IMPACT OF DELINQUENCY PREVENTION AND YOUTH DEVELOPMENT ACT PROGRAMS IN VIRGINIA COMMUNITIES

Comparison of Fiscal Years 1978 Through 1983

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for
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EXECUTIVE SUMMARY

The following summary provides background information on the Virginia Delinquency Prevention and Youth Development Act grant program administered by the Virginia Department of Corrections, and highlights of a recently conducted impact evaluation of the program.

The Virginia Delinquency Prevention and Youth Development Act was passed by the 1979 Session of the General Assembly. The overall mandate of this enabling legislation is to provide grants to "Promote efficiency and economy in the delivery of youth services and to provide support to localities seeking to respond positively to the growing rate of juvenile delinquency." Essentially, the Act can be described as supporting local efforts for a planned, coordinated, long-range effort to attack the core causes of juvenile delinquency.

The theoretical base upon which the delinquency prevention program rests, suggests that juvenile involvement in delinquent activity can best be reduced through organizational change strategies and positive youth development activities which are designed to effect the needs of the entire community rather than remediation or treatment efforts aimed toward individual youth. It is through the involvement of a broad cross-section of individuals, community leaders, and service agencies, that these goals can be accomplished.

The Department of Corrections contracted with Dr. Arnold L. Stolberg of Virginia Commonwealth University to assess the effectiveness of this approach in the 21 funded localities as it has been implemented under the Virginia Delinquency Prevention and Youth Development Act grant program. This report

presents an analysis intended to determine the overall success of the program at preventing juvenile delinquency as shown by such things as complaints of crime committed by juveniles, legal dispositions involving juveniles, school dropouts, etc. A secondary goal is to identify those programs which would have the greatest impact on delinquency rates. Briefly the study's findings are:

FINDINGS

* There were significant reductions in court dispositions of crimes against persons, crimes against property and substance abuse crimes in communities funded under the Virginia DP&YD Act when compared to control communities with no Act grant program.

* The total number of dispositions involving juveniles decreased more or increased at a lesser rate in communities funded through the Virginia DP&YD Act.

* The benefits of Virginia DP&YD Act programs were either maintained or enhanced in the second and third years of funding.

* In communities receiving Virginia DP&YD Act funds having programs which pre-date this funding support, there was a greater reduction in the percentage of complaints for status offenders and a greater increase in the number of cases disposed at intake.

* Teenage dropout rates, teenage pregnancy rates, and the lack of job skills for teenagers not continuing post-high school education were found to consistently predict the rates of court dispositions and court complaints against juveniles.

The overall conclusion of the study is that the Virginia Delinquency Prevention and Youth Development Act grant program, when taken as a whole, significantly influences the reduction of dispositions against juveniles particularly in the areas of property crimes, substance abuse complaints and status offenses.

INTRODUCTION

The purpose of the present report is to provide an assessment of Juvenile Prevention Programming theory as it has been implemented under the Virginia Delinquency Prevention and Youth Development Act (Va. DP&YD Act). The current report presents the results of analyses intended to determine the overall success of the program at preventing juvenile delinquency (i.e., complaints of crimes committed by juveniles, legal dispositions involving juveniles).

Variables selected to measure delinquency prevention include incidences of dispositions involving juveniles (against persons, property, substance abuse, status offenses) and complaints against juveniles (delinquency, status offenses, complaints filed). Youth development was measured by incidence of teen pregnancy and dropout rates. The impact of the funding program on court service unit operations was measured by numbers of complaints disposed at intake.

The current evaluation program has two additional goals. The first is to determine the differential effectiveness of the funding program at yielding prevention goals in participating communities who had programs in place prior to receiving Va. DP&YD Act funds and those who initiated programs with Act funding assistance. Nine communities received funding for programs already in place and previously funded by other sources. Thirteen other communities initiated new programs in response to the program announcement and the perceived need for additional and innovative services.

Identifying directions for future funding and programming was the last goal of this evaluation. Identifying variables which help to predict changes in delinquency rates was expected to be helpful in determining important characteristics of future prevention programming. Thus, a final set of analyses were calculated in the hopes of finding variables which would shed light on modifiable problems that figure significantly in the development of the juvenile delinquent.

