluation of the CYAP, which expanded to 31 state grantees, was to establish a baseline of information on the development and effectiveness of the program's strategies for high-risk youth. To address this goal, the nature of the population served by CYAP was studied, including their knowledge, attitudes, and behavior. A Knowledge, Attitudes, and Behavior (KAB) instrument was developed to measure preprogram, immediate postprogram, and delayed postprogram responses of 1,797 youth aged 9 to 21 years from 14 states. Alcohol and other drug (AOD) knowledge, attitudes, and behavior do not appear related to ethnicity. When the five factors of risk, protection, AOD knowledge, attitudes, and behavior are analyzed separately, it becomes evident that males demonstrate more risk behavior than do females. African Americans and Native Americans are the most protected among the high-risk groups, probably because of participation in religious and recreational activities. The protection factor level is directly related to AOD knowledge and behavior, and inversely related to AOD behavior. Implications for AOD prevention programs are discussed. Six tables and two figures present study findings. The 38-item KAB instrument is included. (SLD)

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Individual Characteristics of High-Risk Youth Participating  
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## COMMUNITY YOUTH ACTIVITY PROGRAM

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**COMMUNITY YOUTH ACTIVITY PROGRAM:  
Individual Characteristics of High-Risk Youth Participating  
In a Community-Based AOD Prevention Program**

**INTRODUCTION**

The Community Youth Activity Program (CYAP) was the first Center for Substance Abuse Prevention (CSAP) grantee demonstration program with a community prevention emphasis mandated by Congress in Section 3521(a)(3)(b) of the Anti-Drug Abuse Act of 1988 (Public Law 100-690). This mandate authorized CSAP to make competitive grants to eligible States providing for the establishment of community services and partnerships designed to develop community activities targeted at alcohol and other drug (AOD) abuse prevention through education, training, and recreation projects aimed towards high-risk youth and their families. In addition to funding, CSAP administered the CYAP grants during the three-year period between fiscal years 1989-1992. When fully implemented, the CYAP consisted of 31 State grantees represented by each region of the United States plus the territory of Puerto Rico. R.O.W. Sciences, Inc., has conducted the National Evaluation of CYAP during the past 3 years.

One of the goals of the National Evaluation of the CYAP has been to establish a baseline of information on the development and effectiveness of the AOD prevention/intervention strategies designed for high-risk youth. The CYAP demonstration emphasized innovation and diversity in design of program prevention/intervention strategies for the youth. It also emphasized determining the characteristics of at-risk youth who participated in the different CYAP projects. The "population being served" was used to define the population targeted by the projects.

**Research Questions**

Several research questions were posed to address this goal. The overall question is as follows:

**What is the nature of the population being served by CYAP projects?**

This primary question can be refined and augmented by several additional questions, around which the analyses of the characteristics of at-risk CYAP youth were structured. These specific, additional questions are:

1. What are the general characteristics of CYAP youth? In particular, is there any relationship between ethnicity and participation in religious activities (a protective factor)?
2. Do participants' risk, protection, AOD knowledge, AOD attitude, and AOD behavior levels vary by gender, ethnicity, or grade level?
  - 2a. If risk and protective factors for youth are held constant, what further insight is revealed about participants' AOD knowledge, attitude, and behavior?
  - 2b. What kind of CYAP prevention and intervention strategies would be appropriate given our information about youths' existing AOD knowledge, attitude, and behavior?

## METHOD

### Instrumentation

The Knowledge, Attitude, and Behavior (KAB) instrument was developed under contract to CSAP to measure youths' responses to the CYAP activities when they first entered the program (preprogram), when they finished the program (postprogram), and some time between 3 and 6 months after they left the program (followup). CYAP project participants were asked whether they wanted to volunteer to participate in the KAB administrations at their CYAP project site. Only youth volunteers were administered the KAB. KAB scales were designed around lifestyle variables that measure youths' (1) identification with viable role models, (2) identification with and responsibility for family processes, (3) problem-solving skills, (4) interpersonal skills, (5) judgment skills, (6) intrapersonal attitude, (7) knowledge of AOD, and (8) behavior intent with AOD use. As an indicator of knowledge, attitude, and behavior change, the KAB instrument includes scales measuring AOD behavior for a lifetime, 12 months, and the past 30 days. Most items on the KAB instrument either covered demographic characteristics of the participants or formed part of a larger scale. In addition, KAB scales represent subfactors that were combined into the five broad factors: risk, protection, AOD knowledge, AOD attitude, and AOD behavior.

The KAB instrument was designed for use with high-risk youth, although it was modeled on the Monitoring the Future instrument used in the High School Senior Survey. To make KAB appropriate for use with high-risk youth, it was necessary to develop the KAB instrument with a modified language level, a lower reading level (seventh grade readability level as measured by the SMOG), shorter items, shorter length of the overall instrument, and modified instructions. The KAB instrument may be unique in another way, too. Much effort was put into making the instrument culturally sensitive.

KAB has been pilot-tested twice with youth representing CYAP projects in 19 States. With this information, the instrument items were refined and parameters of reliability and validity established. KAB does not have population norms at this time.

### Population

Only preprogram KAB administration was used with high-risk youth in this study because too few CYAP projects were able to administer the postprogram KAB within the necessary timeframe and none of the programs had conducted followup KAB administrations by the deadline. Fourteen of the thirty-one CYAP grantees provided preprogram KAB data on a total of 1,797 youth between the ages of 9 and 21. The 14 CYAP State grantees were:

Arizona	California	District of Columbia
Georgia	Louisiana	Maryland
Massachusetts	Montana	Nevada
Ohio	Puerto Rico	Rhode Island
South Carolina	Texas	

### Procedure

The preprogram KAB was to be administered to all participants before they began involvement in any CYAP prevention or intervention activities. However, in most programs the KAB instrument was administered near the beginning of the program for all participants. Thus, each participant had been exposed to the program for a different length of time before taking the preprogram KAB, which means that the responses may not truly measure "preprogram" levels of knowledge, attitude, and behavior as accurately as the term implies.

KAB data were summarized using several statistical procedures. Youth responses for all KAB items constituting a single subfactor were combined into a single score. If all the items in a subfactor had the same scale for their response choices, then the nonmissing responses were averaged to create the subfactor score. However, when the items' response choices were not compatible, each nonmissing response was converted to a Z-score (standardized on the mean and standard deviation of that item across all respondents) before averaging across items. A Z-score is also known as a standard normal variate, standard normal deviate, or normal variate in standard measure (Snedecor and Cochran 1981).

By definition, the Z-scores for a particular item will have a mean of zero and a standard deviation of 1. Therefore, the subfactor scores computed from Z-scores for nonmissing items will have means very close to zero as well. In combining subfactor scores into the broader factor scores, all subfactor scores were standardized and averaged. Thus, the scores for the five broad factors are approximately centered on 0.

The scores for the five factors are computed so that the direction of each factor is sensible. A higher risk factor score indicates that the participant is at greater risk. A higher protective factor score indicates more protection. A higher AOD knowledge factor score indicates the participant has greater knowledge about AOD issues. A higher score on the attitude factor indicates a better attitude about oneself and a more prudent attitude about AOD use. A higher AOD behavior factor score indicates greater involvement with alcohol and other drugs.

## **RESULTS AND DISCUSSION**

### **Characteristics of the Population**

An analysis was performed to examine several features of the participant group. The features selected were age, gender, ethnicity, and school grade level. These variables were examined using descriptive statistics in an effort to answer research question 1.

