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AUTHOR Richards, James M., Jr.; And Others  
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ABSTRACT

The New Youth Initiatives in Apprenticeship Program (YAP) was compared with the Youth Career Development Program (YCD). Data for 1979 and 1980 came from an evaluation of YAP projects by CSR, Incorporated, and an evaluation of the YCD projects by the Educational Testing Service. A multiple regression approach was used to compare student characteristics, effects of participating in YCD and YAP, and effects of participation on a variety of outcomes. Due to program focuses, YAP and YCD had different client groups. YAP clients were predominantly male and white, YCD clients--female and black. YAP participants were likely to have a substantial advantage in obtaining employment. Analyses indicated participants' sex and race were more strongly associated with employment outcomes than differences in program impact. YAP and YCD participants with employment experience exhibited relatively high job satisfaction scores and the lowest level of satisfaction with their pay. YAP participation did seem to lead to greater job satisfaction. Supervisors of both groups appeared to give approximately equal ratings to participants. Comparative analyses did not provide strong evidence of program impact by either demonstration concept, nor did comparisons reveal sharp differences in program impacts. (Nineteen data tables are provided.) (YLB)

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SUPPLEMENTARY REPORT

COMPARISON OF OUTCOMES FOR  
YOUTH APPRENTICESHIP PROJECTS AND  
YOUTH CAREER DEVELOPMENT PROJECTS

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Employment and Training Administration  
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Washington, D.C.

Prepared by

James M. Richards, Jr., Gerald D. Williams,  
and Edward P. Davin  
CSR, Incorporated  
Suite 500  
805 15th Street, N.W.  
Washington, D.C. 20005

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## CHAPTER 1

### INTRODUCTION AND BACKGROUND

High rates of unemployment among young people, especially those from disadvantaged groups, have been a persistent problem in the United States. One way devised to attack this problem has been to attempt to improve the school-to-work transition. Accordingly, the desire to effect improvement in this area has given rise to a variety of programs and approaches. The range of programs operating in this area include vocational education, cooperative education, career education, and varied programs implemented under the Youth Employment Demonstration Projects Act of 1977.

The impetus for the present report grows out of a desire on the part of the Office of Youth Programs (CYP) of the U.S. Department of Labor to make available comparative information on different school-to-work interventions. Specifically, this report summarizes an effort to compare the New Youth Initiatives in Apprenticeship Program (YAP) with the Youth Career Development Program (YCD). Data for this comparison came from an evaluation of the YAP projects conducted by CSR, Incorporated (CSR) and from an evaluation of the YCD projects conducted by the Educational Testing Service (ETS).<sup>\*</sup> To maximize comparability, data analyses were restricted to YAP and YCD demonstrations conducted in 1979 and 1980.

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<sup>\*</sup>A list of the CSR and ETS reports on the YAP and YCD implementations, respectively, is provided in Appendix A at the end of this report.

Although YAP and YCD both involved efforts to improve the school-to-work transition, there were differences in the scope of the YAP and YCD implementations. These differences reflected, in part, differences in orientation. The YCD demonstrations had an instructional focus, e.g., instruction in career decisionmaking, job seeking skills, etc. Also, YCD demonstrations involved both in-school and out-of-school programs. Some of the YCD demonstrations seem to have involved a work component while others did not. Finally, some of the YCD demonstrations were directed at particular target groups, e.g., women, Spanish-American youth, inner-city youth, and so on.

By contrast, the focus of the YAP demonstrations was on employment and on-the-job training (OJT) in apprenticeable occupations. All YAP implementations were in-school projects that involved formal registration and employment of high school seniors in apprenticeable occupations. Any instruction for YAP students in the area of occupational information and career decision-making was incidental. Finally, most of the YAP demonstrations involved both inner-city and suburban youth, including both economically disadvantaged and non-economically disadvantaged students.

Despite the differences in orientation, the two programs (YAP and YCD) did have some common objectives, increased youth employment in particular. Consequently, one criterion for program and policy deliberations by DOL could be the relative effectiveness of the different interventions in increasing youth employment. For example, a positive outcome in terms of employment might be defined in terms of the career potential of the occupations in which the participants were employed, the number of hours worked, hourly wages, or all three.

In a more generic sense, the different demonstrations also shared a common objective in that they all were designed to help ease the transition of youth to the world of work. For the in-school demonstrations, the focus would be on the transition from school to work. For the out-of-school demonstrations, the focus would be on the transition from unemployment or underemployment to full-time work, or from one type of work to another. Consequently, the different demonstrations also might be compared on measures of participants' perceptions of how helpful the demonstrations have been in easing the problems of transition, e.g., measures of satisfaction with the projects, measures of job satisfaction, etc. Thus, evidence of impact, if any, on employment is not the only criterion upon which demonstrations should be compared. Rather, for DOL program and policy purposes the YAP and YCD demonstrations should be compared on as many criteria as possible (within the constraints of the ETS and CSR data).

Fortunately, several of the outcome variables examined in the CSR evaluation are similar to outcome variables examined in the ETS evaluation. This similarity of outcome variables provides the opportunity to conduct the present comparison study. Both evaluations collected followup data about current employment; weeks and hours-per-week worked; wages (both current and starting); and stability of employment. Both evaluations also administered job satisfaction measures that appear similar. Finally, both studies obtained supervisors' ratings that provide roughly comparable measures of actual job performance.

At the same time, the necessity to limit the analyses to variables that were available in comparable form in the CSR and ETS evaluations produced considerable selection of cases, and that selection may have produced groups

that were considerably different from the samples that were used in the primary analyses for the two evaluations. Therefore, any discrepancy between the results of the primary analyses of ETS and CSR and the results of this comparison almost certainly are attributable to such differential selection of cases.

For these reasons, the groups used in the analyses for this report will be referred to as "comparison groups" rather than as samples. A distinction will be made between the "Total Group of Participants" (i.e., those students who actually underwent the YCD and YAP experiences) and the "Total Comparison Group" (i.e., participants plus students in the control groups).

In the ETS study, followup data were collected at two points in time, 3 months and 8 months after each student completed the YCD experience. Because the 8-month YCD data are more comparable to the CSR data for 1979 YAP participants and the 3-month YCD data are more comparable for 1980 YAP participants, comparisons reported here involve these two follow-up periods.

## CHAPTER 2

### PROCEDURE USED TO MAKE COMPARISONS

Any comparison that attempts to integrate data from different studies must seek a "lowest common denominator" of methodology. In the present case, the characteristics of this lowest common denominator were determined by considering what should be involved in a comparison of YCD and YAP demonstrations. First, such a comparison should provide information about the extent to which YCD and YAP serve different kinds of students. Second, such a comparison should provide information about the effects of participating in YCD and in YAP, controlling for differences, if any, in the kinds of students served. Third, such a comparison should provide information about the effects of participation on a variety of outcomes.

The designs of the CSR and ETS evaluations most appropriately can be described as "quasi-experimental." Therefore, the most appropriate lowest common denominator of methodology appeared to be a multiple regression approach following the simple conceptual model shown in Figure 2-1. Although this diagram could be viewed as a "path model," the statistical procedure of path analysis did not appear appropriate for the present comparison. The primary interest is in the effects of program participation, especially when variation in student characteristics is controlled. Thus, the most appropriate statistical analysis appeared to be simple multiple regression, treating both student characteristics and measures of program participation as antecedent or "predictor" variables, and outcome measures as criterion variables.



