Evaluation of the Effects of the 2011 Long Beach YMCA High School Youth Institute Summer Program on Leadership Skills, Technology Skills, Educational Attitudes and Positive Youth Development

Sandra L. Kirkner, M.A.-R.
Research Associate

Julie O'Donnell, Ph.D., M.S.W.
Professor and Director of Research

Maria G. Lozano
Research Assistant

Child Welfare Training Centre
Department of Social Work
California State University, Long Beach

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Table of Contents

Methods

Data Collection

Self-report survey data was collected from all entering 2011 YMCA Youth Institute Summer Program participants prior to the start and on the last day of the program. Two surveys were completed. The first was the Leadership Skills Inventory (Karnes & Chauvin, 2000), a standardized leadership instrument which measures nine areas of leadership skills. The instrument has been shown to have strong reliability and validity. The second instrument, The YMCA Youth Institute Survey is a combined instrument measuring positive youth development (cultural competency, life skills, positive core values, sense of self, social competency-responsible choices, community involvement, and positive adult relationships), technology skills and educational attitudes. The positive youth development measures were created by the researchers specifically to evaluate this project based on The Toolkit for Evaluating Positive Youth Development (The Colorado Trust, 2004). The technology skills measure was created by Dr. Jo Ann Regan to evaluate this project, however, the measure has been revised periodically to reflect the current YI technology curriculum. The three educational attitude measures (self-perceptions, goal valuation, and motivation/self-regulation) came from The School Attitude Assessment Survey – Revised Edition (McCoach & Siegle, 2003), a standardized measure with strong reliability and validity.

Sample

Forty-six (92%) of the 50 YMCA High School Youth Institute (HSYI) participants who completed the 2011 summer program had both pre- and post-test data and were included in these analyses. As shown in Table 1, Fifty-four percent of participants were male. Latinos (65%) were the largest ethnic group, followed by African-Americans (11%), Asian-American/Pacific Islanders and Multicultural youth (9% each), and Whites (6%). Participants ranged in age from 13 to 17 years old. The majority (79%) were between 13 and 14 years old at the start of the

program. Eighty-seven percent of participants were in 8th or 9th grade when they started the summer program. Eight (17%) youth had participated in the Middle School Youth Institute before entering the high school program.

Table 1

Description of Summer 2011 High School Youth Institute Participants

(N = 46)

	%	N
❖ Gender		
Male	54%	25
Female	46%	21
❖ Ethnicity		
Latino	65%	30
African-American	11%	5
Asian American/Pacific Islander	9%	4
Bi/Multicultural	9%	4
White	6%	3
❖ Age at Start of Program		
13	33%	15
14	46%	21
15	13%	6
16	6%	3
17	2%	1
❖ Grade		
8th	52%	24
9th	35%	16
10th	6%	3
11th	7%	3

Analysis

Measures

Leadership Skill Scales

Nine types of leadership skills were measured including fundamentals of leadership (α = .85), written communication (α = .86 to .88), speech communication (α = .88 to .90), character-building (α = .87 to .93), decision-making (α = .84 to .92), group dynamics (α = .90 to .95), problem-solving (α = .85 to .89), personal skills (α = .91 to .92), and planning skills (α = .91 to .94). Participants rated themselves on a scale ranging from 0 "Almost Never" to 3 "Almost Always." Higher scores indicated better self-perceived skills. Changes in skills were investigated using paired-samples t-tests.

Educational Attitude Scales

Three educational attitudes were measured including academic self-perceptions (α = .86), goal valuation (α = .87 to .89), and motivation/self-regulation (α = .88 to .90). The academic self-perception scale consisted of six items that measured the perception/confidence that students had in their own skills. Questions included, "I feel that I can learn new ideas quickly" and "I feel intelligent." The goal valuation scale consisted of six items that measured how much students valued education. Questions included, "It is important to me to get good grades" and "I want to do my best in school." The motivation/self-regulation scale consisted of 10 items and measured how self-motivated students were and how good they were at self-monitoring. Questions included, "I use a variety of strategies to learn new material in high school" and "I am a responsible student." Participants rated their agreement with each statement on a scale ranging from 1 "Strongly Disagree" to 7 "Strongly Agree." Higher scores indicated more positive attitudes. Changes in attitudes were investigated using paired t-tests.

Positive Youth Development Scales

The cultural competence scale (α = .61 to .77) consisted of seven items measuring respect for and comfort with their own and others' cultures. Questions included, "I have respect for teens of other cultures, races or ethnic groups" and "I feel connected to and proud of my own culture." The life skills scale (α = .87 to .92) consisted of 11 items measuring proficiencies that allow youth to transition into and achieve successful adulthood. Questions included, "I am good at making friends" and "I make good decisions."