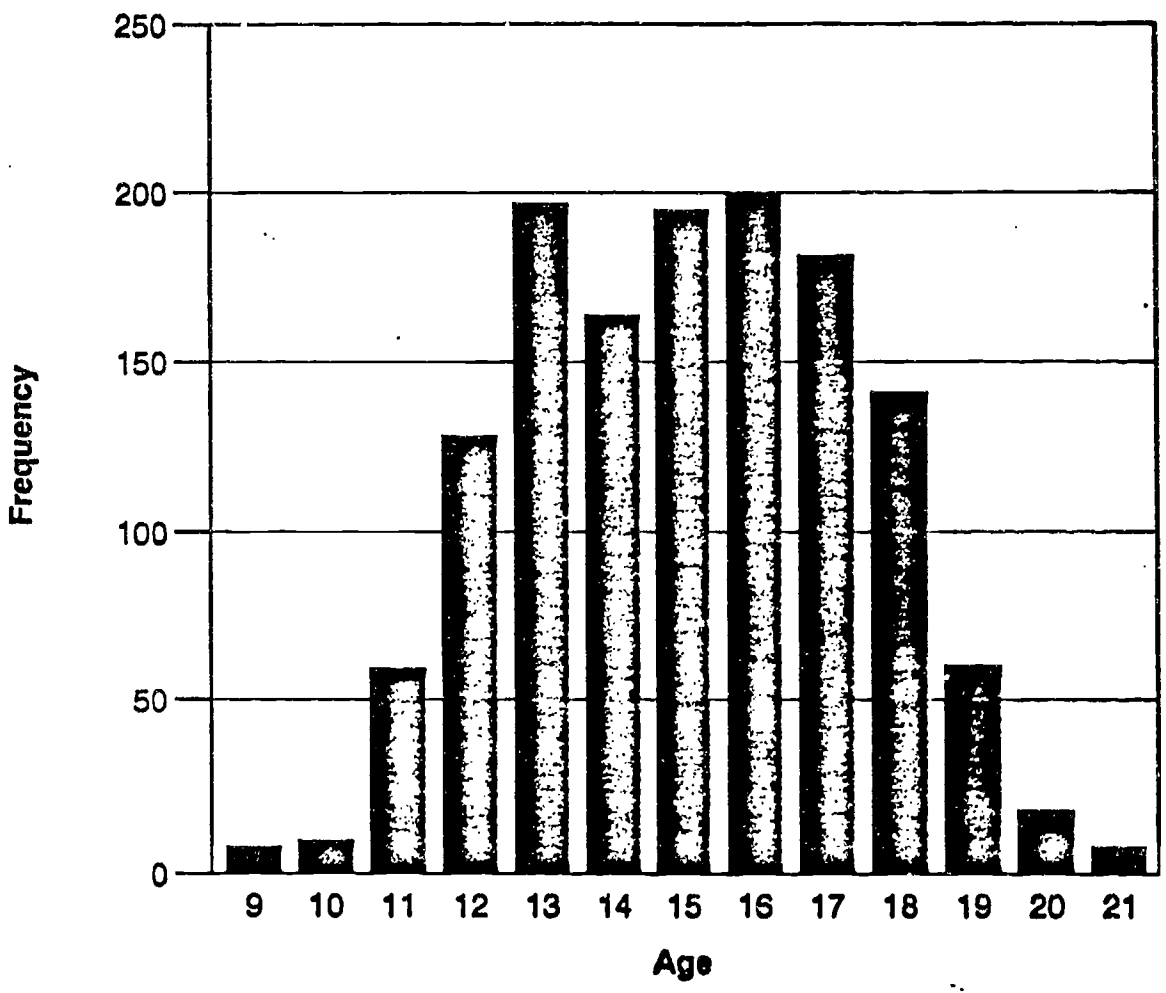
#### **Age**

The ages of the 1,409 youth who participated in CYAP projects ranged from 9 to 21 years old, although most were between 12 and 18 years old. The average age was 14.7. Figure 1 is a histogram showing the entire age range of CYAP youth.

#### **Gender and Ethnicity**

There were slightly more males (51.6 percent) participating in CYAP projects than females (48.4 percent), possibly related to the types of activities offered by the projects. The highest percentage of participants was African-American youth (49.0 percent). The second largest group of participants was whites (24.6 percent). Table 1 presents a full description of the participants' gender and ethnicity. In general, the proportions of males and females within each ethnic group match the proportions in the whole group, with the exception of Puerto Ricans (of whom many more are males) and Native Americans

FIGURE 1. CYAP youth age





**TABLE 1. CYAP youth gender and ethnicity**

Ethnicity	Gender			
	Frequency/Percent	Male	Female	Total
Native American		63 45.3 <sup>1</sup>	76 54.7 <sup>1</sup>	139 7.9 <sup>2</sup>
African-American		449 52.0	414 48.0	863 49.0
Mexican-American		25 53.2	22 46.8	47 2.7
Puerto Rican		60 65.2	32 34.8	92 5.2
Cuban		0 -	1 -	1 0.06
Other Hispanic		40 38.5	64 61.5	104 5.9
Pacific Islander		5 62.5	3 37.5	8 0.5
Asian		4 80.0	1 20.0	5 0.3
White		223 51.6	209 48.4	432 24.6
Other ethnic/racial group		39 56.5	30 43.5	69 3.9
Total		908 51.6	852 48.4	1,760 <sup>3</sup> 100.0

<sup>1</sup>The percentages of each ethnic group who are males or females are presented in these two columns, e.g., 45.3 percent of all Native Americans in the CYAP KAB population are males.

<sup>2</sup>The percentages of the total number of participants who are the particular ethnicity are presented in the "Total" column.

<sup>3</sup>Thirty-seven participants did not provide their gender and/or ethnic group.

(of whom many more are females). This phenomenon may be related, again, to the types of activities being offered.

### **School Grade and Ethnicity**

Nearly one-half of the participant group (47.0 percent) was either in the seventh (24.3 percent) or eighth grade (22.7 percent). With the mean age of CYAP youth being 14.7 and the average grade being 8.5, CYAP youth appear to be a year behind their appropriate grade level. In addition, almost half the participants (41.6 percent) reported having repeated a grade in school at some time. It is also interesting to note that more boys than girls are in this group; 61.6 percent of boys repeated a grade, whereas only 38.4 percent of girls did. Examining the distribution of CYAP youth across grade level and gender showed that more girls were in the eighth grade (25.5 percent) than in the seventh grade (24.2 percent), whereas more boys were in the seventh grade (24.4 percent) than in the eighth grade (19.9 percent). This is interesting because, in the general population, boys tend to be identified by school systems as having more learning problems in the classroom setting than do girls.

Table 2 shows the percentages of CYAP project participants in different grades and ethnic groups. The proportions of participants within each ethnic group in various grades nearly match the proportions for the whole participant group. The exception is Native Americans, of whom 58.4 percent are in the seventh or eighth grade.

To accommodate further analyses, two changes were made to the ethnicity variable. First, one "Hispanic" category was formed by collapsing the Mexican-American, Puerto Rican, Cuban, and other Hispanic categories. There were too few participants in the separate ethnic groups to support trustworthy statistical analyses. In addition, it was felt that these groups exhibited similar patterns in their risk, protection, knowledge, attitude, and behavior levels, which allowed them to be combined for better analysis results. Second, an "Other Ethnic" category was formed by collapsing the Pacific Islander, Asian, and other ethnic/racial categories, again because there were too few participants in the separate ethnic groups for analysis.

