

Evaluation of a Restorative Milieu: Replication and Extension for 2001-2003 Discharges

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The Community Service Foundation and Buxmont Academy operate eight school-day treatment programs, 16 residential group homes, a home and community supervision program and an intensive drug-and-alcohol treatment supervision program in southeastern Pennsylvania for adjudicated delinquent and at-risk youths. All of these programs utilize what are broadly termed "restorative practices." This researcher has coined the term "restorative milieu" because the culture is comprised of many formal and informal restorative techniques and processes, not just isolated formal restorative justice interventions. This paper reports on the replication and extension of a previous evaluation, with a second wave of 858 day treatment discharges during school years 2001-02 and 2002-03. The original finding of a significant reduction in reoffending for youths participating three months or more in a CSF Buxmont Academy restorative environment was replicated with a new cohort of youths and was still evident for the original cohort at two years following discharge.

The International Institute for Restorative Practices (IIRP) is dedicated to restoring community in a disconnected world. Participatory enterprise, learning and decision-making, as opposed to authoritarian or paternalistic approaches, offer the greatest promise for improving relationships and building bonds in communities, schools and workplaces. The institute focuses its research and educational efforts on assisting professionals in education, counseling and human services, criminal justice and organizational management, in refining

and implementing the most effective restorative strategies in the respective fields of endeavor.

Supporting the work of the IIRP are two nonprofit, nongovernmental organizations, the Community Service Foundation (CSF) and Buxmont Academy (known jointly as CSF Buxmont), which operate eight school-day treatment programs, 16 residential group homes, a home and community supervision program and an intensive drug-and-alcohol treatment supervision program in southeastern Pennsylvania for adjudicated delinquent and at-risk youths.

All of these programs utilize what is broadly termed "restorative practices." Restorative practices provide high levels of both control and support to encourage appropriate behavior. CSF Buxmont has developed a culture in which "restorative" characterizes not only staff interaction with youths but staff-to-staff and student-to-student relationships as well. This researcher has coined the term "restorative milieu" because the culture is comprised of many formal and informal restorative techniques and processes, not just isolated formal restorative justice interventions.

The IIRP is responsible for evaluating the results of these programs. This paper reports on the replication and extension of a previous evaluation (McCold, 2002) with a second wave of 858 young people discharged from CSF Buxmont day treatment programs during September-August school years of 2001-02 and 2002-03.

METHODS

Building upon the experience of the previous evaluation, the protocols for data collection were revised. Rather than measuring youths at program entry and exit, interviews and evaluations were conducted upon

admission, at three-month, six-month and 12-month periods. Results regarding the effects of CSF Buxmont programs on youths' social attitudes, self-esteem, family bonding and school bonding are not reported here. (For details about these measures, see McCold, 2002.) Rather, this paper focuses on factors affecting recidivism, as measured by a petition in juvenile court for a new offense.

In the previous wave, data were collected only for youths participating in CSF Buxmont day treatment programs. While information was collected about these youths' participation in CSF community supervision programs, youths who only participated in the Intensive Program (IP) or Home and Community Supervision program (HCS) were not included in the first wave. These youths were included in this second wave of data collection. Thus, the sampling frame was enlarged to encompass all youths receiving services from CSF Buxmont.

Protocols for collecting reoffending data were the same for the first and second waves of data collection. In both, juvenile and adult court records were searched manually, using name matches supplemented with date of birth, where available. Record searches were completed for all youths from Bucks, Montgomery and Northampton counties, which constitutes 95 percent of the total.

