

TEN-YEAR FOLLOW-UP EVALUATION AND ASSESSMENT
OF PROGRAM INTEGRITY OF THE
TURNING POINT PROGRAM

TECHNICAL REPORT

For Talbert House Inc.

By

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CHAPTER 1: INTRODUCTION

In 1990, the first evaluation of the Turning Point Multiple DUI Treatment Program was completed. Since its inception the program has served over 4,000 offenders. The purpose of this report is threefold. First, to provide a descriptive analysis—or “profile”—of the typical Turning Point client. Second, to assess the overall quality (i.e., program integrity) of the Turning Point Program using the Correctional Program Assessment Inventory (CPAI). Finally, we examine the results of a ten year follow-up evaluation of the original 531 Turning Point clients and 192 comparison cases.

TURNING POINT PROGRAM

The Turning Point Program is part of Talbert House Inc., a non-profit, multi-service agency consisting of eighteen programs in three areas: criminal justice, mental health, and substance abuse. The Turning Point Program was developed in response to the demand of housing and treating multiple DUI offenders in Hamilton County, Ohio.

Begun in May 1988, Turning Point started as a 40 bed, 28-day chemical dependency treatment program for male and female inmates serving sentences for multiple DUI offenses. In May of 1992 the program expanded to 52 beds, and the program altered its format to treat males exclusively. Selection for the program consists of six admission criteria: (1) multiple DUI offenses, (2) a minimum sentence of 45 days in jail, (3) security classification of “minimum,” (4) inmate motivation to seek help, (5) inmate agreement to sign a treatment agreement and participate in all programs, and (6)

Hamilton County residency. Inmates with severe psychological disorders, a history of violent behavior, an indication of a criminal lifestyle, work-release or weekend sentences, or those with serious medical problems are excluded from the program.

After serving a jail sentence of at least 30 days, offenders that are screened and selected for the program are relocated to the program site, where they reside for 28 days.¹ During that time they are not permitted to leave the facility; however, contact with visitors is permitted. After completion of the in-patient treatment, offenders are taken back to court for a modified sentence that includes an average of two years of probation. Inmates who successfully complete the program receive a significant reduction in their sentences, often resulting in early release to the community. In addition to the in-patient program, each graduate is required to complete a six month aftercare program consisting of 26 group meetings and attendance at a minimum of three Alcoholics Anonymous and/or Narcotics Anonymous meetings per week.

The five primary goals of the program are as follows:

1. To assess and diagnose the client's alcohol or drug problem.
2. To establish an individualized treatment plan for the client.
3. To provide quality clinical services to the client and their family members during treatment.
4. To provide follow-up aftercare services to support the client's recovery.
5. Abstinence from all mood-altering substances.

¹ While the program is designed for those offenders that serve 30 days in jail prior to admission, due to jail crowding and court convenience not all clients serve the mandatory time.

The program's treatment strategy includes (1) educational presentations conducted daily to assist each client in learning more about the impact of chemical dependency; (2) individual and group counseling sessions designed to help the client work through personal treatment issues and to institute personal lifestyle changes; (3) a strong family participation orientation, with counseling services provided to family members; (4) and participation in the 12 steps of Alcoholics Anonymous and/or Narcotics Anonymous. Aftercare treatment consists of continuing care for a six month period comprised of a minimum of one recovery support group session per week, regular attendance at AA/NA meetings, and regular contact with an assigned probation officer.

RESEARCH DESIGN AND METHODS

In order to evaluate the effectiveness of the Turning Point Program, a quasi-experimental design with non-random assignment to experimental and control groups was used. The original experimental group consisted of 531 offenders that participated in the Turning Point Program from its inception in 1988 until December 1989. The control group consisted of 192 multiple DUI offenders adjudicated during the same period as the experimental group who did not participate in the Turning Point Program. During the first evaluation problems with the research design—specifically, the comparability of the comparison group—resulted in the use of statistical controls to account for the differences between the groups.²

² See Latessa, E.J. and R. Langworthy (1990) Evaluation of the Turning Point Program. Cincinnati, OH: Department of Criminal Justice, University of Cincinnati.

In order to determine the long-term success rates of the original Turning Point and comparison groups, a ten-year follow-up study of new offenses was conducted for the present analysis. As with the previous evaluations, three outcome criteria were assessed: (1) a new offense of any type, (2) a new alcohol-related offense, and (3) a new DUI. As with the earlier studies, minor traffic offenses, such as speeding or probation violations, were not counted as new offenses.

Data Collection

The data used in this study describe the experimental group (531 of the original Turning Point subjects) and comparison group (192 of the original comparison group subjects), as well as the entire population of Turning Point clients since the program's inception in 1988. The data set includes information about subject demographic and experiential characteristics. The data for the comparative analysis of success rates were compiled from two principal sources: Turning Point records and Hamilton County Probation Department records. Turning Point client demographic characteristics, criminal histories, and family backgrounds were extracted from Turning Point records using a data base management system developed to serve the dual purposes of providing administrative statistics and maintaining a data base for program evaluation.

Data describing the comparison group was extracted from Hamilton County Probation Department files. The descriptions of the comparison group subjects were less complete than those for Turning Point, with limited information provided regarding family background variables. Finally, post-release arrest data were developed from record checks of the county-wide computerized arrest records.

Data Analysis

The resulting analysis thus appears in three stages. First, an analysis is conducted on the population of clients that have entered the Turning Point Program since its inception (N=4062). In doing so a “profile” is constructed of all Turning Point clients to determine what the “typical” client looks like.

Second, in order to examine the quality of the Turning Point program, we conducted an evaluation of the program using the Correctional Program Assessment Inventory (CPAI). The CPAI was developed by Paul Gendreau and D.A. Andrews, and is designed to ascertain how closely a correctional intervention program meets known principles of effective correctional treatment.³ There are six primary sections of the CPAI: (1) program implementation and leadership, (2) client pre-service assessment, (3) characteristics of the program, (4) characteristics and practices of the staff, (5) prior evaluation and outcome studies, and (6) miscellaneous items such as ethical guidelines and levels of community support. A recent study of Ohio’s community corrections facilities has shown a strong relationship between CPAI scores and recidivism.⁴

³ See Paul Gendreau and D.A. Andrews (1989). Correctional Program Assessment Inventory, New Brunswick, Canada.

⁴ Latessa, E. and A. Holsinger (1999). Evaluation of the Ohio Department of Youth Service’s Community Correctional Facilities, Cincinnati, OH: Division of Criminal Justice, University of Cincinnati.

Third, a ten-year follow-up of the original Turning Point cohort and comparison groups is presented. In essence, we are attempting to determine whether the “treatment effect” that was revealed in prior evaluations of the Turning Point Program (in 1993 and in 1996) is still present after ten years.

CHAPTER 2: PROFILE OF ALL TURNING POINT CLIENTS

As noted above, the first objective of this report is to provide a descriptive analysis—or “profile”—of all Turning Point clients. Accordingly, this chapter presents a summary of the demographic characteristics, child abuse history characteristics, prior criminal history characteristics, and substance abuse history characteristics of the population of offenders that have entered the Turning Point Program.

Demographic Characteristics

The demographic characteristics of the Turning Point clients are presented in Table 1. The separation of Turning Point clients into cohorts roughly follows the dates of prior evaluations of the Turning Point Program (those conducted in 1990 and 1993). Across each of the three cohorts Turning Point clients tend to be in their early thirties, with few falling into the 18 through 21 age group (only 5.1 percent). Table 1 also shows that most Turning Point clients are male; although significant differences were demonstrated across the cohorts, where the second cohort contained more females than the others.

Most Turning Point clients are white (roughly 77 percent of the program’s population), and most are single (although a considerable number are either married or divorced). Turning Point clients tend to be less educated than the general population, with 38 percent to 48 percent having less than an high school education, but tend to be

Table 1. Demographic Characteristics.

Variable	1 st Cohort 5/88-1/90		2 nd Cohort 1/90-4/93		3 rd Cohort 4/93-8/98		All Clients	
	N	(%)	N	(%)	N	(%)	N	(%)
Age:								
18 Thru 21	44	5.6	71	5.4	74	4.5	196	5.1
22 Thru 28	255	32.4	374	28.7	306	18.5	948	24.7
29 Thru 35	256	32.5	426	32.7	552	33.3	1269	33.0
36 and Over	233	29.6	432	33.2	724	43.7	1427	37.2
	mean =32.9		mean =34.2		mean =35.6		mean =34.5	
Sex*:								
Male	732	91.6	1174	88.4	1644	98.1	3648	93.4
Female	67	8.4	154	11.6	31	1.9	256	6.6
Race:								
White	610	77.0	1004	76.1	1302	78.1	2989	77.1
Black	179	22.6	310	23.5	353	21.2	866	22.3
Other	3	0.4	6	0.5	13	0.8	23	0.6
Marital Status*:								
Single	303	38.0	458	34.8	736	44.1	1535	39.6
Married	231	28.9	398	30.2	389	23.3	1044	26.9
Separated	91	11.4	117	8.9	137	8.2	353	9.1
Divorced	159	19.9	325	24.7	392	23.5	900	23.2
Widowed	14	1.8	18	1.4	15	0.9	47	1.2

*=Variable differs significantly across cohorts at the p<.05 level.

