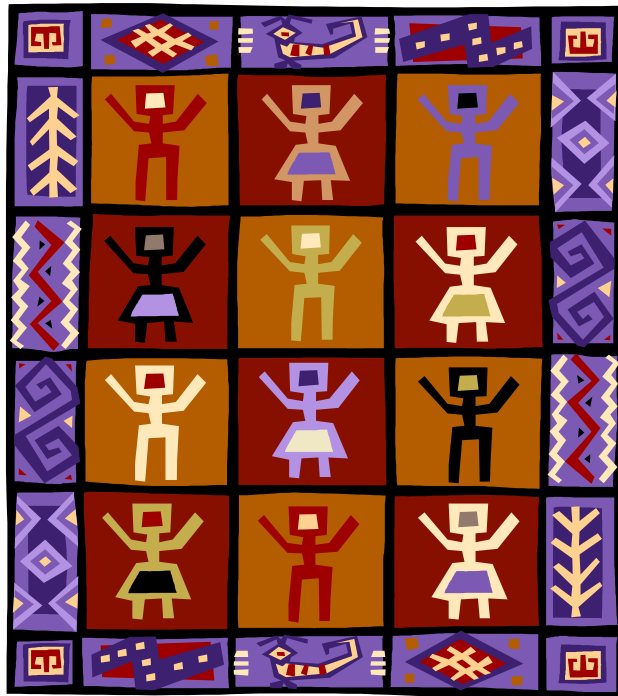


King County's  
Adolescent Treatment Enhancement Project  
Program Evaluation  
March 2004



M. Rutherford, Ph.D., J. Morris, BS, M. Strong-Beers, & L. Ingoglia, MFT  
Alcohol and Drug Abuse Institute, University of Washington

In Collaboration with King County  
Mental Health Chemical Abuse and Dependency Services Division  
Seattle, WA

Adolescent Treatment Enhancement Program  
Program Evaluation  
March 2004

Table of Contents

List of Tables and Figures ..... iii

Executive Summary ..... iv

I. Introduction ..... 1

II. Background ..... 1

III. Program Overview ..... 2

IV. Government Performance Reporting Act Data ..... 3

V. Evaluation Overview ..... 5.

VI. Results ..... 6

    1. Background on All Youth ..... 6

    2. Substance Dependence versus Substance Abuse ..... 8

    3. Standard Treatment Services and Youth Satisfaction ..... 9

    4. ATEP Specific Services and Youth Satisfaction ..... 11

    5. Non-ATEP Services and Youth Satisfaction ..... 13

    6. Program Retention ..... 14

    7. Program Outcomes ..... 15

        a. School Performance ..... 15

        b. Employment ..... 16

        c. Social Relationships ..... 16

        d. Family Relationships ..... 17

e. Psychological Functioning.....	18
f. Criminal Behavior.....	19
g. Substance Use.....	20
d. Cultural Issues.....	22
VII. Discussion.....	23
VIII. Summary.....	25
IX. References.....	26

## List of Tables and Figures

### List of Tables

Table 1: Youth Recruited by Agency and Project Year .....	6
Table 2: Substance Use Histories of ATEP Youth.....	8
Table 3: Initial Differences Between Dependent and Substance Abusing Youth .....	9
Table 4: Substance Abuse Treatment Records for ATEP Youth.....	10
Table 5: Information on ATEP Services and Youth Satisfaction .....	12
Table 6: Information on Multicultural Leadership Program Events .....	13
Table 7: School Functioning.....	15
Table 8: Social Involvement.....	17
Table 9: Percent of Youth Reporting Negative Behaviors with Family.....	18
Table 10: Psychological Functioning.....	18
Table 11: Information on Criminal Variables .....	19
Table 12: Self-Reports of Drug Related Problems .....	21
Table 13: Perceptions of Cultural Importance .....	22

### List of Figures

Figure 1: Substance Use of 124 ATEP Youth.....	20
--	----

# King County's Adolescent Treatment Enhancement Project

## Executive Summary

---

The Adolescent Treatment Enhancement Project (ATEP) was a three-year targeted capacity expansion grant awarded to King County Mental Health Chemical Abuse and Dependency Services Division (MHCADSD) by the Center for Substance Abuse Treatment (CSAT). ATEP was a collaborative effort between MHCADSD and five substance abuse treatment agencies providing services to adolescent minority groups collectively known as the Special Populations Alliance

The primary objective of ATEP was to improve treatment engagement and retention in 200 youth. ATEP was designed to be a one-year program. During this program youth received enhanced case management services as well as a more active treatment format (e.g., more recreational activities) than the more traditional “talk therapies”. ATEP also provided youth increased opportunities to learn and practice new skills with peers in supervised and recovery-oriented environments. ATEP exceeded its goal of treating 200 youth, serving 219 youth during the grant period.

Data on the Government Performance and Results Act (GPRA) questions were provided to CSAT each quarter of the program. GPRA data for all clients served by ATEP (N= 219) was successfully provided to CSAT. A total of 202 youth consented to be re-contacted for a 6- and 12-month follow up. Follow up GPRA data was sent to CSAT on over 84% of the cases that were due for a 6- or 12-month interview.

Additional outcome data for 157 youth at the 6-month interview and 124 youth at the 12-month assessment was obtained in the local evaluation. Results from the local evaluation and GPRA data indicated ATEP successfully accomplished its goals in that participants in ATEP, over time, experienced:

- ❖ Significantly fewer drug related problems
- ❖ Consistently lower use of all substances over time
- ❖ Increased interest in school, fewer truancies, and suspensions
- ❖ More positive choices in use of free time
- ❖ Improved family relationships
- ❖ No new criminal convictions
- ❖ Greater value on their own culture as well as increased comfort being around, and understanding of, people from different cultures

# King County's Adolescent Treatment Enhancement Project

## I. Introduction

In King County, as throughout the country, juvenile crime is a serious problem affecting the safety and well-being of communities and negatively impacting the lives and the futures of many young people. Problematic alcohol and drug use is an especially common feature in the lives of juvenile offenders. For example, in Washington State it is estimated that 82% of youth committed to the Juvenile Rehabilitation Administration are either abusers of or dependent upon alcohol or other drugs<sup>1</sup>. In King County it is estimated that 52% of the males and 47% of the females in the Detention Unit are in need of chemical dependency treatment<sup>2</sup>.

In the juvenile justice system minority youth are frequently treated more severely and are over-represented in the populations of detained youth compared to White youth<sup>3</sup>. Minority youth are more likely than White youth to be labeled as delinquent rather than to be diagnosed as needing treatment services. Recent studies conducted in King County's Detention facility over the last 5 years confirm these findings<sup>4,5</sup>.

Ethnicity has long been viewed as a variable significant to the understanding of the etiology of substance abuse. The role that an individual's ethnicity plays in drug abuse treatment is not as clear<sup>6</sup>. However, it is generally believed that minority youth (including gay, lesbian, bisexual and transgender youth) may be less likely to be successfully engaged in treatment if services are not cognizant of cultural considerations.