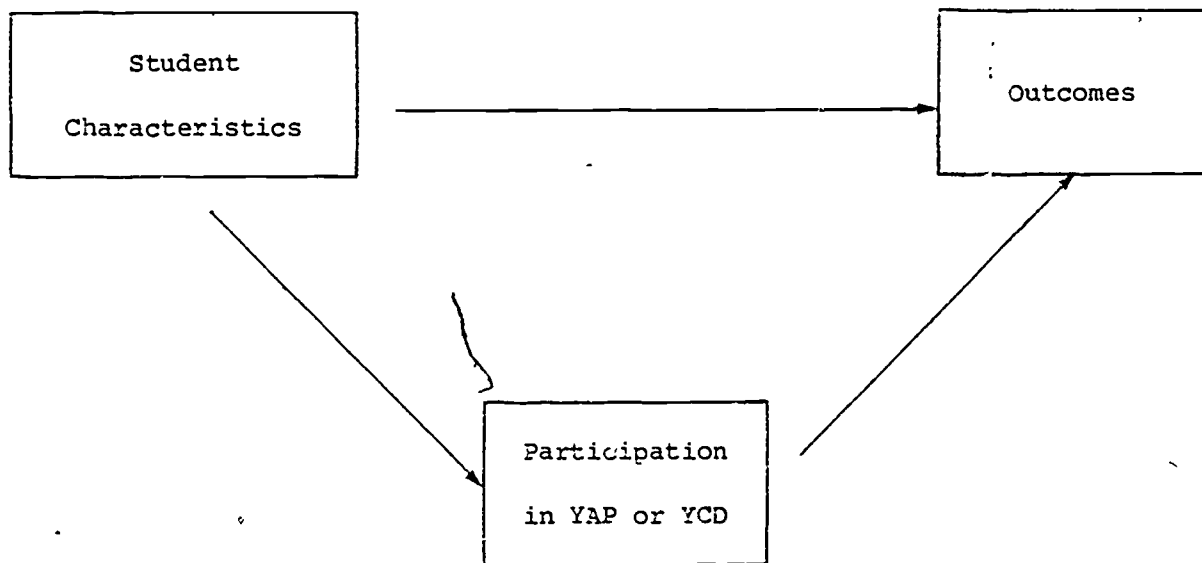


Figure 2-1. Conceptual Model Underlying Comparison of YAP and YCD Demonstrations.

Once the methodology had been determined, the next step involved searching the data files from the CSR and ETS evaluations to identify variables that were similar enough to be treated as common variables in parallel multiple regressions. The variables identified in this search are listed in Table 2-1 and are described in detail below.

#### Background Variables

1. Sex - This student characteristic was treated as a dummy variable in which scores of 1 were assigned to males and scores of 0 to females. This scoring system insures that a positive correlation corresponds with the expected direction of most sex bias.
2. Race - This characteristic also was treated as a dummy variable, with the scoring system insuring that a positive correlation would correspond to the expected direction of any race bias. Scores of 1 were assigned to whites and scores of 0 to members of other races.
3. Age - Scores were the difference between the year of birth and 1981. Because students began their participation at about the same age, use of this scoring system should yield an average age for 1979 participants that is about a year older than the average age for 1980 participants.
4. Family Size - The actual measure of family size used in the present comparison was the total number of family members including the student. This variable, like the next variable, points to some important problems that were encountered in attempting to develop common variables for the CSR and ETS evaluations. These problems

TABLE 2-1

VARIABLES COMMON TO CSR EVALUATION OF YAP DEMONSTRATIONS  
AND ETS EVALUATION OF YCD DEMONSTRATIONS

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Background Variables

1. Sex
2. Race
3. Age
4. Family Size
5. Academic Potential

Participation Variables

6. Participation vs. Non-participation
7. Extent of Participation

Outcome Variables

8. Current Employment
9. Still Employed in First or Apprenticeship Job
10. Weeks Worked
11. Hours Worked Per Week
12. Starting Hourly Wage
13. Current Hourly Wage
14. Job Satisfaction Ratings
15. Supervisor Ratings

have implications for the ways in which DOL can work with contractors in developing future evaluations in a way that will facilitate later integration and comparison of different evaluations. Family background, especially family socioeconomic status, is strongly related to many different student outcomes. For example, low school performance and high unemployment are associated with low socioeconomic status, particularly if socioeconomic status is low enough to justify designation as "economically disadvantaged." Consequently, it would seem important to include measures of family background and socioeconomic status, at least as control variables, in all evaluations like those of CSR and ETS.

Unfortunately, family size was the only measure of family background that could be identified as common to the ETS and CSR evaluations. The results of social science research generally indicate that family size has a weak to moderate association with other family background characteristics (for example, there is a weak negative relationship between family size and socioeconomic status). Therefore family size has enough value as an indicator of family background to be included in the present comparison study. It must be viewed, however, as a relatively weak and inefficient indicator.

The main point of this discussion of the family size variable is that the present comparison would have been much more rigorous and potentially valuable if the CSR and ETS evaluations had included a common core of items dealing with family background,

especially socioeconomic status. Therefore, in planning future evaluations, consideration should be given to establishing a common core of background items. This common core would be especially useful if the items were taken from studies such as the DOL funded National Longitudinal Survey or the National Center for Education Statistics national longitudinal studies. If this approach were employed, sample survey results could be compared with estimates of the population values for the United States as a whole.

5. Academic Potential - Another important student characteristic involves the set of skills, behaviors, aptitudes, etc. that are involved in school grades and scores on achievement and aptitude tests. "Academic potential" appears to be a relatively objective and neutral way of referring to this student characteristic. Both the CSR evaluation and the ETS evaluation included a measure of academic potential. In the CSR evaluation this measure was the student's high school GPA. In the ETS evaluation it was the student's score on a specially constructed version of the Sequential Test of Educational Progress (STEP) Reading Test. Although test scores typically are highly intercorrelated, it is not legitimate simply to transform one of the measures to the metric equivalent of the other and use the transformed scores as though they actually had been obtained from the other.

Nevertheless, an effort was made to develop a measure that would yield at least roughly comparable estimates of academic potential for the two evaluations. This effort involved developing a dummy variable in which each measure (grades and STEP

scores) was split at a cutting score corresponding to the mean of a nationally representative norm group. Students above this cutting score would be assigned a score of 1 on the dummy variables and students at or below the cutting score would be assigned a score of 0 on the dummy variable.

In the case of grades, this cutting score could be made easily and unambiguously by referring to the results of the National Center for Education Statistics' National Longitudinal Study of the High School Class of 1972 (although it would have been more rigorous if the GPA item used by CSR had been identical with the GPA item used in the national survey). In the case of STEP scores, no national norms were available because a special version of the test was involved. Therefore, the cutting score was computed by summing the item "difficulties" (i.e., percentage of cases in the norm group who answered each item correctly). This procedure would have been rigorous if the same norm group had been used for computing all item difficulties. Unfortunately, ETS took items from STEP tests for several different grade levels. Thus, the cutting score for the ETS measure of academic potential must be regarded as an arbitrary dichotomization that cannot be interpreted as comparable to the cutting score for the CSR measure of academic potential.