METHODS

Participating Communities

Thirty-nine Virginia communities were selected to participate in the current program evaluation. Twenty-six communities received funding through the Va. DP&YD Act. Nine of these communities received funding for pre-existing programs. The years of operation of these programs ranged from 3 to 6 with a mean age of 4.33 years. Seventeen communities initiated prevention programs with the assistance of Va. DP&YD Act funds. A third group of 13 communities served as No Treatment Controls. These communities did not receive funding from the Va. DP&YD Act and did not operate prevention programs. Control communities were matched to the funded communities based on the county/town/city status as defined in the Virginia Department of Education's Facing Up: Statistical Data on Virginia's Public Schools reports. Treatment and control counties were further matched on localities' Local Composite Index of Ability-to-Pay, also defined in the Facing Up report. (See Table 1 for listing of participating communities and their matching variable scores.)

Table 1

Demographic Characteristics of Participating Communities

	Locality	City/Town/ County	Local Composite Index	Total Adolescent Population in 1980 Census
1.	Communities with Prevention Programs in Operation Prior to VA. DP&YD Act Funds			
	Richmond	city	.6452	44711
	Newport News	city	.4885	35747
	Lynchburg	city	.5950	15690
	Alexandria	city	1.0000	15941
	Pittsylvania Co.	county	.2868	17148
	Loudon Co.	county	.6377	16284
	Waynesboro	city	.5134	3540
	Montgomery Co.	county	.3895	16897
	Pulaski Co.	county	.3519	8997
2.	Communities with Prevention Programs Initiated with Va. DP&YD Act Funds			
	Roanoke	city	.5463	21157
	Colonial Heights	city	.4415	4172
	Charlottesville	city	.6685	7496
	Albemarle Co.	county	.5529	14651
	Wise Co.	county	.3238	11524
	Smyth Co.	county	.3203	8169
	Norfolk	city	.4727	61039
	Bristol	city	.4437	4422
	Tazewell Co.	county	.3371	13022
	Dinwiddie Co.	county	.3491	6173
	Allegheny Co.	county	.2894	3830
	Clifton Forge	city	.4302	1076
	Covington	city	.5553	2036
	Petersburg	city	.4334	10048
	Prince William Co.	county	.4268	43955
	Manassas	city	.6116	3975
	Manassas Park	city	.2722	1995

Table 1

Demographic Characteristics of Participating Communities

Locality	City/Town/ County	Local Composite Index	Total Adolescent Population in 1980 Census
3. Communities without DP&YD Act Funds and Prevention Programs			
Hampton	city	.7468	32496
Portsmouth	city	.3834	25281
Staunton	city	.5605	4628
Danville	city	.4723	9925
Rockingham Co.	county	.4201	14052
Roanoke Co.	county	.3943	18334
Franklin Co.	county	.3553	9391
Grayson Co.	county	.3384	3955
Greensville Co.	county	.3180	3157
Rappahannock Co.	county	.6502	1440
Russell Co.	county	.3240	8268
Harrisonburg	city	.7367	5001
Falls Church	city	1.0000	1589

Statistical Analyses

Three sets of statistical analyses were calculated to answer evaluation questions. The first two were aimed at assessing the effectiveness of Va. DP&YD Act programs at significantly modifying delinquency rates in participating communities. In these analyses, programs which received Va. DP&YD Act funds were separated into two groups: those with programs which pre-dated the Act funding and those in which programs were initiated with Act financial assistance. The distinction between initiation dates of programs was made because a true experimental design (pre-post-follow up), which was the optimal arrangement of data, could be used only in communities in which pre-intervention delinquency rates were known. This was true for communities in which programs were initiated with Va. DP&YD Act funds. Collapsing all intervention communities would have given an inaccurate picture of program effectiveness because of the inequivalence in pre-treatment data across program types. The third set of analyses explored the relationships between environmental variables which were expected to influence delinquency rates in a community and the actual rates in that community. The goal of this analysis was to suggest future directions for juvenile delinquency prevention programming.