### **Religion and Ethnicity**

AOD use prevention literature (Brisbane and Womble 1985-86; Lee 1983) suggests that youths' participation in religious activities may contribute to protective factors that help steer youth away from AOD behavior. We hypothesized that different ethnic groups may have different levels of participation in

TABLE 2. CYAP youth school grade and ethnicity

School Grade	Ethnicity											Total <sup>2</sup>
	Native American	African-American	Mexican-American	Puerto Rican	Cuban	Other Hispanic	Pacific Islander	Asian	White	Other Ethnic/Racial Group		
6th grade	17 12.4	91 10.6	3 6.3	7 7.6	0 0.0	2 1.9	4 50.0	2 33.3	47 11.0	15 21.7	188 10.7	
7th grade	42 30.7	242 28.2	10 20.8	20 21.7	0 0.0	5 4.7	2 25.0	0 0.0	91 21.4	13 18.8	425 24.3	
8th grade	38 27.7	199 23.2	10 20.8	20 21.7	0 0.0	12 11.3	1 12.5	0 0.0	107 25.1	11 15.9	398 22.7	
9th grade	10 7.3	89 10.4	6 12.5	14 15.2	0 0.0	17 16.0	0 0.0	0 0.0	56 13.2	9 13.0	201 11.5	
10th grade	15 11.0	86 10.0	8 16.7	15 16.3	0 0.0	25 23.6	1 12.5	1 16.7	58 13.6	10 14.5	219 12.5	
11th grade	8 5.8	66 7.7	3 6.3	6 6.5	1 100.0	31 29.3	0 0.0	2 33.3	26 6.1	6 8.7	149 8.5	
12th grade	7 5.1	65 7.6	7 14.6	4 4.4	0 0.0	13 12.3	0 0.0	1 16.7	35 8.2	4 5.8	136 7.8	
Not attending school	0 0.00	19 2.2	1 2.1	6 6.5	0 0.0	1 0.9	0 0.0	0 0.0	6 1.4	1 1.5	34 1.9	

<sup>1</sup>The percentages of each ethnic group (and the total group) who are in the different grades are presented, e.g., 12.4 percent of all Native Americans in the CYAP KAB population are in 6th grade.

<sup>2</sup>Forty-seven participants did not provide their ethnic group and/or grade.

religious activities (i.e., they might regard religion to be of more or less importance). We did not feel that religious differences between boys and girls would be as compelling.

Mean scores for the religious activity protective subfactor were computed. An ANOVA was performed to examine whether there were any significant differences among ethnic and racial groups in their religious activity levels; it showed that there were. The difference between the mean for whites and the means for the other ethnic and racial groups seems to be causing this result. Figure 2 shows the confidence interval around the mean for the white youth does not overlap with the confidence intervals for the means for the Native American, African-American, or Hispanic youth.

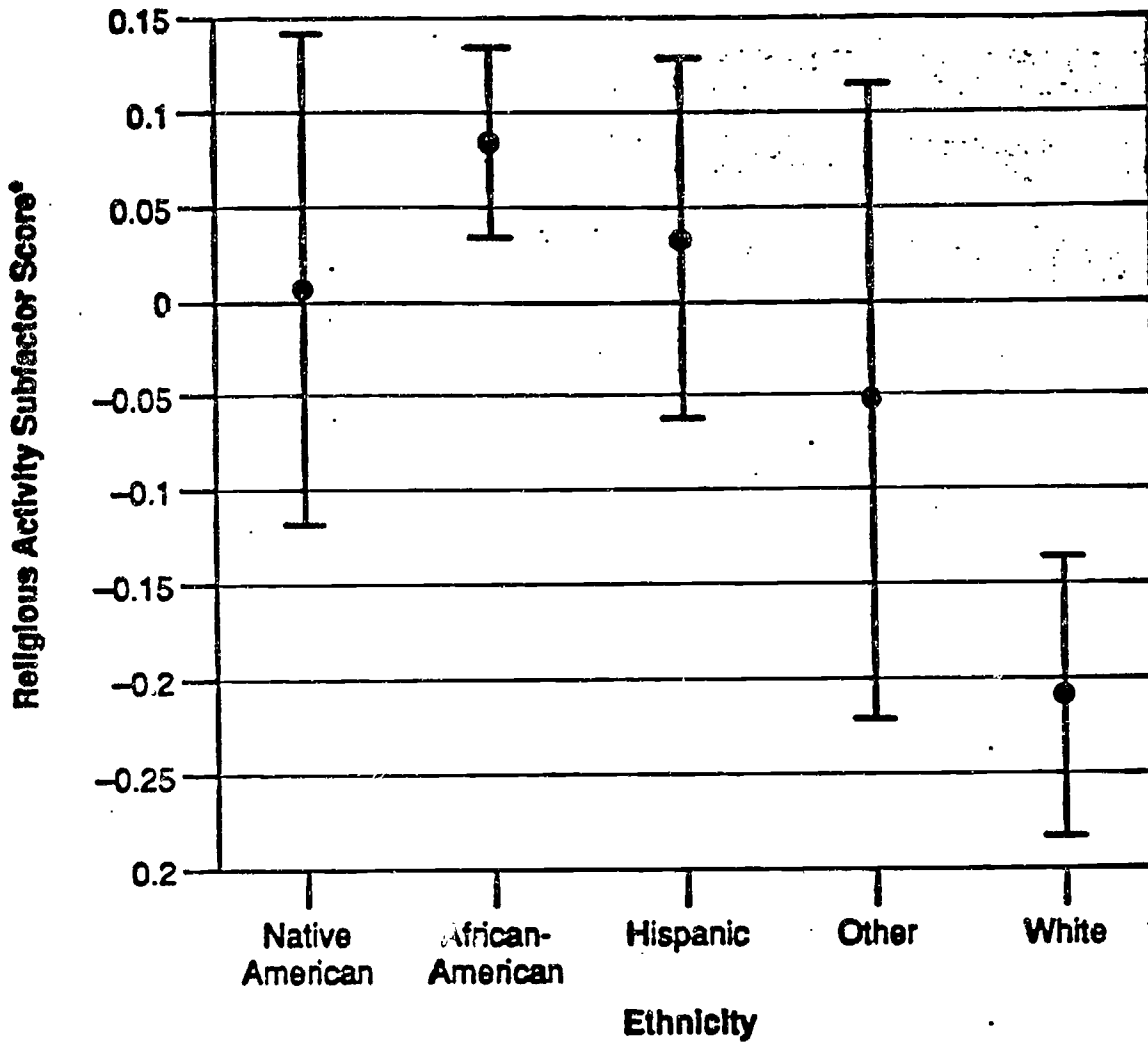
In an effort to determine where the significant differences between pairs of ethnic and racial groups might lie, Tukey's Studentized Range Test was used as a method for examining the comparisons between all pairs of ethnic groups. Results of Tukey's test revealed that significant differences exist between African-American and white youths' participation in religious activities, between Hispanic and white youths' participation, and between Native American and white youths' participation. African-American, Hispanic, and Native American average religious participation were all significantly higher than the average religious participation for white youth.

The results show some evidence that African-American, Hispanic, and Native American youths are all starting off with greater amounts of a protective factor considered important in the literature than are white youths. This apparent lack of protection for whites should be explored by CYAP projects when they plan activities appropriate for their local target populations.

#### **Relationships Between AOD Knowledge, Attitude, and Behavior, Risk and Protective Factors, and Characteristics of CYAP Participants**

Three models were developed to examine the patterns of AOD knowledge, attitude, and behavior among CYAP youth. Table 3 presents the dependent and independent variables found in the models. Analytic procedures for assessing models 1, 2, and 3 included the use of an ANOVA and a MANOVA. A MANOVA was carried out combining all the dependent variables in a model into a single dependent variable because the dependent variables in each model are interrelated. Thus, a MANOVA that takes the interrelationships into account might provide different results from the results arising from separate ANOVAs.

FIGURE 2. Religious activity 95-percent confidence intervals by ethnic group



\* These are standardized Z-scores.

TABLE 3. Models for assessing patterns of AOD knowledge, attitude, and behavior

<p><b>Model 1</b></p> <p><u>Dependent Variables</u></p> <p>Risk factor Protective factor AOD knowledge factor Attitude factor AOD behavior factor</p>	<p><u>Independent Variables</u></p> <p>Gender Ethnicity Grade Grade and gender interaction Grade and ethnicity interaction</p>
<p><b>Model 2</b></p> <p><u>Dependent Variables</u></p> <p>AOD knowledge factor Attitude factor AOD behavior factor</p>	<p><u>Independent Variables</u></p> <p>Gender Ethnicity Grade Grade and ethnicity interaction Risk factor Protective factor Risk factor and ethnicity interaction Protective factor and ethnicity interaction</p>
<p><b>Model 3</b></p> <p><u>Dependent Variables</u></p> <p>AOD knowledge factor Attitude factor AOD behavior factor</p>	<p><u>Independent Variables</u></p> <p>Gender Ethnicity Program Grade Grade and ethnicity interaction Risk factor Protective factor Risk factor and ethnicity interaction Protective factor and ethnicity interaction</p>

## Model 1

Model 1 was constructed to test for differences in the levels of the five factors among youths of differing gender, ethnicity, and school grade, thus answering research question 2. Model 1 included all five factors as dependent variables, with only demographic characteristics as predictor variables (including grade as a covariate). A separate ANOVA was carried out for each factor, as well as a MANOVA combining all five factors into a single dependent variable.