Once again, this discussion reemphasizes the desirability of comparable (ideally identical) measures when comparing evaluation results. Since DOL may wish to compare different sets of evaluation results, it would be desirable to use a core of identical

items in all evaluations. In the case of academic potential, the simplest and most straightforward approach is to include a GPA item.

#### Participation Variables

6. Participation - This measure is a dummy variable in which scores of 1 were assigned to students who actually went through part or all of the YCD and YAP experiences and scores of 0 to students in the control groups.
7. Amount of Participation - Not every participant went through the entire YCD or YAP experience, and it appeared important to measure the actual amount of exposure to these interventions. (In a more generic sense, it seemed important to measure the extent to which these programs were implemented for each student.) Because the YCD demonstrations involved in-school activities, the most appropriate measure of amount of participation appeared to be total program hours. On the other hand, the most appropriate measure for YAP demonstrations appeared to be number of weeks of apprenticeship.

#### Outcome Variables

8. Current Employment - This measure involved a dummy variable with scores of 1 assigned to students who were employed at the time of followup and scores of 0 to students who were not employed. Students in the YCD group were classified as employed only if they were working "full-time" (e.g., 30 hours or more per week), while students in the YAP group were classified as employed if they had any employment. The original intention was to use any employment

for the YCD groups too, but this procedure was precluded by problems with the ETS data for part-time employment. Since the purpose of YCD and YAP was to aid the transition to the permanent labor force, being employed at the time of the followup appeared to be a more appropriate outcome measure than having been employed at any time since completing YCD or YAP.

9. Still in First or Apprenticeship Job - This measure also involved a dummy variable. For YCD students, scores of 1 were assigned to students who were still in the first job they had obtained after completing YCD and scores of 0 to other students. For YAP students, scores of 1 were assigned to students still in the job in which they served their apprenticeship and scores of 0 to other students.
10. Weeks on Job - Scores involved the number of weeks students had worked on their present or most recent job.
11. Hours Per Week - Scores involved the number of hours students typically worked at their present or most recent job.
12. Starting Hourly Wage - Score for YCD students was the hourly wage they received in their first job after completing YCD. Score for YAP students was the salary they received in their apprenticeship job. Students who had never received a salary because they had never worked were eliminated.
13. Current Hourly Wage - Score was the hourly wage students received in their current or most recent job.
14. Job Satisfaction Ratings - YCD students rated their satisfaction with: (a) how the job went, (b) their feelings about their work,



(c) pay, (d) the worthwhileness of their work, and (e) their experiences with the YCD program. Ratings were made on three category scales, with the alternatives adapted to the characteristic being rated. For example, the three categories (and the scores assigned to these categories) for pay were: (1) less than worth, (2) about right, and (3) good for job. In all cases, higher scores indicated greater satisfaction. YAP students rated their satisfaction with: (a) pay, (b) opportunity for advancement, (c) supervision, (d) recognition for doing a good job, (e) on the job instruction, and (f) sense of accomplishment in the job. Ratings were made on the following four-category scale: (1) very dissatisfied, (2) dissatisfied, (3) satisfied, and (4) very satisfied.

15. Work Supervisor Ratings - YCD participants were rated by their current supervisor on the following characteristics: (a) puts in good day's work, (b) gets along with others, (c) would promote, (d) would rehire, and (e) whether their rank compared to that of others is satisfactory. These ratings were made on the following three-category scale: (1) definitely not, (2) generally, and (3) definitely. YAP participants were rated by their current supervisor on the following characteristics: (a) work attitude, (b) skill level, (c) ability to learn, (d) cooperation, (e) punctuality, (f) following instructions, (g) relations with co-workers, (h) self-initiative, (i) pride in work, and (j) overall job performance. These ratings were made on the following four-category scale: (1) poor, (2) fair, (3) good, and (4) excellent.

Data from the ETS evaluation of the 1980 group were unavailable for the present comparison until very late. Therefore, results for both the ETS and the CSR evaluations were analyzed separately by year (i.e., 1979 and 1980). This procedure provides a check on the stability of any trends that might appear in the data.

CHAPTER 3  
CHARACTERISTICS AND EMPLOYMENT OUTCOMES  
FOR TOTAL COMPARISON GROUPS

The most basic questions asked in comparing YCD and YAP are those that pertain to the kinds of students served by these two programs and the extent to which participation in these two programs influenced employment. The first set of analyses for this report examined these issues.

Table 3-1 summarizes the characteristics of the YCD and YAP Total Comparison Groups on the five background variables and on the percentage of the comparison groups who were demonstration participants (rather than in the control groups). The results in this table indicate that YCD and YAP served different types of students. YCD students were predominantly female and non-white (i.e., predominantly black), while YAP students were predominantly male and white. Statistical tests of the differences in the proportions of whites and males indicated that these differences were highly significant.

In view of the moderate to strong relationships of race and sex known to exist in the present data, the observed pattern of differences between the two groups suggests that YAP participants are likely to have a substantial advantage over YCD participants in obtaining employment. It becomes doubly important, therefore, to use a statistical procedure that "controls" for the influence of background characteristics when examining the influence of program participation. The multiple regression procedure used in this study provides such a control. When differences exist as large as those between YCD and YAP in Table 3-1, however, it is doubtful whether such statistical

TABLE 3-1

CHARACTERISTICS OF COMPARISON GROUPS  
FOR THE YCD and YAP DEMONSTRATIONS

	YCD		YAP	
	1979 (N=954)	1980 (N=517)	1979 (N=493)	1980 (N=529)
% Male	31.6	36.0	87.0	88.7
% White	16.9	13.7	82.0	77.9
Average Age	18.3	17.3	19.3	18.2
Average Family Size	4.7	4.9	4.8	4.6
% Above Cutting Score on Measure of Academic Potential	76.7	68.7	55.6	56.3
% of Total Comparison Group Who Were Participants	54.9	60.4	58.4	50.3

Note - The Total Comparison Group includes both participants and members of the control group.

controls really equate the two groups. In other words, comparing YCD and YAP may resemble the proverbial comparison of apples and oranges, and no amount of statistical sophistication can be completely successful in converting the two into a comparable form of fruit. On the other hand, the average ages and family sizes of YCD and YAP participants are roughly comparable. The differences in academic potential are more likely to reflect differences in the measures rather than genuine differences between the groups.