Youths released during the previous wave were included in this record check, along with youths released during the second wave. This allows for computing recidivism rates for a 24-month period for youths in the first wave. In addition to recording petitions occurring after a juvenile was released, all petition information was collected on all youths in both samples. This allowed for a calculation of the number of prior petitions and the age upon first petition, rather than

	Total	School	JuvProb	Child&Yth	p(ChiSq)
Total	100% 858	100% 367	100% 403	100% 88	
GENDER OF STUDENT					
boys	68% 581	68% 250	72% 292	44% 39	0.000
girls	32% 277	32% 117	28% 111	56% 49	
AGE ON PROGRAM ENTRY					
<14 yrs old	11% 97	16% 57	7% 27	15% 13	0.000
14 years old	16% 133	18% 65	12% 50	20% 18	
15 years old	21% 179	21% 76	21% 83	23% 20	
16 years old	28% 236	23% 85	30% 122	33% 29	
17 years old	21% 176	19% 67	25% 102	8% 7	
18+ years old	4% 32	3% 12	5% 19	1% 1	
missing	5	5	0	0	
RACE/ETHNICITY OF STUDENT					
white	71% 522	71% 203	76% 281	50% 38	0.000
black	14% 101	16% 47	11% 42	16% 12	
Hispanic	11% 77	7% 21	9% 33	30% 23	
Asian	1% 9	2% 5	1% 3	1% 1	
Other	3% 22	3% 9	3% 11	3% 2	
missing	127	82	33	12	
COUNTY OF REFERRAL					
Bucks	48% 416	26% 95	72% 290	35% 31	0.000
Montgomery	29% 253	44% 161	17% 70	25% 22	
Northampton	14% 123	18% 65	7% 27	35% 31	
Lehigh	3% 23	1% 4	4% 16	3% 3	
All others	5% 43	11% 42	0%	1% 1	
SCHOOL YEAR DISCHARGED					
2001-02	52% 442	51% 188	53% 214	45% 40	ns
2002-03	48% 416	49% 179	47% 189	55% 48	

Figure 1. Wave 2 Day Treatment Sample

relying upon self-reported data, as was done in the first wave.

The Sample

As shown in Figure 1, the 858 youths discharged from CSF Buxmont day treatment programs were primarily boys (68 percent) and half were 16 or older when they entered the program. Most (71 percent) were white, with black youths constituting 14 percent of the sample and Hispanic youths another 11 percent. Nearly half of the young people were from Bucks County (48 percent) and there were 26 fewer students in the more recent school year. Youths referred by schools were 43 percent of the total and were slightly less likely to be male, younger, less likely to be white and much more likely to be from Montgomery County than their counterparts from probation.

Youths referred by juvenile probation were 47 percent of the total and were less likely to

be female, older, more likely white and much more likely to come from Bucks County than their counterparts referred by school. The remaining 10 percent of the sample was referred by the state social services agency, Children and Youth (C&Y). A majority of these youths were girls (56 percent), much younger, more likely to be Hispanic (30 percent) and more evenly distributed across Bucks, Montgomery and Northampton counties than either school or court-referred youths. These were similar to the patterns revealed from Wave 1 youths, except the proportion of Hispanics referred by C&Y during Wave 2 nearly doubled from Wave 1 (from 17 percent to 30 percent).

RESULTS

The previous study concluded that participation in CSF Buxmont day treatment begins to decrease the recidivism rate for youths after three months of attendance in the program

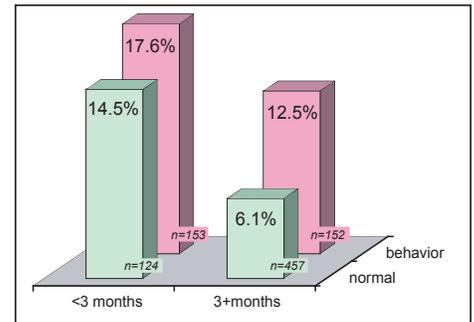


Figure 2. Wave I percent new court petitions within six month of discharge by type of discharge and length of participation (from original study).

(McCold, 2002). As reproduced in Figure 2, the rate for youths discharged for their behavior and therefore not completing the program was reduced from 18 percent to 13 percent for those participating for three months or more, a decrease of 29 percent. Youths participating in CSF Buxmont day treatment who were discharged normally after completing their stay or at the end of the school years had recidivism rates reduced from 15 percent to 6 percent for those participating for three months or more, a decrease of 58 percent.

