

YO! Participants' Employment and Earnings

Executive Summary

The Baltimore Youth Opportunity Program evaluated the employment and earnings impact of the program using the quarterly wage records collected by the state. The evaluation involved using a comparable sub group of the YO! enrollees who did not actively participate in the program as a comparison group.

The first comparison was of the total reported wages, paid after the enrollment date, to the participant group as compared to comparison group. This comparison indicated a positive outcome for active program participants. There was over a 44% difference in the two groups, with the participant group having nearly \$5000 in additional earnings. When the data was adjusted to account for the fact that the participant group had, on average, more time available for work, the active participant group continued to demonstrate a significant positive difference. They out earned the comparison group by more than 35%.

The second point of comparison was the labor market attachment rates of the two groups. Again, the difference between the two groups is significant, with the participant group beating the comparison group by 17 percentage points which equates to a 42% increase in terms of labor market attachment for the active participant group as opposed to the comparison group. When one considers that the participant group, by definition, was more active and engaged in program activities that would generally have taken time away from being available for work, this difference is even more pronounced.

Background

The Baltimore Youth Opportunity Program requested Callahan Consultants, Inc. to evaluate the employment and earnings impact of the program. One of the most reliable and cost effective methods for designing an evaluation of the impact of a program on the employment and earnings of participants is to use the quarterly wage records that the State collects from each employer in the State. These records provide a history of the wages paid each fiscal quarter to more than 90% of all wage earners in the State.

Typically, the approach employed to evaluate wage and earnings impact is to identify a similar group of people who did not receive program services as a control or comparison group. Comparing the wage record history of both the participant and control/comparison group over time provides insights as to the potential employment and earnings impact of the program services.

The timetable for completing this evaluation did not allow for the design and implementation of a pure control group evaluation. Furthermore, while the State agreed to provide access to the wage record data, identification of a traditional control or comparison group proved impossible for two reasons. Accessing the State's data requires a social security number as an identifier. While the program had social security numbers for enrollees, they did not have identifiers for other youth who could serve as the control group. When a program does not create a specific control group at the onset of program operations, often the applicant pool of people who applied for program services but did not enroll may be used for research/evaluation purposes. But this option was not available to the YO! program. Because the US Department of Labor (USDOL) required that the program recruit and enroll all youth in the target area, no applicant pool of youth who were eligible for the program but who did not enroll was available.

In an attempt to find an alternative evaluation approach, we explored several ideas. First we researched finding a similar group of youth that were not in the YO! program and who could be used as a comparison group. Our search did not identify any similar group for which we could obtain social security numbers and permission to study. The second idea involved examining the possibility of using a sub group of the YO! enrollees as a comparison group. This idea proved successful. USDOL requires all YO! program to report monthly the participation of each youth in the program and requires that youth complete at least one program activity that would further their education and/or labor market prospects. Therefore, the program database was rich in terms of the actual level of youth participation in the program. We examined the total YO! participant pool to ascertain if there was a sub-group of youth who had not met these federal standards. Upon discovering that there were a number out-of-school youth who, while technically enrolled, did not meet USDOL participation guidelines we decided that this group could be used as a comparison group. Attachment A provides more information on the comparison group and the rationale for using this group in our evaluation.

The next step was to identify the youth we would compare to the subgroup of YO! enrollees who were not considered participants. After examining a number of options, we decided that our participant group would consist of:

- Out-of-school youth who had participated in the program and enrolled between the start date of the program and 3/31/03 (the same dates were used for the comparison group as well);
- Out-of-school youth who had completed at least one program activity during their time of program participation; and
- Out-of-school youth who became employed after program enrollment.

A number of current YO! enrollees were excluded from our participant group. YO! actively engages youth in pre-employment program activities such as work experience, educational instruction, and training programs and encourages these youth to obtain their educational credential and/or other work enhancement services prior to seeking work. Since program participation essentially removed these youth from the ranks of youth who are available to enter the world-of-work employed it was decided to take them out of our YO! participant group.