Table 4 presents the ANOVA and MANOVA results. The ANOVA findings show that gender is associated with risk, attitude, and behavior (i.e., the risk, attitude, and behavior levels of boys and girls are significantly different). The ANOVA findings also show that ethnicity is associated with protection only (i.e., only the levels of protection differ significantly for different ethnic groups). As discussed earlier, African-American and Hispanic youth show higher mean scores than do white youth for participation in religious activities, a fact suggesting that the pattern observed here for the broader protective factor (which includes participation in religious activities as one component) is similar to the previously observed pattern for religious activity. Grade level is a significant predictor of all factors except risk, meaning that protection, knowledge, attitude, and behavior levels are significantly different for participants in different grades. In addition, the grade and ethnicity interaction is significant in predicting knowledge and behavior, which means that the grade differences in knowledge and behavior show different patterns for the different ethnic groups. When all the dependent measures are combined in a MANOVA, gender, ethnicity, grade, and the grade-by-ethnicity interaction are all significant predictors of the factors. This means that the combination of the five factors varies across all the demographic characteristics we considered.

It appears from an examination of confidence intervals of factors for which gender or ethnicity was a significant predictor that females have lower risk and better attitudes and behavior than males and that whites have the least protection in their environment. In addition, the level of protection is higher in the lower grades than in the higher grades, AOD knowledge is greater in the higher grades, attitude is more positive in the higher grades, and there is greater involvement in AOD behavior in the higher grades.

Tukey's Studentized Range Test was used to test all pairwise comparisons among the ethnic group means. The comparisons show that the significant result for ethnicity as a predictor of the protective factor occurred largely because of the significant differences between the protective factor scores for African-Americans and Hispanics, African-Americans and whites, and Native Americans and whites.

TABLE 4. ANOVA and MANOVA results'

Independent Variables	Risk Factor <sup>2</sup>	Protective Factor <sup>2</sup>	AOD Knowledge Factor <sup>2</sup>	Attitude Factor <sup>2</sup>	AOD Behavior Factor <sup>2</sup>	All Five Combined <sup>2</sup>
<b>Model 1</b>						
Gender	0.0001	NS	NS	0.0088	0.0085	0.0004
Ethnicity <sup>4</sup>	NS	0.0001	NS	NS	NS	0.0001
Grade	NS	0.0001	0.0029	0.0001	0.0001	0.0001
Grade and gender interaction	NS	NS	NS	NS	NS	NS
Grade and ethnicity interaction	NS	NS	0.0031	NS	0.0007	0.0001
<b>Model 2</b>						
Gender			0.0001	0.0002	0.0001	0.0001
Ethnicity			NS	NS	NS	NS
Grade			0.0001	0.0001	0.0001	0.0001
Grade and ethnicity interaction			NS	NS	0.0059	0.0016
Risk factor			NS	0.0001	0.0001	0.0001
Protective factor			0.0001	0.0001	0.0001	0.0001
Risk factor and ethnicity interaction			NS	NS	0.0001	0.0001
Protective factor and ethnicity interaction			NS	NS	0.0005	0.0001
<b>Model 3</b>						
Gender			0.0001	0.0001	0.0001	0.0001
Ethnicity			NS	NS	NS	NS



TABLE 4. (continued)

Independent Variables	Risk Factor <sup>2</sup>	Protective Factor <sup>2</sup>	AOD Knowledge Factor <sup>2</sup>	Attitude Factor <sup>2</sup>	AOD Behavior Factor <sup>2</sup>	All Five Combined <sup>2</sup>
Program			0.0001	0.0001	0.0001	0.0001
Grade			0.0002	0.0001	0.0001	0.0001
Grade and ethnicity interaction			NS	NS	0.0015	NS
Risk factor			NS	0.0001	0.0001	0.0001
Protective factor			0.0001	0.0001	0.0001	0.0001
Risk factor and ethnicity interaction			NS	NS	NS	NS
Protective factor and ethnicity interaction			0.0033	NS	0.0007	0.0001

<sup>1</sup>The results presented here are either the actual p-value of the F-test for the particular variable, if the test was significant, or 'NS' for not significant. The significance level used was different for each model because it depended on the number of independent variables included: For model 1 the cutoff p-value was 0.01 (0.05/5); for model 2 the cutoff p-value was 0.0063 (0.05/8); and for model 3 the cutoff p-value was 0.0056 (0.05/9).

<sup>2</sup>These analyses were ANOVAs.

<sup>3</sup>This analysis was a MANOVA.

<sup>4</sup>A gender-by-ethnicity interaction was originally included in the model, but it was never significant, so it was dropped.

In summary, the ANOVA analyses showed that youths' risk levels varied only by their gender, whereas the strength of protective factors varied only by ethnicity and school grade. School grade and gender have important bearing on attitude and behavior factors, but ethnicity does not (although the relationship between grade and AOD behavior is different for different ethnic groups). And AOD knowledge was different only across school grade, although again the patterns in the levels of knowledge across grades are different for different ethnic groups.

## Model 2

Model 2 was constructed to examine whether the same relationships between the knowledge, attitude, and behavior factors and the demographic characteristics would hold if the protective and risk factors were controlled, thus answering research question 2a. An ANOVA and a MANOVA were applied using the risk and protective factors and their interactions with ethnicity as covariates.

Table 4 shows ANOVA and MANOVA results for model 2. The ANOVA results show that youths' risk level is a significant predictor of AOD attitude and AOD behavior, whereas their protection level is a significant predictor of AOD knowledge, AOD attitude, and AOD behavior. Specifically, the greater the level of risk, the poorer the attitude and the greater the involvement in AOD behavior. The greater the level of protection, the greater the AOD knowledge and the better the AOD attitude and AOD behavior. This fact suggests that protective factors are key to having good AOD knowledge, a positive attitude, and very little AOD behavior. The interactions of ethnicity with the risk and protective factors are associated with AOD behavior only (i.e., they have different relationships with AOD behavior for different ethnic groups).

When a MANOVA is applied to model 2, statistically significant results are shown for both the risk and protective factors as well as for their interactions with ethnicity. In addition, gender, grade, and the grade-by-ethnicity interaction are still significant. However, ethnicity is no longer important once the protective factor has been controlled, implying that the only differences in the five factors among ethnic groups are in the protective factor.

In summary, it is clear that risk and protective factors are more important than ethnicity in predicting whether youth will use alcohol and other drugs, because ethnicity is no longer significant in the model that includes the risk and protective factors. Exposing youth to risk factors seems to indicate that they will be more involved in AOD behavior and have less AOD knowledge and a less positive attitude regardless of ethnicity, although the specific relationships between risk and protection and knowledge,

attitude, and behavior, will be different for different ethnic groups. It would help program managers at each site to know the relative status of the youth population in the areas of risk and protective factors as well as AOD knowledge, attitude, and behavior. Such information can play a role in helping program managers and partnership coalitions design appropriate CYAP prevention and intervention strategies for the population at risk.

Currently, program managers use CSAP's categories of risk, (table 5) to assess the approximate risk level of each CYAP participant. These categories also are used to define each program's target population. To determine whether the targeted levels of risk bear any resemblance to the actual levels of risk among program participants (as measured by the KAB risk factor variable), a plot was created comparing the total number of risk categories targeted for each program with the KAB risk factor score for each program. The plot showed no relationship between the two measures.