There were three questions for the current study. First, could these results be confirmed with a different research team checking court records? Second, would these differences persist if the follow-up period had been extended to two years, instead of the six-month period used in the initial study? Third, could

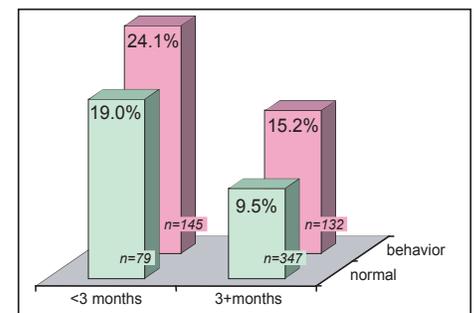


Figure 3. Wave I percent new court petitions within six month of discharge by type of discharge and length of participation (new data - old cases).

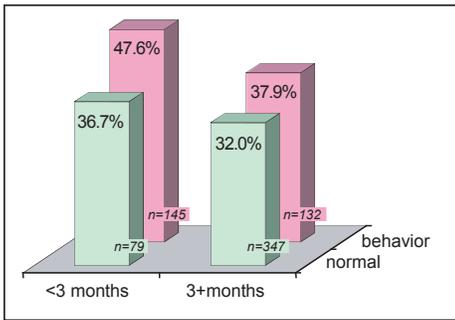


Figure 4. Wave I percent new court petitions within 24 months of discharge by type of discharge and length of participation (new data – old cases).

these results be replicated on a different cohort of young people?

As shown in Figure 3, the new court record checks on Wave I youths revealed many more new court petitions than were found during the previous effort, although the general pattern was replicated. The recidivism rate was reduced from 24 percent to 15 percent for behavior discharges for those completing three months of day treatment, a 37 percent reduction. In addition, youths discharged normally reduced their reoffending from 19 percent to 9.5 percent, a 50 percent reduction for those participating more than three months. Thus, while not identical, the general finding at six months follow-up was replicated on the Wave I sample.

As shown in Figure 4, the effect from three months of participation in CSF Buxmont day treatment still was evident by 24 months from discharge, although substantially reduced. Participation of three months or more for behavior-discharged youths was associated with a 20 percent reduction in new court petitions (from 47 percent to 38 percent), and by 13 percent for those discharged normally (from 38 percent to 32 percent). Nonetheless, the general pattern of reduced reoffending for youths with three months or more of participation in CSF Buxmont day treatment was still evident two years later.

This effect becomes more apparent in Figure 5, comparing the cumulative trends in recidivism rates by type of discharge and length of stay across the 24 months. The trends in reoffending maintain their ranking at the six-month period throughout

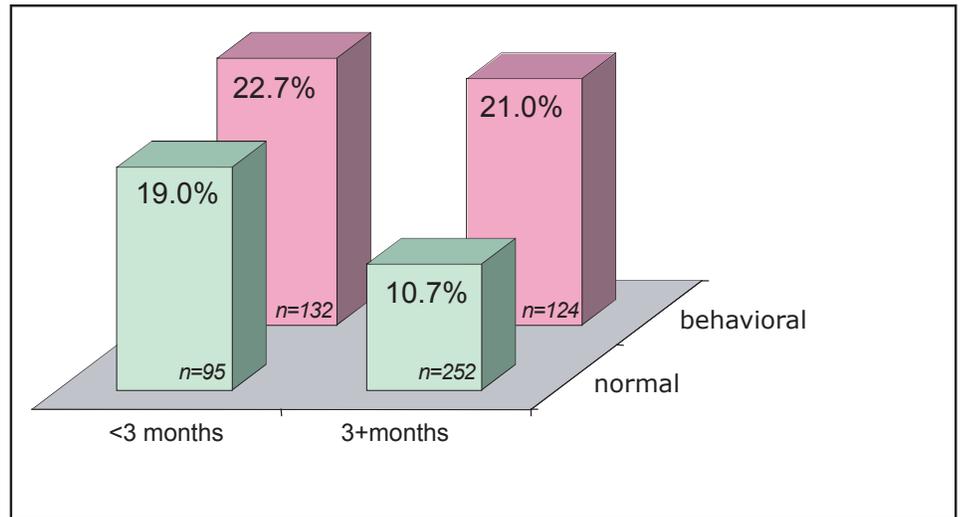


Figure 5. Wave I cumulative percent new court petitions by months follow-up for discharge type and length of stay with post-day treatment supervision separate (new data - old cases).