Table 1. Demographic Characteristics Continued

Variable	1 st Cohort 5/88-1/90		2 nd Cohort 1/90-4/93		3 rd Cohort 4/93-8/98		All Clients	
	N	(%)	N	(%)	N	(%)	N	(%)
Education*:								
Less Than High School	340	47.3	633	48.7	485	38.3	1467	44.3
High School	274	38.1	484	37.2	507	40.0	1274	38.5
More Than High School	105	14.6	184	14.1	275	21.7	568	17.2
Employed At Arrest*:								
Yes	590	75.1	857	67.2	1112	67.6	2617	68.8
No	196	24.9	418	32.8	533	32.4	1186	31.2

*=Variable differs significantly across cohorts at the p<.05 level.

more educated and more likely to be employed than most criminal offenders.⁵ Finally, most Turning Point clients were employed at the time of their most recent arrest.

Child Abuse History Characteristics

Table 2 contains information related to the child abuse history characteristics of all Turning Point clients. Most clients reported not having been a victim of child abuse (the percentage of which did, however, decline across the three cohorts). Accordingly, most of those entering the Turning Point program reported not having been the victim of either sexual abuse or incest.

Prior Criminal History Characteristics

Table 3 contains information on the prior criminal history characteristics of all Turning Point clients. Since the population of offenders in the Turning Point Program are multiple DUI offenders, each cohort had a mean number of DUIs per client above three, and nearly three quarters of all clients had three or more prior DUIs. Most clients, however, did not have extensive misdemeanor or felony records relative to most criminal offenders. As Table 3 indicates, the typical Turning Point client did not have any prior felony convictions, and most had between zero and two prior misdemeanor convictions. Roughly 40 percent of the sample had three or more prior misdemeanors. The mean values for each were 0.49 prior felony convictions and 4.29 misdemeanor convictions.

⁵ The proportion of both educated and employed clients, however, was lower in both the second and third cohorts.

Table 2. Child Abuse History Characteristics.

Variable	1 st Cohort 5/88-1/90		2 nd Cohort 1/90-4/93		3 rd Cohort 4/93-8/98		All Clients	
	N	(%)	N	(%)	N	(%)	N	(%)
Victim of Child Abuse*:								
Yes	358	45.7	460	35.1	248	16.0	1067	29.1
No	426	54.3	851	64.9	1300	84.0	2595	70.9
Victim of Sexual Abuse:								
Yes	45	5.7	83	6.3	72	4.7	200	5.5
No	742	94.3	1225	93.7	1466	95.3	3452	94.5
Victim of Incest*:								
Yes	26	5.7	66	5.1	32	2.1	125	3.4
No	742	94.3	1240	94.9	1501	97.9	3520	96.6

*=Variable differs significantly across cohorts at the p<.05 level.

Table 3. Prior Criminal History Characteristics.

Variable	1 st Cohort 5/88-1/90 N (%)	2 nd Cohort 1/90-4/93 N (%)	3 rd Cohort 4/93-8/98 N (%)	All Clients N (%)
Number of Felony Convictions*				
Zero	613 76.6	1084 81.6	1295 76.5	3227 79.4
1 Thru 2	155 19.4	191 14.4	319 18.9	667 16.4
3 or More	32 4.0 mean =0.48	54 4.1 mean =0.39	78 4.6 mean =0.52	168 4.1 mean =0.49
Number of Misdemeanor Convictions				
Zero	234 29.3	382 28.7	602 35.6	1444 35.5
1 Thru 2	237 29.6	399 30.0	372 22.0	1012 24.9
3 or More	329 41.1 mean =4.42	548 41.2 mean =3.85	718 42.4 mean =4.50	1606 39.5 mean =4.29
Number of DUI Convictions				
Zero	27 3.4	114 8.6	161 9.5	524 7.2
1 Thru 2	158 19.8	219 16.5	345 20.4	724 17.8
3 or More	615 76.9 mean =3.64	996 74.9 mean =3.48	1186 70.1 mean =3.57	2814 75.0 mean =3.59
Three or More DUIs				
Yes	N=615 (77%)	N=996 (75%)	N=1186 (70%)	N=2814 (75%)
No	N=184 (23%)	N=330 (25%)	N=411 (30%)	N=929 (25%)
Days in Jail				
	mean =51.2	N/A	mean =18.65	N/A

*=Variable differs significantly across cohorts at the p<.05 level.

Table 4. Substance Abuse History Characteristics.

Variable	1 st Cohort		2 nd Cohort		3 rd Cohort		All Clients	
	N	(%)	N	(%)	N	(%)	N	(%)
Client's Drug of Choice*:								
Marijuana	61	8.0	73	5.5	113	7.2	251	6.8
Cocaine	24	3.1	57	4.3	36	2.3	119	3.2
Alcohol	657	86.1	1155	87.7	1411	90.0	3236	88.2
Stimulants	2	0.3	1	0.1	2	0.1	5	0.1
Depressants	11	1.4	22	1.7	0	0.0	33	0.9
Hallucinogenics	1	0.1	0	0.0	0	0.0	1	0.0
Other	7	0.9	9	0.7	5	0.3	22	0.6
At Least One Family Member Abuses Alcohol*:								
Yes	659	85.3	1055	85.0	862	70.0	2589	79.4
No	114	14.7	186	15.0	369	30.0	670	20.6
At Least One Family Member Abuses Drugs*:								
Yes	277	35.8	432	35.0	253	21.4	964	30.1
No	496	64.2	804	65.0	930	78.6	2240	69.9
Age At First Use of Alcohol	mean = N/A		mean =14.9		mean =15.3		mean =15.2	
Age At First Use of Drugs	mean = N/A		mean =17.3		mean =16.5		mean =16.7	

*=Variable differs significantly across cohorts at the p<.05 level.

Substance Abuse History Characteristics

Table 4 displays the substance abuse history characteristics of all Turning Point clients. Despite significant differences across the three cohorts, the overwhelming drug of choice among Turning Point clients is alcohol (the preference of roughly 88 percent of the population of clients). Accordingly, most of the clients had at least one family member that abuses alcohol (from 75 percent to 85 percent). As such, the age at which the typical Turning Point offender first uses alcohol or drugs is near the mid-teens (15.2 years old and 16.7 years old for alcohol and drugs, respectively).

CONCLUSIONS

Although certain variables did differ significantly across cohorts (i.e., some of the demographic and experiential variables), these differences were rather small. We can therefore conclude with confidence that the characteristics of Turning Point clients have remained relatively stable over the last ten years. Thus, given the assessment of the total population of Turning Point clients since the program's inception in 1988, the profile of the "typical" Turning Point client would be:

1. A white male in his early thirties.
2. Single (or possibly married or divorced, but unlikely to be either separated or widowed).
3. Employed at arrest, yet is likely to have less than a high school education.
4. Relatively unlikely to have been a victim of child abuse, sexual abuse, or incest.
5. A fairly high-rate DUI offender (with an average number of DUIs over three).

6. One who chooses alcohol as their preferred drug, started drinking in their mid-teens, and has at least one family member that abuses alcohol.

CHAPTER 3: CORRECTIONAL PROGRAM ASSESSMENT INVENTORY

In an attempt to measure the program “quality” of the Turning Point Program, a Correctional Program Assessment Inventory (CPAI) was conducted. Each section of the CPAI is scored as either “very satisfactory” (70 percent to 100 percent), “satisfactory” (60 percent to 69 percent), “satisfactory but needs improvement” (50 percent to 59 percent), or “unsatisfactory” (less than 50 percent). The scores from all six areas are totaled and the same scale is used for the overall program score. Not all six areas are given equal weight and some items may be considered “not applicable,” in which case they are not included in the scoring.