## II. Background

The Adolescent Treatment Enhancement Project (ATEP) was a three-year targeted capacity expansion grant awarded to King County Mental Health Chemical Abuse and Dependency Services Division (MHCADSD) by the Center for Substance Abuse Treatment (CSAT). ATEP was fully implemented in January 2001 and completed in December 2003.

ATEP represents a collaborative effort between MHCADSD and the Special Populations Alliance. The Special Populations Alliance originally consisted of five agencies that provide substance abuse treatment services to adolescent minority groups. The agencies involved in this alliance and the populations that they serve are:

- Central Youth and Family Services, primarily African American
- Consejo Counseling and Referral Services, primarily Hispanic/Latino
- Stonewall Recovery Services for Sexual Minorities, serving gay, lesbian, bisexual, and transgender (GLBT) youth of all nationalities
- United Indians of All Tribes, primarily Native American,

- Washington Asian and Pacific Island Families Against Substance Abuse, primarily Asian/Pacific Islander

The primary objective of ATEP was to improve treatment engagement and retention in 200 youth in substance abuse treatment. This was to be accomplished by providing enhanced culturally relevant case management services, and involving youth in a quarterly Multicultural Leadership Program. Additionally, ATEP sought to increase the number of juvenile justice system referrals to treatment for minority youth through aggressive outreach in the local juvenile courts.

It was anticipated that by retaining youth in substance abuse treatment for longer periods of time they would be less likely to return to substance use and, if the youth was involved in the juvenile justice system, less likely to be rearrested. An outcome evaluation was implemented to meet CSAT reporting requirements and to assess retention rates, substance use patterns and illegal involvement for ATEP participants over a one-year period.

### III. Program Overview

Although there is no standard amount of time that youth typically spend in substance abuse treatment, most youth attend treatment services for less than a year. Compared to standard treatment, the duration and intensity of ATEP is longer and more involved. ATEP was designed to be a one-year program. During this one-year program youth in ATEP were expected to receive enhanced case management services as well as a more active treatment format (e.g., more recreational activities) than the more traditional “talk therapies”. ATEP was to also provide youth enhanced opportunities to learn and practice new skills with peers in supervised and recovery oriented environments. Including organized and structured activities as part of treatment was expected to teach teamwork, personal goal setting, and overcoming challenges as well as enhance treatment retention. Although all agencies were to increase the amount of case management provided to youth, the types and frequency of other services to be provided could vary across the five agencies (e.g., one agency provides tutoring to youth, several agencies took youth camping).

ATEP youth in good standing (i.e., actively participating, clean urine drug screens) were also involved in a quarterly Multicultural Leadership Program. This program involved selected youth from all agencies coming together for an afternoon group activity that emphasized multicultural awareness and understanding, fellowship and support, relapse prevention, and leadership skill development. Each quarter a single agency took the lead in developing the agenda for that quarter’s program. Youth from the lead agency were involved in the planning of the program activities, selection of food, and music for the event. In most events speakers were brought in to discuss their experiences with

substance use and recovery. Youth also spoke about their lives, how they became involved in substance use, and how they were managing to remain drug-free. Prizes, won through drawings and or participation in activities, were also part of each of the events.

During the second and third years of ATEP, select youth from all agencies worked cooperatively with a local film company to produce an hour-long video that described the program and how youth benefited from program participation. This video was shown on local television stations and has been used to promote ATEP to local county and state funding agencies. CSAT was also provided with a copy of this video.

Two retreats were also convened for key agency staff involved in ATEP. During the first year of the project a two-day retreat was held for all the counselors and agency supervisors involved with ATEP. During the second year staff held a one-day retreat. The purpose of the retreats was to allow staff time to discuss the progress of ATEP, discuss whether program modifications were needed, and if so how to implement these changes, as well as fostering continued positive inter- and intra-agency working alliances.

#### IV. Government Performance and Results Act (GPRA) Data

As required by CSAT, for each quarter that ATEP was active, data on the Government Performance and Results Act (GPRA) questions was collected. Data from GPRA questions was also used to enhance the local evaluation (e.g., questions on involvement in community activities, substance use, criminal information, and interests). Outcomes based on several GPRA questions are provided in the Results section of this report. Information from the GPRA questions in combination with those of the local evaluation will be used by MHCADSD to determine the success of ATEP as well as to acquire additional fiscal support for the program.

A Certified Chemical Dependency Counselor at each of the 5 participating treatment agencies collected initial GPRA data from youth. This initial data was then forwarded to the researchers who sent this data to CSAT. Research staff collected GPRA data for the 6- and 12-month evaluations. The research team was responsible for assuring that all GPRA data was provided to CSAT on a quarterly basis.

Initial baseline GPRA data for all clients served by ATEP (N= 219) was successfully provided to CSAT. As described more fully below, only youth providing written consent for follow-up interviews were re-contacted at the 6- and 12-month follow-ups to obtain GPRA data. Follow-up GPRA data was provided to CSAT for over 84% of available cases for the 6- and 12-month assessments.



During the first two years of the project GPRA data was sent to Birch and Davis Associates in a Statistical Package for the Social Sciences (SPSS) data file. During the third year of ATEP, CSAT implemented a web-based data collection system, which was used to provide GPRA data for the remainder of the project.

The few problems encountered regarding submission of GPRA data involved reluctance of counselors to complete the GPRA questions, and trouble with data entry on the web based system. Several of the GPRA questions were the same as those asked during an intake assessment and other questions counselors viewed as inappropriate to ask youth (i.e., During the past 30 days did you engage in sexual activity? Have you ever been pregnant or gotten someone pregnant?). In order to reduce redundancy and excess paper work for counselors, the GPRA questions were embedded in the intake interview, which was the Adolescent Drug Abuse Diagnosis<sup>6</sup> (ADAD). Research staff also met with all the counselors to provide the theoretical underpinnings of why certain GPRA questions were being asked. Approval was obtained from CSAT for questions regarding sexual activity to be considered as optional. These procedures resulted in full cooperation of the counselors responsible for obtaining initial GPRA data.

Submission of data in SPSS data files was non-problematic. However several problems with data entry were encountered using the web based system. Considerably more time for data entry was required when using the web-based system compared to submitting SPSS data files. All data for the ATEP project was collected on scannable forms. This allowed researcher to extract GPRA questions from the intake and follow up forms and directly submit the SPSS data files to Birch and Davis. Utilizing the web-based system required the questions for each individual to be entered by hand. On two occasions review of the web-based data revealed that several cases from another study had been included in the ATEP database. Additionally, on several occasions data that had been entered did not appear in the database and therefore required re-entry. Technical assistance in these matters was received and satisfactorily remedied all problems, although not always in a timely fashion. Difficulty was also encountered in obtaining all client discharge information before access to the web based system was no longer available.

Based on our experiences it is suggested that CSAT encourage future studies to embed GRPA questions in existing forms used by programs to increase cooperation of clinical staff. It is also strongly recommended that CSAT allow the submission of GPRA data in standard data file formats rather than only allowing data entry on the web based system. This would greatly increase the efficiency of data entry and the time required for data entry. Finally it is suggested that projects be granted access to the web based system until the final project report has been submitted. This would allow CSAT to obtain more complete data sets.