About the Youth Compared

Our first consideration was to see how comparable the two groups were. Our participant group consisted of 331 youth while our comparison group had 794 young people. All of the youth resided in the Baltimore Empowerment Zone so we believed that the groups would be essentially similar. To test that assumption we compared the age, education, sex and race of the two groups. The following tables show the results:

Table 1: Educational Status at Time of Enrollment

Educational Status	Participants	%	Comparison	%	Difference
1-4 Yrs of College	0	0.0%	2	0.3%	0.3%
Has GED	15	4.5%	12	1.5%	-3.0%
Has H.S. Diploma	96	29.0%	169	21.3%	-7.7%
Last Grade is 10th	75	22.7%	195	24.6%	1.9%
Last Grade is 11th	66	19.9%	132	16.6%	-3.3%
Last Grade is 9th	52	15.7%	173	21.8%	6.1%
Last Grade is less than 9th	27	8.2%	111	14.0%	5.8%
Average Grade Levels	10.5	N/A	10.1	N/A	N/A
Totals	331	100%	794	100%	N/A

The data indicated that the participant group was slightly better educated than the comparison group. In terms of average educational status, our participant group averaged 10.5 years of education while the comparison group averaged 10.1 years. This slight difference did not provide the participant group with any labor market advantages over the comparison group.

Table 2 shows the age distribution of the two groups. It should be expected that older youth would have more labor market participation than younger youth.

Table 2: Age Distribution at Time of Enrollment

Age	Participants	%	Comparison	%	Difference
16	39	11.8%	106	13.4%	1.6%
17	55	16.6%	169	21.3%	4.7%
18	73	22.1%	161	20.3%	-1.8%
19	76	23.0%	141	17.8%	-5.2%
20	49	14.8%	122	15.4%	0.6%
21	39	11.8%	95	12.0%	0.2%
Average Age	18.5	N/A	18.4	N/A	N/A
Total	331	100.0%	794	100.0%	

While there were differences in the age distribution, with the participant group having a larger portion of its membership in the 18 and 19 year old cohorts, this was somewhat offset by the comparison group have a larger percentage of their members in the 20 and 21 age group. In terms of average age, the groups are nearly identical with the participant group averaging 18.5 years of age and the comparison group averaging 18.4 years of age.

Based on labor market participation rates, the gender composition of a group will influence the overall employment status, with groups that have more male members being statistically more likely to have a larger portion of the group employed. We also decided to look at the racial composition of the groups.

Table 3: Other Demographics

Demographics	Participants	%	Comparison	%	Difference
Female	187	56.5%	416	52.4%	-4.1%
Male	144	43.5%	378	47.6%	4.1%
Native American	0	0.0%	1	0.1%	-0.1%
Asian	0	0.0%	1	0.1%	-0.1%
African American	330	99.7%	772	97.2%	-2.5%
White	1	0.3%	20	2.5%	2.2%
Total	331	100%	794	100%	N/A

In terms of gender, the comparison group was slightly more male in composition, and therefore any impact would result in that group being more likely to have a higher labor market participation rate. In terms of race, both groups were overwhelmingly African American.

This review confirmed our original assumption that both groups were essentially comparable.

Comparisons of Earnings

The first comparison was of the total reported wages, paid after the enrollment date, to the participant group as compared to the total reported wages that were paid to the comparison group. The timeframe for the wage record data set was the 16 fiscal quarter period starting in January, 1999 – prior to the onset of the YO! program – and ending June 2004. Table A below provides the core information from the data provided.