Table 3-2 summarizes the results of an analysis of the relationship of the background characteristics to participant versus control status, and provides a check on the extent to which the YCD and YAP had control groups that were comparable to their participant groups. This table also illustrates the format that will be followed in all subsequent regression tables for this report. There are three elements in this format. The first is the zero-order correlation between each antecedent variable and the outcome variable in question (in Table 3-2, being a participant). The second element consists of the standardized (partial) regression weights. Any given standardized weight can be interpreted, roughly, as the correlation between that antecedent variable and the criterion when the other antecedent variables are held constant. The final element consists of the metric (i.e., "unstandardized" or "raw score") regression weights. Any given metric weight can be interpreted as the amount of change in the criterion that would be produced by one unit of change in that antecedent variable when the other antecedent variables are held constant. When the criterion is dichotomous, as is the case in Table 3-2, the metric weight can be interpreted, very roughly, as the change in the probability of being in the top group of the dichotomy that would be produced

TABLE 3-2

RELATIONSHIP OF BACKGROUND CHARACTERISTICS  
TO PARTICIPANT VERSUS THE CONTROL STATUS

	Zero-Order		Regression Weights			
	<u>Correlations</u>		<u>Standardized</u>		<u>Metric</u>	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=954)	(N=517)				
Sex	.02	.06	.02	.07	.020	.072
Race	-.09	-.16	-.08	-.17	-.111*	-.244*
Age	.01	-.06	.00	.08	.000	-.062
Family Size	-.01	.01	-.01	-.01	-.003	-.002
Academic Potential	-.07	.04	-.06	.04	-.073	.045
Multiple r	.11	.19				
<u>YAP</u>	(N=493)	(N=529)				
Sex	.05	-.03	.06	-.03	.083	-.051
Race	.03	-.01	.02	-.01	.026	-.016
Age	-.07	.04	-.06	.04	-.016	.014
Family Size	.03	-.02	.03	-.03	.010	-.010
Academic Potential	.08	.07	.07	.07	.074	.073
Multiple r	.12	.09				

\* Metric regression weight at least twice its standard error.

by one unit of change in that antecedent variable. A consensus appears to be emerging among social scientists and policy researchers that the metric weights provide the best tool for answering the kinds of questions of concern in the present comparison study. Accordingly, the present comparison follows convention by testing for statistical "significance" by determining whether each metric weight is at least twice its standard error.

The results in Table 3-2 suggest that the YCD and YAP control groups generally were comparable to the participant groups. The only significant bias appears to be that the YCD control group had a larger proportion of whites than the YCD participant group. The implication of this bias for the interpretation of subsequent analyses which include both participant and control groups is unclear. However, the more important analyses described in this report involved comparison of the YCD participants with the YAP participants, and did not involve the control groups associated with these two groups. Consequently, the racial difference between the YCD participant and control groups would have no relevance to those analyses which were based upon comparisons between the two participant groups.

It is an oversimplification to classify a student as a YCD or YAP "participant" because theoretically participation could range from a single day of intervention to completion of the entire program experience. It seems important, therefore, to examine variation in the extent of participation in the YCD and YAP demonstrations. Table 3-3 summarizes the characteristics of YCD and YAP participants, by year of participation, with respect to the background variables and the two different measures of amount of participation. Similarly, Table 3-4 summarizes the regression analysis of the relationships

TABLE 3-3

CHARACTERISTICS OF MEMBERS OF COMPARISON GROUPS  
WHO PARTICIPATED IN YCD AND YAP DEMONSTRATIONS

	1979	1980
	<u>YCD</u>	
	(N=524)	(N=312)
% Male	32.4	38.1
% White	14.9	9.3
Average Age	18.3	17.3
Average Family Size	4.7	4.9
% Above Cutting Score on Academic Potential	74.1	70.2
Average Number of Hours in Program	110.5	123.9
	<u>YAP</u>	
	(N=288)	(N=266)
% Male	88.5	87.6
% White	83.0	77.4
Average Age	19.2	18.3
Average Family Size	4.8	4.6
% Above Cutting Score on Academic Potential	59.0	59.8
Average Number of Weeks of Apprenticeship	32.3	33.3



between background characteristics and amount of participation. These two analyses are limited to members of the Total Comparison Groups with some participation. In other words, the control groups are eliminated from these analyses.

The results in Table 3-3 confirm the differences between YCD and YAP on sex and race composition that were revealed in Table 3-1. Therefore, no further comparisons of the YCD and YAP groups with respect to the background variables are included in this report. In general, the regression analysis in Table 3-4 indicates little relationship between the background variables and amount of participation. There are 20 metric regression weights in Table 3-4, and it is to be expected that one of these weights would be "significant" at the .05 level through chance alone. Hence, little importance can be attached to the single metric weight that is more than twice its standard error.

Table 3-5 summarizes the outcome measures that were analyzed for the comparisons reported in this chapter. Two outcomes were used as criteria in regression analyses in which simple program participation was used as the relevant antecedent variable, namely current employment and current (or most recent) hourly wage. The hourly wage analyses are restricted to those who had received an hourly wage at some time, or, in other words, to those who had some employment experience. Current employment also was used as the criterion in regression analyses in which amount of program experience was the relevant antecedent variable.

The results in Table 3-5 reveal a substantially lower employment rate and a somewhat lower pay rate for YCD participants. It is tempting to interpret these differences as indicating that programs, such as YAP, that focus

TABLE 3-4

RELATIONSHIP OF BACKGROUND CHARACTERISTICS TO AMOUNT OF PARTICIPATION  
 AMONG THOSE IN COMPARISON GROUPS WITH SOME PARTICIPATION

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=524)	(N=312)				
Sex	-.04	-.03	-.04	-.03	-8.504	-10.216
Race	.01	-.08	.01	-.08	3.430	-37.474
Age	-.03	.13	-.03	.11	-4.448	26.913
Family Size	.08	.03	.08	.00	3.172	0.319
Academic Potential	.08	-.15	.08	-.14	17.604	-44.888*
Multiple r	.12	.21				
<u>YAP</u>	(N=272)	(N=257)				
Sex	.08	.07	.08	.07	5.849	4.265
Race	-.08	.00	-.07	.01	-4.281	0.714
Age	.03	.03	.01	.04	0.128	1.160
Family Size	.03	.06	.05	.07	0.708	.893
Academic Potential	-.13	-.06	-.12	-.07	-5.606	-2.849
Multiple r	.17	.12				

\* Metric regression weight at least twice its standard error.

TABLE 3-5

SUMMARY OF OUTCOME MEASURES FOR TOTAL COMPARISON GROUP  
AND TOTAL GROUP OF PARTICIPANTS

	YCD	
	1979	1980
% of Total Comparison Group Working Full-Time	25.0	31.1
Current Hourly Wage for Members of Total Comparison Group With Some Employment	3.69	3.84
% of Participants Working Full-Time	26.2	31.4
	YAP	
	1979	1980
% of Total Comparison Group Currently Employed	85.5	83.8
Current Hourly Wage for Members of Total Comparison Group With Some Employment	4.98	4.09
% of Participants Currently Employed	87.2	84.6

Note: The Total Comparison Group includes both participants and members of the control group.

specifically on employment are more likely to succeed in furthering employment. The temptation to make this interpretation should be resisted. The observed differences in employment patterns are more likely to be the consequence of differences in sex and race composition rather than differences in program impact. Most of the YAP group who are employed at all are employed full-time, so variation in the definition of current employment probably had relatively little influence.

The regression analysis relating participation vs. control group status to current employment is summarized in Table 3-6; the regression analysis relating participation to current wages is in Table 3-7; and the regression analysis relating amount of participation to current employment is in Table 3-8. These tables provide general confirmation of the fact that males and whites have an advantage in terms of both employment and pay, but almost no evidence for any impact of participation in YCD and YAP on these outcomes. The only metric weight exceeding twice its standard error had the opposite sign from the same (nonsignificant) regression weight in the other year. In the absence of evidence that either YCD or YAP had any impact on employment outcomes it is meaningless to try to compare their outcomes.