## V. Evaluation Overview

The outcome evaluation of ATEP consisted of assessing the progress of youth 6 and 12 months from the date that they entered ATEP. Although baseline information, including GPRA data, was obtained on all youth entering ATEP, 6- and 12-month data was only obtained on youth consenting to participate in follow-up interviews. Prior to beginning recruitment for the study, all procedures and consent forms were reviewed and approved by the University of Washington's Human Subjects Institutional Review Board.

When youth entered ATEP, a certified chemical dependency counselor administered a modified version of the Adolescent Drug Abuse Diagnosis (ADAD) interview. The ADAD was modified to include the general and adolescent specific Government Performance and Results Act (GPRA) questions. At the 6- and 12-month follow-up, research staff administered a shorter follow-up version of the ADAD that also included GPRA questions. Several questions regarding youths' overall satisfaction with ATEP and specific program elements (e.g., recreational activities, counseling) were also included at each follow up. Youth were compensated \$15 for completing the 6-month interview and \$20 for completing the 12-month interview. Most follow-up interviews were conducted over the phone.

Records of the amount of time that youth spent in treatment and the amount of services received while in treatment were obtained from review of the Division of Alcohol and Substance Abuse (DASA) Treatment Assessment Report Generation Tool (TARGET) database. The TARGET database contains treatment records for all individuals receiving publicly funded substance abuse treatment in Washington State.

The goal of recruiting at least 40 youth from each of the 5 treatment agencies into ATEP over the 3-year study period was met and exceeded by 4 of the 5 treatment agencies (Table 1). As a result of several staff changes and difficulties establishing a youth program, at the conclusion of ATEP's second year Stonewall Recovery Services disbanded their adolescent program and seceded from further involvement in ATEP. Eight GLBT youth had been recruited from Stonewall. Since there were a substantial number of GLBT youth already receiving services at United Indians of All Tribes (UIAT), this agency took primary responsibility for recruiting additional GLBT youth for ATEP. UIAT recruited another 12 GLBT youth during the final project year.

In the initial phases of ATEP implementation 17 youth already participating in treatment in one of the five agencies were admitted to the program as "pilot" subjects. Utilizing pilot subjects allowed the agencies to finalize ATEP intake procedures, client selection criteria, program content and staffing needs. Since the 17 pilot youth had already been in treatment for various amounts of time they were not recruited into the outcome evaluation. Baseline GPRA data for these

youth was, however, provided to CSAT. Therefore, the total number of youth admitted to ATEP was 219. Of those youth, 202 were recruited to participate in the 6- and 12-month follow up interviews.

TABLE 1  
Youth Recruited by Agency and Project Year

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Total</u>
Central Youth and Family Services	15	18	19	52
Consejo Counseling And Referral Services	13	20	14	47
Stonewall Recovery Services	0	8	(12)	20
Washington Asian Pacific Islander Families Against Substance Abuse	15	12	30	57
United Indians Adolescent Substance Abuse Treatment Program	12	16	15	43
Total	55	74	90	219

Since ATEP was three years in duration, of the 202 youth consenting to be involved in follow-up interviews, there were a 185 6-month interviews that could potentially be completed during the study period and 143 12-month interviews that could potentially be completed. When contacted for the 6-month interview 5 youth requested to be withdrawn from the study. The follow-up rates for the study are 84.9% for the 6-month interviews (N =157 interviews completed) and 86.7% for the 12-month interviews (N = 124). The only significant differences found between youth that completed a 12-month interview and those that did not was that when they entered ATEP youth completing the 12-month interview reported more days of alcohol use (9.0 days versus 6.4 days) and a greater percentage of these youth reported spending “a fair amount” of time with their families (62.9% versus 50.0%).

## VI. Results

### 1. Background Information on All Youth

The most common referral sources for ATEP came from the legal system (20.8%), helping professionals such as counselors (20.8%), or from school officials (19.8%). ATEP was successful in increasing the number of juvenile justice referrals, which was typically much lower for minority youth prior to ATEP.

The typical youth entering ATEP was a 15.5 year-old male. Youth entering ATEP had completed on average 9 years of school and the majority (83.7%) were currently enrolled in school. The ethnicity of youth reflected the populations

served by the five treatment agencies providing ATEP services; 29.7% were Hispanic, 25.1% were African American, 24.2% were Native American, 15.1% were Caucasian, and 13.7% were Asian.

During the preceding year the most common living situations for youth were with their mother alone (29.2%), with both parents (26.5%), with other relatives (10.7%), or with mother and step-father (10.2%). The majority of youth reported no history of physical (71.1%), emotional (65.0%) or sexual abuse (93.1%). Alcohol problems were reported in 26% of mothers and 39% of fathers. Drug use problems were reported in 16% of mothers and 26% of fathers.

The majority (71.4%) of youth in ATEP were satisfied with how they spent their free time. Sixty-four percent of youth reported being involved in a relationship during the last 3 months. Approximately one third of partners were reported to drink alcohol and/ or use drugs. Slightly over half (54.4%) of the youth were sexually active, but the majority of ATEP youth (91.7%) had never been pregnant or impregnated someone.

With respect to psychological problems, few youth (6.2%) previously received inpatient psychiatric treatment and just over a quarter (28.0%) reported prior outpatient counseling for psychological problems. Medication for psychological problems was being taken by 8.3% of the youth. Data was not collected on what types of medication were being taken.

Just over half (55.3%) of ATEP youth had been arrested at least once. On average, these youth were first arrested at age 13. The most common prior arrests were for shoplifting (21.9%), car theft (17.8%), assault (16.1%), probation violations (15.1%), and minor in possession (13.2%). Arrested youth reported being incarcerated an average of 1.9 months during their lifetime. Thirty-three percent of youth were on probation at the time they entered ATEP and 13% were awaiting trial or sentencing.

For 57.5% of youth entering the program, ATEP was the first occurrence of substance abuse treatment. Approximately 38% of youth had prior experiences in outpatient substance abuse treatment and a relatively small proportion of youth (13.1%) had previously been in inpatient substance abuse treatment. The primary substances used by youth entering ATEP were marijuana, alcohol, and tobacco (Table 2). The typical ATEP youth began smoking cigarettes, drinking alcohol and smoking marijuana between 12 and 13 years of age. Youth reported just over two years of regular alcohol and marijuana use. One youth reported intravenous (IV) use of heroin and 2 youth reported (IV) use of cocaine during their lifetime.

TABLE 2  
Substance Use History of ATEP Youth

<u>Substance</u>	<u>% Using</u>	<u>Age of Regular Use</u>	<u>Average Days Per Month Use</u>	<u>Lifetime Months Use</u>
Marijuana	96.3	12.7	13.8	28.7
Alcohol	90.4	12.5	7.7	27.7
Tobacco	44.3	12.4	25.7	34.6
Cocaine	11.8	14.6	0.3	7.2
Hallucinogens	7.3	14.4	0.2	11.2
Amphetamine	6.8	14.8	0.3	15.7
PCP or Ecstasy	6.8	15.6	0.4	5.4

## 2. Substance Dependence versus Substance Abuse

Just over half of the youth were diagnosed as substance abusers (51.6%), 44.3% were diagnosed as chemically dependent and 4.1% were classified as involved in “experimentation” with substance use. Unsurprisingly there were several significant differences between youth diagnosed as dependent versus those diagnosed as substance abusers. Since few youth (N= 9) were diagnosed as experimenters they were excluded from the following analyses.