Table: Post Enrollment Wages

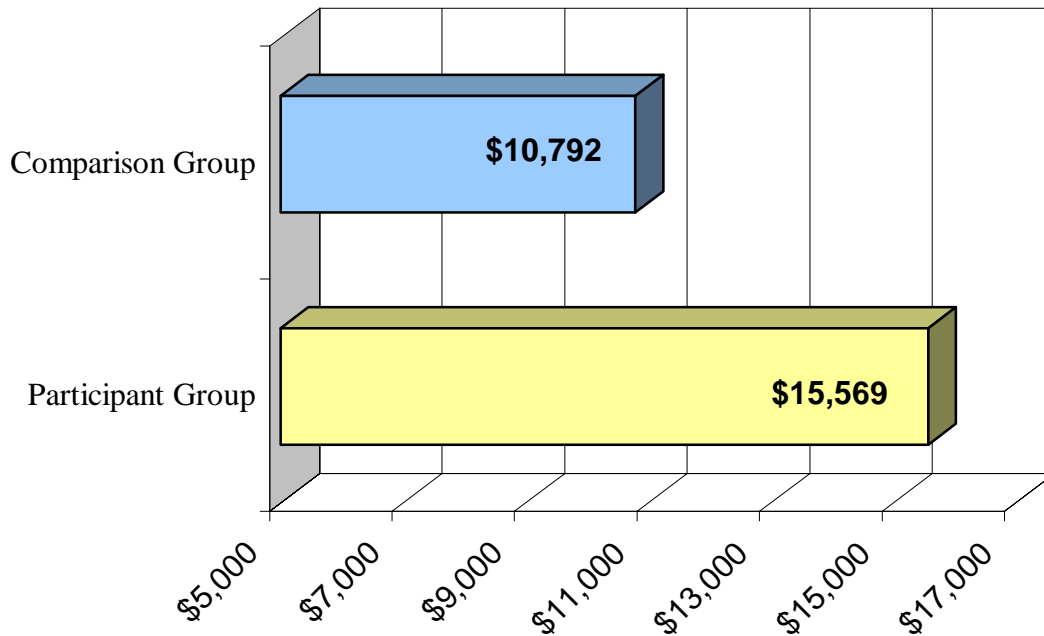
	Participant Group	Comparison Group
Total Youth	331	794 (8)
Total Earnings Reported (1)	\$5,153,432.00	\$8,568,760.00
Total Quarters Available for Work (2)	4,008	9,047
Participants' Average Earnings (3)	\$15,569.28	\$10,791.89
Average Quarterly Earnings (4)	\$1,285.79	\$947.14
Average Quarters Per Youth (5)	12.1	11.4
Equivalent Years Available for Employment (6)	1,002	2,261.75
Equivalent Annual Earnings (7)	\$5,143.15	\$3,788.55

Table Notes:

1. Total Earnings Reported: This represents the total wages reported earned after the date listed as the YO! enrollment date and in the timeframe starting January 1, 1999 and ending June 30 2004.
2. Total Quarters Available for Work: This equals the total number of fiscal quarters that the group had available to work starting from the quarter which is listed as their YO! enrollment date and ending June 2004.
3. Participants' Average Earnings: This is calculated by dividing the total earning by the number of youth in the group.
4. Average Quarterly Earnings: This is calculated by dividing the total earnings by the total number of quarters available for work.
5. Average Quarters Per Youth: This is calculated by dividing the total number of quarters available for work by the total number of youth in the group.
6. Equivalent Years Available for Employment: Calculated by taking the cumulative total quarters available for all youth to work divided by four. This produces a figure that is equal to the person years available to work during the study period and is a means used to equalize the fact that quarters available for work differed for each group.
7. Equivalent Annual Earnings: Calculated by dividing total earnings by the equivalent years available for employment. This adjusts for the difference in the number of quarters available for work in each group.
8. The total group equaled 804 but 10 youth were under the age of 16 when enrolled and were taken out of the comparison group because work and school laws prohibit them from seeking employment and keeping them in the comparison group caused the results of comparison group to be artificially lower.

The following graph shows the differences between the participant and comparison group relative to their average earnings. As the data indicates, there was over a 44% difference in the two groups with the participant group having nearly \$5000 in additional earnings.