These generally negative results should not be interpreted, however, as invalidating the more positive results reported in both the CSR evaluation of YAP and the ETS evaluation of YCD. In both evaluations the selection of cases and the choice of variables were oriented to the specific purposes of the YCD and YAP demonstrations rather than to finding a lowest common denominator of methodology in order to attempt comparisons. For example, the YAP evaluation found that positive outcomes were strongly associated with demonstration

TABLE 3-6

RELATIONSHIP OF BACKGROUND VARIABLES AND PARTICIPATION  
TO CURRENT EMPLOYMENT FOR TOTAL COMPARISON GROUP

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=954)	(N=517)				
Sex	.08	.12	.08	.12	.070*	.114*
Race	.06	.17	.07	.17	.083*	.229*
Age	.07	-.01	.06	-.01	.041	-.010
Family Size	.06	-.04	.09	.00	-.016*	-.000
Academic Potential	-.03	.00	-.03	-.02	-.036	-.016
Participation	.03	.01	.03	.03	.029	.026
Multiple r	.15	.21				
<u>YAP</u>	(N=493)	(N=439)				
Sex	.11	-.01	.11	-.02	.113*	-.024
Race	.07	.25	.04	.24	.037	.209*
Age	.12	-.03	.13	-.01	.024*	-.003
Family Size	.01	-.03	.00	-.03	.001	-.007
Academic Potential	.08	.15	.09	.13	.065	.098*
Participation	.06	.02	.05	.02	.038	.011
Multiple r	.20	.28				

\* Metric regression weight at least twice its standard error.

TABLE 3-7

RELATIONSHIP OF BACKGROUND CHARACTERISTICS AND PARTICIPATION  
TO CURRENT WAGES FOR MEMBERS OF TOTAL COMPARISON GROUP  
WITH SOME EMPLOYMENT

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YU</u>	(N=340)	(N=269)				
Sex	.25	.13	.24	.12	.458*	.232*
Race	.09	.02	.09	.00	.217	.009
Age	.04	.10	.02	.09	.035	.153
Family Size	-.03	-.06	-.01	-.07	-.003	-.028
Academic Potential	.10	-.04	.08	-.03	.177	-.063
Participation	.02	-.05	.02	-.05	.036	-.096
Multiple r	.28	.21				
<u>YAP</u>	(N=406)	(N=388)				
Sex	.24	.15	.24	.14	1.275*	.479*
Race	.06	.06	.04	.05	.174	.128
Age	.06	-.08	.00	-.07	-.001	-.055
Family Size	.02	-.04	.04	-.03	.037	-.023
Academic Potential	.02	-.04	.03	-.04	.088	-.077
Participation	.04	-.04	.03	-.03	.096	-.063
Multiple r	.25	.19				

\*Metric regression weight at least twice its standard error.

TABLE 3-8

RELATIONSHIP OF BACKGROUND VARIABLES AND AMOUNT OF PARTICIPATION  
TO CURRENT EMPLOYMENT FOR TOTAL GROUP OF PARTICIPANTS

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=524)	(N=312)				
Sex	.09	.12	.10	.12	.089*	.117*
Race	.05	.14	.06	.13	.079	.20*
Age	.03	-.03	.03	-.02	.020	-.018
Family Size	.09	-.08	.10	-.06	.018*	-.012
Academic Potential	.03	-.06	.01	-.06	.008	-.063
Total Program Hours	.07	-.03	.07	-.02	.000	.000
Multiple r						
<u>YAP</u>	(N=257)	(N=228)				
Sex	.07	-.08	.08	-.10	.083	-.111
Race	.06	.26	.03	.24	.023	.207*
Age	.14	-.06	.16	-.02	.022*	-.013
Family Size	-.04	-.09	-.06	-.10	-.012	-.023
Academic Potential	.10	-.19	.13	.19	.089	.142*
Weeks of Apprenticeship	-.03	.10	-.02	.12	-.003	.002*
Multiple r	.21	.36				

\* Metric regression weight at least twice its standard error.

characteristics, whereas the present comparison study combined data from demonstrations that varied substantially in their impact on outcomes. The positive results obtained in the CSR and ETS evaluations probably should be interpreted as correct, and the inconclusive results obtained here as the consequence of using a lowest common denominator methodology.



## CHAPTER 4

### EMPLOYMENT OUTCOMES FOR YCD AND YAP PARTICIPANTS

#### WITH SOME EMPLOYMENT EXPERIENCE

The contingencies of data collection in the CSR and ETS evaluations made it inevitable that data on some outcome variables would be missing for one or both groups. Similarly, some variables, such as continuation in the first or apprenticeship job, by definition, are available only for students with some employment. Thus, several of the analyses were restricted not only to participants but also to participants who had been employed at some time since completing their participation. Such analyses are presented in this chapter. These analyses also used amount of participation as the relevant measure in the regression analyses.

Table 4-1 summarizes the various overall outcomes. Limiting the analysis to participants with some employment markedly increased the proportion of the YCD group currently working (full-time), but this trend did not eliminate the difference between YCD and YAP. Although the control groups have been eliminated, it still appears more reasonable to attribute this difference to differences in race and sex composition of the YAP and YCD demonstrations rather than to differences in program impact.

The number of weeks on the job, number of hours worked per week, and starting hourly wage are lower for YCD participants than for YAP participants. Conversely, the proportion of the YCD participants still in their first job is higher than the proportion of YAP participants still in their apprenticeship job. These data hint at the possibility that attrition over time (as reflected in the 1979-1980 differences) is greater for YAP participants. This

TABLE 4-1

SUMMARY OF AMOUNT OF PARTICIPATION AND OUTCOME MEASURES  
FOR PARTICIPANTS WITH SOME EMPLOYMENT

	YCD	
	1979 (N=238)	1980 (N=168)
Average Number of Hours in Program	109.8	125.8
% of Participant Group Working Full-Time	61.3	59.5
% Still in First Job	61.3	71.4
Average Number of Weeks on Job	13.8	14.0
Average Hours Per Week	34.8	37.9
Average Hourly Wage in First Job	3.35	3.43
Average Current Hourly Wage	3.71	3.80
	YAF	
	1979 (N=249)	1980 (N=205)
Average Number of Weeks of Apprenticeship	32.7	33.9
% of Participant Group Currently Employed	90.0	94.6
% Still in Apprenticeship Job	42.3	62.2
Average Number of Weeks on Job	57.9	40.7
Average Hours Per Week	41.5	40.2
Average Starting Hourly Wage	3.94	3.46
Average Current Hourly Wage	5.03	4.05

difference, like many other differences observed, may be attributable to the sharp differences in the race and sex composition of the two groups. Additionally, this difference also may be attributable to the marked differences in the role of employment within the structures and processes of the two different demonstration concepts.

Table 4-2 summarizes a regression analysis for current employment that closely parallels the analyses in Table 3-6 and Table 3-8. Although one metric regression weight for amount of participation did exceed twice its standard error, in general the results in Table 4-2 confirm the results in Tables 3-6 and 3-8. That is, little evidence was obtained for any consistent influence of amount of participation in either YCD or YAP on current employment. Certainly, the data presented in Table 4-2 do not provide a basis for comparing the impact of these programs on employment.