The most common referral source to treatment for dependent youth was from the legal system (31.8%), while most substance abusers were referred to treatment by their friends (28.9%). Dependent youth were slightly older than abusers (16 years old versus 15 years old) and were less likely to be female (31.9% versus 47.4%). Dependent youth were also less likely to be Hispanic than substance abusers (7.6% versus 50.6%). Fewer dependent youth were enrolled in school when they entered treatment compared to substance abusers (77.9% versus 88.7%). A smaller number of dependent youth reported trouble controlling their tempers during the previous year than substance abusing youth (28.4% versus 44.1%). Dependent youth were more likely to report taking medication during the previous month for psychological problems (19.8% versus 7.7%).

There were several indicators that youth diagnosed as dependent had more involvement in illegal behavior and substance use compared to youth diagnosed as substance abusers (Table 3). Dependent youth were more likely to be on probation when they entered treatment, had been picked up more times by the police, were engaged in more days of illegal activity, and were more likely to have earned money illegally during the previous year than youth diagnosed as abusers. Compared to substance abusers, dependent youth used more marijuana, smoked

tobacco for a longer period, and were more likely to have previously been in outpatient treatment.

TABLE 3

Initial Differences Between Substance Dependent and Substance Abusing Youth

	<u>Dependent</u> (N=113)	<u>Abusing</u> (N=97)
% On Probation	46.8	18.5***
Times 'Picked Up" by Police	5.6	3.1**
% Reporting Over \$500 in Illegal Income Last Year	21.2	5.3***
Average Days of Illegal Activity in Prior Month	3.3	1.6*
Average Days of Marijuana Use in Prior Month	16.2	11.0***
Months of Regular Marijuana Use	31.3	20.2***
Months of Regular Tobacco Use	19.5	5.6***
% Previously in Outpatient Substance Abuse Treatment	48.6	23.4**

\*= p<.05, \*\*=p<.01, \*\*\*=p<.001

### 3. Standard Treatment Services and Youth Satisfaction

Table 4 presents information from DASA's TARGET database regarding the amount of time that youth in ATEP spent in various substance abuse treatment modalities (e.g., inpatient, outpatient, halfway house), and services (e.g., group counseling, individual therapy) received while in treatment.

Considering time spent in intensive and standard outpatient treatment, on average, ATEP youth spent 6.5 months in outpatient treatment. Each month during time in treatment the typical ATEP youth received one hour of individual counseling, 6 hours of group therapy, 7 hours of case management, less than one hour of counseling addressing family issues, and one urine drug screen. There were 27 youth that received inpatient treatment during the ATEP program. On average these youth spent less than one month in inpatient treatment.

TABLE 4

## Average Substance Abuse Treatment Services Received by ATEP Youth

	<u>All Youth</u> (N=219)	<u>Dependent</u> (N=88)	<u>Abusing</u> (N=68)
<u>Treatment Modality-Days In</u>			
Inpatient	5.3	9.2	2.0**
Intensive Outpatient	15.9	22.0	14.8
Standard Outpatient	184.8	170.0	233.1***
Recovery House	0.8	2.0	0
Group Care Enhancement	0.7	1.8	0
Detoxification	0.7	1.1	0.5
<u>Treatment Activities-Hours or Number</u>			
Conjoint Counseling with Family	0.4	0.6	0.2**
Family Counseling Without Client	1.8	2.9	0.5***
Individual Counseling	6.1	7.3	4.9*
Group Counseling	39.7	30.0	53.5***
Case Management	43.3	22.0	70.6***
Urine Drug Screens	6.4	6.6	6.5

\* = p < .05 \*\* = p < .01, \*\*\* = p < .01

There were significant differences in the amount of time spent in treatment and the services received while in treatment between dependent and substance abusing youth. Given the more severe substance use histories of dependent youth it is not surprising that these youth spent significantly more time in inpatient treatment, but less time in standard outpatient treatment compared to substance abusing youth.

By dividing the hours that a service was provided by the number of months in treatment one can get an idea of how many sessions of a particular type of service youth received per month. While in treatment, on average, dependent youth received more hours of individual therapy each month than substance abusing youth (1 hour per month compared with 0.6 hours per month). However, compared to dependent youth substance abusing youth received on average more

hours of group counseling (4.5 hours versus 6.5 hours per month) and case management (4.5 versus 8.6). Although dependent youth received more counseling addressing family issues, both groups received less than one hour per month of this type of counseling. It is unclear why dependent youth generally received few services per month than substance abusing youth. One possibility is that dependent youth were more likely to miss or choose not to attend scheduled counseling session than substance abusing youth.

Information on youths' satisfaction with inpatient and outpatient substance abuse treatment services was obtained from youth at the 6- and 12-month assessments. Generally, there were no significant differences between dependent and abusing youth in satisfaction ratings of treatment programs. Of youth receiving inpatient treatment (N = 26) during the study period, more than half (61.6%) reported being "satisfied" with the treatment received. Satisfaction ratings of outpatient treatment were given by 163 youth. Of these youth, 43.5% reported being "very satisfied" with the program they attended and 38.9% reported being "somewhat satisfied" with the program. While almost all youth (88.2%) were satisfied with their counselor, chemically dependent and substance abusing youth did differ significantly in their ratings of their counselor. Fewer dependent youth than substance abusing youth were satisfied with their counselor (82.9% versus 94.6%).

#### 4. ATEP Specific Services and Youth Satisfaction

In addition to standard substance abuse treatment services ATEP sought to provide youth more non-traditional treatment services and if necessary transportation or bus passes to and from the treatment program and related activities. ATEP successfully provided recreational activities to more than half (55.8%) of youth and cultural arts and education to approximately a quarter of the youth (22.0% and 25.5% respectively) during treatment. Only 10% of youth were involved in inter-agency recreational activities during the program.

In general, youth found the recreational activities with members of the same and other treatment agencies to be most enjoyable and helpful in learning to use free time constructively without substance use as well as to understand others' beliefs and views. Although satisfaction with cultural activities increased over time, youth appeared to enjoy cultural education activities more than cultural art activities. A relatively small percentage of youth received tutoring as part of ATEP, but over 80% of the youth receiving tutoring were satisfied with those services.

As seen in Table 5, significantly fewer dependent than substance abusing youth were involved in recreational activities, cultural education, and tutoring. However, no significant differences were found on any satisfaction ratings between dependent and substance abusing youth for any services received as part of ATEP.