However, the subfactors that constitute the KAB risk factor variable are different from the risk categories used by CSAP. Thus, two common CSAP and KAB risk categories were chosen for a more indepth comparison: (1) violent or delinquent behavior and (2) living in a single-parent household. We found that the average violent or delinquent behavior level as measured by the KAB instrument was no higher for programs that had targeted participants at risk for this behavior than programs that had not. In addition, programs that targeted youths at risk because of living with a single parent did not have a higher percentage of participants living with single parents than programs that had not targeted such youths.

In summary, the levels and types of risk exhibited by program participants seem to bear little resemblance to what was targeted at the program's inception. However, many of the CYAP projects evolved from their original intentions, which may explain some of the discrepancy. More research must be done before interpreting these findings too strongly.

### **Model 3**

Model 3 was intended to examine the effect of different CYAP prevention and intervention strategies. It was constructed to consider whether participants of different CYAP projects had different levels of knowledge, attitude, and behavior, thus providing the first part of the answer to research question 2b. The second part of the answer comes from an examination of the average levels of the five factors found among different programs' participants. Table 4 shows ANOVA and MANOVA results for model 3.

TABLE 5.

**Risk factors of CYAP participants before CYAP (n=45), after CYAP (n=71)  
and the change in percent**

Risk Factor	Number Before CYAP	Percent Before CYAP	Percent After CYAP	Percent After CYAP	Increase	Change in Percent
Already abusing substances	18	40	31	44	+13	+4%
Children of substance abusers (COA)	22	49	45	63	+23	+14%
Developmental disability	2	4	8	11	+6	+7%
Exposure to drug users	15	33	22	31	+7	+2%
Gang members	4	9	11	16	+7	+7%
Group home or ward of State	3	7	10	14	+7	+7%
Head Start eligible	6	13	11	16	+5	+3%
Homeless or runaway	4	9	8	11	+4	+2%
Latchkey child younger than 12	8	18	19	27	+11	+9%
Living arrangement--low-income housing	22	49	35	49	+13	0%
Living arrangement--single-parent household	27	60	31	44	+4	-16%
Physically disabled or in chronic pain	3	7	6	9	+3	+2%
Pregnancy risk or early sexual activity	11	24	19	27	+8	+3%
Pregnant adolescents, teen parents	7	16	18	25	+11	+9%
School behavior problem	20	44	26	37	+6	-7%
School dropout or dropout risk	23	51	35	49	+12	+2%
Severe emotional problems	5	11	19	27	+14	+16%
Siblings of those at risk	6	13	16	23	+10	+10%
Suicidal or past suicide attempt	3	7	9	13	+6	+6%
Victim of abuse or neglect	15	33	27	38	+12	+5%
Violent or delinquent behavior	12	27	22	31	+10	+4%
Other	9	20	17	24	+8	+4%

Analytical procedures included using an ANOVA and a MANOVA that added program type as an independent variable. In addition, the AOD knowledge, attitude, and behavior levels were examined for each program separately. Results from this analysis can provide program managers with insight as to how they might create successful prevention and intervention strategies given the level of AOD knowledge youth in their programs have, the kinds of attitudes the youth exhibit, and the kinds of AOD behavior in which CYAP youth are involved.

The ANOVA and MANOVA results show that program type is associated with AOD knowledge, attitude, and behavior even when the effects of risk and protective factors are controlled. This suggests that AOD knowledge, attitude, and behavior levels are different in different programs. It is interesting to note that the grade-by-race interaction is no longer significant, suggesting that it was serving as a proxy for program type in the earlier models. Gender, grade, and the risk and protective factor covariates are still associated with knowledge, attitude, and behavior as in model 2.

Mean scores for the program-level factor for each program are shown in table 6. Arizona and California grantees provide two examples of the way in which KAB information can be used to determine effective prevention and intervention strategies. First, youth participating in the Phoenix, AZ, gang prevention program show some interesting characteristics. The standardized average risk score (-.1526) is low, indicating the group is at less risk. The group's average score on the protective factor (-.1858) is also low, indicating that there is little in the way of protective features in their environment. Their average scores for AOD knowledge (.0568) and attitude (.1591) are slightly higher than their average score for AOD behavior (.0339). This suggests that good knowledge and attitude scores exist, but with less well-developed AOD behavior inhibition (i.e., with some AOD behavior still present).

Participants of the California program located in the San Jacinto Valley are similar to the Arizona group on average risk factor score (-.1214) and average protective factor score (-.1757). However, as a group their AOD average knowledge score (-.0993) and attitude score (-.0361) are low and their average AOD behavior score (.0144) is positive (i.e., their knowledge and attitude are poor in addition to the existence of AOD behavior).

This information may be helpful to program managers, because it indicates where they should focus CYAP project content. In Arizona, it seems that it would be more important to stress the need for less AOD use, thus attempting to increase positive behavior. In California, this focus also is important, but the population in the San Jacinto Valley project may need much more information to improve AOD knowledge and more self-esteem work to improve attitude.

TABLE 6. Mean factor scores\* by program

Program Name	Risk	Protective	Knowledge	Attitude	Behavior
New Turf - City of Phoenix Youth Program	-.1526	-.1858	.0568	.1591	.0339
San Jacinto Valley-Wide Teen Project	-.1214	-.1757	-.0993	-.0361	.0144
St. Cyprian Community Action Group	.0310	-.0708	-.4580	.3523	-.1065
Project SUCCESS	.0049	.1000	-.2715	-.1238	-.1784
Black Alcoholism Council (BAC)	-.0758	.2846	.2746	.2322	-.0804
Mothers Against Drugs	-.3654	.2205	.1352	.4884	-.3302
Project Uplift	-.0516	.0340	-.1071	.1863	-.0970
Save a Child	-.2635	.2891	-.2514	-.0190	-.3736
Hillside Village and Crescent Court Development	-.0415	-.0661	.1964	-.0504	-.1860
Bromley - Heath	-.0444	.1695	.4901	.0758	-.1369
Elliot Church of Roxbury	.1599	.0032	-.0618	-.0027	.1135
Project Unity	.0575	-.0735	.2836	-.0609	-.0184
Northern Educational Services	-.0852	.3487	.5258	.2447	-.1044
Aureus Co.: A Management Company for Non-Profit	-.0576	.5912	.3309	.0661	-.3509
Pleasant Homes	-.3279	.2213	.2243	.3283	-.2608
Boards in Motion	-.2487	-.2483	-.0466	-.1305	-.0390
Crow Cultural Youth at Risk	.0895	.1785	.1844	-.1208	.2999
Libby Cares	-.3124	.0427	.0717	.3273	-.0655
HELP	-.4062	-.0334	-.1565	.1205	-.2707
Human Resources Council	.3728	-.1994	-1.0623	-.5969	.9444

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TABLE 6. (continued)

Program Name	Risk	Protective	Knowledge	Attitude	Behavior
Jr. High Lock-In	-.1458	-.3230	-.0969	-.1210	-.0420
PLAS4FN	-.3559	-.1079	.1138	.1439	-.0638
BSA	.0368	-.5626	.1194	.0670	.2272
Family Advocate	.0174	-.5188	.3976	.1071	.2793
Ohio (50)	.1862	.0783	-.1503	-.1681	-.1052
Character Formation Institute of Volunteers Corporation	.3291	-.0065	-.2542	-.2683	n/a
Peer Counseling	-.1965	-.1222	.2647	.3176	-.0718
Better Kids Project	.2314	-.1217	.0397	-.2789	.4407
Prevention Project for Group Homes	-.1256	-.1436	-.0539	-.5087	.0412
John De La Howe	.1497	-.1224	.1137	-.4418	.6792
Thornwell Carolina	-.0604	.0913	.4524	-.2803	.1660
Project Harambee	.0625	.0838	-.0213	.1269	-.2705

\*These are standardized Z-scores.

