

Outcomes Analysis For the Change of PACE Program in Lucas County
April 8, 2004

Abstract

Alcohol is the psycho-active substance most frequently used by youth in the United States. Despite numerous consequences related to underage alcohol use, 10.1 million youth ages twelve to twenty years admitted to consuming alcohol during 2001. Enforcement of underage drinking laws by police has typically failed to be a priority. Peer and parental influence are strong predictors of underage drinking. Alcohol prevention and intervention programs fall short of providing comprehensive programs that address peer and parental influences along with encouraging law enforcement agencies to address underage drinking. The Change of PACE program is a comprehensive community based alcohol intervention program whose goal is to divert first time alcohol offenders from juvenile court and police contact. A summative program evaluation was performed on the program and seventy percent of youth were diverted from engagement with the juvenile court and police contact upon discharge from the program. The research found that the thirty percent of youth who had contact with the police, fifty percent of contact was for traffic offenses, followed by traffic offenses, followed by misdemeanor offenses then status offense. Statistical significance was found between unsuccessful discharge and new contact with police. Recommendations are given for future research and program enhancement.

Methodology and Measurement

Sample

From May 1, 2002 through November 15, 2003 132 youth participated in the Change of PACE program. This author was able to locate 128 of the 132 case records of youth who participated in the program from the start of the program and stopped on November 15, 2003 to allow for arrests to be collected a minimum of ninety days post discharge. This time frame allowed for data collection to begin January 2004 and measurement of arrest ninety days post discharge was collected March 24, 2004.

Of the 128 records found, 116 of the youth were first time alcohol offenders who had no involvement in the juvenile justice system. Twelve youth who participated in the program were referred by the Substance Abuse Services Department from the Lucas County Juvenile Court. These youth were enrolled in the Juvenile Justice System and were not the population that the Change of PACE program was created for, so this group was not included in the sample. The sample used for this outcomes analysis was 116 youth between the ages of 14 to 18 who were first time alcohol offenders with no involvement with the juvenile justice system.

Most of the youth who participated in the Change of PACE Program were Caucasian and female.

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Table I Gender and Race

Gender	Race			Total 100%
	White 95.7%	Black 1.7%	Other 2.6%	
Male 47.4%	51	1	3	55
Female 52.6%	60	1	0	61
Total	111	2	3	116

The majority of youth resided in suburban areas in Southeast Michigan and Northwest Ohio. Most of the youth were 17 years of age, followed by 16 year olds.

Table II Age and Area of Residence

Suburban, Urban & Rural		Age						Total
		13 3.4%	14 7.8%	15 5.2%	16 28.4	17 52.6%	18 2.6%	100%
Suburban	62.1%	4	6	4	19	36	3	72
Urban	27.6%	0	3	2	8	19	0	32
Rural	10.3%	0	0	0	6	6	0	12
Total	100%	4	9	6	33	61	3	116

Youth referred to the Change of PACE Program were referred predominately by suburban police officers for status offenses. These offenses included prohibition of minors, underage consumption, unruly, possession of alcohol, curfew violations and minor purchase of alcohol. Misdemeanor referral offenses were for disorderly conduct.

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Table III Referral Source and Referral Offense

Referral Source		Referral Offense		Total
		Status Offense 98.3%	Misdemeanor Offense 1.7%	100%
Suburb	75.9%	86	2	88
Urban	24.1%	28	0	28
Total	100%	114	2	116

Age of first use of alcohol was collected to measure what ages the youth first consumed alcohol. The earlier a youth begins using alcohol, the increase in likelihood that the youth will experience subsequent alcohol related problems, illegal drug use and/or alcohol abuse/dependence in their lifetime (Komro & Toomey, 2002; Spoth et al., 2002). Youth who participated in the Change of PACE program reported their age of first use beginning at age nine. Most youth in the program reported first use of alcohol occurred at age fifteen (26.7%) and sixteen (26.7%). A small portion of youth (3.4%) denied tasting or consuming alcohol in their lifetime. Youth who reported first use of alcohol between the ages of nine through thirteen accounted for 10.4% of the program participants.