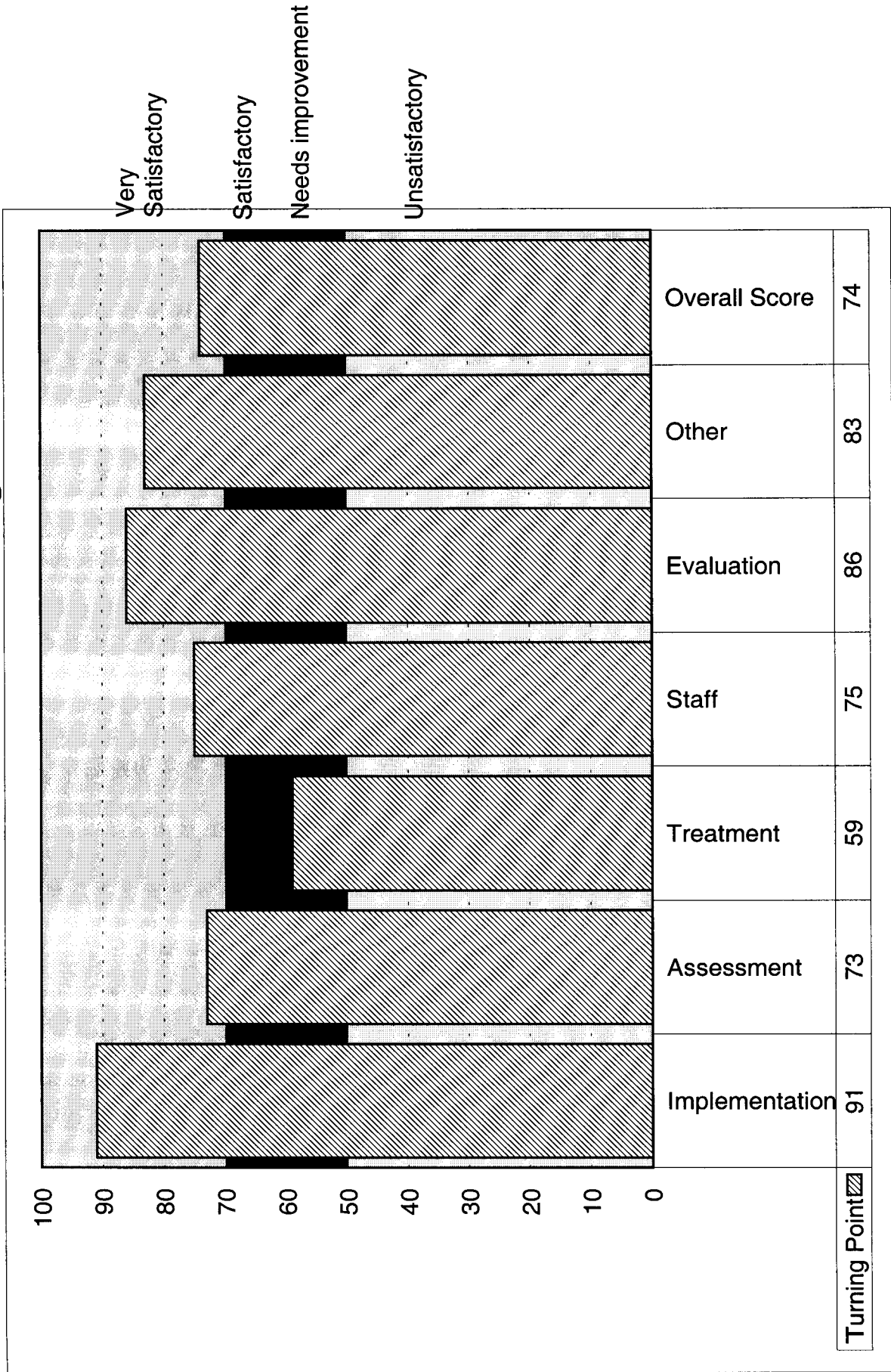
Data were collected through structured interviews with selected program staff in November 1997. Other sources of information reviewed were policy and procedure manuals, treatment materials and curriculum, a sample of case files, and other selected program materials. Figure 1 shows the CPAI scores for the Turning Point Assessment in each of the six areas, while Figure 2 compares the Turning Point scores to average scores from over 100 programs assessed nationally.

Program Implementation

This section examines how much influence the current program directors had in designing and implementing the program, his or her qualifications and experience, his or her involvement with the staff and the offenders, and the overall implementation of the program. In the “program implementation” area Turning Point scored in the “very satisfactory” range, and nearly 20 percentage points above average. Generally, we found

Figure 1.

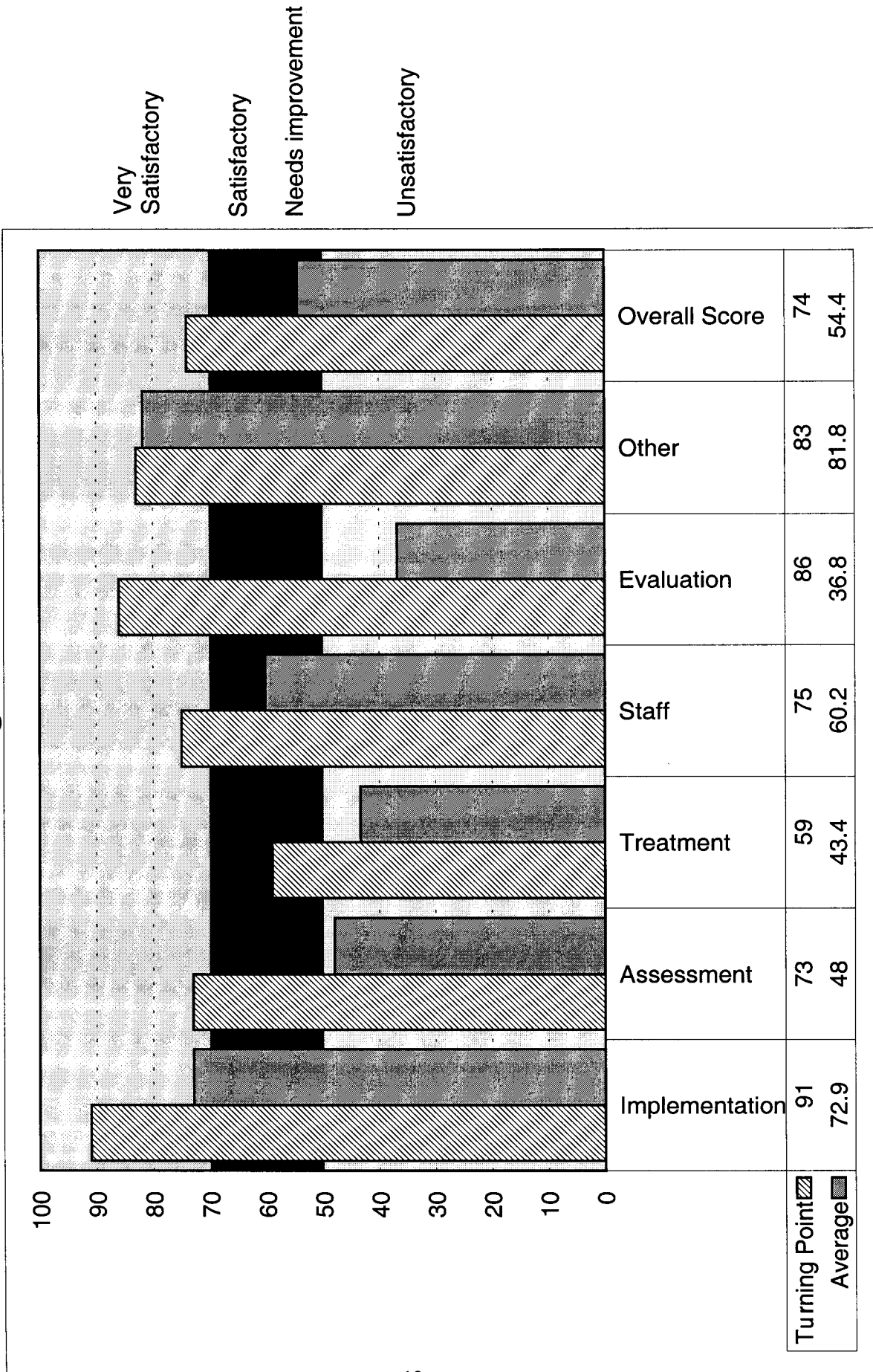
CPAI Results for Turning Point



Conducted November 1997. Very satisfactory=70% or higher, Satisfactory=60-69%, Needs improvement=50-59%, Unsatisfactory=less than 50%.

Figure 2.

CPAI Results for Turning Point Compared to Average



The average is based on 108 CPAI assessments across a wide range of programs. Very satisfactory=70% or higher, Satisfactory=60-69%, Needs Improvement=50-59%, Unsatisfactory=less than 50%.

that there was qualified leadership, and that the program was well-designed and implemented.

Client Pre-Service Assessment

This section includes three basic areas: selection of offenders, the assessment of specific characteristics, and the manner in which these characteristics are assessed. The “client pre-service assessment” scores indicate that the program scored in the “very satisfactory” range, and well above average in this area. The program is receiving appropriate clients, and a number of risk and needs areas are assessed using standardized and objective instruments. The program does not assess responsivity factors.

Program Characteristics

This section examines the degree to which the program targets crime producing behaviors, the type of treatment provided, how the treatments are used in the program, and how offenders are prepared to return to the community.

The Turning Point score in this area was in the high range of “satisfactory but needs improvement,” which again was above average. The strength of the program in this area included that the program targets a major criminogenic need (substance abuse), has a detailed treatment manual, clients are involved in structured activities for a majority of the time, there are completion criteria, and the program uses behavioral approaches. There were also several major shortcomings in this area, including that the program does not vary or match treatment by risk or responsivity factors. Furthermore, rewards and punishers are not used in the most effective manner.

Staff Characteristics

This section concerns the qualifications, experience, stability, training, and involvement of the program staff. The Turning Point Program scored in the “very satisfactory” range. Overall, the staff were found to be extremely well-qualified, experienced, and have remained with the program for over two years.

