

Impact of Service Learning: High School Students as Health Coaches for Children

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Abstract

The current study examined high school students' perceptions of healthy eating and exercise lessons in an obesity prevention curriculum being delivered to children in an urban area. Evaluators assessed high school student perceptions of their service learning. Forty-seven high school students participated and coached 65 children. The high school students recorded their perceptions of their experience by answering a series of questions in their journals after each teaching session. The high school students also recorded the children's daily eating and exercise goals, roadblocks to reaching goals, and ideas for overcoming roadblocks. Results indicated that the majority of high school students ($n = 45$) wanted to participate in service learning in the future and that they were learning about teaching, setting goals with children, and learning about themselves as leaders. Future research should examine the long-term impact of the service experience for the high school students.

Social transactions between teachers and adolescents providing services in their communities can foster civic engagement and learning (Zeldin, Christens, & Powers, 2013). Adolescents bring perspectives, experiences, and information into the partnership, which can greatly benefit the community they are serving. This relationship can empower adolescents and enhance their involvement in community projects. If adolescents participate in a leadership role when delivering services, the experience can promote their growth and enhance its meaning for them (Zeldin, et al., 2013; Zeldin, Larson, Camino, & O'Connor, 2005). In the current study, adolescents volunteered to teach young children about healthy eating and exercise, and they gained experience as teachers working with elementary school-age children. A unique partnership was built between the adolescents and the adults who taught them the curriculum, prior to their working with the children. Additionally, a partnership was built between adults, adolescents, and the children they served to address a critical community issue, which is at the heart of civic development in youth/adult partnerships.

Service-learning activities that connect adolescents with others in their community have the potential to enhance their development as leaders as well as contribute to their social and emotional learning (Colby, Ehrlich, Beaumont, & Stephens, 2003; Chung & McBride, 2015; Flanagan & Christens, 2011; Zeldin et al., 2013). When adolescents can learn about a program and then teach it to others, they have opportunities to share knowledge and are empowered as teachers as they

promote positive change within communities (Camino, 2000; Wong, Zimmerman, & Parker, 2010; Zeldin et al., 2005). Through their involvement in service, adolescents may become inspired to be future community leaders and continue civic engagement to address key community problems (Colby et al., 2003). The current project extended the notion of service partnerships by teaching high school-age youth (our coaches or service providers), who became involved with elementary-age youth to teach them about improving healthy eating and exercise behaviors through an existing obesity prevention program.

Reflective Journaling

After working with the children, the high school students solidified their knowledge through reflective journaling and their reflections are the foundation of the current study (Giles & Eyler, 1994). Reflection on service-learning experiences can help students understand the meaning of their work, when they respond to questions that assist them in critically examining their experiences (Bringle & Hatcher, 1999). Within this framework, and consistent with Dewey's philosophy of experience as a "teacher," reflection is a critical tool facilitating knowledge, insight, and a review of community experiences (Bringle & Hatcher, 1999; Eyler & Giles, 1999; Giles & Eyler, 1994). We also expected that students who were involved in the project would want to participate in further service in the future, such that participating in service would "...lead to a valuing of community" (Giles and Eyler, 1994, p. 83).

Training Model

A coach-the-coach model was used to train the high school students (Sanders, Reynolds, Bagatell, Treu, O'Connor, & Katz, 2015). A university instructor and the leader of the service project educated high school students about the obesity prevention program and reviewed the "lesson for the day" for the adolescent coaches before they worked with one to three elementary school-age children. This study sought to determine high school students' perceptions of their service opportunity, and their views of an obesity prevention program that they delivered. As mentioned, a reflexive approach guided our work, emphasizing the importance of participants' perceptions as they defined the meaning of their experience and whether it enhanced their knowledge (e.g., Giles & Eyler, 1994). This study also sought to determine what children learned from working to develop healthy eating and exercise goals with their high school-age coaches. This was a verification check to determine that one-on-one coaching by high school students was occurring. Thus, qualitative data analyzed for this study included written reflections from daily journals completed by the high school students. These analyses provided information about high school-age students' perceptions of the meaning of their experiential learning process as they implemented an obesity prevention program for elementary school-age children. Daily goal sheets where high school students and the children they coached selected a daily healthy eating and exercise goal for the child were another source of data.

