



## THE UNIVERSITY OF TEXAS AT DALLAS

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GRADUATE PROGRAMS IN PUBLIC AFFAIRS

May 19, 2011

Mr. Jerry D. Silhan, Executive Director  
Youth Village Resources of Dallas  
6333 E. Mockingbird, Suite 147-872  
Dallas, Texas 75214

Dear Mr. Silhan,

I attach for your review our final report covering the impacts of Youth Village Resources of Dallas' programs on youth held in Dallas County's Youth Village (YV) residential placement center. Brie Diamond and I are pleased to report positive outcomes in almost all areas.

To summarize, we find that relative to a matched sample of comparable youth who did not have the programs available to them during 2004-07, young men who participated in YVRD programs during 2008-10 were:

- Much less likely to be abnormally released from Youth Village due to administrative removal, failure to adjust, program disruption or runaway.
- Less likely to recidivate (i.e., be re-arrested) for delinquent misdemeanor and felony offences at 6, 12 and 18 months after leaving YV.
- More likely to show improvement in TAKS math scores – but no change in reading scores - during and after leaving YV.
- Much more likely to find employment sooner, work more frequently and earn more in total within one year of leaving YV. This is the biggest and clearest area of impact.

Our findings are captive of a method of analysis - Propensity Score Matching - that produces results less firm than would obtain with random assignment (not feasible in our case). We are nevertheless confident that the positive outcomes we report are real and that there are no obvious negative results. The "worst" outcome, for TAKS reading, is that participation produced no gain.

In closing, I would like to express our thanks for the opportunity to assist YVRD in evaluating its own performance, and commend the organization for the evident success that it has achieved through its actions on behalf of wayward youth in Dallas County.

Sincerely,

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Youth Village Resources of Dallas  
**Assessment of Program Impacts**

**Final Report**

Prepared by:

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May 20, 2011

## A. Introduction

In 2008, Youth Village Resources of Dallas (YVRD) introduced several skill/vocational training programs for young men at Dallas County Youth Village (YV), a juvenile residential placement facility for errant youth. These programs cover computer technology, culinary arts, dog training, food management and career preparation. Through June 2010, almost 190 youth successfully completed these programs. As shown in Table 1, most of the young men completed one program; a significant number completed a combination of two programs, and a few successfully finished three or more.

Table 1: Participation in YVRD Programs 2008-2010 (all youth)

Participation in:	Program Name					Number of Youth
	Computer	Culinary	Dog Train.	Food Mgmt	Career	
1 program	X					28
		X				40
			X			42
				X		8
					X	7
subtotal:						125
2 programs	X	X				15
	X		X			5
	X			X		4
	X				X	4
		X		X		13
		X			X	3
			X		X	6
subtotal:						50
3 programs	X	X	X			1
	X	X		X		2
	X	X			X	1
	X		X		X	2
	X			X	X	1
		X		X	X	2
			X	X	X	1
subtotal:						10
4 programs	X	X	X		X	1
	X		X	X	X	1
subtotal:						2
<b>TOTAL</b>	<b>65</b>	<b>78</b>	<b>59</b>	<b>32</b>	<b>29</b>	<b>187</b>

The outward purpose of these programs is to provide at-risk males 14 to 17 years of age with improved opportunities to find and hold part-time and eventually full-time employment. In the process of doing that, the programs try to empower participants to take more positive control of their lives, for instance, by controlling behaviors that put them in contact with the

juvenile justice system in the first place, and doing better in school... both of which have positive impacts on employment, income and life outlooks in general.

A basic question that comes up after more than 3 years of implementation is this: Do the YVRD programs achieve their goals? This, obviously, is a crucial question because it serves little useful purpose to continue programs if they fall far short of expectations. Similarly, if programs are effective in changing the life courses of young men who participate in them, then there is well-grounded reason for continuing and even expanding them into the future.

In the following, we explain the method we adopted and data we used to analyze the impacts of YVRD programs, and then present our findings with respect to four key program outcomes:

- Abnormal release due to administrative removal, failure to adjust, program disruption or runaway. This is an indicator of change in behavior while youth are in YV.
- Re-arrest (or recidivism) of youth after they leave YV. This is an indicator of change in behavior after youth leave YV
- Performance on the Texas Assessment of Knowledge and Skills (TAKS) test. This is an indicator of change in academic performance after youth leave YV.
- Employment and earnings. These are direct indicators of material gain from YVRD skill/vocational training.

## **B. Method and Data**

For assessment purposes, there is one fundamental question to answer. What would have happened to YV residents if YVRD programs were not available? In the ideal world of research, answering this type of question requires randomly assigning some youth to a programs group, other youth to placebo activities comparison group and then evaluating differences in outcomes. This kind of assignment was not feasible. We therefore adopted a matching approach. That is, we created a “comparison” group by matching boys who participated in YVRD programs during 2008-10 with boys who did not participate during 2004-07 (because the programs were not available at the time).