Table IV Age of First Use of Alcohol

Age of First Use of Alcohol		Number	Percent
Ages	9-10	2	1.8%
	11	2	1.8%
	12	4	3.4%
	13	4	3.4%
	14	25	21.6%
	15	31	26.7%
	16	31	26.7%
	17	13	11.2%
No	Use	4	3.4%
Total		116	100.0

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Family history of chemical dependency is a risk factor for future alcohol related problems in adulthood. Forty-four percent of youth who participated in the Change of PACE program reported a family history of chemical dependency.

Table V Family History of Chemical Dependency

Family History	Number	Percent
Yes	51	44%
No	65	56%
Total	116	100%

The majority of youth (94%) who participated in the Change of PACE program did not meet the criteria for alcohol or drug abuse or dependence.

Table VI Diagnosis or Lack of Diagnosis

DSM IV-R Diagnosis or Lack of Diagnosis	Number	Percent
No Diagnosis	109	94%
Alcohol Abuse	3	2.6%
Alcohol Dependence	1	.9%
Alcohol & Cannabis Dep.	3	2.6%
Total	116	100%

Of the youth who participated in the Change of PACE program, 89.7% completed all three phases of the program and were successfully discharged.

Table VII Completion

Completion	Number	Percent
Successful	104	89.7%
Unsuccessful	12	10.3%
Total	116	100%

Method

A summative program evaluation was performed on the Change of PACE Program (Prevention through Assessment, Community Service and Education program). Through the use of agency closed records, data was collected to answer three questions:

- Does the Change of PACE program reduce the number of first time alcohol offenders involved in the juvenile justice system?
- What percentage of youth had contact with the police from discharge from the program?
- What are the characteristics of youth who had contact with the police?

The single main variable was youth who were re-arrested. The dependent variables were successful discharge, unsuccessful discharge and new arrest. The independent variables were age of first use of alcohol, family history of chemical dependency, referral from suburban or urban justice system and diagnosis. Diagnosis, family history of chemical dependency, and first age of alcohol use were chosen because the literature reported that these characteristics are risk factors of underage drinkers who have problems with alcohol and these youth will continue to have interaction with the criminal justice system. This data also measured if the program was meeting its objective of diverting youth from the further criminal justice involvement. Referral source was collected to establish where referrals were coming from, urban or suburban juvenile justice systems.

Measurement

Data collected to measure the independent variables included successful completion of all three phases of the program, unsuccessful discharge, urban, rural and suburban residence,

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race, gender, age, age of first drink and diagnosis. Successful completion was defined as the customer completing the three phases of the program; assessment, education and community service. Unsuccessful discharge was defined as failure to complete any phase of the program. Unsuccessful discharge was defined as failure to complete any phase of the program.

Data collection Methods

The data for this research was collected from the Addiction Severity Index, the Lucas County T.A.S.C. referral form and arrest records run in both the juvenile justice and adult justice systems. The data was entered on data forms by the author. The Lucas County T.A.S.C. referral form contained basic demographics data necessary for state and federal reporting requirements and billing information. The Addiction Severity Index is a computerized alcohol and drug assessment instrument. The Addiction Severity Index's validity has been tested in a number of studies. It proves to have a high sensitivity and specificity to the presence of alcohol problems (Hile, Adkins & Noel, 1999). The counselor or social worker used a semi-structured interview process to gather the information needed to make an Axis I DSM IV diagnosis.

Results and Findings

Does the Change of PACE Program Reduce Involvement in the Juvenile Justice System?

From May 1, 2002 through November 15, 2003, the Change of PACE program diverted 86 (74.1%) youth from involvement in the juvenile justice system.

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What are the Characteristics of Youth Who Had Contact with the Police?

Of the thirty youth who had contact with the police, gender was split fifty percent male and fifty percent female. Twenty-nine of the youth were Caucasian and one was “other”. Twelve (40%) of the thirty youth reported a family history of chemical dependency.

The majority of youth (93%) who had police contact did not meet the criteria for substance abuse or dependence. Two youth (7%) were diagnosed with alcohol and cannabis dependence.

Table VII Police Contact and Diagnosis

Police Contact	Substance Abuse/Dependence								Total
	No Diagnosis		Alcohol Abuse		Alcohol Dependence		Alcohol & Cannabis Dep.		
Contact	28	93%	0	0	0	0	2	7%	100%
Total	28	93%	0	0	0	0	2	7%	30

The majority of contact with police (26.6%) occurred within sixty days of discharge from the program. Those youth that had contact with police, sixty-five percent of contact was due to traffic offenses and twenty-three percent was related to status offenses. Eighty-seven percent of youth who had contact were successfully discharged from the program. Of the thirty youth who had police contact, twenty-six (87%) were successfully

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discharged and four (13%) were unsuccessfully discharged. There was no statistical significance between unsuccessful discharge from the Change of PACE program and police contact.