## SUMMARY AND CONCLUSIONS

The two research questions addressed by the analysis has lead to several conclusions. First, the general characteristics of CYAP participants analyzed in the first research question revealed a number of attributes of high-risk youth who are participating in the CYAP projects as follows:

- CYAP youth are represented by nearly equal numbers of males and females attending middle and high school, with ages ranging from 9 to 21 years. Many of these youth have repeated a grade at some point in their life.
- Almost one-half of all CYAP youth are African-American, and only one-fourth are white.

Interestingly, white youth have lower participation levels in religious activities than African-American, Native American, or Hispanic youth, indicating that white youths' protection from AOD behavior may be threatened. African-Americans are most involved in religious activities, with Hispanics and Native Americans close behind.

The second research question addressed by the analysis focused on patterns of CYAP participants' risk, protection, AOD knowledge, AOD attitude, and AOD behavior factors. The analysis was performed considering ways in which these issues vary when gender, ethnicity, and grade level are examined. The analysis performed with respect to these issues showed that patterns for each individual factor was different. In general, ethnicity is a significant predictor of protection only. When all five factors (risk, protection, AOD knowledge, attitude, and behavior) are combined and analyzed together, the variation in ethnicity seems to be a result of only the protective factor. Therefore, AOD knowledge, attitude, and behavior does not appear related to ethnicity. However, when the five factors are analyzed separately, the following conclusions can be stated:

- Risk factors vary only by gender, with males demonstrating more risk behaviors than females. Youth showing elevated risk factors in their lives also indicate a poor AOD attitude while showing elevated AOD behavior. Therefore, high-risk youth are clearly in danger of being attracted toward AOD use. This appears to be true regardless of ethnicity.
- Protection factors vary across ethnicity, with African-Americans and Native Americans demonstrating that they are the most protected among high-risk ethnic and racial groups. Youth showing a strong protective factor show high levels of AOD knowledge and positive attitudes while demonstrating low levels of AOD behavior. Therefore, participation in religious and recreation activities and consistent contact with parents and other adults may help steer youth away from AOD use.



- Protection factors also vary across grade level. However, this finding may be a function of how programs were implemented. (That is, different programs were aimed both at youth of different backgrounds and youth in different grades.)
- AOD knowledge varied only across grade level with youth in higher grades having more knowledge than youth in lower grades; however, there was variation in this finding for each ethnic and racial group.
- AOD attitude factors varied across gender, showing that males had a less healthy attitude about themselves and about drug use than females. This attitude showed improvement as grade level increased through high school.

AOD behavior varied across gender and grade. Males demonstrated more AOD behavior than females, which increased as they progressed through high school. This general finding remains true although the frequency of AOD behavior varied across grade for each ethnic and racial group.

Another aspect of the analysis of the second research question focused on controlling for risk and protection factors demonstrated by the high-risk youth. When this kind of analysis was performed, the following conclusions were reached:

- AOD knowledge, attitude, and behavior vary across gender and grade, but not across ethnicity. This conclusion reinforces that which was attained in the prior analysis.
- Increased risk factor level of youth is related to a decrease in AOD attitude and an increase in AOD behavior. Therefore, as youths' risk factors increase, their AOD attitude and behavior shows more vulnerability.

Protection factor level is directly related to AOD knowledge and attitude and inversely related to AOD behavior. Therefore, as youths' protection factors increase, their AOD knowledge and attitude increase, while their risk of AOD behavior decreases.

The task of determining the best or most appropriate AOD use prevention program has a lot to do with knowing the levels of risk and protection factors and the AOD knowledge, attitude, and behavior factors demonstrated by the target youth. This is important because knowledge, attitude, and behavior of CYAP youth varied across programs. Examining youths' relative levels of factors for specific projects can be helpful in refining program content. Such information plays an important role in helping program managers and coalitions and partnerships design appropriate CYAP prevention and intervention programs emphasizing consistent contact with parents and other adults, recreation activities, and the importance of religious and spiritual involvement.

Knowing the level of high-risk youths' AOD knowledge, attitude, and behavior before they begin to participate in the CYAP program type offered has some important implications for prevention/intervention strategy design. Emphasis can be placed on activities that address youths' weak areas, whether they are AOD knowledge, attitude, or behavior. If all three areas are weak, then an appropriately balanced prevention program can be created. If only one of these areas is weak, then more emphasis can be placed where it appears to be needed. Therefore, examining youths' factor levels for each specific program is helpful. Last, knowledge, attitude, and behavior of the youth varied across gender and grade even after statistically controlling for the program variable. Yet, the pattern shown across grade level was no longer different for each ethnic/racial group. However, this may be just a proxy for the type of CYAP implemented. Nevertheless, administering the KAB instrument to all high-risk youth in a preprevention program setting has merit in allowing program managers to accurately assess individual and group levels on youths' risk and protective factors as well as their AOD knowledge, attitude, and behavior.

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# KNOWLEDGE, ATTITUDE, AND BEHAVIOR INSTRUMENT (KAB)

## Introduction

This instrument was developed for the Center for Substance Abuse Prevention (CSAP), Substance Abuse and Mental Health Services Administration (SAMHSA), Public Health Service, U.S. Department of Health and Human Services, as part of the Community Youth Activity Program (CYAP) demonstration program. The Knowledge, Attitude, and Behavior instrument (KAB) was developed to be used as a tool with which high-risk youths' lifestyle changes can be measured and monitored. It was designed as a self-report instrument, and it is recommended that it be administered prior to youth participation in a program (pretest), after the youth have completed the program (posttest), and at a later time, such as 3 months, after the posttest (followup). KAB was extensively pilot-tested among youth from different racial and ethnic groups and was adjusted to be culturally sensitive across these groups. Youth voluntarily participating in CYAP projects in 19 States were surveyed using KAB. The information was used to refine questions further and establish parameters of reliability and validity. It is recommended that this instrument be used with youth ages 12 to 18. There are no established norms for KAB at this time.

## Instructions

This instrument was designed either to be administered orally or to be self-administered. Self-administered forms can be completed either in a group setting or individually. When administering the instrument orally, the interviewer should complete the information box (below) before beginning the interview. When the instrument is self-administered either individually or in a group, the information may be completed after the interview. The youth's name may be used as the Youth Identifier. However, the interviewer may wish to use a neutral code such as a case number to protect the confidentiality of the interviewee.

Youth should be told at the beginning of the interview that all information will be kept confidential. The interviewer should instruct youth to answer all questions completely and honestly. They should be told that it is not a test, so there are no right or wrong answers. Some questions ask for opinions or impressions. Youth should be instructed to respond exactly as they feel or think.

### To be completed by the interviewer or the person administering the instrument:

Program Identifier (Name or Activity) \_\_\_\_\_

Program Location (Address or Site) \_\_\_\_\_

Date \_\_\_ / \_\_\_ / \_\_\_ Youth Identifier \_\_\_\_\_

Sequence (Check one):

- 1st (Pretest)
- 2nd (Posttest)
- 3rd (Followup)

# KNOWLEDGE, ATTITUDE, AND BEHAVIOR INSTRUMENT (KAB)

1. What is your grade level in school? If this is summer vacation time for you, in what grade will you be this fall? Circle one answer.

1. 6th grade
2. 7th grade
3. 8th grade
4. 9th grade
5. 10th grade
6. 11th grade
7. 12th grade
8. Not currently attending school

2. What is your sex? Circle one answer.

1. Male
2. Female

3a. In what year were you born? 19\_\_ \_\_

3b. In what month were you born? Circle one.

