

Effects of YMCA High School Youth
Institute on Grades, Attendance and
Content Standard Test Scores
(2009 - 2010)

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Introduction

The YMCA of Greater Long Beach High School Youth Institute is an innovative program that uses technology as an integral mechanism for promoting positive youth development and enhancing the academic success and career readiness of low-income, culturally-diverse high school students. Classes enter each summer with an intensive eight-week program. Upon graduation from the summer program, participants become “High School Youth Institute Alumni,” who are then able to voluntarily participate in a wide range of year-round programs throughout their high school, and sometimes, even their college years. Year-round involvement opportunities include, but are not limited to, digital art labs, homework assistance, academic advising, personal/home advising, community service, equipment check-out, field trips, paid technology and mentoring assignments, community leadership positions and social work support. The program has been in operation since June, 2001. This is the fourth year in which the program effects on grades, attendance, and test scores have been explored.

Methods

Data Collection

In order to be included in the grade evaluation, both the student and their parent signed an informed consent allowing researchers to collect their grades, attendance and test scores from the Long Beach Unified School District (LBUSD). This information was collected using only school district identification numbers. Research staff from LBUSD then randomly selected a comparison sample of high school students who were matched to the Youth Institute sample based on gender, ethnicity and year in school. Approximately five comparison students were matched for each Youth Institute participant. The district provided academic grade point average (GPA), total GPA, cumulative academic GPA,

cumulative total GPA, absences, English Language Arts (ELA) and Math content standard test scores for 2009-2010 academic year. The pre-test measures for these analyses were taken from the end of the 2008-09 academic year, and the post-test measures were taken at the end of the 2009-10 academic year. Please note that for 9th graders, the pre-test measures came from the final semester of middle school (8th grade).

Sample Description for Active HSYI Participants, Non-Active HSYI Participants and Comparison Students

One-hundred, thirty-seven (66%) of the High School Youth Institute participants who finished the program in the summers of 2006, 2007, 2008, and 2009 had both parent and child informed consents, and had some useable data for the 2009-10 academic year, are included in these analyses. Ninety-three (68%) of the 137 were considered active (attended 10 or more activities in the current year or 60 or more over the past two years) at the HSYI during the 2009-10 academic year. For the purposes of these analyses, YI youth were divided into “Active,” and “Non-Active” groups. Table 1 displays the demographic characteristics of the active HSYI sample ($N = 93$), the matched, comparison sample ($N = 465$), and the non-active HSYI sample ($N = 44$). There were no significant gender or ethnic differences between active HSYI participants and the comparison sample or the active HSYI and non-active HSYI participants.

Table 1
Demographics of YMCA HSYI Active Participants, HSYI Non-Active Participants and
Comparison Students for the 2009 – 2010 Academic Year

	Active HSYI Participants (N = 93)		Non-Active HSYI Participants (N = 44)		Comparison Students (N = 465)	
	%	N	%	N	%	N
Gender						
Male	52%	48	46%	20	52%	240
Female	48%	45	54%	24	48%	225
Ethnicity						
Latino	48%	45	59%	26	48%	225
Asian-American/Pacific Islander	25%	23	16%	7	25%	115
African-American	23%	21	18%	8	23%	105
European-American	4%	4	7%	3	4%	20
Grade						
9 th Grade	15%	14	16%	7	15%	70
10 th Grade	33%	31	25%	11	33%	155
11 th Grade	24%	22	36%	16	24%	110
12 th Grade	28%	26	23%	10	28%	130

Analysis

Multivariate analysis of co-variance (MANCOVA) was used to compare outcome differences between High School Youth Institute and comparison students and between “Active,” and “Non-Active” youth on academic grade point average (GPA), total GPA, cumulative academic GPA, cumulative total GPA, absences, and English-Language-Arts (ELA) and Math content standard test scores while controlling for baseline measures.

Given the exploratory nature of the study and the small sample sizes of the HSYI groups, differences are reported at the .10 level.