The matching process, called Propensity Score Matching (PSM), uses individual characteristics, such as age, race/ethnicity, offense type that led to referral to YV, prior TAKS scores, substance abuse, victimization, gang membership, number of prior arrests, and school status as match criteria to create a set of non-participants in 2004-07 against which we could compare program participants of 2008-10. Perfect matching is not possible. As a result, out of 456 boys in 2004-07, the PSM method created a matched comparison group of 414. Similarly, out of 139 boys in 2008-10 (less than the 187 in Table 1 because of incomplete data), the PSM method created a

matched program group of 86. We excluded unmatched youth of 2004-07 and 2008-10 because, being too different to be matched, comparison of outcomes that included them would be biased, i.e., apples to oranges comparison.

Nonetheless, as Table 2 indicates, there are still some important differences between the comparison and program groups. Program kids are a bit older. They have been in YV a bit longer. Their reading scores on prior TAKS tests are higher. And the share of them that took vocational education classes in school is higher. These differences, however, are not big enough to cause too much bias in analysis.

Table 2: Comparison of Socio-Demographic Characteristics

	<b>Comparison Group</b>	<b>Program Group</b>
Age	15.3	15.5
Race		
African American	56%	61%
Caucasian	10%	9%
Hispanic	33%	26%
Other	1%	0%
Referral Type		
Misdemeanor	60%	50%
Felony	39%	50%
Status	1%	0%
Days in YV	222	251
TAKS Score*		
Math	51%	54%
Reading	59%	66%
Substance Abuse	4%	17%
Abuse Victim	8%	14%
Gang Membership	21%	23%
Number of Priors	1.6	1.6
School Status		
In School	80%	85%
Failing	74%	79%
Special Education	32%	24%
Vocational Education	74%	92%
ESL Student	18%	14%

\* This is measured as percentage of questions answered correctly. We use this measure because raw scores are not comparable across different grade levels

We acquired and merged data on these individuals from three sources. Schooling data came from the Texas Education Agency (TEA). Juvenile justice data came from the Dallas County Juvenile Department. Employment and earnings data came from the Texas Workforce Commission. All our findings derive from analyses of these data. It is important to underscore in this context that assembling such data, for legal reasons, is extraordinarily difficult in the case of juveniles. It would not have been possible to conduct the present study without full cooperation of the TEA, Dallas County Juvenile Department and TWC, and generous support of the Pegasus Fund.

### **C. Findings**

As noted above, our findings relate to four classes of outcome: abnormal release from YV, recidivism, performance on the TAKS test, and employment and earnings.

#### ***i) Abnormal release from YV***

Far fewer program participants - 45 % fewer than the comparison group - were removed from YV because of failure to adjust, for disruption or for running away (Table 3). A persistent goal of the Juvenile Department is to release youth normally, when their period of residence comes to its proper close. For YV, this is an important measure of success, and is an indicator that residents have changed their behaviors for the better. Our analysis suggests that program participation was instrumental in raising the rate of normal, successful release by a considerable margin.

Table 3: Comparison of Terms of Release from Youth Village

	Comparison Group	Program Group
abnormal release (unsuccessful)	20.3%	11.1%
normal release (successful)	79.7%	88.9%

#### ***ii) Recidivism***

Table 4, below, shows the number of individuals who did and did not recidivate for delinquent offenses (i.e., misdemeanors and felonies only) at 6, 12 and 18 months after leaving YV. The Table shows an important difference at the end of 6 months. About 10% of leavers in the program group and 13% of the comparison group were re-arrested for delinquency, a difference of 3 points, indicating that 23% (i.e., -3% / 13%) fewer YVRD program graduates were re-arrested. At 12 months there is an increase in the difference, to 6 points, suggesting that 30% (i.e., -6% / 20%) fewer program participants were re-arrested. At 18 months, these figures drop to 3 points and a lowering of 13%. However, because our data track 18 months of recidivism for only 47 program participants, these last figures are not firm for the whole participant group.

Table 4: Comparison of Recidivism Rates at 6, 12 and 18 months After Release from YV

Group	Time Since Leaving Youth Village					
	6 months		12 months		18 months	
	number	%	number	%	number	%
Program Group						
did not recidivate	77	90%	74	86%	37	79%
recidivated	8	<b>10%</b>	12	<b>14%</b>	10	<b>21%</b>
Total	86	100%	86	100%	47*	100%
Comparison Group						
did not recidivate	361	87%	331	80%	316	76%
recidivated	53	<b>13%</b>	83	<b>20%</b>	98	<b>24%</b>
Total	414	100%	414	100%	414	100%
<i>difference in points</i>		<b>-3%</b>		<b>-6%</b>		<b>-3%</b>
<i>difference in percentage</i>		<b>-23%</b>		<b>-30%</b>		<b>-13%</b>

Table 5, below, shows the average age of youth by type of recidivism. It communicates that there is no meaningful age difference between comparison and program youth across types. In other words, the possibility is remote that age differences might explain some of the differences in recidivism shown in Table 4.

