Evaluation of the Effects of the 2012 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

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

January, 2013

Table of Contents

Methods

Data Collection

Self-report survey data was collected from all entering 2012 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 designed 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

Thirty-nine (85%) of the 46 YMCA High School Youth Institute (HSYI) participants who completed the 2012 summer program had both pre- and post-test data and were included in these analyses As shown in Table 1, 51% were male. Latinos (52%) were the largest ethnic group, followed by Asian-American/Pacific Islanders (28%), and African-Americans (15%). Participants ranged in age from 13 to 15 years old. The majority (79%) was 13 or 14 and almost all (89%) participants were in 8th or 9th grade when they started the summer program. Seven

(18%) youth had been in the Middle School Youth Institute before entering the high school program.

Table 1

Description of Summer 2012 HSYI Participants

(N = 39)

	%	N
❖ Gender		
Male	51%	20
Female	49%	19
❖ Ethnicity		
Latino	52%	20
Asian American/Pacific Islander	28%	11
African-American	15%	6
Bi/Multicultural	5%	2
❖ Age at Start of Program		
13	33%	13
14	46%	18
15	21%	8
❖ Grade		
8^{th}	51%	20
9^{th}	38%	15
10^{th}	8%	3
11^{th}	3%	1

Analysis

Measures

Leadership Skill Scales

Nine types of leadership skills were measured including fundamentals of leadership (α = .89 to .90), written communication (α = .87 to .89), speech communication (α = .89 to .92), character-building (α = .90 to .93), decision-making (α = .88 to .92), group dynamics (α = .92 to

.95), problem-solving (α = .88 to .89), personal skills (α = .92 to .94), and planning skills (α = .94 to .96). 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 to .87), goal valuation (α = .88 to .93), and motivation/self-regulation (α = .91 to .94). 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-samples t-tests.

Positive Youth Development Scales

The cultural competence scale (α = .72 to .78) 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 = .84 to .91) 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 = .72 to .86) 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 = .76 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 .79) 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 = .65 to .85) 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) 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 participants self-reported significantly higher skill levels in fundamentals of leadership, t (35) = 3.08, $p < .05$, written communication, t (38) = 6.71, $p < .05$, speech communication, t (38) = 6.92, $p < .05$, character-building, t (38) = 2.52, $p < .05$,

decision-making, t (38) = 3.22, $p < .05$, problem-solving, t (37) = 3.63, $p < .05$, personal, t (37) = 3.62, $p < .05$, and planning, t (37) = 2.84, $p < .05$, at the end of the summer program.

Table 2

Summer 2012 YI Participant Report of Changes in Leadership Skills

	Before Summer			End of Summer		
Skills	Mean	SD	N	Mean	SD	Difference
Fundamentals of Leadership	2.10	.66	36	2.41	.49	.31**
Written Communication	1.87	.56	39	2.40	.45	.53**
Speech Communication	1.82	.57	39	2.27	.51	.46**
Character Building	2.45	.39	39	2.58	.39	.12**
Decision-Making	2.28	.44	39	2.50	.47	.22**
Group Dynamics	2.19	.51	38	2.33	.52	.14
Problem-Solving	2.05	.62	38	2.36	.54	.30**
Personal	2.32	.47	38	2.53	.41	.21**
Planning	2.17	.54	38	2.41	.54	.24**

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

Technology Skills

Technology skills were measured by participant self-report of their ability to use 13 types of technology. The response categories ranged from 1 "No Skills" to 4 "Excellent Skills." Higher scores indicated greater skill level. As shown in Table 3, these youth reported significantly higher skills in sending email, t (38) = 2.69, $p < .05$, web design, t (38) = 5.07, $p < .05$, using word processing software, t (37) = 3.57, $p < .05$, using data processing software, t (37) = 3.82, $p < .05$, digital video filming, t (38) = 8.36, $p < .05$, using computers to complete school assignments, t (38) = 2.40, $p < .05$, digital music creation, t (38) = 6.25, $p < .05$, presentation software, t (37) = 6.25, $p < .05$, digital video editing software, t (38) = 6.07, $p < .05$, graphic design, t (38) = 6.59, $p < .05$, digital photography, t (38) = 6.67, $p < .05$, and animation, t (38) = 4.59, $p < .05$, at the end of the summer program.