Evaluation

This section centers on the types of feedback, assessments, and evaluations used to monitor how well the program is functioning. The “evaluation” section revealed that the Turning Point Program scored in the “very satisfactory” range, and over twice as high as the national average. The program has quality assurance processes in place, and there have been several published outcome studies of the program.

Other

The final section in the CPAI includes miscellaneous items pertaining to the program such as changes in the program, community and funding support, completeness of files, and presence of an advisory board. Turning Point scored “very satisfactory” in this area. Client records are complete and confidential, ethical guidelines are in place, and there have been no disruptions in program funding or community support. The only area of concern was that the placement of another program in the facility was disruptive.

CONCLUSIONS

Overall, the Turning Point Program scored in the “very satisfactory” range of the scale, and meets 74 percent of the principles of effective intervention. This indicates that program integrity is very high. It should also be noted that less than 10 percent of the programs we have assessed nationally have scored in this range. The program is designed around an effective treatment model, the leadership and staff are well-qualified, offenders are provided structured behavioral treatment, and the program has quality assurance and evaluation mechanisms to ensure program integrity is maintained.

CHAPTER 4: THE TEN-YEAR FOLLOW-UP EVALUATION

In 1993, Langworthy and Latessa conducted a one-year follow-up evaluation to determine whether Turning Point clients performed better than other chronic drunk drivers after they were released from custody; a four-year follow-up replication of their study was published in 1996.⁶

SUMMARY OF THE PREVIOUS EVALUATIONS

Initially, Langworthy and Latessa's evaluation in 1993 was to be conducted via a quasi-experimental design with non-random assignment to experimental (Turning Point) and control groups (probationers). The experimental group consisted of the population of offenders (N=531) that participated in the Turning Point Program from its inception in 1988 to December 1989. The control group consisted of 192 multiple DUI offenders adjudicated during the same time period as the experimental group, but did not participate in the Turning Point Program. Data describing Turning Point subjects' demographic characteristics, personal histories, program performance, and post-release performance were collected by the Turning Point staff. Data describing the comparison group subjects' demographic characteristics were collected by University of Cincinnati staff,

⁶ For the complete results from these studies see: Edward J. Latessa and Robert Langworthy (1993), "Follow-Up Evaluation of the Turning Point Program." Technical Report for Talbert House Inc., and Robert Langworthy and Edward J. Latessa (1993), "Treatment of Chronic Drunk Drivers: The Turning Point Project." Journal of Criminal Justice 21:265-76; Robert Langworthy and Edward J. Latessa (1996), "Treatment of Chronic Drunk Drivers: A Four-Year Follow-Up of the Turning Point Project." Journal of Criminal Justice 24:273-81.

and post-release (from jail) performance were collected by the Hamilton County Probation Department.

The two groups differed significantly across a number of substantively significant variables; thus, statistical control (as opposed to experimental control) became necessary. Specifically, Langworthy and Latessa attempted to isolate a “treatment effect” statistically by controlling for each client’s sex, age, employment status, number of children, number of prior DUIs, time at risk, and the number of days spent in jail. Upon controlling for these variables, a moderate but statistically significant treatment effect was revealed for any new offense, any new alcohol-related offense, and any new DUI offense (between a 4.7 percent and 12.9 percent reduction in recidivism). Accordingly, the treatment effect appeared strongest among the truly chronic DUI offenders: Turning Point clients with 3 or more DUIs who have also spent 30 or more days in jail had a 16.6 percent lower recidivism rate than the comparison group.

The four-year follow-up evaluation indicated similar results. Again, although the “treatment effect” was somewhat sporadic across the various subgroups in the analysis, the Turning Point clients did perform significantly better than the comparison group cases across each of the outcome criteria. The treatment effect was also strongest among the most serious DUI offenders (nearly 11 percent for any new DUI offense), even though it was smaller in magnitude than in the one-year follow-up evaluation.

Thus it appears that the Turning Point Program was successful in treating the chronic DUI offender over a four-year period. A question still remains, however, concerning how long such a treatment effect may last. To address this question, the

present analysis is a replication of Langworthy and Latessa's (1993) original evaluation and four-year follow-up replication study using a ten-year follow-up period.

RATES OF SUCCESS

Table 5 displays the rates of success for both Turning Point and comparison group cases over the ten-year period. Follow-up data from the Hamilton County Probation Department were available for all 531 of the original Turning Point group subjects, and 192 for the original comparison group. Although the two groups, on average, were at risk in the community for a comparable amount of time, the Turning Point clients had higher rates of success on each of the three outcome measures.

Excluding traffic and minor offenses, Turing Point clients were nearly 30 percent more successful in avoiding any new offense, 2.8 percent more successful for a new alcohol-related offense, and 8.9 percent more successful for a new DUI offense. Accordingly, the differences across the Turning Point and comparison groups on the "any new offense" and any new "DUI" measures were statistically significant. The next question that needs to be addressed is whether this apparent treatment effect will still remain after controlling for the substantive differences between groups.

STATISTICAL ESTIMATES OF SUCCESS

The following presents a series of logistic regression equations that assess the effect of Turning Point on the likelihood of success while controlling for differences

Table 5. Turning Point and Comparison Group Days at Risk and Percent Successful.

	Mean days at Risk	<u>Percent Successful</u>		
		Any new offense*	Alcohol related	DUI**
Turning Point (n=531)	3385	33.9	51.8	63.6
Comparison Group (n=192)	3445	3.6	49.0	54.7

*=Statistically significant at $p < .01$ (two-tailed).

**=Statistically significant at $p < .05$ (one-tailed).

between groups. Logistic regression permits us to estimate the likelihood of a success rather than a failure while controlling for a number of other variables (in this case variables that distinguish the Turning Point and comparison groups). Our interest in these regressions is twofold. First, we use these equations to determine whether the Turning Point treatment (treatment is dummy coded) produces a statistically significant difference in post-release performance. Second, we use the equations to estimate the effect of Turning Point treatment on success rates. This later analysis is focused on the substantive significance of the group differences.

The regressions are presented in several stages that, eventually, sequentially limit the cases to those that met the original program eligibility criteria (3 or more prior DUIs and 30 or more days in jail). These equations allow us to determine whether the design population performs differently than the assigned population.

Total Pooled Sample

The pooled sample includes all cases in the original Turning Point and comparison groups for which post-release performance measures could be calculated; in all, the sample includes a total of 663 cases. Table 6 presents the set of logistic regression equations for the pooled sample that predict the likelihood of success/failure employing three different success criteria. Our interest is in the coefficient associated with Turning Point which indicates that across all three outcome criteria Turning Point clients were more likely to succeed than comparison group members. Since the “Turning Point” variable was dummy coded to values of zero and one (where a 1 indicates a failure), the negative coefficients indicate lower likelihood of failure.

Table 6. Logistic Regression of the Likelihood of Success of Turning Point (Original Cohort) and Other Multiple DUI Offenders Controlling for Demographic and Experiential Differences.

NOTE: Failure codes are 1 if a new offense occurs and 0 if no new offense occurs. The coefficients, therefore predict a 1. Thus, negative coefficients indicate a lower likelihood of a 1 (i.e., a lower likelihood of failure), and positive coefficients indicate a higher likelihood of a 1 (i.e., a higher likelihood of failure).

These logistic regression equations are translated to success rates for Turning Point and comparison group subjects and appear in Figure 3.

[Logit coefficients]

	Any new offense	Any new alcohol offense	New DUI
Sex (0=male, 1=female)	-.775*	-.662*	-.421
Age (years)	-.055**	-.037**	-.031**
Job (0=employed, 1=unemployed)	.327	.280	.166
Children (number)	.168*	.096	.083
Prior DUIs (# convictions)	.011	.102*	.102*
Time at risk (days)	.001**	-.000	.000
Time jailed (days)	.004*	.003*	.003**
Turning Point (0=no, 1=yes)	-3.434**	-.335	-.442*
Constant	6.977**	.889	.164
-2 log likelihood (8 df) (N=663)	614.402**	885.851**	862.210**

*= statistically significant at p<.05 (two-tailed).