Changes in delinquency rates were first studied in communities with programs initiated with Va. DP&YD Act funds and were compared to changes in the same rates in control communities. Analyses of covariance were calculated with changes in the incidence of court disposition and of complaints involving juveniles in a one year period as the dependent variables, treatment/control status as the independent variable and total population of adolescents as measured in the 1980 census data as the covariate. This method of analysis

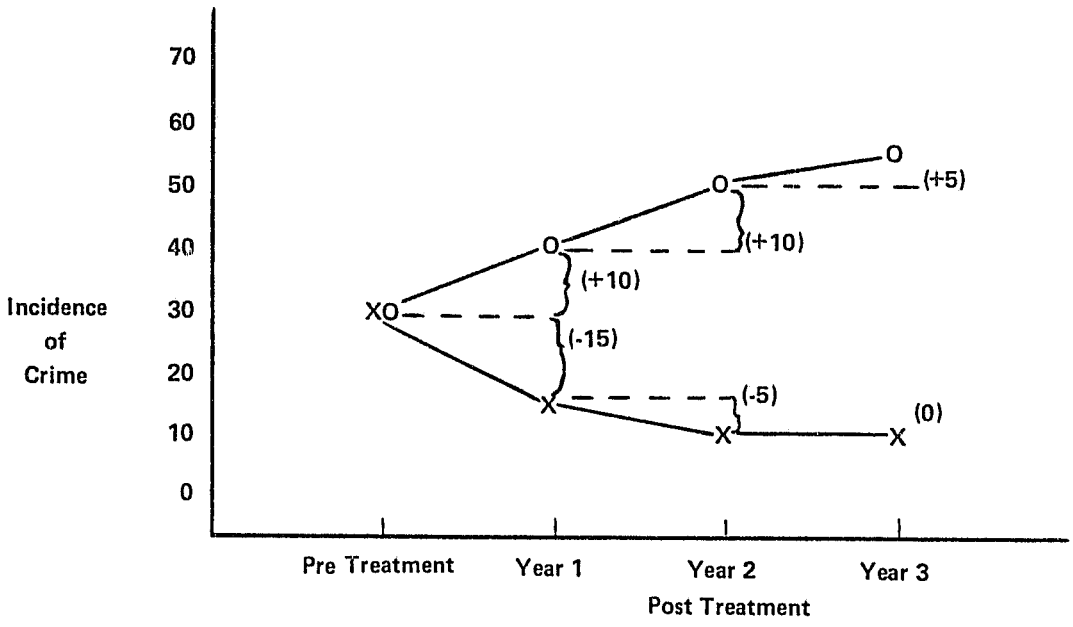
was chosen because it considers change in delinquency rates as the variables of primary consideration. It easily facilitates a comparison of with special programs and those without them. It also allows communities to be equalized based on the total population of potential juvenile offenders. (Communities with larger juvenile populations have higher probabilities of juvenile offenses and also have higher potential of change in incidence from year to year.)

Understanding the implications of results using change scores as dependent variables can best be demonstrated by considering the hypothetical data presented in Figure 1. The treatment and control communities had equivalent frequencies of the problem crime before intervention. The treatment program yielded significant changes in incidence rates as compared to the no treatment control community through the first two years of funding. The relative change across communities was not significantly different in the third year of funding. As can be seen, the absence of significant, differential improvement in the third year does not imply that the incidence rates are now equivalent across communities. Data simply imply that relative changes have ceased but absolute differences are maintained. (See Figure 1.)

The second set of statistical analyses considered communities with prevention programs which were in operation prior to Act funding and communities without special programming. Repeated measures analyses of covariance were calculated using juvenile court dispositions and complaints against juveniles

Figure 1

Hypothetical Data to Demonstrate Implications of Results Using Change Scores as Dependent Variables



X= Treatment Group
O= Control Group
(#)= Change Score

over the four year period (pre to three years post funding initiation) were the repeated dependent measures, funding status (treatment/no treatment) was the independent variable, and total population of adolescents in the 1980 census was the covariate. This method of analysis allowed the investigator to study the effect of Act funding on communities with existing prevention programs as compared to communities without both Act funds and prevention programs. Communities could be equated for total number of juveniles and the related potential for juvenile dispositions and complaints. Finally, the special problems encountered when a dependent measure is used on several occasions are most appropriately handled with this statistic. It must be emphasized that only the effect of Act funding can be determined in this analysis with the data available. The effectiveness of the program can not be determined because pre-intervention rates are unknown. Only the ability to maintain pre-existing group differences can be determined.