Table 3

Summer 2012YI Participant Report of Changes in Technology Skills

	Before Summer			End of Summer		
Technology	Mean	SD	N	Mean	SD	Difference
Email use.	3.10	.82	39	3.44	.64	.33**
Internet use (visit websites/surf web).	3.56	.64	39	3.74	.59	.18
Web design (construction, layout, domain registration, maintenance, applications, Dreamweaver, Photoshop, HTML, peripheral configuration).	1.95	1.02	39	2.90	.72	.95**
Word processing software (Word) to write reports and/or letters.	3.08	.85	38	3.58	.64	.50**
Data processing software (Excel) for databases or spreadsheets.	2.11	.95	38	2.66	.88	.55**
Digital Video Filming (Camera, lighting, etc.)	1.90	.97	39	3.15	.71	1.26**
Using the computer to complete school assignments.	3.33	.87	39	3.64	.67	.31**
Digital music creation (GarageBand, Reason, Logic Pro).	1.95	1.12	39	3.00	.83	1.05**
Presentation software (Powerpoint, Keynote, Inspiration).	2.29	1.06	38	3.34	.78	1.05**
Digital Video Editing (Final Cut Pro, iMovie, After Effects, etc.).	1.79	.98	39	3.03	.84	1.23**
Graphic Design (Photoshop, Illustrator, InDesign).	1.79	1.08	39	3.13	.66	1.33**
Digital Photography (DSLR camera, lighting, memory card, Photoshop, etc.).	1.77	1.04	39	2.90	.75	1.13**
Animation (Cinema 4D, After Effects, Stop Motion).	1.41	.78	39	2.51	1.25	1.10**

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

Educational Attitudes

As shown in Table 4, these participants self-reported a significant improvement in academic self-perceptions, t (38) = 2.14, $p < .05$; and a significant decrease in goal valuation, t (38) = -2.66, $p < .05$, at the end of the summer program.

Table 4

Summer 2012 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	5.47	.85	39	5.77	.91	.30**
Goal Valuation	6.53	.61	39	6.11	1.15	-.43**
Motivation/Self-Regulation	5.47	.94	39	5.73	1.13	.26

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

Positive Youth Development

As shown in Table 5, at the end of the summer, participants self-reported significant improvement in life skills, t (38) = 2.79, $p < .05$, sense of self, t (38) = 2.16, $p < .05$, social competency/personal responsibility, t (38) = 2.51, $p < .05$, and caring adult relationships, t (36) = 2.35, $p < .05$. They also reported somewhat higher community involvement, t (36) = 1.95, $p < .10$, at the end of the summer program.

Table 5

Summer 2012 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	3.63	.34	39	3.72	.36	.09
Life Skills	3.21	.40	39	3.40	.42	.18**
Positive Core Values	3.36	.35	39	3.44	.43	.09
Sense of Self	3.22	.44	39	3.38	.41	.17**
Social Competency/Personal Responsibility	3.38	.42	39	3.56	.41	.18**
Community Involvement	2.94	.49	37	3.11	.63	.17*
Caring Adult Relationships	3.06	.88	37	3.40	.68	.33**

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

Conclusions

Overall, the evaluation results of the 2012 Youth Institute Summer Program were quite positive and represent a substantial improvement over those found last year. Significant positive changes were demonstrated in all four key areas hypothesized to be influenced by HSYI participation. Although the absence of a control group makes it difficult to definitively conclude that these changes were completely the result of HSYI participation, it is unlikely that such changes would occur without some type of intervention. At the end of the summer, these youth rated themselves significantly higher on eight (89%) of the leadership skills measured. Thus, it appears that program participation helped youth to develop a diverse range of leadership skills that should prove beneficial to them both in school and the larger community. In particular, the gains they reported in written and speech communication combined with their enhanced planning skills should serve them well in the school domain.