The regression analysis for continuation in the first or apprenticeship job is summarized in Table 4-3; for weeks worked in Table 4-4; for hours per week in Table 4-5; for starting hourly wage in Table 4-6; and for current hourly wage in Table 4-7. A few of the metric regression weights presented in these tables exceeded twice their standard error, but these significant results are scattered, and do not reveal any strong, consistent associations between the antecedent variables and the different criterion variables.

There are indications that the race and sex composition of the groups, as well as the duration of participation, have some association with the relevant outcomes. In addition, the association with outcomes exhibited by the demographic characteristics and by the level of participation both appear to be somewhat more consistent for the YAP group. However, it is important to reiterate that the statistically significant results included in Tables 4-2

TABLE 4-2

RELATIONSHIP OF ANTECEDENT VARIABLES TO CURRENT EMPLOYMENT  
FOR PARTICIPANTS WITH SOME EMPLOYMENT

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=238)	(N=168)				
Sex	-.02	.03	-.01	.01	-.012	.013
Race	-.04	.20	-.05	.18	-.059	.288
Age	.00	-.06	.02	-.04	.186*	-.038
Family Size	.15	-.13	.14	-.10	.028*	-.024
Academic Potential	-.06	-.06	-.07	-.08	-.081	-.081
Total Program Hours	.11	-.05	.12	-.05	.001*	.000
Multiple r	.20	.24				
<u>YAP</u>	(N=249)	(N=204)				
Sex	-.01	-.03	-.01	-.04	-.008	-.029
Race	.08	.15	.07	.16	.055	.092
Age	.16	.05	.18	.08	.024*	.035
Family Size	-.02	-.06	-.04	-.06	-.008	-.008
Academic Potential	.08	.08	.09	.09	.052	.044
Weeks of Appren- ticeship	-.07	.03	-.06	.04	-.001	.000
Multiple r	.22	.21				

\* Metric regression weight at least twice its standard error.

TABLE 4-3

RELATIONSHIP OF ANTECEDENT VARIABLES TO CONTINUATION IN  
FIRST OR APPRENTICESHIP JOB FOR PARTICIPANTS WITH SOME EMPLOYMENT

	Zero-Order		Regression Weights			
	<u>Correlations</u>		<u>Standardized</u>		<u>Metric</u>	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=238)	(N=168)				
Sex	-.02	-.03	-.03	-.03	-.034	-.024
Race	-.13	-.05	-.13	-.05	-.163*	-.082
Age	-.01	-.11	-.01	-.11	-.007	-.010
Family Size	.07	.01	.05	.01	.010	.002
Academic Potential	.00	.09	.01	.09	.006	.089
Total Program Hours	-.02	.02	-.01	.06	.000	.000
Multiple r	.15	.20				
<u>YAP</u>	(N=242)	(N=201)				
Sex	.07	.08	.07	.07	.119	.102
Race	.05	.14	.03	.15	.048	.180*
Age	.08	.06	.08	.10	.018	.090
Family Size	-.02	.00	-.03	.00	-.009	.001
Academic Potential	.04	.15	.06	.16	.058	.156*
Weeks of Appren- ticeship	.00	.01	.00	.01	.000	.000
Multiple r	.12	.24				

\* Metric regression weight at least twice its standard error.

TABLE 4-4

RELATIONSHIP OF ANTECEDENT VARIABLES TO WEEKS WORKED  
FOR PARTICIPANTS WITH SOME EMPLOYMENT

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=206)	(N=124)				
Sex	-.06	.09	-.06	.08	-1.148	1.425
Race	.01	.11	.01	.10	.240	3.024
Age	-.08	-.15	-.07	-.13	-1.094	-2.244
Family Size	.10	-.08	.09	-.06	.391	-.244
Academic Potential	.01	.05	.01	.03	.156	.692
Total Program Hours	.03	-.02	.02	.01	.002	.001
Multiple r	.14	.21				
<u>YAP</u>	(N=246)	(N=204)				
Sex	.05	.07	.03	.05	5.029	6.475
Race	.03	.15	.05	.17	6.488	17.182*
Age	.05	.09	.04	.11	.786	8.450
Family Size	-.02	.01	-.03	.02	-.881	.452
Academic Potential	-.02	.06	.01	.07	1.188	5.904
Weeks of Apprenticeship	.20	.10	.20	.09	.378*	.179
Multiple r	.21	.23				

\* Metric regression weight at least twice its standard error.

TABLE 4-5

RELATIONSHIP OF ANTECEDENT VARIABLES TO HOURS WORKED  
PER WEEK FOR PARTICIPANTS WITH SOME EMPLOYMENT

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=238)	(N=163)				
Sex	.04	.07	.04	.08	1.165	1.901
Race	-.03	.05	-.03	.05	-1.198	1.830
Age	.04	.09	.03	.11	.778	2.318
Family Size	-.01	-.02	-.01	-.02	-.049	-.117
Academic Potential	-.06	.05	-.06	.06	2.111	1.569
Total Program Hours	.01	-.03	.02	-.02	.004	-.002
Multiple r	.09	.15				
<u>YAP</u>	(N=245)	(N=200)				
Sex	.19	.19	.17	.17	5.094*	4.323*
Race	.07	.11	.08	.11	1.749	2.242
Age	.08	.06	.08	.07	.280	1.051
Family Size	-.01	-.04	-.02	-.03	-.077	-.130
Academic Potential	.00	-.01	.04	.01	.630	.167
Weeks of Appren- ticeship	.17	.12	.17	.10	.058*	.042
Multiple r	.27	.23				

\* Metric regression weight at least twice its standard error.

TABLE 4-6

RELATIONSHIP OF ANTECEDENT VARIABLES TO HOURLY WAGE  
IN FIRST JOB FOR PARTICIPANTS WITH SOME EMPLOYMENT

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=70)	(N=36)				
Sex	.15	.04	.14	.02	.219	.025
Race	.17	.02	.21	.00	.401	.031
Age	.14	-.16	.12	-.16	.139	-.155
Family Size	-.12	.01	-.07	.03	-.023	.008
Academic Potential	.11	-.09	.11	-.16	.193	-.184
Total Program Hours	-.12	-.17	-.14	-.18	-.001	-.001
Multiple r	.33	.27				
<u>YAP</u>	(N=226)	(N=193)				
Sex	.11	.11	.11	.12	.566	.262
Race	.01	-.11	.00	-.12	.011	-.124
Age	.05	-.01	.04	-.04	.026	-.064
Family Size	.09	-.01	.09	-.01	.076	-.003
Academic Potential	.03	-.03	.03	-.02	.098	-.039
Weeks of Appren- ticeship	.04	.06	.04	.06	.002	.002
Multiple r	.16	.18				

\* Metric regression weight at least twice its standard error.