In the final set of analyses the ability to predict juvenile court dispositions and complaints with environmental variables was studied. Hierarchical multiple regressions were calculated with each court disposition and juvenile complaint category as the dependent variable (predicted score) and total population of juveniles, program category (treatment/no treatment), community economic index, job skills of teens not continuing post-high school education, dropout rate and number of teen pregnancies were the independent or predictor variables. This method of analysis was chosen because with it a number of variables can independently and collectively predict a specific,

continuous score. Further, the statistic allows the user to determine the strength of each variable at determining the dependent variable and allows the user to infer the existence of other, potentially stronger predictor variables. The significance of the previously mentioned predictor variables on disposition and complaint rates could be determined, thus shedding light on the necessary directions for future interventions.

RESULTS

Evaluating Prevention Programs Initiated with Va. DP&YD Act Funds:

Comparisons of communities with programs initiated with Va. DP&YD Act funds and the unfunded, control communities indicate that significant reductions in the court dispositions of crimes against persons, crimes against property, substance abuse crimes, and total number of dispositions involving juveniles decreased more or increased less in funded communities than in non-funded communities in the first year after the programs were initiated. Crimes against persons increased an average of 1.88 incidences in the year after programs were initiated for funded communities and an average of 8.92 incidences in non-funded communities ($F(2,27)=3.02$, $p<.05$). Crimes against property decreased in program communities an average of 5.70 and increased an average of 24.92 incidences in communities without prevention progams ($F(2,27)=3.52, p<.05$). Substance abuse dispositions decreased an average of 7.47 times in program communities and increased 6.23 times in control communities ($F(2,27)=7.69, p<.001$). Total number of court dispositions involving juveniles decreased by an average of 26.53 in Va. DP&YD Act communities and increased an average of 78.53 incidences in non-funded controls ($F(2,27)=5.16, p<.01$). (See Table 2.)

Table 2

Comparisons of Communities with Programs Initiated with Va. DP&YD Act Funds and No Treatment Control Communities: Pre-Treatment to Year 1 of Funding

Mean Change Scores and F Tables

	DP&YD Act Treatment Communities	No Treatment Control Communities	F	p
Court Dispositions				
Crimes Against Persons	1.88	8.92	3.02	.05
Crimes Against Property	-5.70	24.92	3.52	.05
Substance Abuse Offenses	-7.47	6.23	7.69	.001
Status Offenses	-6.82	3.62	2.49	n.s.
Total Offenses	-26.53	87.53	5.16	.01
Complaints Involving Juveniles				
Delinquency	79.53	159.31	.96	n.s.
Status Offenses	45.76	28.35	1.03	n.s.
% Status Offenses	-.88	.39	3.61	.05
Complaints Filed	33.58	145.54	1.04	n.s.
Complaints Disposed at Intake	106.29	42.92	2.67	.08
% of Complaints Disposed at Intake	-.82	-.23	.03	n.s.
Teenage Pregnancies	-5.94	-160.31	.89	n.s.
Dropout Rate	8.35	****	.90	n.s.

$N_{control}=13$
$N_{treatment}=17$

****Scores not available

The average percentage of complaints which were status offenses decreased in prevention communities .88 incidences while the same score increased an average of .39 incidences for no treatment controls ($F(2,27=3.61, p<.05)$. The number of cases disposed at intake increased more in treatment communities (106.29) than in control communities (42.92). The magnitude of this differential improvement approaches significance ($F(2,27)=2.67, p<.08$). (See Table 2.)