**= statistically significant at p<.01 (two-tailed).

Figure 3. Pooled Sample

Percent Successful (all differences are significant at $p < .05$)

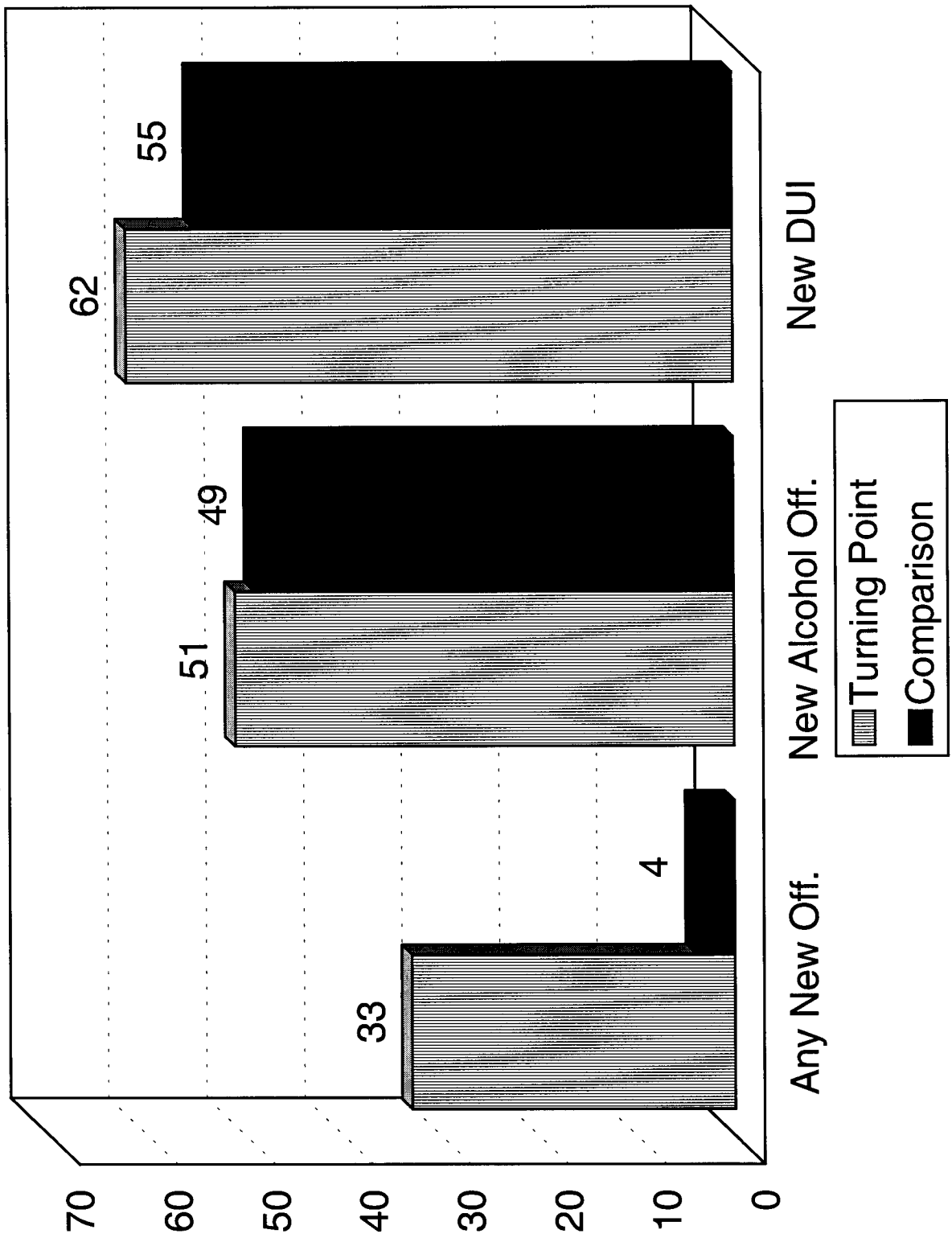


Figure 3 compares the estimated success rates for Turning Point clients and comparison group members. The success rate estimates were derived from the regression equations in Table 6.⁷ Consistent with the regression coefficients, the success rates indicate that Turning Point clients were 29 percent more successful for any new offense, 2 percent more successful for any new alcohol-related offense, and 7 percent more successful for any new DUI offense. These analyses show that although the differences across groups are statistically significant, the magnitude of these differences is rather small (with the exception of the any new offense category).

Three or More Prior DUIs

The Turning Point Project was originally intended to serve a select group of drunk driving clients—those with three or more prior DUIs who served at least 30 days in jail prior to being admitted to Turning Point. In the initial assessment of Turning Point it was apparent that some individuals did not meet these admission criteria so the analysis was focused more closely on persons originally targeted by the project. Table 7 presents the set of logistic regression equations for the 524 subjects from both groups who had the requisite 3 or more prior DUIs. Again, the statistically significant and negative coefficients in each model indicate that Turning Point clients are significantly more likely to succeed than those in the comparison group.

⁷ The estimated success rates were calculated in several stages. First, the natural log-odds of success rather than failure was estimated for the average individual. This was accomplished by multiplying median values for each variable by its coefficient and summing. Then the antilog of the estimate was taken giving us the odds of success. Finally, the percent successful was estimated from the odds.

Table 7. Logistic Regression of the Likelihood of Success of Turning Point (Original Cohort) and Other Multiple DUI Offenders (Original Comparison Group) with Three or More Prior DUI Convictions Controlling for Demographic and Experiential Differences.

NOTE: Failure codes are 1 if a new offense occurs and 0 if no new offense occurs. The coefficients, therefore predict a 1. Thus, negative coefficients indicate a lower likelihood of a 1 (i.e., a lower likelihood of failure), and positive coefficients indicate a higher likelihood of a 1 (i.e., a higher likelihood of failure).

These logistic regression equations are translated to success rates for Turning Point and comparison group subjects and appear in Figure 4.

[Logit coefficients]

	Any new offense	Any new alcohol offense	New DUI
Sex (0=male, 1=female)	-.986*	-.599	-.423
Age (years)	-.068**	-.043**	-.031**
Job (0=employed, 1=unemployed)	.253	.112	.115
Children (number)	.161*	.103	.069
Prior DUIs (# convictions)	.109	.104	.087
Time at risk (days)	.001**	-.000	.000
Time jailed (days)	.005*	.003*	.004**
Turning Point (0=no, 1=yes)	-3.849**	-.527*	-.459***
Constant	6.911**	1.175*	.309
-2 log likelihood (8 df) (N=524)	489.340**	694.537**	686.147**

*= statistically significant at $p < .05$ (two-tailed).

**= statistically significant at $p < .01$ (two-tailed).

***=statistically significant at $p < .05$ (one-tailed as predicted).

Figure 4. 3+ DUIs

Percent Successful (all differences are significant at $p < .05$)

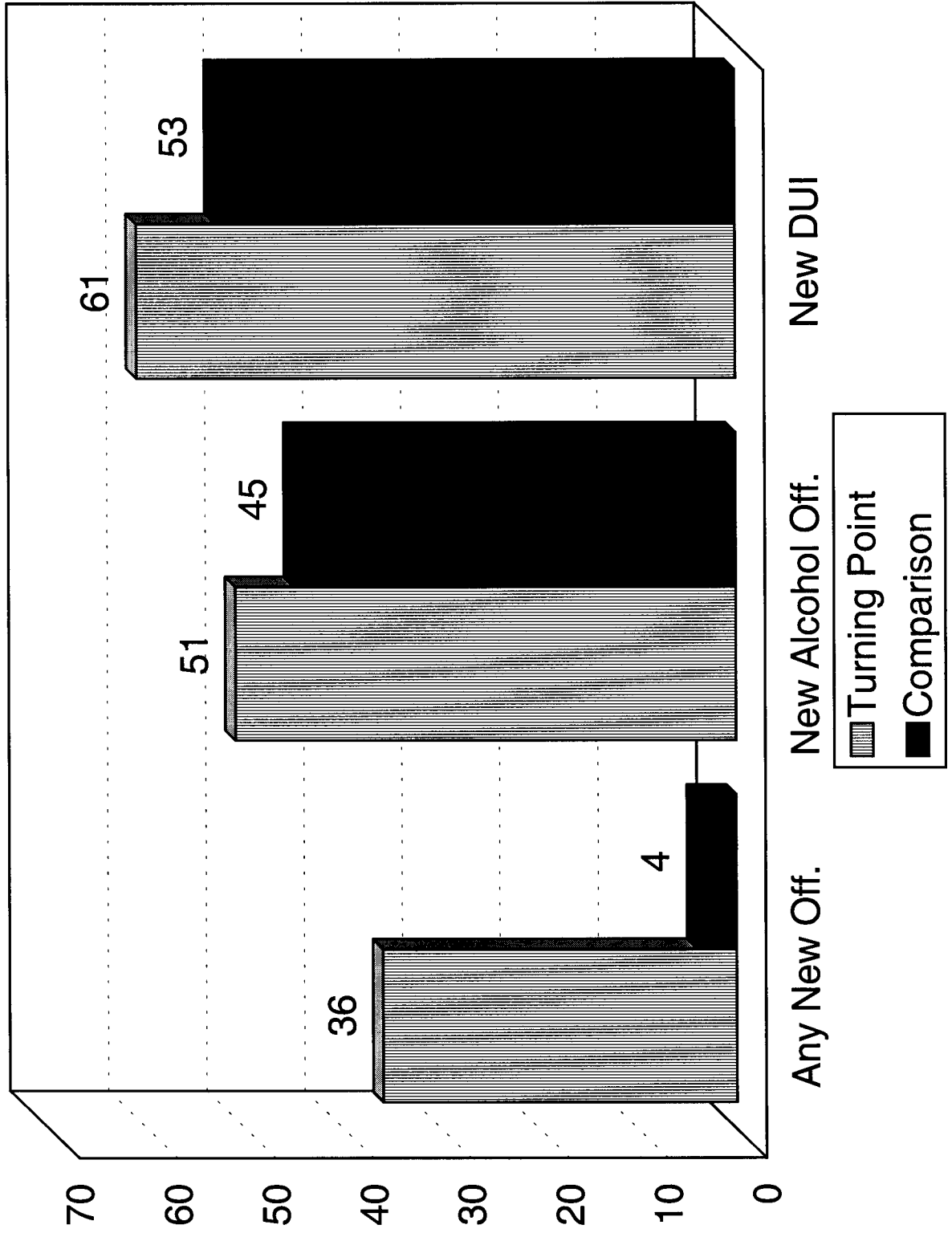


Figure 4 indicates the estimated rates of success for cases in each group. Consistent with the logistic regression equations, Turning Point subjects, on average, were 32 percent more successful for any new offense, 6 percent more successful for any new alcohol-related offense, and 8 percent more successful for any new DUI offense. Overall, these estimated success rates parallel those from the pooled sample, with the magnitude of the treatment effect for any new offense increasing 3 percent, and any new alcohol-related offense increasing 4 percent.