the 24 months, with youths discharged for their behavior with less than three months participation having the highest rate (48 percent) and those discharged normally with more than three months the lowest (32 percent). Thus, the reduction in recidivism reasonably attributable to program participation is lessened but not lost, even after two years. Youths who received CSF community services following discharge from day treatment (n=180) received an average of five months care, after which their recidivism rate accelerated through the end of the first year to nearly match that of short-stay behaviorally-discharged youths. This is the only group whose pattern of recidivism changed over the course of the two years or for whom conclusions reached at six months would have been incorrect at 24 months.

Finally, as for the new cohort of young people in Wave 2, the effect of participating in the CSF Buxmont day treatment program for more than three months displays the same pattern of new court petitions at six months as did Wave I, as shown in Figure 6. The rate of recidivism for youths discharged for their behavior declined after three months of CSF Buxmont day treatment participation by 8 percent (from 23 percent to 21 percent), compared to a 44 percent reduction for youths normally discharged (from 19 percent to 11 percent). Thus, even on a

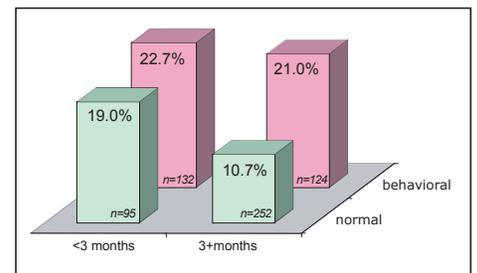


Figure 6. Wave 2 percent new court petitions within six months of discharge by type of discharge and length of participation (new data – new cases).

new cohort of youths with more concerted court record checks, the general effect of CSF Buxmont day treatment on recidivism is dramatic for youths participating for three or more months.

A number of multivariate analyses on the Wave 2 data revealed that the factors most closely related to the risk of receiving a new court petition within six months of release were gender and age on first petition. As shown in Figure 7, the younger the youth at their first court petition, the greater the rate of recidivism. Youths with no prior petitions have the lowest rate of recidivism. Moreover, the rate of recidivism is higher for boys than for girls, regardless of the age at first petition.