The positive core value scale (α = .75 to .81) consisted of seven items measuring caring, empathy, integrity, honesty, responsibility, equality and fairness. Questions included, "I am good at taking responsibility for my actions," and "I am good at speaking up for people who have been treated unfairly. The sense of self scale (α = .77 to .79) consisted of six items measuring how youth view themselves and their abilities to cope with the basic challenges of life. Questions included, "I can handle whatever comes my way" and "I feel that I can make a difference."

The social competency/responsible choices scale (α = .77 to .82) consisted of six items measuring good behavior, hard work, personal responsibility and fairness. Questions included, "I can identify the positive and negative consequences of my behavior" and "I think I should work to get something if I really want it." The community involvement scale (α = .78 to .82) consisted of four items measuring feelings of connectedness to the community and volunteer activities. Questions included, "I feel a strong connection to my community" and "I feel good about myself because I help others."

The positive adult relationships scale (α = .87 to .88) consisted of three items measuring the amount of perceived social support received from adults outside of the family. Questions included, "There is a caring adult outside my family in my life who is around when I need

him/her" and "There is a caring adult outside of my family who I can talk to about my problems."

Results

Leadership Skills

As shown in Table 2, summer HSYI self-reported a significant improvement in only one of the nine areas of leadership. Participants reported significantly higher speech communication skills, t (45) = 2.84, $p < .05$, at the end of the summer program.

Table 2

Summer 2011 YI Participant Report of Changes in Leadership Skills

	Before Summer			End of Summer		
Skills	Mean	SD	N	Mean	SD	Difference
Fundamentals of Leadership	2.33	.52	46	2.31	.47	-.02
Written Communication	2.04	.54	46	2.17	.49	.13
Speech Communication	2.10	.51	46	2.30	.48	.20**
Character Building	2.51	.37	46	2.53	.43	.02
Decision-Making	2.50	.41	45	2.45	.53	-.05
Group Dynamics	2.33	.42	46	2.38	.53	.05
Problem-Solving	2.28	.53	46	2.38	.56	.10
Personal	2.48	.38	44	2.55	.38	.07
Planning	2.34	.42	44	2.38	.47	.04

*p < .10, **p < .05

Technology Skills

Technology skills were measured by self-report of skill level with 13 types of technology. Participants rated themselves on a scale ranging from 1 "No Skills" to 4 "Excellent Skills." Higher scores indicated greater skill level. As shown in Table 3, study participants reported significantly higher skills in sending email, t (44) = 3.39, $p < .05$, web design, t (44) = 3.08, $p < .05$, digital video filming, t (44) = 3.60, $p < .05$, digital music creation, t (44) = 5.23, $p < .05$,

presentation software, t (44) = 2.72, $p < .05$, digital video editing software, t (44) = 5.43, $p < .05$, graphic design, t (44) = 5.05, $p < .05$, digital photography, t (44) = 5.25, $p < .05$, and animation, t (44) = 2.28, $p < .05$, at the end of the summer program. The greatest skill gains were found in digital photography, digital music creation and digital video editing.

Table 3

Summer 2011 YI Participant Report of Changes in Technology Skills

	Before Summer			End of Summer		
Technology Use	Mean	SD	N	Mean	SD	Difference
Email use.	3.20	.84	45	3.58	.72	.38**
Internet use (visit websites/surf web).	3.71	.59	45	3.76	.57	.04
Web design (construction, layout, domain registration, maintenance, applications, Dreamweaver, Photoshop, HTML, peripheral configuration).	2.29	.99	45	2.82	.83	.53**
Word processing software (Word) to write reports and/or letters.	3.60	.58	45	3.62	.58	.02
Data processing software (Excel) for databases or spreadsheets.	2.53	.99	45	2.58	.89	.04
Digital Video Filming (Camera, lighting, etc.)	2.64	1.03	45	3.20	.76	.56**
Using the computer to complete school assignments.	3.60	.69	45	3.67	.56	.07
Digital music creation (GarageBand, Reason, Logic Pro).	2.32	.105	44	3.20	.77	.89**
Presentation software (Powerpoint, Keynote, Inspiration).	2.93	.92	45	3.33	.85	.40**
Digital Video Editing (Final Cut Pro, iMovie, After Effects, etc.).	2.22	1.06	45	3.07	.84	.84**
Graphic Design (Photoshop, Illustrator, InDesign).	2.44	1.14	45	3.20	.82	.76**
Digital Photography (DSLR camera, lighting, memory card, Photoshop, etc.).	2.16	.95	45	3.07	.81	.91**
Animation (Cinema 4D, After Effects, Stop Motion).	1.82	.91	45	2.29	1.08	.47**

*p < .10 , **p < .05

Educational Attitudes

As shown in Table 4, these teens did not report any significant changes on the three educational attitude measures.