1. January
2. February
3. March
4. April
5. May
6. June
7. July
8. August
9. September
10. October
11. November
12. December

3c. On what day (number) of the month were you born? \_\_ \_\_

4. How do you describe yourself? Circle one answer.

1. American Indian/Native American
2. Black or African-American
3. Mexican American or Chicano
4. Puerto Rican
5. Cuban
6. Other Latin American, South American, or Spanish
7. Pacific Islander such as Hawaiian, Samoan
8. Oriental or Asian American
9. White or Caucasian
10. Other racial or ethnic group

Please let us know which: \_\_\_\_\_

5. With whom do you live? Circle one answer.

1. Two parents. May include a stepparent.
2. Only your mother
3. Only your father
4. Only adult relatives
5. A guardian
6. Others (Please tell us who: \_\_\_\_\_)
7. Group home

6. How many times have you moved from one home to another? Circle one answer.

1. No times
2. Once
3. Twice
4. Three times
5. Four or more times

7. Which of the following best describes most of your grades during the past school year? Circle one answer.

- |           |                  |
|-----------|------------------|
| 1. E or F | 4. B             |
| 2. D      | 5. A             |
| 3. C      | 6. Not in school |

8. During the last 30 days that you were in school, how many days of school did you miss? Circle one answer for each line.

	<i>None</i>	<i>1 Day</i>	<i>2 Days</i>	<i>3 Days</i>	<i>4-5 Days</i>	<i>6-10 Days</i>	<i>11 or More</i>
a. Because you were sick	1	2	3	4	5	6	7
b. Because you skipped or "cut"	1	2	3	4	5	6	7
c. For other reasons	1	2	3	4	5	6	7

9. Have you been held back in school or had to repeat a grade level? Circle one answer.

1. No
2. Yes

10. Adults and youth do all sorts of things together. In a typical week approximately how many times do you do the following activities with an adult? Circle one answer for each line.

	<i>Never</i>	<i>1-2 Times a Week</i>	<i>Almost Everyday</i>	<i>Everyday</i>
a. Eat dinner	1	2	3	4
b. Listen to music	1	2	3	4
c. Play sports	1	2	3	4
d. Watch TV	1	2	3	4
e. Attend church, temple, or religious or spiritual meetings	1	2	3	4
f. Clean house	1	2	3	4
g. Visit relatives	1	2	3	4
h. Play video games	1	2	3	4
i. Cook meals	1	2	3	4
j. Discuss daily events	1	2	3	4

11. When you have problems, can you talk to your mother, father, or other adult about your problems? Circle one answer.

1. Never
2. Sometimes
3. Always

12. Where would you go *first* if you had a question about alcohol or other drugs? Circle one answer.

1. Mother, father, or both
2. Brothers or sisters
3. Uncle or aunt or older relative
4. A friend your age
5. An older friend
6. Teachers
7. Kids who are leaders
8. Books
9. School counselors
10. Hotlines or crisis centers
11. Medical doctor or nurse
12. Police
13. Minister, priest, rabbi, or other spiritual leader

13. How often do you do each of the following? Circle one answer for each line.

	Never	A Few Times a Year	At Least 1-2 Times a Month	At Least 1-2 Times a Week	Almost Everyday
a. Watch TV	1	2	3	4	5
b. Go out with your girlfriend or boyfriend	1	2	3	4	5
c. Play video games	1	2	3	4	5
d. Attend afterschool activities, drama, school clubs	1	2	3	4	5
e. Play sports, coach sports	1	2	3	4	5
f. Work for pay	1	2	3	4	5
g. Attend school dances	1	2	3	4	5
h. Do volunteer work	1	2	3	4	5
i. Attend religious meetings or spiritual activities	1	2	3	4	5
j. Go to the movies	1	2	3	4	5
k. Read books, magazines, and newspapers	1	2	3	4	5
l. Go to parties	1	2	3	4	5
m. Ride around in a car for fun	1	2	3	4	5
n. Hang out with friends	1	2	3	4	5

14. Have you been involved with any of the following activities in the past year? Circle one answer for each line.

	Yes	No
a. Drug education classes	1	2
b. TV or magazine drug-free messages	1	2
c. Stress management or wellness classes	1	2
d. Sports, fitness, or martial arts programs	1	2
e. Wilderness programs and camping	1	2
f. Craft programs	1	2
g. Community service projects, health fairs, celebrations, environment improvement projects	1	2
h. Individual counseling	1	2
i. Group counseling	1	2
j. Summer school	1	2
k. Self-help groups or support groups such as ALATEEN, ALANON, or Narcotics Anonymous	1	2
l. Job training programs	1	2
m. Health education classes	1	2
n. Reading brochures, pamphlets or seeing videos on alcohol and other drugs	1	2
o. Social events such as dances and parties	1	2
p. Cultural events or heritage awareness activities	1	2
q. Afterschool programs or extended day-school programs	1	2
r. Family counseling	1	2
s. Crisis counseling or hotline counseling	1	2
t. Youth leadership training	1	2
u. Tutoring others	1	2
v. Involvement with a caseworker	1	2
w. Presentations by community or police programs or leaders such as Officer Friendly or DARE	1	2

15. How important is religion in your life? Circle one answer.

1. Not important
2. A little important
3. Very important

16. To what extent do you agree with the following statements? Circle the answer that tells how you feel about yourself. Circle one answer for each line.

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
a. I take a positive attitude toward myself.	1	2	3	4
b. Life often seems meaningless.	1	2	3	4
c. People should do their own thing, even if other people think it is strange.	1	2	3	4
d. I feel I do not have much to be proud of.	1	2	3	4
e. I feel I am a person of worth and equal to others.	1	2	3	4
f. I enjoy life as much as anyone.	1	2	3	4
g. I get a real kick out of doing things that are a little dangerous.	1	2	3	4
h. Sometimes I think that I am no good at all.	1	2	3	4
i. I am able to do things as well as most other people.	1	2	3	4
j. The future often seems hopeless.	1	2	3	4
k. I like to test myself every now and then by doing something a little risky.	1	2	3	4
l. I feel that I can't do anything right.	1	2	3	4
m. I feel that my life is not very useful.	1	2	3	4

17. Circle the answer that describes how you think. Circle one answer for each line.

	No	Not Sure	Yes
a. "Downers" can be taken safely with alcohol.	1	2	3
b. Drinking coffee after drinking alcohol is a good way to sober up.	1	2	3
c. Babies of mothers who are cocaine or heroin addicts are likely to be born addicted.	1	2	3
d. Heavy alcohol use hurts the family.	1	2	3
e. Heavy drinking over a long period of time kills brain cells.	1	2	3
f. Smoking marijuana can hurt a person's ability to drive a car.	1	2	3
g. Pregnant women who have two drinks a day may harm their unborn babies.	1	2	3

18. Here are some questions that ask about how sure you are that you would be able to do certain things. Circle one answer for each line.

	Definitely Could Not	Probably Could Not	Probably Could	Definitely Could
a. I could go up to someone my age and start talking to that person.	1	2	3	4
b. If a friend wants me to do something that I don't want to do, I could tell my friend that I don't want to do it.	1	2	3	4
c. If a friend wanted to give me alcohol, I could say no.	1	2	3	4
d. If a friend wanted to give me marijuana, I could tell my friend that I didn't want any.	1	2	3	4
e. If friends did something that I didn't like, I could ask them to change what they were doing.	1	2	3	4
f. If some of my friends are playing a game, I could ask them if I could join.	1	2	3	4
g. If a friend wanted to give me some cocaine or crack, I could say no.	1	2	3	4

19. People use alcohol and other drugs for different reasons. Do you think it is okay to drink alcohol or use other drugs for the following reasons? Circle one answer for each line.