The benefits of program initiation were either enhanced or were maintained in Va. DP&YD Act communities in the second year of funding. The number of dispositions involving crimes against persons and property and substance abuse crimes continued to decline in communities with funding while the same scores increased in the matched control communities. Crimes against persons decreased an average of 30.33 incidences in treatment communities and increased an average of 13.76 incidences in controls ($F(2,19)=3.22, p<.05$). Substance abuse crimes decreased an average of 4.88 incidences in the second year of funding in funded communities and increased an average of 17.38 incidences in control communities ($F(2,19)=4.85, p<.01$). The relative difference in the number of crimes against property approached significance ($F(2,19)2.87, p<.07$) with treatment communities showing an average decrease in these crimes of 17.44 incidences while controls showed an increase of 69.31 incidences. (This last difference may initially appear to be greater than all others. It is not a significant difference because the average change in each community varies substantially around the reported means. There is a significant overlap in the average change for the two categories of communities.) All other improve-

ments yielded in the first year of funding were maintained in the second year. (The reader must be reminded that change scores are the dependent variables in these analyses. If a relatively greater change is reported in one year and no significant differences are found in the second, then the data can be interpreted to mean that one community improved more than the other in the first year and maintained the lead in the second.) (See Table 3.)

Benefits of Va. DP&YD Act funding realized in the first and second years of program operation were maintained during the third year of funding. In addition, the number of status offenses in treatment communities decreased by an average of 13.00 incidences while control communities demonstrated an average increase of 13.38 incidences ($\underline{F}(2,15)=3.14, \underline{p}<.05$). (See Table 4.)

Table 3

Comparisons of Communities with Programs Initiated with Va. DP&YD Act Funds and No Treatment Control Communities: Year 1 to Year 2 of Funding

Mean Change Scores and F Tables

	DP&YD Act Treatment Communities	No Treatment Control Communities	F	p
Court Dispositions				
Crimes Against Persons	-30.33	13.76	3.22	.05
Crimes Against Property	-17.44	69.31	2.87	.07
Substance Abuse Offenses	-4.88	17.38	4.85	.01
Status Offenses	-1.33	10.23	1.64	n.s.
Total Offenses	173.22	171.46	1.36	n.s.
Complaints Involving Juveniles				
Delinquency	8.22	10.15	.53	n.s.
Status Offenses	-24.22	3.31	1.95	n.s.
% Status Offenses	-.44	.15	.14	n.s.
Complaints Filed	37.22	50.77	.47	n.s.
Complaints Disposed at Intake	25.33	-11.62	1.54	n.s.
% of Complaints Disposed at Intake	-.44	-4.38	1.12	n.s.
Teenage Pregnancies	-21.11	-10.38	.62	n.s.
Dropout Rate	-30.00	-8.00	1.38	n.s.

$N_{control}=13$
$N_{treatment}=9$

Table 4

Comparisons of Communities with Programs Initiated with Va. DP&YD Act Funds and No Treatment Control Communities: Year 2 to Year 3 of Funding

Mean Change Scores and F Tables

	DP&YD Act Treatment Communities	No Treatment Control Communities	F	p
Court Dispositions				
Crimes Against Persons	.60	8.08	.43	n.s.
Crimes Against Property	-54.70	-18.00	.43	n.s.
Substance Abuse Offenses	-5.00	1.61	.29	n.s.
Status Offenses	-10.20	1.31	1.07	n.s.
Total Offenses	-80.00	-11.77	.63	n.s.
Complaints Involving Juveniles				
Delinquency	20.00	18.00	.17	n.s.
Status Offenses	-13.00	13.38	3.14	.05
% Status Offenses	-1.80	-.15	.65	n.s.
Complaints Filed	-25.80	57.23	2.57	n.s.
Complaints Disposed at Intake	17.00	23.07	.19	n.s.
% of Complaints Disposed at Intake	-.60	-1.08	.05	n.s.
Teenage Pregnancies	3.20	-8.77	.97	n.s.
Dropout Rate	-6.00	-40.00	1.20	n.s.

$N_{control}=13$
$N_{treatment}=5$

Evaluating Prevention Programs in Existence Prior to Va. DP&YD Act Funding:

Comparisons of communities receiving Va. DP&YD Act funds for programs which pre-dated this support with no treatment control communities indicate greater reductions in the percentage of complaints for status offenses and greater increases in the number of complaints disposed at intake in treatment communities. The percentage of complaints for status offenses followed a progression of an average percentage of 13.78% prior to funding, 9.11% in the first year of funding, 9.66% in the second year and 10.22% in the third year of funding. Control communities followed a progression of 12.07 in the pre-test year, and 12.46, 12.62 and 12.46 in the treatment years. The magnitude of differences on this dimensions approached significance ($F(3,84)=2.28, p<.08$). The number of complaints disposed at intake increased more for treatment communities than for control communities ($F(3,84)=3.34, p<.02$). Treatment community average incidence increased from 315.44 prior to funding to 388.11 in the first year of funding and 453.33 and 510.55 in the following years. Control communities showed relatively little change over the four year period: 136.77, 179.69, 168.07, 191.15 (See Table 5.)