Table 4

Summer 2011 YI Participant Report of Changes in Educational Attitudes

	Before Summer			End of Summer		
Educational Attitude Scale	Mean	SD	N	Mean	SD	Difference
Academic Self-Perceptions	5.65	.92	45	5.68	.92	.03
Goal Valuation	6.38	.76	45	6.76	1.88	.38
Motivation/Self-Regulation	5.57	.87	45	5.73	.78	.15

*p < .10, **p < .05

Positive Youth Development

As shown in Table 5, participants self-reported significant improvement in five (71%) of the seven positive youth development areas at the end of the summer program. Positive, significant differences were found in cultural competence, t (44) = 2.05, $p < .05$, life skills, t (44) = 2.18, $p < .05$, positive core values, t (44) = 2.57, $p < .05$, social competency/personal responsibility, t (44) = 2.21, $p < .05$, and community involvement, t (41) = 2.70, $p < .05$. Youth also reported somewhat higher caring adult relationships, t (44) = 1.83, $p < .10$, at the end of the summer program.

Table 5

Summer 2011 YI Participant Report of Changes in Positive Youth Development Scales

	Before Summer			End of Summer		
Development Scale	Mean	SD	N	Mean	SD	Difference
Cultural Competence	3.61	.34	45	3.71	.37	.10**
Life Skills	3.25	.42	45	3.38	.52	.13**
Positive Core Values	3.31	.40	45	3.45	.45	.14**
Sense of Self	3.35	.44	45	3.44	.43	.09
Social Competency/Personal Responsibility	3.37	.44	45	3.50	.48	.13**
Community Involvement	2.99	.65	42	3.19	.59	.20**
Caring Adult Relationships	3.19	.85	42	3.45	.74	.26*

*p < .10, **p < .05

Conclusions

Overall, the evaluation results of the 2011 Youth Institute Summer Program were somewhat mixed. HYSI summer program participation, as envisioned, appears to have positively influenced technology skills and positive youth development, however, only a single significant change was found in leadership skills and there were no changes in educational aspirations. Given past evaluations of the HSYI program, the findings regarding the lack of change in leadership skills is somewhat perplexing. It may prove beneficial for staff to review the wilderness retreat activities or how they supported work within the project-based learning activities to better understand why the usual leadership skill development did not appear to occur within this cohort. It may be useful, as these participants enter the alumni program, to provide additional training related to leadership development as a mechanism for meeting this project goal.

In contrast, these HSYI summer participants self-reported significantly better technology skills on 69% of the skills (e-mail, web design, digital video filming, digital music creation, presentation software, digital video editing, graphic design, digital photography, and animation) measured here. Thus, it appears that participation in the HSYI, as hypothesized, exposed these youth to a wide variety of technology applications and helped them to gain high-end technology skills that should prove valuable to them in their future academic and career endeavors. The changes in technology skills, not unexpectedly, primarily reflected the major areas of technology emphasized in the summer program. For example, it is not unexpected that using the computer to complete school assignments remained unchanged since these youth were not involved in school over the summer. It is possible that offering HSYI workshops focusing on some of the other areas (word processing, database management, Internet research) during the year-round program might also help to encourage further use in these areas.

Another anticipated outcome of the HSYI is improved educational attitudes. Unlike the last two years, these youth did not evidence significant improvement on any of the educational attitude measures, although all went up slightly. It may be beneficial to provide additional educational supports to these youth in the coming year to help encourage academic commitment. This could be done through the existing higher education initiative or through individual academic counseling. It may be useful to ensure a structured approach to encouraging education is taken so all youth are mentored in this important project area.

The HSYI is designed to incorporate positive youth development strategies into all aspects of the program, since participation in youth development programs have been shown to enhance academic success (Hall, Yohalem, Tolan & Wilson, 2003) while reducing involvement in adolescent problem behaviors (Roffman, Pagano & Hirsch, 2001; Meltzer, Fitzgibbon, Leahy & Petsko, 2006). There were strong indications that involvement in the summer HSYI program

had a positive influence on the different aspects of positive youth development. For example, there were significant improvements in cultural competence, life skills, positive core values, social competency/personal responsibility, and community involvement, as well as some improvement in caring adult relationships. These findings are an improvement over the results from the last two years and suggest that program participation helped to develop protective factors that should reduce the likelihood of involvement in problem behaviors by these participants.

In conclusion, the results of this evaluation suggest that the HSYI summer program primarily influenced the youth who participated in the 2011 summer program in the areas of technology and positive youth development. It may prove useful during the coming academic year for staff to focus on the development of leadership skills as well as on supporting positive educational attitudes.

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