TABLE 4-7

RELATIONSHIP OF ANTECEDENT VARIABLES TO CURRENT HOURLY WAGE  
FOR PARTICIPANTS WITH SOME EMPLOYMENT

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=209)	(N=163)				
Sex	.26	.13	.26	.12	.533*	.242
Race	.04	.06	.06	.04	.159	.140
Age	.00	.02	-.03	.04	-.044	.066
Family Size	-.08	-.10	-.07	-.09	-.029	-.043
Academic Potential	.11	-.07	.09	-.08	.226	-.177
Total Program Hours	-.04	-.07	-.04	-.09	.000	-.001
Multiple r	.30	.20				
<u>YAP</u>	(N=245)	(N=202)				
Sex	.21	.13	.21	.11	1.167*	.274
Race	.03	.09	.02	.08	.085	.158
Age	-.02	-.01	-.03	-.02	-.021	-.040
Family Size	.06	-.06	.07	-.06	.070	-.028
Academic Potential	.03	-.05	.04	-.03	.152	-.057
Weeks of Apprenticeship	.10	.16	.09	.16	.006	.007*
Multiple r	.25	.23				

\* Metric regression weight at least twice its standard error.

through 4-7 are scattered with respect to the antecedent variables, the two program concepts, and the two years of graduation, and that, consequently, no clear pattern can be discerned based upon these results.

In summary, these results do not reveal any clear relationship between the relevant outcomes and participation in either YCD or YAP. Therefore, the results of these analyses are not particularly enlightening for policy relevant comparisons of YCD impact and YAP impact. Once again it should be remembered that the primary evaluations of both YAP and YCD yielded more positive results. The inconclusiveness of the present results seems to be primarily a consequence of the lowest common denominator methodology which was employed in these comparisons, and not a consequence of a lack of impact by the two individual programs.

## CHAPTER 5

### JOB SATISFACTION SCALES AND SUPERVISOR RATINGS

#### FOR YCD AND YAP PARTICIPANTS

The final set of analyses conducted for the present comparison involved job satisfaction scales and supervisor ratings. Like the analyses reported in Chapter 4, these analyses were limited to participants with some employment. In each instance the analyses were further limited to cases with data available for the specific scales and ratings in question.

Table 5-1 summarizes the overall outcomes with regard to the job satisfaction scales and Table 5-2 presents the regression analyses for these data. To conserve space and avoid information overload, Table 5-2 reports only the results for amount of program participation as a predictor of job satisfaction, eliminating the correlations and regression weights for the background variables.

The results in Table 5-1 suggest that both YCD and YAP participants are reasonably satisfied with all aspects of their jobs (although both groups are least satisfied with their pay). When the differences in the job satisfaction scales are considered, it seems likely that the absolute level of satisfaction is about the same in the two groups. The regression analyses in Table 5-2 yielded several metric regression weights that exceeded twice their standard error. All of these statistically significant metric regression weights involved YAP participants, and some such significant weights were obtained in each year. These results suggest, but do not prove, that participation in YAP was somewhat more likely than participation in YCD to lead to greater job satisfaction (or perhaps to a job that is inherently more satisfactory). Some of the results of the primary evaluation of YAP are consistent with this conclusion.

TABLE 5-1  
 AVERAGE JOB SATISFACTION SCORES  
 FOR YCD AND YAP PARTICIPANTS

	YCD	
	1979 (N=189)	1980 (N=142)
How Job Went	2.38	2.35
Feelings About Work	2.30	2.36
Pay	2.13	2.12
Worthwhileness of Work	2.35	2.46
Program Experiences	2.39	2.37
	YAP	
	1979 (N=280)	1980 (N=255)
Pay	2.66	2.76
Advancement Opportunities	2.81	2.87
Supervision	3.07	3.10
Recognition for Good Job	3.01	2.98
On-the-Job Training	3.19	3.23
Accomplishment	3.24	3.36

TABLE 5-2  
RELATIONSHIP OF AMOUNT OF PARTICIPATION  
TO MEASURES OF SATISFACTION

	Zero-Order		Regression Weights			
	Correlations		Standardized		Metric	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=189)	(N=142)				
<u>Satisfaction With</u>						
How Job Went	.06	-.02	.05	-.08	.000	.000
Feelings About Work	.10	-.03	.09	-.06	.001	.006
Pay	.06	-.10	.07	-.12	.001	-.001
Worthwhileness of Work	-.06	-.08	-.08	-.12	-.001	.000
Program Experiences	.03	.10	.02	.08	.000	.000
<u>YAP</u>	(N=280)	(N=255)				
<u>Satisfaction With</u>						
Pay	.03	.07	.05	.06	.002	.002
Advancement	.10	.17	.12	.16	.004*	.006*
Supervision	.05	.22	.05	.21	.002	.007*
Recognition	.05	.14	.06	.14	.002	.006*
On-the-Job Training	.02	.21	.04	.21	.001	.008*
Accomplishment	.12	.11	.12	.11	.004*	.004

\* Metric regression weight at least twice its standard error.

The overall outcomes for supervisor ratings are summarized in Table 5-3, and the supervisor rating regression analyses are presented in Table 5-4. The overall outcomes suggest that supervisors of both YCD and YAP participants are generally satisfied with the participants' work. Since these data were based upon random samples of all participants, regardless of current employment status, these data provide some evidence of positive impact by the programs, as judged by the supervisors of the participants.

The regression analyses relating amount of participation to supervisor rating levels include three metric regression weights which may be considered statistically significant. All three of these significant regression weights involved YAP participants and all three of them also involved participants who graduated from high school during 1980. The difference between the two program concepts may be explained by the stronger emphasis of the YAP concept on employment. The difference with respect to the years of graduation may be attributable to the fact that four of the seven YAP projects were in the initial stages of implementation during the 1978-79 academic year. Other data available indicate that both the level and the quality of participation were very uneven during that year in the newly implemented demonstration projects.

TABLE 5-3  
 AVERAGE SUPERVISOR RATINGS FOR  
 YCD AND YAP PARTICIPANTS

	YCD	
	1979	1980
	(N=50)	(N=284)
Puts in Good Day's Work	2.88	2.86
Gets Along With Others	2.90	2.93
Would Promote	2.76	2.60
Would Rehire	2.86	2.82
Rank Compared to Others	2.62	2.59
	YAP	
	1979	1980
	(N=162)	(N=149)
Work Attitude	2.93	2.97
Skill Level	2.78	2.76
Ability to Learn	2.93	2.99
Cooperation	3.12	3.14
Punctuality	2.95	2.97
Following Instructions	2.88	2.94
Relations with Co-workers	3.10	3.28
Self Initiative	2.72	2.70
Pride in Work	2.88	2.88
Overall Job Performance	2.86	2.91

TABLE 5-4  
RELATIONSHIP OF AMOUNT OF PARTICIPATION  
TO SUPERVISOR RATINGS

	Zero-Order		Regression Weights			
	<u>Correlations</u>		<u>Standardized</u>		<u>Metric</u>	
	1979	1980	1979	1980	1979	1980
<u>YCD</u>	(N=50)	(N=284)				
<u>Employer Rating of:</u>						
Puts in Good Day's Work	.05	-.05	.06	-.06	.001	.000
Gets Along With Others	.03	-.02	.01	-.04	.000	.000
Would Promote	.06	-.06	.04	-.04	.000	.000
Would Rehire	.06	-.04	.07	-.02	.001	.000
Rank Compared to Others	-.04	-.01	-.08	.01	-.001	.000
<u>YAP</u>	(N=162)	(N=149)				
<u>Job Performance Rating of:</u>						
Work Attitude	.09	.12	.12	.15	.005	.007
Skill Level	.07	.15	.08	.17	.003	.007*
Ability to Learn	.03	.16	.05	.19	.002	.007*
Cooperation	-.02	.05	.01	.08	.000	.004
Punctuality	.04	.05	.06	.09	.003	.004
Following Instructions	.00	.04	.01	.05	.001	.002



TABLE 5-4 (CONTINUED)

Relations with Co-workers	.02	.11	.03	.14	.001	.005
Self Initiative	.05	.16	.06	.17	.003	.008*
Pride in Work	.07	.08	.09	.11	.004	.005
Overall Job Performance	.07	.12	.10	.14	.004	.006

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\* Metric regression weight at least twice its standard error.