TABLE 5  
Information on ATEP Services and Youth Satisfaction

	<u>Dependent</u> (N=88)	<u>Abusing</u> (N=68)
% Involved in Agency Recreation Activities	44.4	70.7***
Average Days per Month in Recreational Activities	2.2	5.5***
% Satisfied with Recreational Activities	86.2	94.0
% Reporting Recreation Helped "A lot" to Have Fun Without Using Drugs	62.5	76.5
% Involved in Cultural Education	17.2	36.2**
Average Days per Month Cultural Education	2.6	2.3
% Satisfied	82.9	94.6
% Involved in Cultural Arts	19.2	27.6
Average Days per Month Cultural Arts	1.7	1.9
% Enjoying "A Lot"	55.6	53.6
% Receiving Tutoring	3.3	37.1***
Average Days per Month Tutoring	3.7	5.8
% Satisfied With Tutoring	80.0	88.1
% Involved in Inter-agency Recreational Activities	10.6	9.5
Average Days per Month Inter-Agency Activities	0.6	0.4
% Enjoying Inter-Agency Activities a "Fair Amount"	64.7	100
% Feeling "Very Comfortable" in Inter-Agency Activities	43.8	54.5
% Reporting Inter-Agency Activities Helped to	71.4	81.8
% Receiving Transportation/Bus Passes	65.2	69.4

\*\*= p<.01. \*\*\*=p<.001

Quarterly Multicultural Leadership Program (MLP) events were another important component of ATEP (Table 6). In order to participate in these events youth were required to be in compliance with ATEP rules and not actively be using drugs or alcohol. As a result of these requirements not all ATEP youth were eligible to attend an MLP. Approximately 40% of youth attended at least one MLP prior to their 6-month assessment and 25.8% reported attending at least one MLP between their 6- and 12-month assessments. Dependent youth were less likely to have attended at least one MLP while in treatment compared to substance abusing youth (23.2 % versus 47.4%). No difference between the two groups was found on reports of satisfaction or likes and dislikes regarding the MLPs attended.

TABLE 6  
Information on Multicultural Leadership Program Events

	<u>6-Month</u> (N= 157)	<u>12-Month</u> (N=124)
% Attending at least one Event	39.5	25.8
% Enjoying Event	71.6	77.4
% Feeling "Comfortable" at the Event	82.5	84.9
% Reporting Event Helped To "Better Understand" Others' Culture	46.6	70.0
% Reporting Event Helped To Feel "Better" Being With People of a Different Culture	44.3	41.9
<u>Common Likes-% Reporting</u>		
Meeting Other Youth with Similar Problems	31.6	14.3
Dancing	21.1	7.1
Food	15.8	14.3
<u>Common Dislikes-% Reporting</u>		
Event Was Unorganized	19.5	15.7
Speakers	14.6	15.7
Entertainment	9.7	1.8
Long Way to Travel	9.7	0

The majority of youth attending MLPs enjoyed and felt comfortable at the event. The opportunity to meet other youth with similar problems, but different backgrounds, the food and dancing all contributed to youth's enjoyment of these events. MLPs appeared to increase the awareness of others' culture in about half of youth attending during the first 6 months of ATEP. MLP events occurring during the second 6 months of youths' treatment appeared to have more of an impact on their understanding and acceptance of differing cultures.

### 5. Non-ATEP Services and Youth Satisfaction

In addition to ATEP, youth could have been enrolled in specialized services such as those provided through the juvenile courts, mental health services, and or chosen to attend community self-help groups such as Alcoholics Anonymous. Generally less than 20% of ATEP youth received any of these services.

Seven percent of youth were involved in Aggression Replacement Therapy (ART) during the first 6 months of ATEP and 3.2% were involved in ART during the

second 6 months of treatment. Youth generally reported satisfaction with ART (75% at 6- and 12-months). Approximately 4% of ATEP youth were also participants in the Chemical Dependency Disposition Alternative (CDDA) or juvenile Drug Court programs. A higher percentage of the dependent youth than substance abusing youth were involved in these programs (7.9 % versus 1.5%). Information on youths' satisfaction with CDDA and Drug Court was not solicited.

Approximately 17% of youth reported being involved with self-help groups during the study period. A greater percentage of dependent youth attended self – help than substance abusing youth (23.8% and 6.9% respectively). However, there were no significant differences between groups in their satisfaction ratings of self-help groups. Sixty seven percent of those in self-help groups were “satisfied” with the groups.

More dependent youth reported receiving some mental health counseling than substance abusing youth (19.2% compared to 8.6%) during the study period. There were no significant differences in the satisfaction ratings for mental health counseling between dependent and substance abusing youth. Close to 80% of these youth were satisfied with the mental health services received.

## 6. Program Retention

There were 164 youth that had the opportunity to complete 12 months of treatment during the 3-year ATEP study. Of these youth, 48.5% completed 6 months of treatment, 23.8% completed 10 months of treatment, and 10.5% were still actively involved in treatment 12 months following admission. At all these time points dependent youth were significantly less likely than substance abusing youth to be retained in treatment. For example, at the 6-month assessment 42% of dependent youth were still in treatment compared to 63.2% of substance abusing youth. At 12-months 6.8% of dependent youth were still in treatment while 36.8% of abusing youth were still in treatment.

One hundred and fifty youth reported why they chose to stay in ATEP as part of the 6-and 12-month assessments. In general, the most common reasons given were; they were required to attend (25.0%), they liked the other youth in the program (19.1%); they liked the activities (10.5%); and they liked the counselors (10.5%).

Youth remaining in treatment past 6 months were more likely than youth leaving treatment within 6 months to cite that the activities were a primary reason for staying in treatment (27% versus 3%). Youth remaining in treatment for more than 6 months also reported more often than youth leaving before 6 months that the program helped them stop using drugs (21% versus 9%), that they liked the other youth in the program (20% versus 5%), and that they liked the counselors (19% versus 3%) as important reasons for staying in treatment.

Significant differences in the primary reasons for staying in treatment were given by dependent and substance abusing youth. Dependent youth reported that the main reasons for staying in ATEP were that they were required to attend (31.1%); they liked the counselors (14.9%); and they like the other youth in the program (13.5%). Substance abusing youth stated that they stayed in ATEP mainly because they like the other youth (24.2%); they were required to attend (19.2%); and they liked the activities (17.9%).

The most common reasons youth gave for leaving ATEP were that; they wanted to use the time to do something else (33.3%); they moved (27.1%); or the program was “boring” (12.5%). There were no significant differences in the reasons for leaving ATEP between dependent and substance abusing youth.

## 7. Program Outcomes

By engaging youth in treatment longer it was hypothesized that youth in ATEP would demonstrate decreases in substance use as well as improvements in functioning in other areas. The following sections present information from 6- and 12-month follow-up interviews of 124 youth. Included are changes in youths’ behavior in school, employment status, social and family relationships, emotional well-being, illegal behavior and substance use over the 12-month study period. Changes referred to as “significant” all reached a minimum of the  $p < .05$  level. Results are presented for the entire sample of 124 and separately for dependent and substance abusing youth when significant group differences in outcomes were found.

### *a. School Performance*

Examination of the data for the 124 youth completing the 12-month interview suggests that ATEP significantly impacted several areas of school functioning (Table 7). The percentage of youth stating that they were “interested” in school increased significantly over the study period. There were also significant decreases in the amount of time that youth were truant and or suspended. An increase in grades was also evident, but not statistically significant. Although the percentage of youth enrolled in school decreased over time the percentage of youth graduating or earning a GED increased significantly.