Thirty or More Days in Jail

The initial assessment also determined that not all individuals in the sample had served at least 30 days in jail prior to being released either to probation or Turning Point. Table 8 presents the set of equations for the 434 subjects who had served the requisite 30 days in jail. Again, we note that, except for the new alcohol-related offense variable, all Turning Point coefficients are negative and statistically significant. This suggests, as with the previous two logistic regression models, that Turning Point clients performed better upon release than comparison group members across each outcome criteria.

Figure 5 compares the estimated success rates for Turning Point clients and comparison group members who served 30 or more days in jail. The results show that Turning Point clients were 26 percent more successful for any new offense, 6 percent more successful for any new alcohol-related offense, and 10 percent more successful for any new DUI offense. This suggests that the treatment effect is remaining stable across the various subgroups, and that as we approach the design population the treatment effect for any new DUI is growing in magnitude.

Table 8. Logistic Regression of the Likelihood of Success of Turning Point (Original Cohort) and Other Multiple DUI Offenders (Original Comparison Group) with Thirty or More Days in Jail Controlling for Demographic and Experiential Differences.

NOTE: Failure codes are 1 if a new offense occurs and 0 if no new offense occurs. The coefficients, therefore predict a 1. Thus, negative coefficients indicate a lower likelihood of a 1 (i.e., a lower likelihood of failure), and positive coefficients indicate a higher likelihood of a 1 (i.e., a higher likelihood of failure).

These logistic regression equations are translated to success rates for Turning Point and comparison group subjects and appear in Figure 5.

[Logit coefficients]

	Any new offense	Any new alcohol offense	New DUI
Sex (0=male, 1=female)	-.423	-.356	-.089
Age (years)	-.059**	-.047**	-.044**
Job (0=employed, 1=unemployed)	.328	.273	.247
Children (number)	.177*	.086	.118
Prior DUIs (# convictions)	.080	.231**	.162**
Time at risk (days)	.001**	.000	.000
Time jailed (days)	.008**	.003	.004*
Turning Point (0=no, 1=yes)	-2.753**	-.384	-.493***
Constant	5.610**	.519	.198
-2 log likelihood (8 df) (N=434)	424.035**	566.225**	556.158**

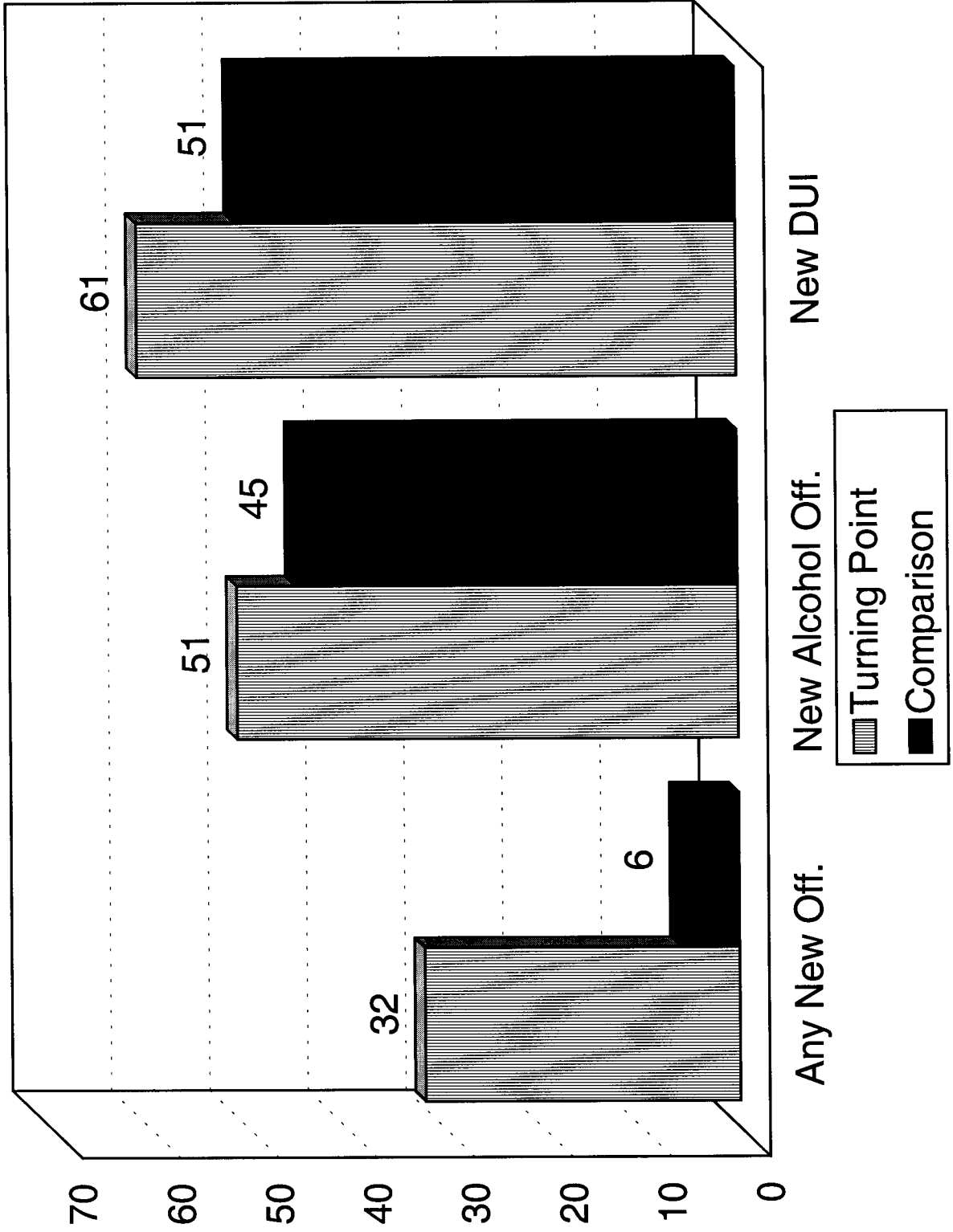
*= statistically significant at p<.05 (two-tailed).

**= statistically significant at p<.01 (two-tailed).

***=statistically significant at p<.05 (one-tailed as predicted).

Figure 5. 30+ Days

Percent Successful (all differences are significant at $p < .05$)



The Design Population

The initial assessment revealed that just 56 percent (N=406) of the pooled sample met both of the Turning Point Program criteria. Specifically, just 406 of the 724 pooled sample had 3 or more prior DUIs and had served at least 30 days in jail prior to release to either probation or Turning Point. Table 9 presents the set of logistic regression equations for the remaining 350 subjects who meet the Turning Point Program's admission criteria. Once again we note that each of the Turning Point coefficients across the three outcome measures are negative and statistically significant; indicating that Turning Point clients were significantly more successful in post-release performance than those in the comparison group.

Figure 6 presents the estimated success rates for Turning Point and comparison group cases for the design population. Again, paralleling the logistic regression equations in Table 9, Turning Point clients were, on average, 30 percent more successful for any new offense, 10 percent more successful for any new alcohol-related offense, and 14 percent more successful for any new DUI offense. Consistent with Langworthy and Latessa's previous evaluations the treatment effect for new DUI offenses increased when the model was applied to the design population (this held true as well as for new alcohol offenses, and to a lesser degree any new offense).

Table 9. Logistic Regression of the Likelihood of Success of Turning Point (Original Cohort) and Other Multiple DUI Offenders (Original Comparison Group) with Three or More prior DUI Convictions and Thirty or More Days in Jail Controlling for Demographic and Experiential Differences.

NOTE: Failure codes are 1 if a new offense occurs and 0 if no new offense occurs. The coefficients, therefore predict a 1. Thus, negative coefficients indicate a lower likelihood of a 1 (i.e., a lower likelihood of failure), and positive coefficients indicate a higher likelihood of a 1 (i.e., a higher likelihood of failure).

These logistic regression equations are translated to success rates for Turning Point and comparison group subjects and appear in Figure 6.