Table IV Police Contact/Type of Offense and Completion

Police Contact Type of Offense		Completion		Total
		Successful	Unsuccessful	
Status	Offense	6	0	6
Misdemeanor	Offense	3	2	5
Traffic	Offense	17	2	19
Total		26	4	30

Characteristics of youth who were successfully and unsuccessfully discharged

Successful and unsuccessful youth who participated in the program had similar characteristics. Of the 116 youth who successfully and unsuccessfully completed the Change of PACE Program the majority were referred on status offenses.

Table VV Completion Type and Referral Charge

Completion	Referral Charge		Total
	Status Offense	Misdemeanor Offense	
Successful	103	1	104
Unsuccessful	11	1	12
Total	114	2	116

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Another similarity was that a majority of both successful and unsuccessful youth were not diagnosed with substance abuse or dependence disorders.

Table VVI Completion and Diagnosis

Completion	Substance Abuse/Dependence				Total
	No Diagnosis	Alcohol Abuse	Alcohol Dependence	Alcohol Cannabis Dep.	
Successful	98	3	1	2	104
Unsucc.	11	0	0	1	12
Total	109	3	1	3	116

Of the 112 youth who reported use of alcohol, those youth who successfully completed the program reported their first use of alcohol at earlier ages than their unsuccessful counterparts.

Table VVII Age of First Use of Alcohol and Completion

Age First Use	9	10	11	12	13	14	15	16	17	Total
Successful Completion	1	1	2	3	4	23	30	26	10	100
Unsuccessful Completion	0	0	0	1	0	2	1	5	3	12
Total	1	1	2	4	4	25	31	31	13	112

Of the thirty youth who had contact with police, twenty-six were successfully discharged and four were unsuccessfully discharged. Unsuccessful youth had police contact while enrolled in the Change of PACE program and ninety days post discharge. The youth who were successfully discharged had most contact with the police at sixty days post discharge followed by contact while the youth were enrolled in the program and six months post discharge.

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Table IV Contact with Police and Completion

Contact with Police	During Intervention	30 Days	60 Days	90 Days	4 Months	6 Months	9 Months	12 Months	Total
Successful	4	2	8	3	2	4	2	1	26
Unsuccessful	2	0	0	2	0	0	0	0	4
Total	6	2	8	5	2	4	2	1	26

What percentage of youth had contact with the police from discharge from the program?

Of the 116 youth who participated in the Change of PACE Program, twenty-six percent had contact with police. Of the twenty-six percent of youth who had police contact, 24 (93%) of the 26 youth had police contact after discharge from the program.

Discussion

This evaluation was performed on youth who were first time alcohol offenders and not involved with the juvenile justice system. This population is specific and the research was intended to discover outcomes for the Change of PACE program. Based on a small sample that was specific to the program, this research is not generalizable to a larger population. The research was also limited by a small fraction of youth who were referred to the program and had never consumed alcohol and/or were not under the influence of alcohol when their ticket or offense occurred. Some youth were ticketed for underage possession of alcohol because they were among a group of youth who were consuming alcohol.

The Change of PACE program diverted 74.% of 116 youth from entering into the Lucas County Common Pleas Court Juvenile Court. This diversion freed up court dockets and probation case loads for youth who were medium and high risk offenders. The youth who were unsuccessfully discharged from the program (26%) may have lacked the

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support needed to complete the program. A parent or guardian may not have been available for the education phase or the youth's attitude toward the intervention may have impeded his/her ability to participate.

Youth who had contact with the police while participating in the program was unexpected. Most of the contact with the police occurred at sixty-days post discharge. Half of police contact was through traffic tickets such as speeding, failure to control and reckless operation. Misdemeanor offenses accounted for twenty-eight percent and status offenses accounted for 21.1 percent of contact with the police, these offenses placed the youth in the juvenile justice system. Continued contact with the police and the commission of misdemeanor offenses are indicators of high risk behaviors. This suggests that the Change of PACE program may need to focus on alcohol and drug use and high risk behaviors.