While there was a significant increase in the percentage of dependent youth that graduated over time, there was not a significant change in the number of substance abusing youth graduating. The percentage of dependent youth graduating from school increased from 3.1 at baseline to 16.7 at the 12-month assessment. This was the only area in school functioning where differing degrees of improvement were evident between dependent and substance abusing youth. In part, this difference may be explained by the fact that dependent youth were, on average, a year older than substance abusing youth. Therefore, it is not unexpected that more dependent youth would have graduated or earned a GED

during the study period.

---

TABLE 7  
School Functioning of 124 ATEP Youth

	<u>Baseline</u>	<u>6-Month</u>	<u>12-Month</u>
% Interested in School	79.2	89.1	93.3***
% Attending School	87.8	72.6	69.4***
% Graduated or Earning GED	3.3	6.2	10.5***
Average Days per Month Truant	4.1	0.5	0.6***
Average Days per Month Suspended	2.7	0.1	0.2***
% Earning Above Average Grades	17.0	22.0	24.5

---

\*\*\*=p<.001

*b. Employment*

The majority of youth in ATEP had never been formally employed (76.7%). On average, youth that had worked retained their jobs less than 3 months.

For the 124 youth completing all interviews, ATEP appeared to have an impact on employment. There was a significant increase in the number of youth employed part-time over the study period (18.3% baseline, 37.5% at 6-month, 45.1% at 12-months). There was a corresponding increase in the average number of days worked in the preceding month from 2.9 initially, to 3.5 days reported at the 6-month interview and 5.3 days reported at the 12-month assessment. The monthly-earned income of youth also increased from \$87.71 at baseline to \$179.70 at the 12-month interview, but this increase was not statistically significant.

There were no differences between dependent and substance abusing youth in the degree of improvements seen with respect to employment.

*c. Social Relationships*

Data provided several indications that ATEP assisted youth in utilizing free time more constructively and promoted positive social relationships. Although over the 12-month study period the average number of hours youth reported spending “hanging out” remained stable at approximately 5 per day, significant fewer youth were spending that time with drug using friends or involved with gangs, and more youth were spending time with drug free friends (Table 8).

At baseline many youth reported that there were opportunities to be involved with church (61.6%), after school (55.3%), community clubs (55.3%), and cultural

activities (46.6%) in their neighborhoods, but fewer than 10% of youth reported participating in any of these activities. The percentage of youth reporting regularly participating in church, community and recreational activities more than doubled during the 12-month study period.

TABLE 8  
Social Involvement of 124 ATEP Youth

	<u>Baseline</u>	<u>6-Month</u>	<u>12-Month</u>
% Spending "A Fair Amount" of Time with Drug Using Friends	52.0	41.7	40.2*
% Spending "A Fair Amount" of Time with Non-Drug Friends	48.3	58.3	58.1
% Reporting Gang Involvement	16.4	2.8	5.0***
% Involved in Church Activities	4.8	19.5	16.1**
% Involved in Community Clubs	7.3	20.4	19.4**
% Involved in Recreational Activities	15.3	31.9	34.7***
	*=p<.05, **= p<.01, ***=p<.001		

Several significant differences in social functioning between dependent and substance abusing youth were found. The percentage of youth involved in church activities significantly increased over time for dependent youth (1.5% at baseline to 13.6% at 12-months), but did not significantly increase over time for substance abusing youth. Over time, there was a significant increase in the percentage of substance abusing youth reporting spending "a lot" of time with drug-free friends (10.0% at baseline to 37.3% at the 12-month assessment) and a significant decrease in the percentage involved in gang activities (25.0% at baseline to 12.5% at 12-months). There was not a significant change over time in either of these areas for dependent youth.

*d. Family Relationships*

Despite the fact that the average days of family problems did not change over the 12-month study period (approximately 5 days per month), there were indications that ATEP had a positive impact on youths' family relationships. The percentage of youth reporting that they "got along well" with their family increased significantly from 80.2% at baseline to 88.5% at the 12-month interview. There was also a significant increase in the percentage of youth reporting that they had a good relationship with their fathers, which went from 26.1% at baseline to 40.3% at the 12-month assessment. As shown in Table 9, significant reductions in the percentage of youth reporting arguing, lying, stealing, or going against family rules were also evident over the study period. There were no areas in family functioning where dependent and substance abusing youth differed in the degree

of improvements.

TABLE 9  
Percent of 124 ATEP Youth Reporting Negative Behaviors with Family\*

	<u>Baseline</u>	<u>6-Month</u>	<u>12-Month</u>
Arguments with family	67.5	39.6	25.9
Going against family wishes	48.8	32.7	29.0
Lying to family	55.6	36.3	27.6
Stealing from family	13.8	4.4	5.6

\* all changes significant at p<.001

*e. Psychological Functioning*

Although almost all youth entering ATEP reported that they had several “good qualities” and were “a person of worth” slight but significant increases on these variables were seen over the 12-month study (90% at baseline to 98% at 12-months). Nevertheless, the average days per month that youth experienced emotional problems significantly increased from 2.8 days at baseline to 5.9 days at the 12-month assessment. This increase does not appear to be related to increased depression or anxiety since the percent of youth reporting these did not increase over time (Table 10). The increase in days of emotional problems may, in part, signify attainment of a higher level of ego development. Youth functioning at higher developmental levels tend to exhibit increases in conflicting emotions and general distress compared to youth at lower levels of ego development<sup>7</sup>. It is also possible that youth are now experiencing normal adolescent concerns and anxieties regarding their future that were previously masked by their substance use.

TABLE 10  
Psychological Functioning of 124 ATEP Youth

<u>% Reporting</u>	<u>Baseline</u>	<u>6-Month</u>	<u>12-Month</u>
Depression	21.0	22.1	21.8
Anxiety	20.8	23.0	21.8
Trouble Controlling Temper	25.0	17.3	19.5
Suicidal Thoughts	11.6	4.5	2.4***
Impulsive Behaviors	60.4	49.1	47.2

\*\*\*=p<.001

The number of youth reporting suicidal ideation significantly decreased over time.

The number of youth reporting difficulty controlling their temper and engaging in impulsive behaviors also decreased, but the decrease was not statistically significant. There were no areas in psychological functioning where dependent and substance abusing youth differed in the degree of improvements.

*f. Criminal Activity*

Involvement in ATEP reduced the likelihood that a youth would be arrested or detained. However, ATEP involvement did not appear to result in a reduction in youths’ self-reported illegal behavior (excluding substance use). The average number of days of self-reported illegal activity remained stable at approximately 3 days per month over the study period. The most commonly reported illegal activities that youth engaged in were graffiti writing (13.7%), weapons offenses (13.8%), curfew violations (12.9%), and vandalism (10.5%). All other illegal activities (e.g., assault, drug sales, shoplifting arson) were reported by less than 5% of youth during the 12-month study period.

Although none of the 124 youth completing the 12-month assessment reported being arrested for new charges during the study period, several youth were detained during the course of the study. The percentage of youth detained, and the average number of times they were detained, significantly decreased over time (Table 11). The average number of days per month that youth were detained decreased as well, but the decrease was not statistically significant.