Table 5: Comparison of Average Age by Type of Recidivism

Recidivism Type	Average Age	
	Comparison Group	Program Group
Recidivated	14.4	14.6
Delinquent	14.3	14.6
Misdemeanor	14.2	14.8
Felony	14.4	14.6
Status Offense	15.0	-
Did Not Recidivate	15.5	15.7

All in all then, the analysis suggests that program participation has a beneficial effect on the probability of re-arrest for delinquency for up to 18 months after youth leave YV.

### *iii) TAKS Scores*

In our analysis, we looked at TAKS reading and math scores (measured as % correct answers) for several years before each individual entered YV and then during and after leaving YV. Reading scores for the comparison group show a less than **1% average annual improvement**

over time. Program participants seemed to do better, registering an average annual improvement rate of a bit less than **2%**. This difference is negligible, however. There is no meaningful difference in TAKS reading performance between the two groups.

Results on TAKS scores for math are different. The comparison group showed a **3.4% average annual improvement** in scores over the years. For program participants, the figure is **5.9%**, substantially better. So to the extent that YVRD programs put demands on quantitative reasoning, something that one should expect in computer, culinary and food management activities, the effect reveals itself in TAKS math performance.

#### *iv) Employment and Earnings*

The area where differences are most significant and where outcomes can be traced directly to YVRD programs has to do with employment and earnings. Table 6 shows the basic findings. One finding, in Part a. of the table, is that among youth appearing in TWC data who obtained employment at any time after release from YV, 73% of those who participated in the program found some employment within one year of release. In contrast, less than 20% of comparison youth who ever obtained employment did so within one year of release.

This implies, among other things, that the program helps to reduce the time needed for youth to find jobs. Part b. of the table shows that this is indeed the case. Program graduates find first part-time jobs earlier than comparison youth, some at age 15-16. Through age 18-19, bigger shares of program youth in each age group are able to find jobs.

This “head start,” combined with the higher number of quarters worked by program graduates (Part c. of the table), explains the difference in earnings. The program group, as shown in Part d. of the table, earned \$2956 within one year of release. This is much better, 45% better, than the \$2038 earned by the comparison group. Because both groups work for more or less the same types of employers – temp agencies, retail and grocery stores, fast food outlets, package delivery services and the like – it seems clear that the basic advantage provided by YVRD is quicker connection between the job seeker and job.

Table 6: Comparison of Employment and Earnings

	Comparison Group	Program Group
<b>a. Employment Within 1 Year of Release</b>		
employed during any quarter	19%	73%
not employed during any quarter	81%	27%
<b>b. Age at First Employment</b>		
15-16	0%	13%
16-17	7%	19%
17-18	16%	35%
18-19	20%	21%
All	10%	25%
<b>c. % of Individuals Who Worked:</b>		
0 quarters within 1 year of release	55.9%	14.6%
1 quarters within 1 year of release	20.2%	25.5%
2 quarters within 1 year of release	11.8%	14.6%
3 quarters within 1 year of release	4.6%	16.4%
4+ quarters within 1 year of release *	7.7%	30.0%
<b>d. Average Earnings Within 1 Year of Release</b>	\$2038	\$2956

\* Some youth recorded multiple jobs during some quarters, thus the number of wage quarters worked in one year exceeds 4 quarters for some youth.

#### D. Conclusion and Recommendation

The overall impression provided by the data and the method we adopted to analyze them paints a picture of YVRD effectiveness in addressing the challenge of transforming the lives of many at-risk youth...of shifting them away from non-productive life courses. This is most evident with respect to employment and earnings, but is clear as well in the other dimensions of abnormal release, recidivism and academic performance.

This finding is important. It signals that YVRD is on an effective path that warrants continuation, refinement as necessary, and expansion, at least experimentally, to other juvenile facilities.

In bigger context, it is vital to appreciate that at any one time there are nearly 100,000 youth in residential placement across the United States and a bit less than 10,000 in Texas. To date, we have run across no research, professional publications or reports that refer to programs comparable to what YVRD has put in place in Dallas County. Although we cannot say that it is the only program of its type (because we have not done the kind of search necessary to back this claim) it is certainly among the very, very few. In this sense, YVRD is a pioneer in the

residential placement frontier and, as such, offers a model that other facilities might want to replicate. In other words, YVRD accomplishments are worth trumpeting.

In that vein, as well as to examine details that we could not study because of limited data (e.g., too few program participants to assess effects of different programs, too short employment tracking periods), we recommend that another assessment, covering all program graduates through June 2011 and including longer employment records of earlier graduates, be initiated later this year. This suggestion assumes that TEA, Juvenile Department and TWC data remain accessible for analysis.