	No	Not Sure	Yes
a. To see what it is like	1	2	3
b. To relax or feel less tense	1	2	3
c. To feel good or get high	1	2	3
d. To seek deeper insights or understandings	1	2	3
e. To have a good time	1	2	3
f. To fit in with a group	1	2	3
g. To get away from my problems	1	2	3
h. To relieve boredom or nothing to do	1	2	3
i. To release anger or frustration	1	2	3
j. To be more creative	1	2	3
k. To do better in sports	1	2	3
l. To look better	1	2	3
m. To get to sleep	1	2	3
n. To lose weight	1	2	3

20. During the past 30 days, how many of your friends did the following things? Circle one answer for each line.

	<i>None</i>	<i>A Few</i>	<i>Some</i>	<i>Most</i>	<i>Don't Know</i>
a. Smoked cigarettes	1	2	3	4	5
b. Used alcohol or other drugs	1	2	3	4	5
c. Hit teachers or work supervisors	1	2	3	4	5
d. Got into serious fights at school or at work	1	2	3	4	5
e. Stole from other people	1	2	3	4	5
f. Took something from a store without paying for it	1	2	3	4	5
g. Damaged school property on purpose	1	2	3	4	5
h. Argued with their parents or hit their parents	1	2	3	4	5
i. Took part in a fight where a group of your friends were against another group	1	2	3	4	5
j. Set fire to someone's property on purpose	1	2	3	4	5
k. Got into trouble with police because of something they did	1	2	3	4	5
l. Used snappers, or inhaled gas, glue, or cleaners	1	2	3	4	5

21. During the past 30 days, have you done any of the following things that may be against the rules or against the law? Circle one answer for each line.

	<i>No</i>	<i>Not Sure</i>	<i>Yes</i>
a. Hit a teacher or supervisor	1	2	3
b. Got into a fight at school or work	1	2	3
c. Took something not belonging to you from a person	1	2	3
d. Took something from a store without paying for it	1	2	3
e. Damaged school property on purpose	1	2	3
f. Argued or had a fight with either of your parents	1	2	3
g. Took part in a fight where a group of your friends were against another group	1	2	3
h. Went into a house or building when you were not supposed to be there	1	2	3
i. Set fire to someone's property on purpose	1	2	3
j. Got into trouble with police because of something you did	1	2	3

22. Have you ever smoked cigarettes? Circle one answer.

1. Never
2. Once or twice
3. Now and then but not everyday
4. Everyday in the past, but quit
5. Everyday now

23. During the past 30 days, how many cigarettes did you smoke? Circle one answer.

1. None
2. 1 cigarette per day but not everyday
3. 1-5 cigarettes per day, but not everyday
4. 1-5 cigarettes per day
5. 5-20 cigarettes per day
6. About one pack or more per day

24. Do you plan to smoke cigarettes in the future? Circle one answer.

1. No
2. Not sure
3. Yes

25. In the past, how many times, if any, did you use smokeless tobacco, snuff, chew, or dip? Circle one answer for each line.

	<i>None</i>	<i>1-2 Times</i>	<i>3-5 Times</i>	<i>6-9 Times</i>	<i>10-19 Times</i>	<i>20-39 Times</i>	<i>40 or More Times</i>
a. During the past 30 days	1	2	3	4	5	6	7
b. During the past 12 months	1	2	3	4	5	6	7
c. In your lifetime	1	2	3	4	5	6	7

26. Do you plan to use smokeless tobacco, snuff, dip, or chew in the future? Circle one answer.

1. No
2. Not sure
3. Yes

27. How many times, if any, have you drunk any alcohol such as beer, wine, or hard liquor? Circle one answer for each line.

	None	1-2 Times	3-5 Times	6-9 Times	10-19 Times	20-39 Times	40 or More Times
a. During the past 30 days	1	2	3	4	5	6	7
b. During the past 12 months	1	2	3	4	5	6	7
c. In your lifetime	1	2	3	4	5	6	7

28. Do you plan to drink alcohol in the future? Circle one answer.

1. No
2. Not sure
3. Yes

29. Think back over the past 30 days. How many times have you had five or more drinks "in a day?" A "drink" is a glass of wine, a bottle or can of beer, a shot glass of liquor, or a mixed drink. Circle one answer.

1. None
2. 1-2 times
3. 3-5 times
4. 6-9 times
5. 10 or more times

30. How many times, if any, have you used marijuana, which is sometimes called smoke, joint, tea, weed, sezz, sen, reefer, pot, or grass? Circle one answer for each line.

	None	1-2 Times	3-5 Times	6-9 Times	10-19 Times	20-39 Times	40 or More Times
a. During the past 30 days	1	2	3	4	5	6	7
b. During the past 12 months	1	2	3	4	5	6	7
c. In your lifetime	1	2	3	4	5	6	7

31. How many times, if any, have you used cocaine, sometimes called crack, coke, rock, snow, sugar, toot, or white? Circle one answer for each line.

	None	1-2 Times	3-5 Times	6-9 Times	10-19 Times	20-39 Times	40 or More Times
a. During the past 30 days	1	2	3	4	5	6	7
b. During the past 12 months	1	2	3	4	5	6	7
c. In your lifetime	1	2	3	4	5	6	7

32. How many times, if any, have you used hallucinogens such as LSD, mescaline, angel dust, acid, windowpane, cubes, shrooms, mushrooms, or PCP? Circle one answer for each line.

	None	1-2 Times	3-5 Times	6-9 Times	10-19 Times	20-39 Times	40 or More Times
a. During the past 30 days	1	2	3	4	5	6	7
b. During the past 12 months	1	2	3	4	5	6	7
c. In your lifetime	1	2	3	4	5	6	7

33. How many times, if any, have you used "downers" or barbiturates such as sleeping pills, yellows, reds, red devils, ludes, yellow jackets, or Quaaludes? Circle one answer for each line.

	None	1-2 Times	3-5 Times	6-9 Times	10-19 Times	20-39 Times	40 or More Times
a. During the past 30 days	1	2	3	4	5	6	7
b. During the past 12 months	1	2	3	4	5	6	7
c. In your lifetime	1	2	3	4	5	6	7



34. How many times, if any, have you used "uppers" such as black beauties, crank, speed, meth, crystal, pep pills, or bennies? Circle one answer for each line.

	None	1-2 Times	3-5 Times	6-9 Times	10-19 Times	20-39 Times	40 or More Times
a. During the past 30 days	1	2	3	4	5	6	7
b. During the past 12 months	1	2	3	4	5	6	7
c. In your lifetime	1	2	3	4	5	6	7

35. How many times, if any, have you used medicines or tranquilizers such as Valium or Librium or pain medicines such as codeine, Dilaudid, or Percodan? Circle one answer for each line.

	None	1-2 Times	3-5 Times	6-9 Times	10-19 Times	20-39 Times	40 or More Times
a. During the past 30 days	1	2	3	4	5	6	7
b. During the past 12 months	1	2	3	4	5	6	7
c. In your lifetime	1	2	3	4	5	6	7

36. How many times, if any, have you inhaled or sniffed poppers, snappers, Amys, gas, glue, sprays, locker room, whiteout, push, cleaning fluids, or paints? Circle one answer for each line.

	None	1-2 Times	3-5 Times	6-9 Times	10-19 Times	20-39 Times	40 or More Times
a. During the past 30 days	1	2	3	4	5	6	7
b. During the past 12 months	1	2	3	4	5	6	7
c. In your lifetime	1	2	3	4	5	6	7

37. When, if ever, did you first try each of the following drugs? Circle one answer for each line.

	Never	Grade 6 or Below	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
a. Smoked cigarettes on a regular basis	1	2	3	4	5	6	7	8
b. Tried an alcoholic beverage for more than just a few sips	1	2	3	4	5	6	7	8
c. Tried marijuana or hashish	1	2	3	4	5	6	7	8
d. Tried LSD or mescaline	1	2	3	4	5	6	7	8
e. Tried uppers, speed, pep pills, meth, etc.	1	2	3	4	5	6	7	8
f. Tried downers, yellow, ludes, barbs, etc.	1	2	3	4	5	6	7	8
g. Tried painkillers	1	2	3	4	5	6	7	8
h. Tried cocaine or crack	1	2	3	4	5	6	7	8
i. Tried snappers, poppers, or other things you inhale to get high	1	2	3	4	5	6	7	8
j. Tried smokeless tobacco, snuff, dip	1	2	3	4	5	6	7	8
k. Smoked your first cigarette	1	2	3	4	5	6	7	8
l. Drank enough to feel drunk or very high	1	2	3	4	5	6	7	8

38. Do you plan to use drugs in the future? Circle one answer.

- No
- Not sure
- Yes

THE END

Thank you for helping us with our survey.