---

TABLE 11  
Information on Criminal Variables for 124 ATEP Youth

	<u>Baseline</u>	<u>6-Month</u>	<u>12-Month</u>
Average Days Per Month of Illegal Behavior	3.2	3.3	3.2
% Detained in Prior 6 Months	29.3	15.9	16.1***
Average Number of Times Detained in Prior 6 Months	0.6	0.3	0.2***
Average Number of Days Detained in Prior 6 Months	2.2	0.9	1.4
% Earning Over \$500 Illegally in Prior Year	20.3	-	15.3

\*\*\*=p<.001

---

The improvements in criminal activity were primarily accounted for by changes in the dependent youth group. From baseline to the 12-month assessment there was a significant decrease in the percentage of dependent youth detained (49% at baseline to 18% at 12-months), on probation (49% to 29%), and in the average number of times dependent youth were detained (0.9 to 0.2). It is also noteworthy that at the 6-month assessment, dependent youth reported on average

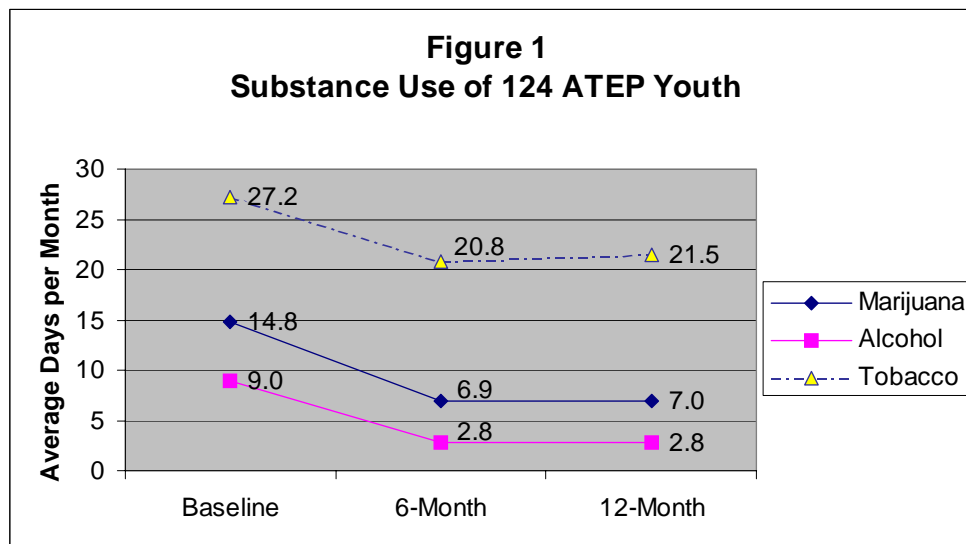


significantly more days of illegal activity per month than substance abusing youth (4.9 versus 1.8), but there was no difference between the groups at the 12-month assessment. There were no significant differences on any measure of criminal activity over time found for substance abusing youth. These results are not unexpected since significantly fewer substance abusing youth initially had any involvement in illegal activities.

*g. Substance Use*

Several findings indicate that involvement in ATEP helped youth decrease their substance use. The percentage of youth reporting any use of marijuana and alcohol significantly decreased over the 12-month study period (marijuana use- 94.4% to 50.4%, alcohol use- 84.7% to 59.8%). Moreover, the average days of use per month of alcohol and marijuana also significantly decreased (Figure 1). The frequencies of use on days that marijuana or alcohol was used also decreased, but the decrease in frequency of alcohol use was not statistically significant. The percentage of youth using marijuana more than once per day went from 50.7% at baseline to 37.7% at the 12-month assessment and the percentage of youth reporting alcohol use of more than one drink per setting decreased from 72.2% at baseline to 59.3% at the 12-month assessment.

Although the average days per month of tobacco use significantly decreased from baseline to the 12-month assessment, the percentage of youth smoking cigarettes significantly increased (39.5% to 49.6%).



As seen in Table 12, there were also significant decreases over time in the

percentage of youth reporting feeling stressed, giving up important activities, and experiencing emotional problems as a result of their substance use.

Although dependent youth initially reported significantly more use of marijuana compared to substance abusing youth, both groups evidenced a significant decrease in the percentage of youth using marijuana, and in the average days of marijuana use per month over time. Dependent youth reported significantly more days per month of marijuana use than substance abusing youth at the 6-month assessment (9.6 days per month versus 4.3 days), but there was not a difference between the groups at the final assessment.

Over time, both groups also evidenced a decrease in the average days of alcohol use. However, the percentage of substance abusing youth using alcohol significantly decreased from 90% at baseline to 44% at the final assessment, while it remained relatively stable over time for dependent youth (82% to 74%). Dependent youth were also found to be using significantly more alcohol at the final assessment compared to substance abusing youth (4.0 days per month compared to 1.6 days).

---

TABLE 12  
Self-Reports of Drug Related Problems by 124 ATEP Youth\*

<u>% Reporting</u>	<u>Baseline</u>	<u>6-Months</u>	<u>12-Months</u>
Being Stressed Because of Substance Use	52.0	18.9	18.9
Giving Up Important Activities Because of Substance Use	42.3	10.8	10.7
Having Emotional Problems Because of Substance Use	38.7	14.4	10.7

\*all changes significant at p<.001

---

Even though dependent youth reported a longer history of smoking cigarettes at baseline, there was not a difference in the percentage of youth reporting smoking at baseline between dependent and substance abusing youth. At the 12-month assessment significantly more dependent youth reported smoking cigarettes than substance abusing youth (65% versus 28%). Additionally, while the average days of tobacco use remained stable at about 25 days per month for dependent youth, it decreased significantly from 28 days per month to 15 days per month for substance abusing youth.

There were no other significant group differences in reports of substance use

frequency or in substance related problems.

*h. Cultural Issues*

In addition to the questions regarding culture and the MLP events, at each assessment youth were asked three general questions pertaining to how important the culture of their family and friends was to them and how comfortable they were with people from different cultures. It was expected that participation in the ATEP program would result in youth placing increasing value on their own culture, feeling more comfortable around individuals from different cultures and be more likely to befriend youth from different cultures. ATEP appeared to be successful in achieving these goals (Table 13). After ATEP participation significantly more youth viewed their families culture as important to them and felt comfortable around individuals of different cultural backgrounds.

Although there was also a significant increase in the number of youth reporting that their friends culture was important to them there appeared to be some confusion on how youth interpreted this question. The majority of youth responding that others’ culture was important to them expressed that they respected others cultures, and had no trouble being friends with youth from different cultures. Others expressed that they thought by stating that their friends culture was important to them they were saying that they were prejudiced and would not be friends with someone from a different culture. Since many youth did not verbalize what they felt this question meant to them or ask for clarification of this item there is concern that not all youth understood the intent of this question in the same manner. Therefore the number of youth reporting that their friends’ culture was important may not be accurate.