Similarly, these HSYI summer participants self-reported significantly better technology skills on 12 (92%) of the 13 skills measured here, including e-mail, web design, word processing, data processing, digital video filming, use of computer to complete school assignments, digital music creation, presentation software, digital video editing, graphic design, digital photography, and animation. It is also worth noting that many of the gains were quite large, particularly in the areas specifically targeted during the summer program. These findings suggest that the summer program, with its intensive technology focus was able to teach these youth a wide variety of digital media skills. Unlike most years, this cohort also reported a significant increase in using computers to complete school assignments; possibly because they were able to see how these new skills may be transferable to their future academic assignments.

Another anticipated outcome of the HSYI is improved educational attitudes. The findings in this area were mixed. Although these youth reported a significant increase in their academic self-perceptions (confidence in skills) they reported a significant decline in goal valuation (value of education) and no change in their academic motivation and self-monitoring. It is possible that the gain in academic self-perceptions was related to their ability to learn many new things during the summer program. This is important given research has indicated that higher academic self-perceptions are both related to, and predictive of, better academic outcomes (Erkman, Caner, Sart, Borkan, Sahan, 2010; Pershey, 2010). Thus, this improvement may help participants to do better in school in the coming years. However, considering the decline in goal valuation, the program may not have had enough emphasis on the linkage of the content and purpose of the summer to the importance of school and higher education. 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 during the summer through college field trips or presentations.

The HSYI is designed to incorporate positive youth development strategies into all aspects of the program, since participation in youth development programs has been shown to enhance academic success (Hall, Yohalem, Tolan & Wilson, 2003), while reducing involvement in adolescent problem behaviors (Meltzer, Fitzgibbon, Leahy & Petsko, 2006; Roffman, Pagano & Hirsch, 2001). There were indications that involvement in the summer HSYI program had a positive influence on some aspects of positive youth development. For example, there were significant improvements in life skills, sense of self, social competency/personal responsibility, and caring adult relationships, as well as some improvement in community involvement. These findings 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 positively influenced youth in many key areas of their lives. It will be interesting to see if these changes continue to be seen throughout their first alumni year.

References

Erkman, F., Caner, A., Sart, H., Borkan, B., & Sahan, K. (2010). Influence of perceived teacher acceptance, self-concept, and school attitude on the academic achievement of school-age children in Turkey. *Cross-Cultural Research, 44*, 295-309.

Hall, G., Yohalem, N., Tolman, J., & Wilson, A. (2003). *How afterschool programs can most effectively promote positive youth development as a support to academic achievement: A report commissioned by the Boston after-school for all partnership.* Washington, DC: National Institute on Out-of-School Time.

Karnes, F. A. & Chauvin, J. C. (2000). *Leadership development program manual.* Scottsdale AZ: Gifted Psychology Press, Inc.

McCoach, D. B., & Siegle, D. (2003). The school attitude assessment survey-revised: A new instrument to identify academically able students who underachieve. *Educational and Psychological Measurement, 63*, 414-429.

Meltzer, I. J., Fitzgibbon, J. J., Leahy, P. J., & Petsko, K. E. (2006). A youth development program: Lasting impact. *Clinical Pediatrics, 45*, 655–660.

Pershey, M. G. (2010). A comparison of African American students' self-perceptions of school competence with their performance on state-mandated achievement tests and normed tests of oral and written language and reading. *Preventing School Failure, 55*, 53-62.

Roffman, J. G., Pagano, M. E., & Hirsch, B. J. (2001). Youth functioning and experiences in inner-city after-school programs among age, gender, and race groups. *Journal of Child and Family Studies, 10*, 85-100.

The Colorado Trust. *The after-school initiative's toolkit for evaluating positive youth development.* Denver, CO: The Colorado Trust, 2004.