Table 5

Comparisons of Communities with Va. DP&YD Act Programs which Pre-dated Funding with No Treatment Control Communities

Mean Scores and F Tables

	Treatment Communities				Control Communities				F	p
	Pre-Funding	Treatment Years 1	2	3	Pre-Funding	Treatment Years 1	2	3		
Dispositions										
Persons	40.00	62.56	79.00	89.67	13.62	22.54	36.31	44.38	.49	n.s.
Property	174.84	235.33	293.67	271.88	75.31	100.23	169.53	151.53	.26	n.s.
Subst. Abuse	13.67	25.88	30.22	32.56	5.62	11.85	29.23	30.85	.66	n.s.
Status Offen.	35.33	35.11	36.33	41.55	20.92	24.53	34.76	36.07	.91	n.s.
Total Offen.	606.56	800.33	973.56	1032.11	255.92	334.46	505.92	517.69	.64	n.s.
Complaints										
Delinquency	493.00	668.11	776.33	813.11	215.92	375.23	385.38	403.38	.83	n.s.
Status Offen.	112.77	101.00	119.22	148.88	50.08	73.92	77.23	90.62	1.26	n.s.
% Status Off.	13.78	9.11	9.66	10.22	12.07	12.46	12.62	12.46	2.28	.08
Complaints Filed	572.56	700.55	853.55	939.22	233.08	378.62	429.38	486.62	.91	n.s.
Complaints Disposed at Intake	315.44	388.11	453.33	510.55	136.77	179.69	168.07	191.15	3.34	.02
% Disposed	31.33	31.88	31.11	31.00	27.76	27.53	23.15	22.07	.76	n.s.
Pregnancy	419.55	433.56	420.22	401.55	377.46	217.15	206.76	198.00	.68	n.s.
Dropouts	230.00	395.88	352.33	345.11	****	178.92	170.92	164.92	1.65	n.s.

Average Juvenile Population$_{Treatment}$=19439.44

Average Juvenile Population$_{Control}$=10578.23

(Some differences in average treatment/control scores are due to population differences. The reader must consider the average juvenile population for each category of community when comparing mean scores.)

$N_{Treatment}$=9

$N_{Control}$=13

****Data not available

Identifying Influences on Delinquency Rates:

Predictive statistics were used to identify significant determinants of communities' juvenile complaints and disposition reates. Communities were divided into two groups: those with funding and those without. Teen dropout rates, teen pregnancy rates and job skills for teens not continuing post-high school education were found to consistently predict court dispositions and complaints against juveniles in the first, second and third years of funding in both treatment and control communities.

Hierarchical multiple regression analyses were calculated to predict delinquency rates. This statistic was chosen because it provides a measure of the variation in predicted scores accounted for by the predictor variables and also identifies which predictor variables are most important in this relationship. For example, 42% of the variance in dispositions involving crimes against persons in the first year funding was accounted for by the resultant regression equation. Significant predictors included a community's economic index, dropout rates, and teen pregnancy rates. This can be interpreted to mean that almost half of all the variance in scores in this dependent measure were accounted for by the three independent/predictor variables. This is an unusually strong relationship. (See Table 6.)

Forty-two percent of the variance in first-year funding rates of dispositions involving crimes against persons was accounted for by the economic index of the community, dropout rate and teen pregnancy rate

Table 6

Predicting Complaints and Dispositions Against Juveniles in the First Year of Funding: Multiple Regression Analyses

Predicted Score	Variance Accounted For	F	p	Significant Predictor Variables
Dispositions:				
Against Persons	42%	3.82	.005	Economic Index, Dropout Rate, Teen Pregnancy Rate
Property Offenses			n.s.	
Substance Abuse	33%	2.63	.03	Teen Pregnancy Rate
Status Offense			n.s.	
Total	37%	3.19	.01	Dropout Rate
Complaints:				
Delinquency	35%	2.87	.02	Dropout Rate
Status Offense	81%	23.01	.0001	Dropout Rate Teen Pregnancy Rate
% Status Off.			n.s.	
Complaints Filed			n.s.	
Disposed at Intake	78%	19.23	.0001	Dropout Rate Teen Pregnancy Rate
% Disposed at Intake			n.s.	