[Logit coefficients]

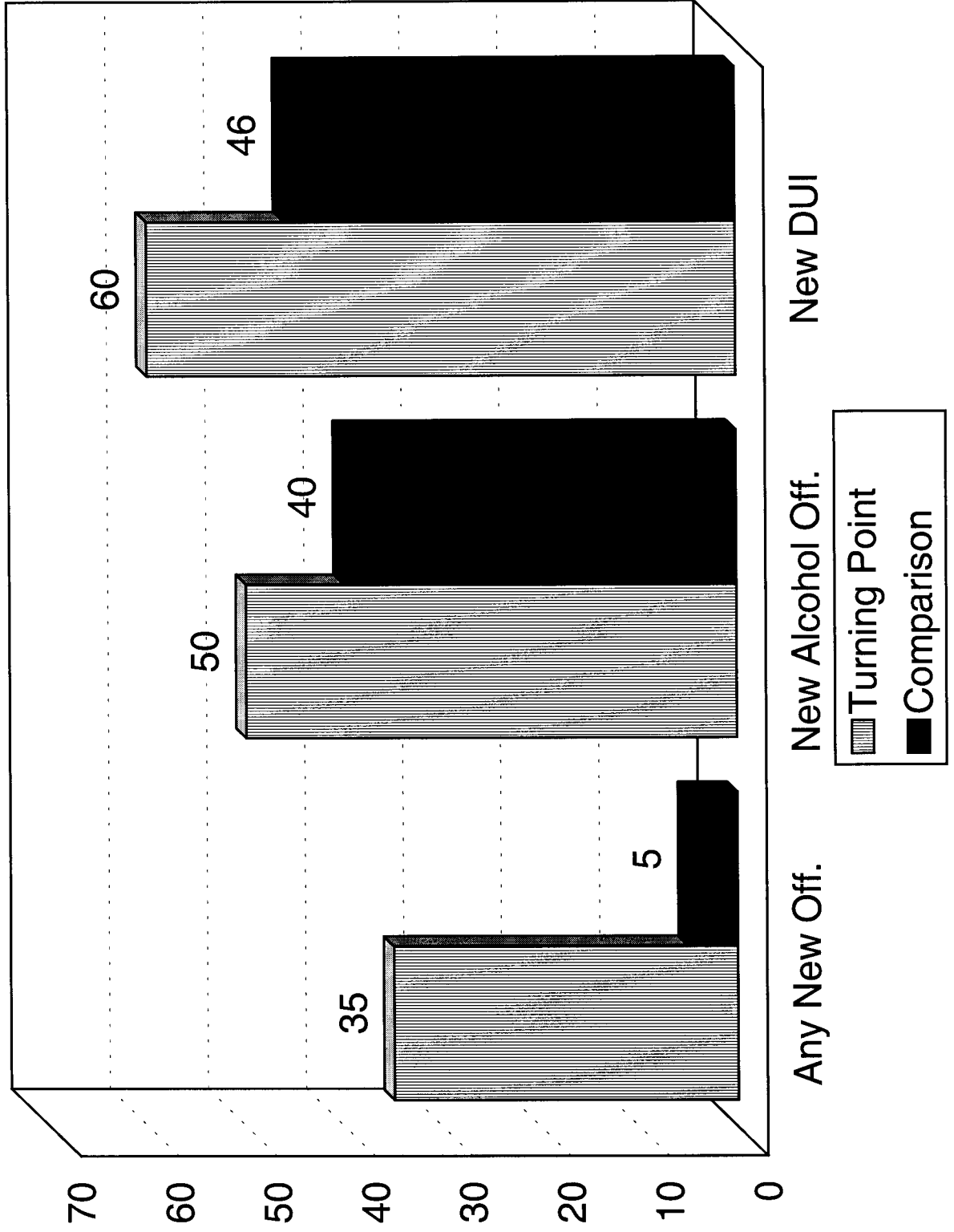
	Any new offense	Any new alcohol offense	New DUI
Sex (0=male, 1=female)	-.662	-.298	-.064
Age (years)	-.070**	-.055**	-.049**
Job (0=employed, 1=unemployed)	.253	.112	.165
Children (number)	.150	.086	.106
Prior DUIs (# convictions)	.197*	.242**	.164*
Time at risk (days)	-.001**	.000	.000
Time jailed (days)	.008**	.003	.005*
Turning Point (0=no, 1=yes)	-3.229**	-.649*	-.653*
Constant	5.513**	1.045	.504
-2 log likelihood (8 df) (N=350)	339.080**	451.956**	447.398**

*= statistically significant at p<.01 (two-tailed).

**= statistically significant at p<.05 (two-tailed).

Figure 6. 3+DUIs, 30+ Days

Percent Successful (all differences are significant at $p < .05$)



RATES OF FAILURE OVER TIME

Figure 7 presents the results of an analysis tracking those in the original Turning Point cohort that failed. Treating the total number of clients who failed as the baseline (i.e., 100 percent), the bars on the chart indicate the percentage of Turning Point clients who failed by year. The percentages from 1990 up to 1998 show a general linear pattern of increase in rates of failure for new DUIs, where roughly an additional ten percent of Turning Point offenders will fail with a new DUI in each additional year. Although this pattern may suggest that the rates of failure do not appear to be “tapering off” over the last ten years, the decrease in the rates of failures over the last two to three years may suggest that if a Turning Point client is going to fail with a new DUI, he/she has probably already done so.

TREATMENT EFFECTS OVER TIME

Figure 8 indicates the overall treatment effects for a new DUI for the “design population” for each of the three evaluations of the Turning Point Program (from the one, four, and ten-year follow-up evaluations). As the figure shows, the treatment effect dropped from about 16 percent to 11 percent from the one-year to the four-year evaluation. This downward trend in the success of the Turning Point clients relative to the comparison group cases did not, however, continue over time. Rather, the treatment effect experienced a “rebound” and is now stronger than it was after four years, and is

Figure 7. DUI Failure Rates By Year

(For Those Who Failed)