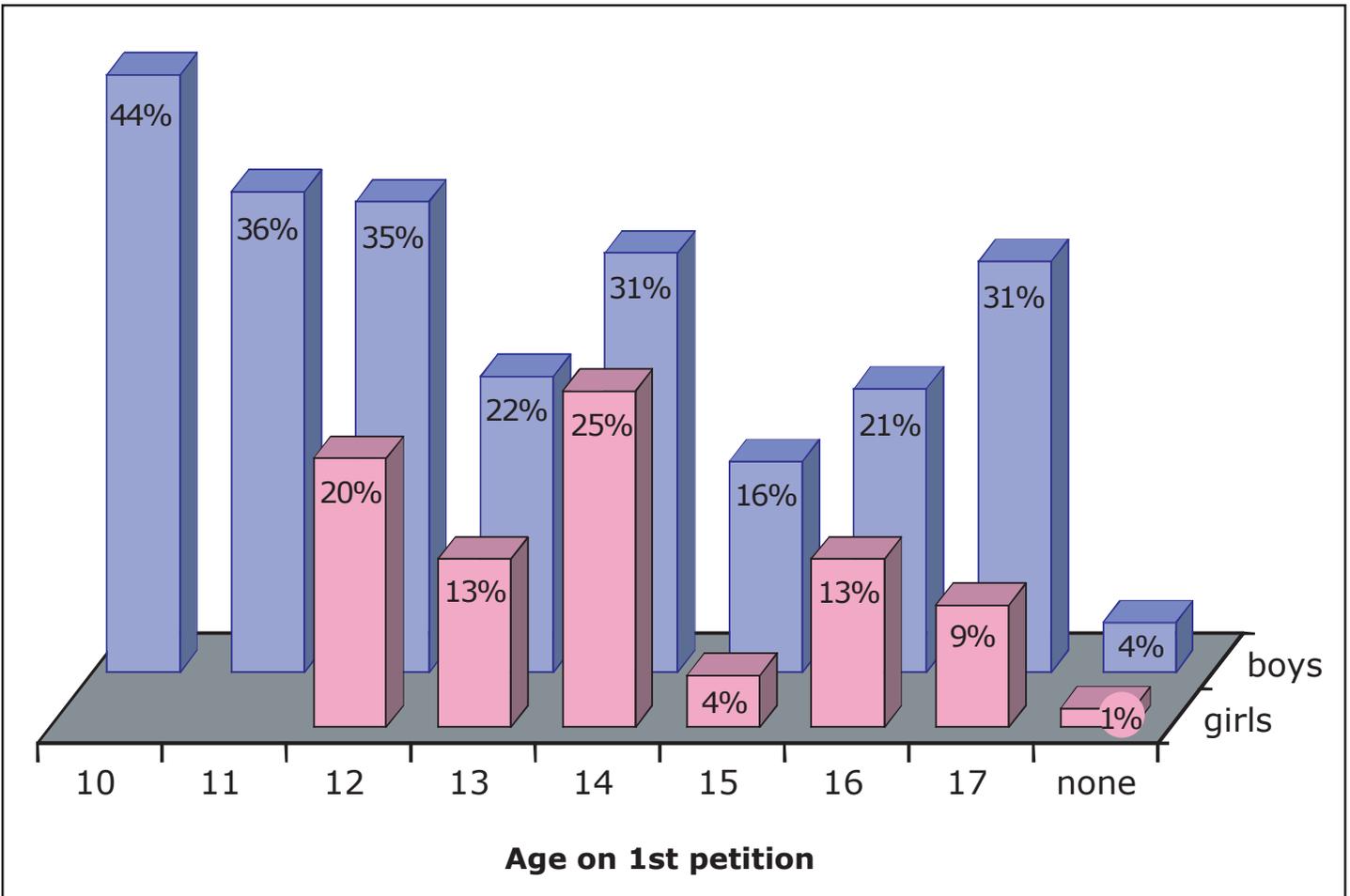


Figure 7. Wave 2 percent new court petition within six months of discharge by gender and age on first petition (excluding youths with CSF supervision services following day treatment discharge).

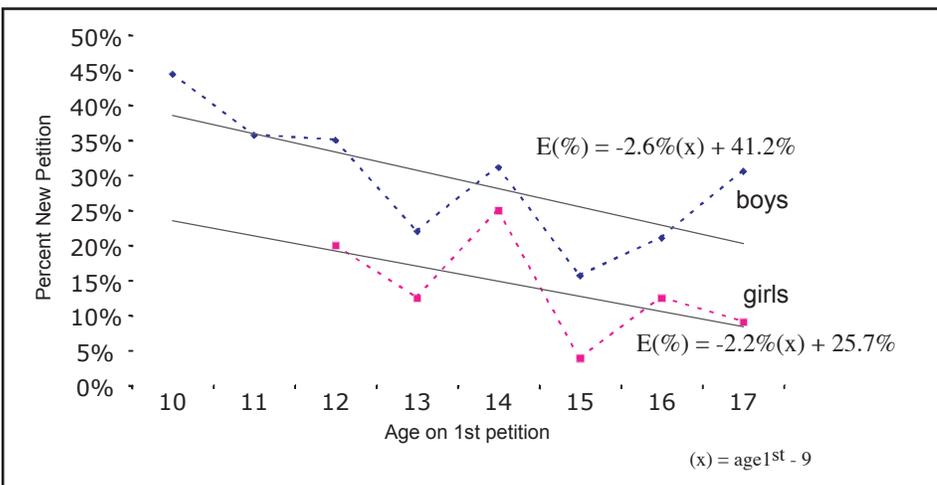


Figure 8. Wave 2 equations for risk control factors of gender and age on first petition for youth with a prior petition and without CSF follow-up supervision.