($F(6,32)=3.82, p<.005$). Thirty-three percent of the variance in first-year funding rates of substance abuse dispositions was accounted for by teen pregnancy rates ($F(6,32)=2.64, p<.03$). Thirty-seven percent of the variance in total dispositions involving juveniles in the first year of funding was accounted for by dropout rates ($F(6,32)=3.19, p<.01$). Thirty-five percent of the variance in first-year funding delinquency complaints was accounted for by dropout rates ($F(6,32)=2.87, p<.02$). Eighty-one percent of the variance in first-year funding status offense complaints was accounted for by dropout rates and teen pregnancy rates ($F(6,32)=23.01, p<.0001$). Seventy-eight percent of the variance in the number of complaints disposed at intake during the first year of funding was accounted for by dropout rates and teen pregnancy rates ($F(6,32)=19.23, p<.0001$). (See Table 6.)

Significant relationships were found between all second-year funding dispositions and predictor variables. Substantial portions of the variance in frequencies of crimes against persons (69%, $F(6,24)=9.00, p<.0001$), property offenses (47%, $F(6,24)=3.61, p<.01$), substance abuse offenses (52%, $F(6,24)=4.42, p<.003$), status offenses (39%, $F(6,24)=2.56, p<.0004$) was accounted for by program status (funded/not funded), job skills of teens not continuing post-high school education, dropout rates and teen pregnancy rates. The number of status offense complaints was also found to have a significant relationship with predictor variables. Sixty-two percent of the variance in status offense complaint frequencies was accounted for by job skills and dropout rates ($F(6,24)=6.46, p<.0004$). (See Table 7.)

Table 7

Predicting Complaints and Dispositions Against Juveniles in the Second Year of Funding: Multiple Regression Analyses

Predicted Score	Variance Accounted For	F	p	Significant Predictor Variables
Dispositions:				
Against Persons	69%	9.00	.0001	Job skills, Dropout Rate, Teen Pregnancy Rate
Property Offenses	47%	3.61	.01	Program, Job skills Dropout Rate
Substance Abuse	52%	4.42	.003	Program, Dropout Rate, Teen Pregnancy Rate
Status Offense	39%	2.56	.05	Program, Dropout Rate
Total	62%	6.48	.0004	Job Skills, Dropout Rate
Complaints:				
Delinquency			n.s.	
Status Offense	62%	6.46	.0004	Job Skills, Dropout Rate
% Status Off.			n.s.	
Complaints Filed			n.s.	
Disposed at Intake			n.s.	
% Disposed at Intake			n.s.	

Forty-seven percent of the variance in third-year funding substance abuse dispositions was accounted for by dropout and teen pregnancy rates ($F(6,20)=3.00, p<.02$). Sixty-one percent of the variance in the number of complaints filed in the third year was accounted for by teen pregnancy rates ($F(6,20)=5.31, p<.002$). (See Table 8.)

Table 8

Predicting Complaints and Dispositions Against Juveniles in the Third Year of Funding: Multiple Regression Analyses

Predicted Score	Variance Accounted For	F	p	Significant Predictor Variables
Dispositions:				
Against Persons			n.s.	
Property Offenses			n.s.	
Substance Abuse	47%	3.00	.02	Dropout Rate, Teen Pregnancy Rate
Status Offense			n.s.	
Total			n.s.	
Complaints:				
Delinquency			n.s.	
Status Offense			n.s.	
% Status Off.			n.s.	
Complaints Filed	61%	5.31	.002	Teen Pregnancy Rate
Disposed at Intake			n.s.	
% Disposed at Intake			n.s.	

DISCUSSION

The discussion of program evaluation data and results will be divided into four sections: the effectiveness of prevention programs initiated with Va. DP&YD Act funds, the impact of Va. DP&YD Act funds on ongoing prevention programs, the overall effectiveness of the Va. DP&YD Act programs, and directions for future funding and programming.

