

Effects of YMCA High School Youth
Institute on Grades, Attendance and Test
Scores (2007 – 2008)

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March, 2009

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, community service, equipment check-out, field trips, dance clubs, paid technology and mentoring assignments, community leadership positions and social work support. The program has been in operation since June, 2001.

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 from the school district. Youth Institute participants’ grades were collected from the Long Beach Unified School District (LBUSD) 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. Five comparison students were matched for each Youth Institute participant. This year, the district provided cumulative academic grade point average (GPA), absences and content standard test scores (English Language Arts and Math) for the 2007 – 2008

academic year. The pre-test measures for these analyses were taken from the end of the 2006 academic year, and the post-test measures were taken at the end of the 2007 academic year.

Sample Description for 2007 Academic Year

Thirty-nine (55%) of the 71 High School Youth Institute participants who actually finished the program in the summers of 2006 or 2007, had both parent and child informed consents, and useable data for the 2007 academic year are included in these analyses. Table 1 displays the demographic characteristics of the High School Youth Institute sample ($N = 39$) and the matched, comparison sample ($N = 195$). Fifty-four percent of both the HSYI participants and the comparison sample were female. Latinos made up almost half (46%) of both samples, followed by Asian-American/Pacific Islanders (31%), and African-Americans (23%). There was no significant gender or ethnic differences between HSYI participants and the comparison sample.

Table 1

Demographics of YMCA High School Youth Institute Participants and Comparison
Students for the 2007 – 2008 Academic Year

	YMCA High School Youth Institute Participants		Comparison Students	
	(N = 39)		(N =195)	
	%	N	%	N
Gender				
Female	54%	21	54%	105
Male	46%	18	46%	90
Ethnicity				
Latino	46%	18	46%	90
Asian-American/Pacific Islander	31%	12	31%	60
African-American	23%	9	23%	45

Analysis

Multivariate analysis of co-variance (MANCOVA) was used to compare outcome differences between High School Youth Institute and comparison students on cumulative academic grade point average (GPA), absences and content standard test scores, while controlling for baseline measures. Given the exploratory nature of the study and the small sample size of the HSYI group, differences are reported at the .10 level.

Comparisons between Youth Institute and Comparison Students on Cumulative Academic GPA, Absences and Content Standard Test Scores for the 2007 Academic Year

As shown in Table 3, YMCA High School Youth Institute students had somewhat higher cumulative academic GPAs than comparison students after intervention, $F(1, 231) = 3.01, p < .10$. Although no other significant differences were found, it is worth noting

that High School Youth Institute participants were better than comparison students in all areas after intervention.

Table 3

Comparisons of Cumulative Academic GPA, Absences and Content Standard Test Scores between HSYI Participants and Comparison Students for the 2007 Academic Year

Measure	HSYI Participants		Comparison Students		F-Value
	Adjusted Mean	N	Adjusted Mean	N	
Cumulative Academic GPA	2.55	39	2.39	195	3.01*
Absences	6.85	39	8.71	195	1.29
Content Standards					
English Language Arts	348.34	36	345.97	172	.16
Math	320.35	35	310.04	157	1.56

* 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 this 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 school grades, attendance and test scores. Youth Institute participants had somewhat higher cumulative academic GPAs for the 2007 – 2008 academic year, however, there were no differences in absences or test scores between the two groups. These findings are somewhat similar to the results from the grade evaluation from last year, although, at that time, YI participants had significantly higher cumulative GPAs as well as significantly fewer absences.

The finding of higher grades may be important as over half (59%) of these HYSI participants had their baseline grades taken from their last semester of middle school and

their ending measures after their first year of high school. Research suggests that youth seem to be particularly vulnerable to negative risks such as lower grades during the transition between middle school and high school (Alspaugh, 2001; Smith, 2006). It is possible that Youth Institute involvement may have helped participants to negotiate the difficult transition from middle school to high school more effectively than their peers. This suggests that efforts to engage youth in the Youth Institute prior to actual entry into high school may help provide them with valuable supports as they grow, develop and take on the added challenges of high school.

Taken in combination, with the findings from last year, this report provides some support for the notion that the HSYI may, as hypothesized, positively influence the academic performance of youth. However, in order to strengthen the ability to draw these conclusions, it will be important to have a larger sample size and to increase, when possible, the number of youth and parents who agree to participate in this research as well as to investigate the longitudinal effects of participation. It will also be interesting to see whether similar findings happen in the coming year since the evaluation of the summer program found significant improvement in academic self-perception and some improvement in academic motivation and self-regulation, which have not been typically found in other YI evaluations.

References

- Alspaugh, J. W. (2001). Achievement loss associated with the transition to middle school and high school. *The Journal of Educational Research, 92*, 20-25.
- Smith, J. S. (2006). Examining the long-term impact of achievement loss during the transition to high school. *The Journal of Secondary Gifted Education, 17*, 211-221.