## CHAPTER 6

### SUMMARY AND CONCLUSIONS

The YAP and YCD projects differed markedly in program design. YAP focused upon employment experience for in-school youth. YCD focused upon providing career development information and job-seeking techniques in a classroom setting for both in-school and out-of-school youth. In its origins, the YAP concept was not targeted upon the economically disadvantaged. By contrast, the YCD concept was oriented, from the outset, toward the economically disadvantaged population, and toward specific subsets of the economically disadvantaged population with additional barriers to employment. These differences in program design primarily account for the sharp differences in the race and sex composition of the YAP and YCD client groups. Basically, the YAP client group was predominantly male and white, while the YCD client group was predominantly female and black.

The analyses presented in this report also revealed some other interesting features of the YAP and YCD demonstrations. First, the analyses clearly indicate that, for both the YAP and YCD demonstrations, the participants' sex and race were more strongly associated with the various employment outcomes than were either of the measures of program participation. In short, males and whites served by both types of demonstrations fared better than females and blacks, whereas the analyses did not provide conclusive evidence that participation in either demonstration had a positive impact upon employment outcomes. For the association between race and sex and employment outcomes, and also for the association between participation and employment outcomes,

a greater number of statistically significant relationships were observed for the YAP demonstrations.

Participants in the YAP and YCD demonstrations who had some employment experience generally exhibited relatively high job satisfaction scores. Both groups of participants exhibited the lowest level of satisfaction with their pay. For YCD participants, there were no statistically significant relationships between any of the job satisfaction measures and the level of participation. For YAP participants, there were a number of statistically significant relationships between the individual measures of job satisfaction and the level of participation. It does appear, therefore, that YAP participation does lead to greater job satisfaction, perhaps by helping participants to gain access to and retain employment in somewhat targeted (apprenticeable) positions that are inherently more satisfying for the types of students involved.

In addition to examining differences in job satisfaction scales, this study also examined differences in the ratings given to participants by job supervisors. In general, the supervisors of both participant groups appeared to give approximately equal ratings to the participants. As with the job satisfaction scores, there were no statistically significant relationships between the individual supervisor rating items and the level of participation, for YCD participants. This may be attributable to the lack of an emphasis upon employment in the YCD demonstration. For the YAP participants, all the statistically significant relationships between supervisor ratings and level of participation were observed among the participants who graduated in 1980, with no significant relationships for participants who graduated in

1979. This difference by year of graduation may be attributable to the fact that four of the seven operating YAP projects were in the start-up phase of operations during the 1978-79 academic year.

In general, the comparative analyses presented in this report did not provide strong evidence of program impact by either of the demonstration concepts, nor did the comparisons reveal sharp differences in program impact between the two different demonstration concepts. It is important to note once again, as has been done at the relevant junctures within the body of this report, that the absence of evidence in the comparative analyses for program impact should not be regarded as definitive. This lack of evidence of program impact is not consistent with the findings of the two separate evaluations of the YAP and YCD demonstrations, which examined program impact in a much more specific and detailed fashion based upon comparisons with carefully selected control groups. Therefore, it may be concluded that the relative lack of impact revealed by the analyses presented in this report is attributable to the lowest common denominator methodology employed for these comparisons.

The present comparative effort was undertaken despite a relatively high level of incompatibility between the demonstrations in three key areas. First, the two demonstrations involved very different treatments. Second, the two demonstrations served very different client groups. Third, the evaluations of the two demonstrations lacked comparable data in several key areas. Therefore, the results of this comparative analysis should be viewed more in terms of their contribution to the advancement of methodologies designed to compare results derived from different evaluations. If more

comparable data had been available from the two evaluation efforts, it still would have been difficult to separate the effects of the differences in program treatments from the effects of the differences in client characteristics. However, it is much more reasonable to expect that concern for improved evaluation would lead to an increase in the comparability of evaluative data than it is to expect that concern for improved evaluation would lead to enhanced incorporation of experimental design within program concepts. Therefore, a few conclusions and suggestions regarding data comparability are offered below.

The present comparisons were handicapped because data concerning student background and academic performance or potential were not collected in identical form in the YCD and YAP evaluations, and also by the lack of outcome data collected in identical form. Therefore, DOL should consider establishing a relatively small set of core background and outcome items that all contractors conducting evaluations would be required to include in their questionnaires and other data collection instruments. Although contractors would need to supplement these items with items relevant to the purposes of the particular evaluation in question, the common core items always would be included. To the extent feasible, it should be possible to relate these common core items to some nationally representative sample. The presence of such a common core of items should produce a much more rigorous, generalizable "lowest common denominator" of methodology. With such data available, the usefulness of the results derived from a comparative methodology such as that employed here should be enhanced considerably.

It is important to note that this suggestion is not intended to support imposition of a standardized methodology or data collection battery across a variety of program concepts. Rather, this suggestion is limited to standardization of specific key items with appropriately different evaluation methodologies and data collection approaches. Further, this suggestion is not intended as a criticism of past practices. Rather, this suggestion is intended as a very modest contribution to the development of evaluation strategies for the future which will encompass the considerable diversity of program purposes and processes, on the one hand, and which will provide wider opportunities for comparison of results across different evaluations, on the other hand.

Appendix A

List of Reports on YAP and YCD Demonstrations

CSR, Incorporated

Davin, E.P., & Williams, G.D. Study of New Youth Initiatives in Apprenticeship: Vol. 1: Summary and Issues. DOL Contract No. 99-9-2224-33-57. (October, 1981).

Davin, E.P., & Williams, G.D. Study of New Youth Initiatives in Apprenticeship. Vol. 2: Site Visit Reports. DOL Contract No. 99-9-2224-33-57. (October, 1981).

Williams, G.D., Davin, E.P., Barrett, B., & Richards, J.M. Jr. Report on Impacts: Study of New Youth Initiatives in Apprenticeship. DOL Contract No. 99-9-2224-33-57. (August, 1981).

Martin, S.T., Williams, G.D., & Davin, E.P. Apprenticeship - School Linkage Implementation Manual. DOL Contract No. 99-9-2224-33-57. (October, 1981).

Educational Testing Service

Rock, D., & Freeberg, N.E. Assessment of the Youth Career Development Program for School-to-Work Transition: A Phase I Evaluation Demonstration Study. Technical Report #2. DOL Contract No. 27-34-78-04 (September, 1980).

Rock, D., & Freeberg, N.E. Addendum to Technical Report #2. DOL  
Contract No. 27-34-78-04 (February, 1981).

Rock, D., & Freeberg, N.E. Assessment of the Youth Career Development  
Program for School-to-Work Transition: A Phase II Evaluation Demon-  
stration Study. Technical Report #19. DOL Contract No.  
27-34-78-04 (January, 1982) [In review by DOL].