Before beginning this discussion, the definition of the impact of the programs must be reviewed. The Department of Corrections, Division of Youth Services has chosen the most conservative measures of change possible. Changes in actual complaints and dispositions involving juveniles are the dependent variables in this program evaluation.

The conservativeness of the measures and difficulty in obtaining significant program effects is most apparent when contrasted with other sorts of evaluation strategies. Assessment measures which are assumed to reflect desired program effects are most frequently chosen as indicators of impact. Increases in Scholastic Aptitude Test scores, for example, are used to reflect gains in the academic domain. Problems exist with such a strategy. Large means and standard deviations (average variations in test scores around the mean) provide an inflated view of program success. An increase of ten points on the SAT's may appear to reflect significant improvement when, in fact, it suggests very little change. In addition, errors in measurement occur in all tests which may yield results which cloud their meaning.

Real occurrences of complaints and dispositions against juveniles are used to define program impact in this evaluation. Such measures, because of their lack of statistical inflation and because of the general clarity of their meaning, yield more difficult to obtain and more accurate findings.

Impact of Prevention Programs Initiated with Va. DP&YD Act Funds

Data clearly indicate that programs initiated with Va. DP&YD Act funds yield significant reductions in complaints and dispositions against juveniles which are apparent in the first year of funding and which are either maintained or increase throughout the funding term. Dispositions of crimes against persons and property, substance abuse offenses and total dispositions showed significantly greater reductions in program communities than in controls in the first year of funding. The percentage of status complaints were also reduced and the number of complaints disposed at intake were increased during the same time period. Differences in treatment/control improvements continued to grow in the second year of funding, particularly in the areas of dispositions of crimes against persons and property and substance abuse offenses. Other first year improvements maintained the lead demonstrated in the pre-intervention to first year of funding changes. The discrepancies between program and control communities which occurred in the first two years of funding were maintained in the third year.

Impact of Va. DP&YD Act Funds on Pre-Existing Prevention Programs

The effect of prevention programs which received Va. DP&YD Act funds and which were in operation prior to this funding are difficult to evaluate or

demonstrate. Significant improvements were found in treatment community percentages of status offense complaints and number of cases disposed at intake after funding. These improvements are very encouraging, particularly in light of the problems inherent in the data available.

Other program effects may have occured but they can not be evaluated due to the data available and the design utilized in this evaluation. Pre-intervention data do not exist on the treatment communities; only pre-funding data are available. True experimental designs require that groups be equivalent in all ways before intervention begins. In this evaluation, the treatment and control groups differ because intervention had started before our "pre" data point. Changes in dispositions and complaints can and probably did occur prior to this point which can not be considered. Improvement in one group can only be determined relative to change in another and data are not available to fully allow such comparisons.

The Overall Impact of Va. DP&YD Act Funds

Multiple regression analyses clearly indicate that the Va. DP&YD Act program, taken as a whole, significantly influences the rate of dispositions against juveniles, particularly in the areas of property, substance abuse and status offenses. Data also suggest tht benefits of the program as a whole are not visible until the program has been in operation for at least one year. The reader must be reminded that this more conservative evaluation of program impact results from the collapsing of the two sources of program data: from communities with programs initiated with Va. DP&YD Act funds and

from communities with pre-existing programs. The more exciting results of the former group are decreased but not eliminated by the more conservative results of the latter.

Directions for Future Programming and Funding

The most significant findings in the multiple regression analyses are that higher delinquency rates co-occur with lack of job skills, high dropout rates and high teen pregnancy rates. It can not be automatically concluded that the latter problems cause higher delinquency statistics. The statistics do not allow such inferences. It can be legitimately concluded that when dropout and pregnancy rates are high and when job skills are low, the number of complaints and dispositions against juveniles will be high.

An extension of this data to prevention programming is that if job skills can be increased and if dropout and teen pregnancy rates can be decreased, then dispositions and complaints can be expected to drop. Thus, it may be concluded that delinquency as it has been defined here can be prevented if it is viewed as a problem caused by multiple sources: job skills, teen pregnancy and dropping out of school. It can further be concluded that programs which attempt to modify one or more of these co-occuring variables have the best chance of preventing delinquency and should be given the highest funding priorities.

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