These results were highly correlated with the number of prior arrests, number of petitions, age at first out-of-home placement and risk scales computed from intake data. These other variables became insignificantly related to recidivism once gender and age at first petition were entered. Since these data were available on all youths with court checks, these two measures were used to create an expected rate of recidivism. As shown in Figure 8, the linear slopes were computed separately for boys and girls, and the expected probability for receiving a new court petition was calculated from these equations. Youths with no prior court petition were assigned an expected rate of 0 percent.

One other possible confounding factor affecting group rates of new court petitions is the effect of post-day treatment com-

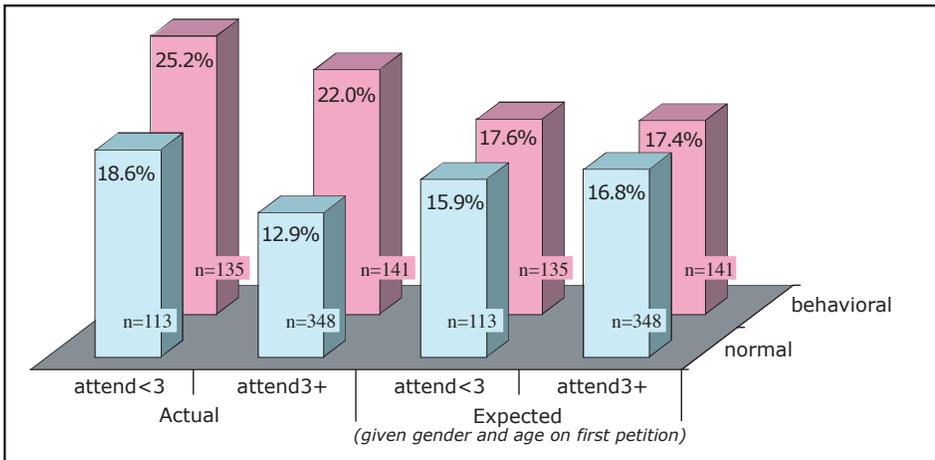


Figure 9. Wave 2 percent with new petition and expected rates within six months of discharge by reason for discharge and length of stay (excluding youth petitions for probation violation following discharge).

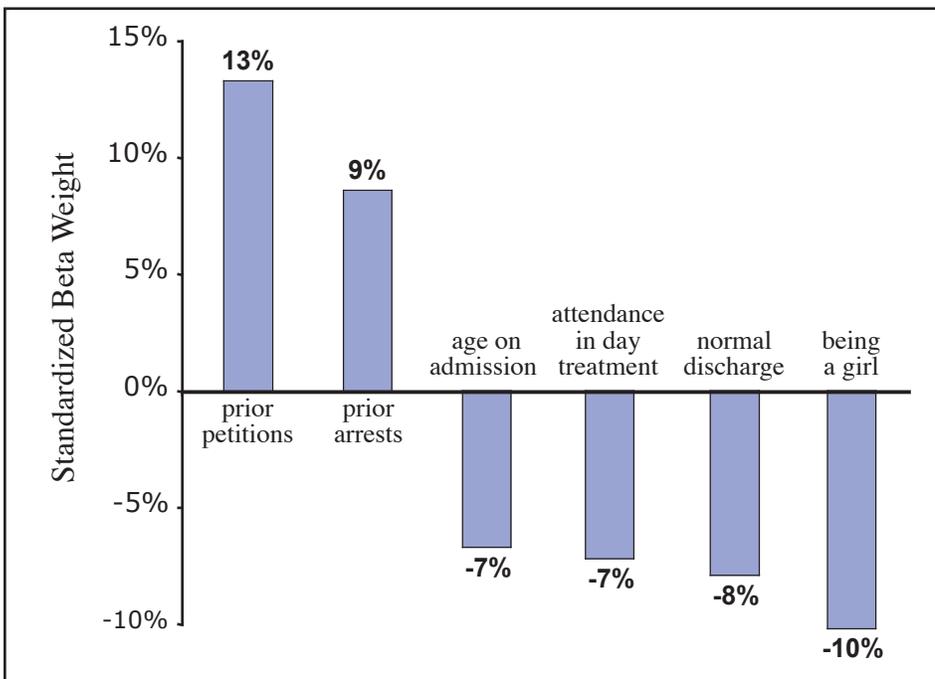


Figure 10. Wave 2 standardized beta weights for regression on percent new petitions within six months of discharge.