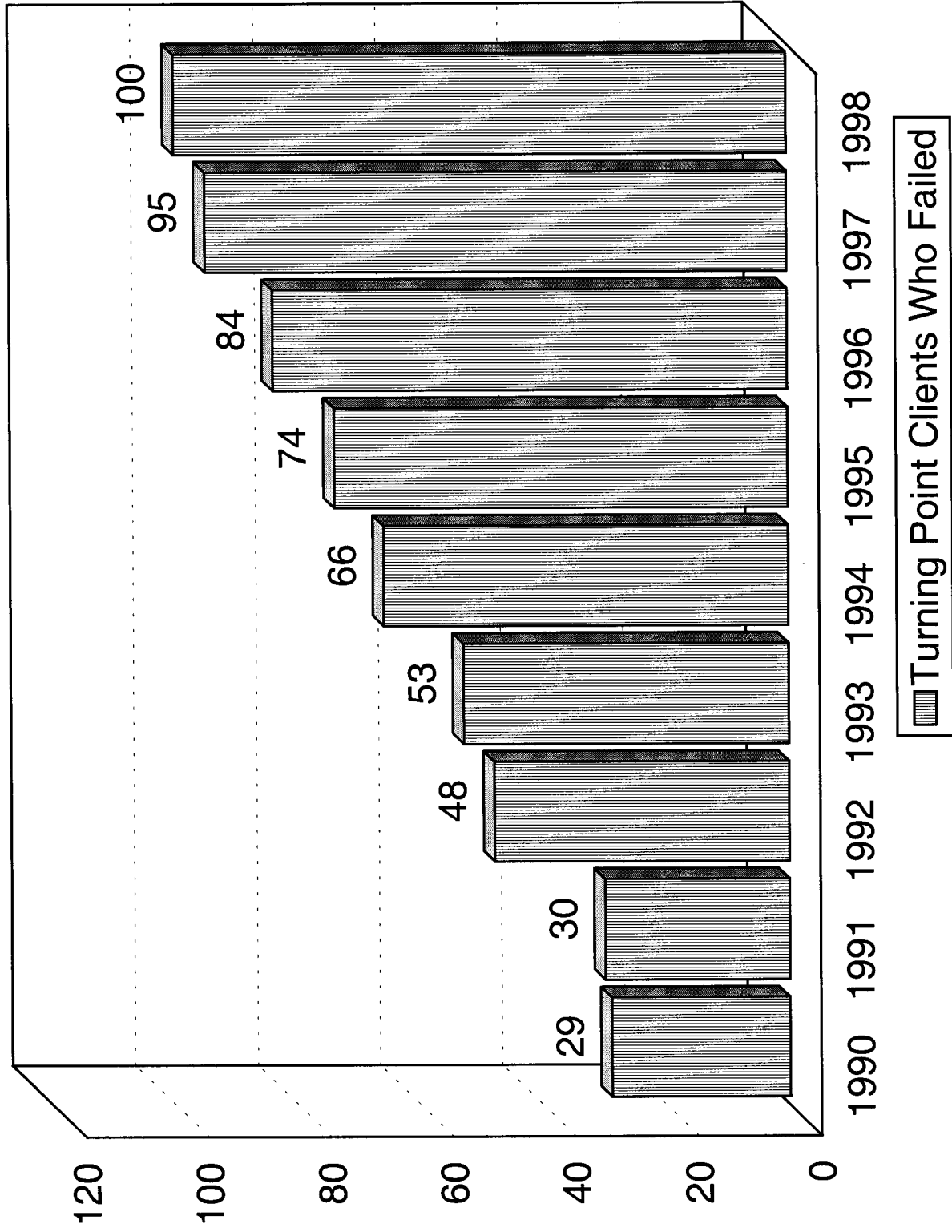
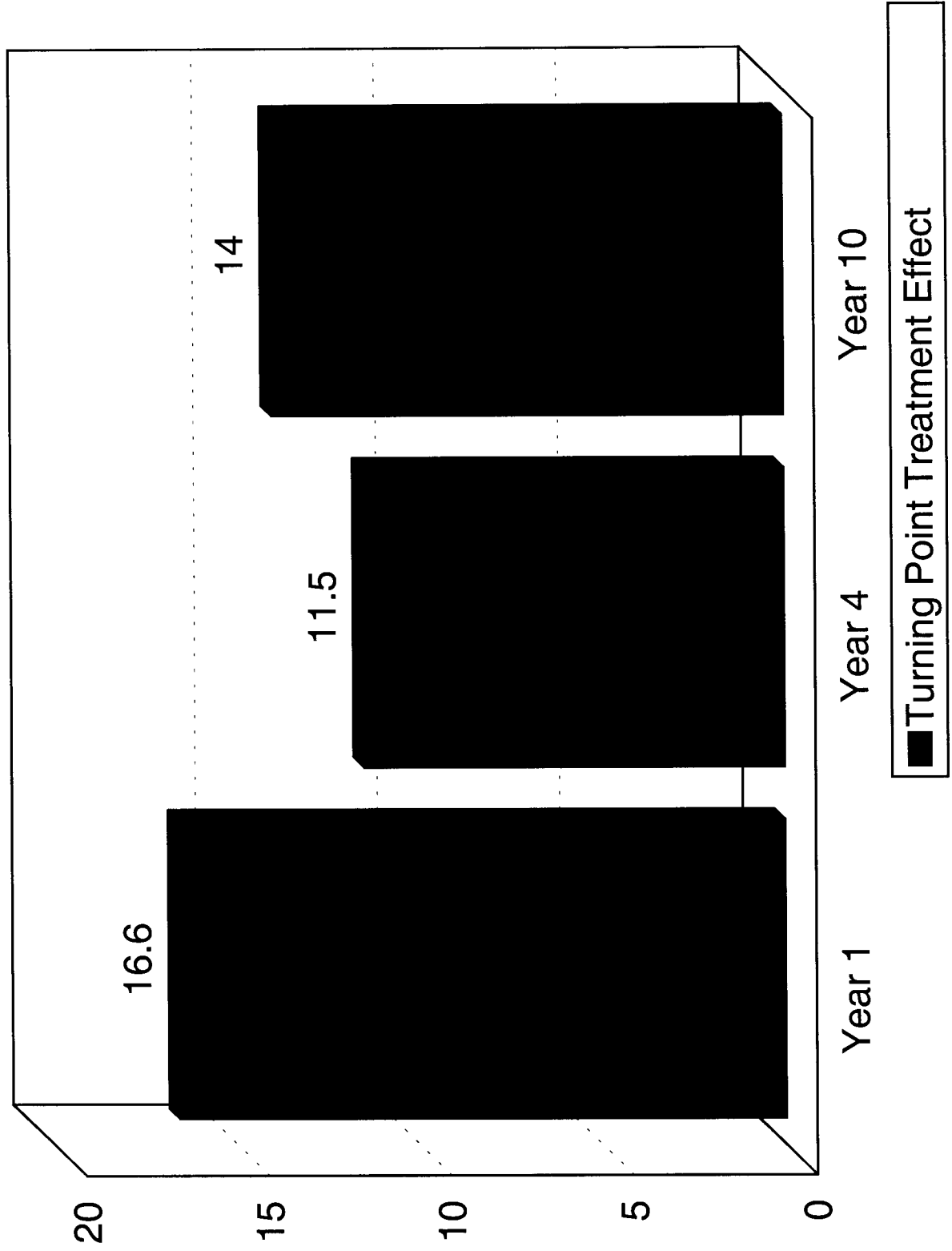


Figure 8. Habitual Drunk Driver Studies: One, Four & Ten-Year Follow-Up Differences
Between Turning Point & Comparison Cases

(Based on the Design Population)



even more stable (i.e., significant across more of the different subgroups and outcome criteria) than it was in either of the previous evaluations.

CONCLUSIONS

Previous evaluations of the Turning Point Program concluded that program clients were more likely to succeed than comparison group members when demographic and experiential differences were statistically controlled. It was also noted that the success differential was most pronounced when comparisons were limited to individuals that the Turning Point Program was designed to treat (persons with 3 or more DUIs and 30 or more days in jail). A four-year replication of the original study by Langworthy and Latessa showed that the treatment effect, while slightly diminished in magnitude, was still statistically significant for the “design population” cases.

The present analysis affirms these original results, and actually increases our confidence in the validity of a Turning Point treatment effect. Unlike the one-year and four-year follow-up evaluations, where statistically significant treatment effects were both modest and sporadic (if present, near 10 to 12 percent), the ten-year follow-up shows that the treatment effect of Turning Point is now more stable and stronger than before. Indeed, the treatment effect held true for 10 of the 12 logistic regression models across the various subgroups and outcome measures.

CHAPTER 5: CONCLUSIONS

There are a number of conclusions that can be reached from the results of this study:

First, the profile of all Turning Point Program clients indicates that each of the three cohorts are similar with regard to background characteristics (e.g., demographic, child abuse history, prior criminal history, and substance abuse history characteristics). Therefore, it is plausible to conclude that the post-release performance of the latter two cohorts will be similar to that of the original cohort over time. This conclusion is, however, tenuous and will require confirmation with additional follow-up evaluations.

Second, the CPAI score indicates that the Turning Point Program has a high level of program integrity. As stated above, the program is designed around an effective treatment model, the leadership and staff are well-qualified, offenders are provided structured behavioral treatment, and the program has quality assurance and evaluation mechanisms to ensure program integrity is maintained.

Third, the ten-year follow-up of the original Turning Point cohort demonstrated that Turning Point clients continue to be more likely to succeed than comparison group members. Although statistically significant across various subgroups, the success rates of the Turning Point clients was even more pronounced when comparisons were limited to those individuals for which the program was designed. In other words, the program had its greatest success with those offenders that had 3 or more prior DUI offenses and had served at least 30 days in jail prior to admission to the program.

Fourth, since the follow-up period for the original group now averages nearly ten years, we can state with confidence that the differences between the original Turning Point cohort and the comparison group have not diminished over time. Indeed, if anything the “treatment effect” has become more consistent, stable, and has become stronger since the evaluations in 1993 and 1996.

Fifth, the superior performance of the original Turning Point cohort was present regardless of the success criteria used (any new offense, any new alcohol-related offense, or any new DUI offense).

Sixth, there does not appear to be any diminishing returns in the rate of failure (DUI) for these offenders over time. It is reasonable to expect that, at some point, all of those who are going to fail will do so. Even with the ten-year follow-up period, however, we do not know if we have reached that point yet.

Finally, other considerations include the cost savings of the Turning Point Program. While a cost analysis was not included as a part of this study it should be noted that Turning Point appears to be a cheaper alternative to traditional incarceration. Direct cost savings include the difference between Turning Point costs, which were estimated in 1993 as \$45 per day per offender including security, versus \$65 per day per offender for the County jail. In addition, Turning Point collects fees from those able to pay and returns a portion to the County. Indirect cost savings include the average number of days saved from a jail sentence, since those offenders that complete Turning Point have their sentences reduced. This is estimated to be an average of 185 days per offender based on figures provided by the Hamilton County Probation Department.

RECOMMENDATIONS

Based on the findings of the above analysis we offer the following recommendations:

1. Restrict the Turning Point Program to those who meet the program admission specifications. That is, Turning Point services are most effective when provided to persons meeting basic program requirements of having 3 or more DUIs and having served 30 or more days in jail prior to release to Turning Point. If Turning Point is to continue admitting persons outside of the program specifications we suggest that two additional considerations be reviewed.
 - a. First, although the ten-year follow-up evaluation indicated that persons admitted to Turning Point who did not meet program specifications still performed significantly better than comparison group members, the magnitude of these differences were not as large as those for the design population. Thus we recommend that costs of alternatives become a primary consideration. As recommended in the 1993 evaluation, there needs to be a thorough cost-benefit analysis conducted on the Turning Point Program versus other correctional alternatives.
 - b. Second, we recommend that persons not being admitted directly from jail where they have served 30 or more days be admitted for a longer term to allow for detoxification.
2. Finally, there is a need to continue a long-term follow-up of the subjects in this study. The data indicate that there are substantial numbers of new DUI failures even among those at risk up to nearly ten years, suggesting that we still do not know even what the failure rate will be among these individuals. Therefore, we recommend another follow-up study of these subjects in another two to three years to focus specifically on new DUI offenses.