---

TABLE 13  
Perceptions of Cultural Importance of 124 ATEP Youth\*

<u>% Reporting</u>	<u>Baseline</u>	<u>6-Month</u>	<u>12-Month</u>
Families’ Culture is Important	61.0	79.6	95.2
Friends’ Culture is Important	35.8	38.1	58.9
Feeling Comfortable Around Those of Different Cultures	65.9	88.5	95.2

\* all changes significant at p<.001

---

There was a significant increase in the percentage of dependent youth reporting that their families’ culture was important (76% at baseline to 94% at 12-months) that was not found with substance abusing youth. Conversely, there was a significant increase in the percentage of substance abusing youth reporting that their friends’ culture was important (15% at baseline to 31% at 12-months) and in

those reporting that they felt comfortable around those of different cultures (38% at baseline to 68% at 12-months) that was not evident in dependent youth. There were no significant differences between the two groups in how comfortable youth felt with people from different cultures.

## VII. Discussion

The goals of ATEP were to increase program retention and improve program outcomes, as well as increase youths' understanding of their own and others culture by providing enhanced case management and culturally relevant services to 200 minority youth. The program also sought to increase the number of referrals for minority youth to substance abuse treatment. ATEP exceeded the number of youth that it planned on serving, reaching a total of 219 youth as well as increasing the rate of referrals from the juvenile justice system. ATEP also appeared to increase youths' connection to their families' culture and increase youths' feeling of comfort with people of differing cultural backgrounds.

As proposed, ATEP provided youth an array of recreational and cultural services. Despite the fact that over half the youth participated in recreational activities, the majority of ATEP youth were not involved in the full array of enhanced services. A third of youth participated in MLP events, but rates of MLP attendance were expected to be relatively low as participation in these events was reserved for youth demonstrating marked progress in treatment. Moreover, the physical space restrictions of the location where events were held often resulted in a limited number of youth from each agency being able to attend an MLP event. A quarter of youth participated in cultural arts or education, and 10% were involved in interagency recreational activities. It is unclear from the existing data whether rates of participation in these activities was somewhat lower than expected because such services were not made available to all youth or whether youth chose not to participate in these services. Youth reports of satisfaction with services received and the reasons given for staying in treatment suggest that inclusion of the non-standard treatment activities, especially recreational activities, were well liked by youth and helped to engage youth in treatment and increase program retention as expected.

ATEP was also successful in providing youth increased case management services. On average youth in ATEP received approximately 6 to 7 hours of case management each month that they were in treatment. Reports on the services received by youth in Drug Court, a more intensive program than ATEP, found that youth in Drug Court received on average 2 hours of case management per month that they were in treatment. Youth in standard substance abuse treatment referred by the legal system received on average less than one hour per month of case management<sup>8</sup>. Youth in ATEP appear to have received substantially more

case management than what is typically provided to youth in treatment.

The population of ATEP youth was almost equally divided into chemically dependent and substance abusing youth. Generally experimental programs will include either dependent or substance abusing youth, however this does not reflect the real world of adolescent substance abuse treatment. Agencies seldom have the ability to implement separate programs for dependent and substance abusing youth. Counseling may address different issues for dependent and substance abusing youth and possibly the frequency of sessions may be more intense for dependent youth. Therefore, ATEP did not restrict eligibility of youth by substance use disorders diagnoses.

Despite the fact that dependent youth had more severe involvement in illegal behavior and more use of marijuana than substance abusing youth when they began ATEP, both groups improved significantly over time. There were no significant differences in illegal activity and use of marijuana between dependent and substance abusing youth at the final assessment. In most other areas of functioning significant improvements were evident for both groups over time. These results suggest that participation in ATEP was effective in improving functioning for both dependent and substance abusing youth.

Even though both dependent and substance abusing youth demonstrated several significant improvements following ATEP participation, youth were not retained in treatment as long as anticipated. Most youth spent 6 months in treatment. Dependent youth on average left treatment 2 months before substance abusing youth. The activities provided in ATEP were a primary reason that youth chose to remain in treatment more than 6 months regardless of substance use diagnosis. Fewer dependent youth were involved in the recreational and cultural activities in ATEP than substance abusing youth, which may, in part, explain the group differences in retention rates. It is, however, unclear why dependent youth had less involvement in the recreational and cultural activities. Engaging dependent youth early on in non-standard treatment services may be an important factor in increasing the retention rates of these youth.

Although youth were expected to participate in ATEP for one-year significant improvements in illegal behavior, substance use, and other areas were seen even though the average time in treatment was 6 months. It may be unreasonable to expect that youth remain in treatment for a year. It may be more developmentally appropriate for youth that have achieved abstinence and other clinical goals to be involved in other activities rather than substance abuse treatment, especially if they are involved in other constructive activities (e.g., school, community activities, work). The finding that the main reason for leaving treatment was that youth wanted to do something else with that time in conjunction with the finding that participation in community and church groups increased over time support

the view that treatment does not necessarily need to last one year to result in significant improvements. Moreover, analyses of data dividing the group of youth into those completing less than 6 months of treatment and those remaining in treatment more than 6 months revealed no meaningful significant differences.

A limitation of the ATEP evaluation was the lack of control group. Fiscal resources did not allow for the inclusion of an appropriate control group. In order to validate that participation in ATEP results in improved retention, enhanced services, increased cultural awareness, and improved outcomes more than standard services; future studies must include a control group of youth receiving standard services recruited from the same agencies providing ATEP treatment.

## VIII. Summary

ATEP accomplished the goal of providing enhanced treatment services including case management, as well as recreational and cultural services. The program exceeded the number of youth that it was expected to serve. Although, program retention rates were not as high as anticipated youth involved in ATEP demonstrated significant improvements over time in their substance use and improved functioning in other areas (i.e., school, work, social and family). Additionally, participation in ATEP appeared to increase youths' comfort with those from different cultures and increased the value that they placed on their own culture. These findings were true for chemically dependent and substance abusing youth.

## IX. References

1. Juvenile Rehabilitation Administration (1997). 1996-97, The JRA Overview. Report for the Washington State Department of Social and Health Services.
2. Mental Health Profile Study, Report of Findings, (Jan-Feb 1999). King County Department of Community and Human Services. Mental Health, Chemical and Abuse Dependency Services Division and the Department of Youth Services.
3. Juvenile Offenders and Victims, 1999 National Report (1999). National Center for Juvenile Justice. Pittsburgh, PA.
4. Murray, C. and Associates (2000). King County Phase II Juvenile Justice Operational Master Plan. Seattle, WA.
5. Racial Disproportionality in County Juvenile Facilities: Information, Needs and Neglected Causes: A Report to the Washington State Legislature, December 1998.
6. Brown, B., Joe, G., and Thompson, P. (1985). Minority group status and treatment retention. *International Journal of the Addictions*, 20 (2), 319-335.
7. Friedman, A.S. and Utada, A. (1989). A method for diagnosing and planning the treatment of adolescent drug abusers (The Adolescent Drug Abuse Diagnosis [ADAD] Instrument). *Journal of Drug Education*, 19 (4):285-312.
8. Abe, J.A and Izard, C.E. (1999). The developmental functions of emotions: An analysis in terms of differential emotional theory. *Cognition and Emotion*, 13 (5): 523-549.
9. Rutherford, M., Strong-Beers, M. and Ingoglia, L. (2004). Chemical Dependency Disposition Alternative: Final Report to Washington State Legislature, December 2004.