munity supervision on those who have their probation revoked prior to being petitioned in court for a new offense (n=42). These youths are no longer at risk of a new petition and would, therefore, bias the results. As shown in Figure 9, the reduction in new court petitions from three months participa-

tion changed little for behavior at 13 percent and was reduced to 30 percent for normal discharges when youths petitioned for probation violation were removed from the sample. In addition, as shown, the expected rates of recidivism based upon the two control variables are nearly identical for all four groups.

Therefore, prior risk of recidivism cannot be the cause of the differences observed among youths discharged during Wave 2.

Another way to demonstrate how the effect of participation in CSF Buxmont is independent from youths' pre-existing risk is through a multivariate analysis. Results found the number of days present was significantly associated with lower recidivism, even after controlling the effects related to prior record (number of prior petitions, number of prior arrests, age on admission), gender and reason for program discharge, as shown in Figure 10 (adjusted R² = 5.1%, df = 857).

Finally, a nonlinear trend of the effect of participation in CSF Buxmont day treatment on the risk of being petitioned in court on a new offense for those discharged normally was sketched in the previous study and is reproduced in Figure 11. The rate of recidivism decreased from 16 percent, falling rapidly between 12 and 20 weeks of participation, and remained near 6 percent thereafter.

Although the level of recidivism is a bit higher in the new cohort of the Wave 2 sample, the expected nonlinear effect of program participation was evident, as shown in Figure 12. In this more recent sample, the rate of recidivism decreases from 21 percent, falling rapidly between 12 and 20 weeks of participation, and remains near 7 percent thereafter.

CONCLUSIONS

Demonstrating the effect of a program through patterns of recidivism is not simple to do, absent a random assignment of cases to a control group. Random assignment equally distributes all the non-program factors known to determine recidivism between two groups. Random assignment does not explain what these equalized factors are, nor does it allow for testing how these factors interact with a young person's success with an intervention.

Outside randomized experiments, in the real world, factors likely to affect recidivism are also likely to affect program participation, and the most difficult cases will be selectively screened out. Restorative practices do hold young people accountable for their behavior. This is why cases discharged because of youths'

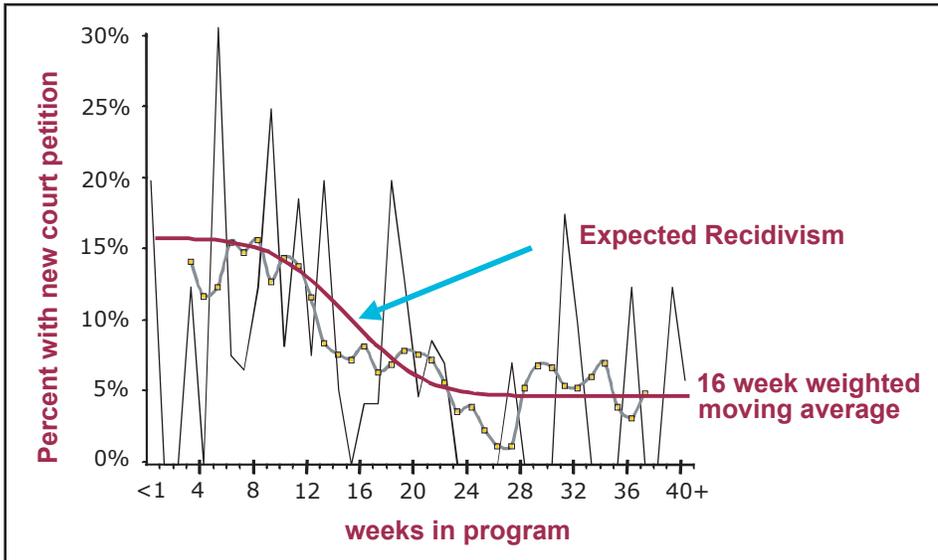


Figure 11. Wave 1 expected effect of day treatment on recidivism by length of participation for youths discharged normally (n=606) (original finding).