Comparisons between Active HSYI Participants and Comparison Students on Grades, Absences, ELA and Math Content Standard Test Scores for the 2009-10 Academic Year

As shown in Table 2, there were no significant differences found between YMCA Active High School Youth Institute participants and Comparison students on any of the academic measures.

Table 2

Comparisons of Grades, Absences, and ELA and Math Content Standard Test Scores between Active HSYI Participants and Comparison Students for the 2009-10 Academic Year

Measure	Active HSYI Participants		Comparison Students		F-Value
	Adjusted Mean	N	Adjusted Mean	N	
Academic GPA	2.48	90	2.41	379	.56
Total GPA	2.63	90	2.53	391	1.29
Cumulative Academic GPA	2.54	91	2.49	465	1.46
Cumulative Total GPA	2.67	91	2.62	465	2.11
Absences	6.84	93	7.34	465	.46
Content Standards					
English Language Arts	346.45	65	346.93	321	.01
Math	310.47	60	314.60	300	.46

** Significant at the .05 level

* Approaching significance at the .10 level

Comparisons between Active and Non-Active HSYI Youth on Grades, Absences, ELA and Math Content Standard Test Scores for the 2009-10 Academic Year

As shown in Table 3, Active HSYI participants had significantly higher Total GPA, $F(1, 124) = 5.14, p < .05$, Cumulative Academic GPA, $F(1, 127) = 6.91, p < .05$,

and Cumulative Total GPA, $F(1, 127) = 6.70, p < .05$, than Non-Active HSYI participants. Active HSYI participants also had somewhat higher academic GPAs than Non-Active HSYI participants, $F(1, 123) = 3.42, p < .10$.

Table 3
Comparisons of Grades, Absences, ELA and Math Content Standard Test Scores between Active and Non-Active HSYI Participants for the 2009-10 Academic Year

Measure	Active HSYI Participants		Non-Active HSYI Participants		F-Value
	Adjusted Mean	N	Adjusted Mean	N	
Academic GPA	2.43	90	2.14	36	3.42*
Total GPA	2.59	90	2.25	37	5.14**
Cumulative Academic GPA	2.51	91	2.36	39	6.91**
Cumulative Total GPA	2.65	91	2.50	39	6.70**
Absences	7.11	93	8.61	41	.96
Content Standards					
English Language Arts	342.35	65	347.32	28	.47
Math	308.31	60	321.14	24	1.42

** Significant at the .05 level

* Approaching significance at the .10 level

Conclusions

One of the primary goals of the YMCA Youth Institute is to help promote better academic success for low-income, culturally-diverse youth. In the current study, Youth Institute participants were compared with a random, matched comparison group of high school students to determine the effects of the Youth Institute on grades, attendance and test scores. Although YI participants had higher grades on all measures than those in the comparison group, none of the differences were significant. There was also no difference between the two groups on attendance. The lack of differences in attendance this year is a departure from previous years. Prior evaluations of the project have found positive effects

on school attendance, which is encouraging given the link between attendance, grades and high school completion (Allensworth & Easton, 2007; National Education Goals Panel, 1994; Roby, 2004; Shutt, 2000). Given the fact that there were no academic differences between YI participants and the comparison group, staff may need to prioritize academic guidance and homework support to youth in the coming year to ensure they are meeting academic goals of the project. Closer tracking of academic performance; for example, having youth turn in their quarterly report cards or requiring academic advising sessions might help staff to intervene early when academic challenges occur.

The findings here, combined with those from last year, do strongly indicate that YI involvement after the intensive summer program does help YI youth to do better academically since “Active” participants evidenced significantly higher total GPA, cumulative total GPA, cumulative academic GPA, and somewhat higher Academic GPA than “Non-Active” YI youth, at the end of the school year. This suggests that ongoing efforts to encourage youth to stay involved in the program throughout the school year should benefit them academically. Overall, these findings, combined with those of past years do provide some evidence to suggest that active YI participation is related to higher academic performance.

References

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