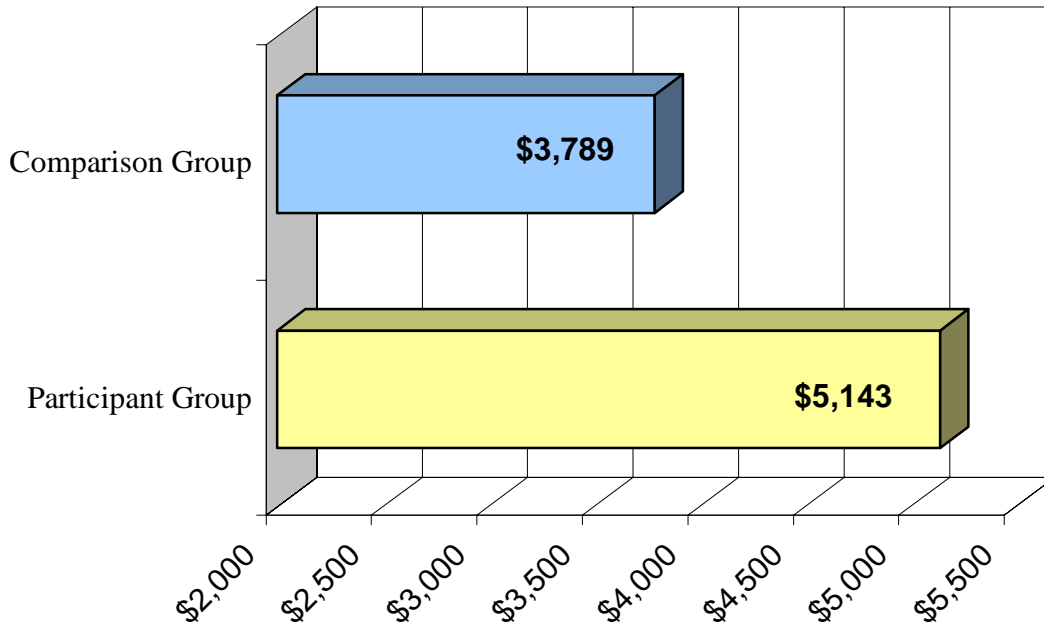
Post Enrollment Earnings



Interestingly, the review of the data showed that in the comparison group, several incidents of exceedingly high wages were reported which appeared to be clerical errors, for example there were eight reported quarters with earning that exceed \$30,000. No quarter in the participant group exceeded \$17,000. Taking out these potential clerical mistakes causes the difference between the two groups to expand. However, there was means to ascertain if the data was correct or in error since it is impossible for us to identify the employer who submitted the report. After consideration of the issue, it was determined that while not likely it was possible that these were legitimate earnings reports and we did not delete the records.

Another consideration was that the data in the table shows that youth who were a part of the participant group had more quarters available for work. The data indicated that the participant group had 12.1 quarters available post enrollment versus 11.4 quarters for the comparison group. Could this difference account for the increased earnings reported? In order to adjust for this difference in time available for work, we adjusted the quarters to equivalent person years by dividing the quarters available for work by 4 to create a figure that represent person years for each group. Then we used the person years figure as the denominator for a calculation using the total earnings. The graph that follows shows the result of this adjustment.

Adjusted Earnings Comparison



As the graph indicates, by adjusting the quarters into equivalent person years to equalize the time available for work, the gap between the participant group and the comparison group narrowed. However, the difference between the two groups was still significant with the earning of the participant group showing a more than 35% increase over the comparison group.