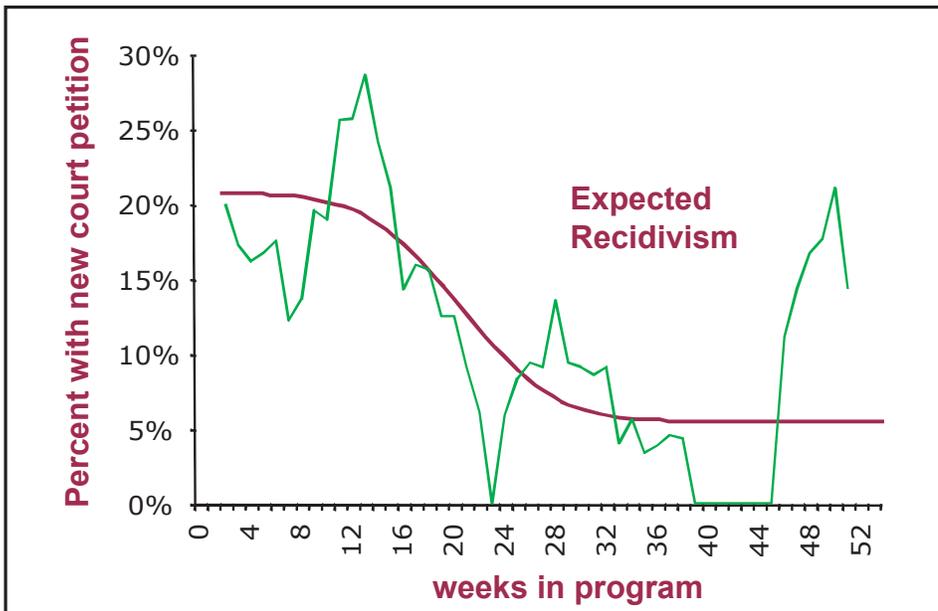


Figure 12. Wave 2 expected effect of day treatment on recidivism by length of participation for youths discharged normally (n=780) (replicated finding).

own behavior, such as a being arrested, failure to attend, running away or refusal to cooperate must be evaluated separately from those completing the program.

Presumably, the effect of any program on more difficult youths will undoubtedly be less than it is for those choosing to cooperate. In spite of a very open intake and referral policy, CSF Buxmont staff work hard to hold onto clients. The overall program completion rate of 63.8 percent was once again remarkably high for this type of community-based program.

The effect of a youth's prior history and gender are likely to have more to do with reoffending than effects of any single short-term intervention into the lives of today's teenagers. This study sought to take account of these effects in evaluating the effect of substantial participation in a restorative milieu.

A strong statistical case can be made for a causal effect when differences in recidivism rates are shown to be related to length of participation (dose effect). The case becomes even stronger when this relationship remains after statistically controlling for all the other factors affecting whether any individual will get into trouble again.

The original finding of a significant reduction in reoffending for youths participating three months or more in a CSF Buxmont Academy restorative environment has now been replicated with a new cohort of youths, and the follow-up period has been extended to two years after discharge on the original cohort. The empirical results of these two studies provide strong scientific evidence that prolonged involvement in a restorative milieu can dramatically reduce reoffending among at-risk and misbehaving young people. ☉

REFERENCES

McCold, P. (2002, November). Evaluation of a restorative milieu: CSF Buxmont School/Day Treatment programs 1999-2001 evaluation outcome technical report. Paper presented at the American Society of Criminology Annual Meeting, Chicago, Illinois. [http://www.iirp.org/Pages/erm.html]