This research is a foundation for future research for the Change of PACE program. This research should be duplicated in the future to include a larger sample along with a qualitative study that should be performed to examine those youth who unsuccessfully discharge from the program. It would be important to gain knowledge of where youth are failing out of the program and why they are not engaging with the intervention.

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References:

- Ary, D., Tildesley, E., Hops, H., & Andrews, J. (1993). The influence of parent, sibling, and peer modeling and attitudes on adolescent use of alcohol. *International Journal of the Addictions, 28*, 853-880.
- Botvin, G., & Kantor, L. (2000). Preventing alcohol and tobacco use through life skills training: Theory, methods and empirical findings. *Alcohol Research and Health, 24*(4), 250-257.
- Californo, J. (2000). Winning the war on drugs: It's all in the family. *America, 182*(2), 6-8.
- Cassel, R., & Blackwell, J. (2002). Positive assertiveness begins with character education and includes the abuse of cigarettes, alcohol and drugs. *Journal of Instructional Psychology, 29*(2), 77-79.
- Chermack, S., Stoltenberg, S., Fuller, B., & Blow, F. (2000). Gender differences in the development of substance related problems: The impact of family history of alcoholism, family history of violence and childhood conduct problems. *Journal of Studies on Alcohol, 61*(6), 845-852.
- Drug Strategies. Ohio Profile. Office of Drug Strategies, Washington, D.C.
- Fitzgerald, J.L., & Arndt, S. (2002). Reference group influence on adolescent alcohol use. *Journal of Alcohol and Drug Education, 47*(2), 42-56.
- Komro, K., & Toomey, T. (2002). Strategies to prevent underage drinking. *Alcohol Research and Health, 26*(1), 5-14.
- Lonczak, H., Huang, B., Catalano, R., Hawkins, D., Hill, K., Abbott, J., & Kosterman, R. (2001). The social predictors of adolescent alcohol misuse: A test of the social development model. *The Journal of Studies on Alcohol, 62*(2), 179-189.
- Maney, D., Higham-Gardill, D.A., & Mahoney, B. (2002). The alcohol related psychosocial and behavioral risks of a nationally representative sample of adolescents. *The Journal of School Health, 72*(4), 157-163.
- Olds, R., & Thombs, D. (2001). The relationship of adolescent perceptions of peer norms and parent involvement to cigarette and alcohol use. *The Journal of School Health, 71*(6), 223-228.
- Piazza, N., & Ivoska, W. (2001). The ADAS student survey 2000 for Toledo and Lucas County, Ohio. Report prepared for the Lucas County Alcohol and Drug Addiction Services Board.

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- Pluddemann, A., Theron, W., & Steel, H. (1999). The relationship between adolescent alcohol use and self consciousness. *Journal of Alcohol and Drug Education*, 44(3), 10-20.
- Reifman, A., Barnes, G., Dintcheff, B., Farrell, M., & Uhteg, L. (1998). Parental and peer influences on the onset of heavier drinking among adolescents. *Journal of Studies on Alcohol*, 59(3), 311-318.
- Scheier, L., Botvin, G., Griffin, K., & Diaz, T. (1999). Latent growth models of drug refusal skills and adolescent alcohol use. *Journal of Alcohol and Drug Education*, 44(3), 21-48.
- Spoth, R., Gyll, M., & Day, S. (2002). Universal family-focused interventions in alcohol-use disorder prevention: Cost-effectiveness and cost benefit analyses of two interventions. *Journal of Studies on Alcohol*, 63(2), 219-228.
- SAMHA Office of Applied Studies. (2002). Substance Abuse and Mental Health Administration; Highlights of 2001-2002 reports on substance abuse and mental health. Retrieved on 10-03-03 from google.com at www.samhsa.gov/oas/highlights2k2.
- Wagenaar, A., & Wolfson, M. (1995). Deterring sales and provision of alcohol to minors: A study of enforcement in 295 counties in four states. *Public Health Reports*, 110(4), 419-427.
- Werch, C., & Owen, D. (2002). Iatrogenic effects of alcohol and drug prevention programs. *Journal of Studies on Alcohol*, 63(5), 581-590.
- Wynn, S., Schulenberg, J., Kloska, D., & Laetz, V. (1997). The mediating influence of refusal skills in preventing adolescent alcohol misuse. *The Journal of School Health*, 67, 390-395.

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