Comparisons of Labor Force Attachment

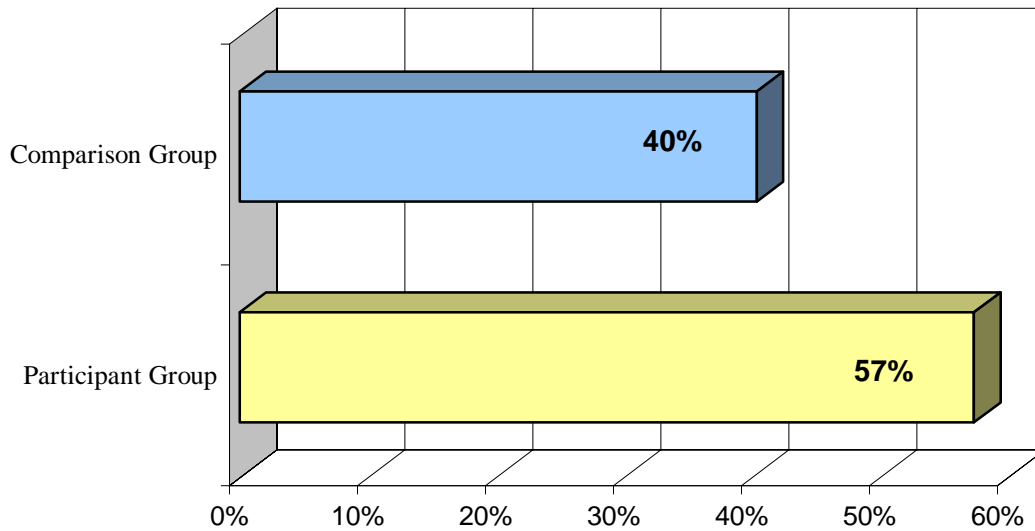
Labor market attachment is also an indicator of labor market status, with a higher level of labor market attachment generally considered a positive indicator of success. While the State’s wage record data do not provide actual dates of employment, an estimate of labor market attachment could be calculated by tracking and adding the quarters where earnings were reported for the two groups. Table B, which follows, shows the number of quarter that earnings were reported for each group after the date shown as the YO! enrollment date and thru June 30, 2004.

Table: Labor Market Attachment

	Participant Group	Comparison Group
Quarters Available to Work	4,008	9,047
Quarters Reported With Wages	2,298	3,651
% Of Quarters Worked	57.34%	40.36%

The graph that follows provides a visual representation of the above data.

% of Quarters Worked



The difference between the two groups is significant, with the participant group beating the comparison group by 17 percentage points, which equates to a 42% increase in the labor market attachment for the active participant group over the comparison group. When one considers that the participant group, by definition, was more active and engaged in program activities that would generally have taken time away from being available for work, this difference is even more pronounced.

YO! Baltimore Comparison Group

In an effort to evaluate the YO! Baltimore program it was decided to ascertain if a control or a comparison group of youth could be identified, youth who were essentially similar to the young people who are engaged in the YO! Baltimore program but who did not participate in the program. In line with a traditional research and evaluation approach it was thought that comparing the status of the youth who participated in YO! Baltimore to the status of those who did not participate would yield important information that would provide insight to the overall effectiveness of the program. While the creation of a traditional control group typically takes place at the onset of program operations, this approach was not allowed by US Department of Labor. In fact, at the onset of the program, all of the Youth Opportunity programs were prohibited from using any of the allocated resources for any type of program evaluation or the creation of a control group.

While not as effective as a pre identified control group, it was decided to seek a comparison group of youth who could be used for a comparison study of the youth in YO! Baltimore who actively took part in the program and youth who did not participate in the program. After exploring available alternative data sources it was determined that the best data source for identifying a group of young people to compare the YO! Baltimore participants is the YO! Baltimore data source itself. This decision was based on a number of facts. First, the US Department of Labor insisted that all Youth Opportunity programs be considered an entitlement program. Furthermore, all Youth Opportunity programs were designed as community saturation programs. US DOL monitored and rated these programs based on their efforts to actively recruit all youth who resided in the target neighborhoods. Consequently, it is believed that the overwhelming majority of the all youth who lived in the targeted areas were aggressively recruited and offered YO! Baltimore services. This provides us the opportunity to construct a comparison group of similar youth to compare to the youth who participated in the YO! Baltimore program.

Because concerted efforts were made to engage all youth in the targeted neighborhoods, the unintended result was that some youth came to one of our Ports but did not continue to actively participate in YO! Baltimore. A review of the demographic information on this group of young people indicated that they share essentially the same demographic and socio-economic circumstances as the group of youth who did actually enroll in YO! Baltimore and actively participated in the program. Therefore, these circumstances offer the opportunity to use this group of young people – youth who initially enrolled in YO! Baltimore but did not actually follow through and obtain services – as a comparison group. We have identification data on these youth, permission to obtain information on them from other agencies and the capacity to track these individuals in a similar fashion as we can track our YO! Baltimore participants.