Overview of the Children's Healthy Eating and Exercise (CHEE) Program

High school students were taught ideas for teaching young children about healthy eating and exercise using the Children's Healthy Eating and Exercise Program, which is an evidence-based obesity prevention program (Dai, Nabors, King, Vidourek, Chen, Hoang, & Mastro, 2014; Nabors, Burbage, Woodson, & Swoboda, 2015; Nabors, Bartz, Strong, Hoffman, Steffer, & Pangallo, 2012; Nabors, Burbage, Pangallo, Benard, Gardocki, Strong, Shelton, & Jones, 2013). This curriculum focuses on teaching children about healthy eating using the Traffic Light Diet developed by Epstein and colleagues (Epstein, 2005; Epstein & Squires, 1988) as well as other ideas about healthy eating from MyPlate (see <https://www.choosemyplate.gov/MyPlate>). Children also learn about portion size;

reducing sugar intake; increasing intake of fruits and vegetables; and reducing intake of high fat, high calorie foods such as cake and ice cream. In addition, children learned about the importance of stretching and 60 minutes of daily exercise, and they set healthy eating and exercise goals with group leaders. Group leaders use motivational interviewing techniques to positively encourage children to set healthy eating and exercise goals and to help them brainstorm about ideas to overcome barriers to attaining their goals (Resnicow, Davis, & Rollnick, 2006; Söderlund, Nordqvist, Angrbratt, & Nilsen, 2009; Nabors et al., 2015). Children and group leaders also identify people and actions that will help children achieve their healthy eating and exercise goals. In previous evaluations children participating in the CHEE program showed improved knowledge about their health, exercised more, and reported consuming more fruits and vegetables and fewer desserts or treats (foods high in sugar and low in nutritious content) (Dai et al., 2014; Nabors et al., 2013, 2015).

Methods

Participants

High school-age youth. For week one 23 high school students (the first group), including six males and 17 females from four high schools in the United States participated. Thirteen were Caucasian, five were African American, one was Hispanic, three were biracial, and one student did not report an ethnic group. Three of the high school students were 14 years of age, 10 were 15 years of age, six were 16 years of age, and four were 17 years of age. These students were supervised by four teachers from their participating schools, a supervisor from the community-based program leading the service project, and the first author.

For week two, participants were 24 different students (the second group), 12 males and 11 females, from four different local high schools. One of the students did not provide any type of demographic information. Nineteen of the students were Caucasian and four were African American. Seven of the high school students were 15 years of age, 10 were 16 years of age, and six were 17 years of age. Youth were supervised by four different teachers from their schools, the leader from the community-based program, and the first author.

Eight different high schools were involved over the course of the program. Students in the first iteration of the program were from four high schools and youth from four other high schools participated in week two. For each group of four

high schools (two of the high schools were in the suburbs, with students from middle- to upper-income families) and two were city schools where the majority of students were from low-income families (received subsidized or free school lunches). The mix of high schools was intentional, and high school students elected to participate in the program as part of a summer service-learning experience. A critical component of the summer experience was serving other low-income areas, such as a homeless shelter and other urban organizations serving low-income families. The high school students also had an evening where they shopped for a meal using food stamps. They participated in an educational session with the director of the program to learn about poverty and food insecurity.

Elementary school-age children. The elementary school-age children ($N = 65$, kindergarten through 6th grade) were attending a summer program at a local Boys and Girls Club serving children from a low-income urban area. There was one Caucasian child attending the Boys and Girls Club and the other children were either African American or biracial (African American/Caucasian).

The 2015 Generosity Report provides facts about all of the Boys and Girls Clubs in the Cincinnati region (Boys and Girls Clubs of Greater Cincinnati, 2016). This report indicated that, "...83% of the kids live at or below the poverty line and 84% of our club members qualify for free or reduced lunch" (p. 5). The Boys and Girls Club center, where this project was held, is in the center of housing projects located in an urban area.

Procedures

A university-based institutional review board approved this study. Parent and child permission was required. Ethical considerations before, during, and after the study were carefully considered by the research team and proper steps were taken to protect the confidentiality of the high school students and children; no identifying information was collected for this study. The program lasted for eight sessions over a two-week period, with 60- to 75-minute sessions on Mondays through Thursdays in the afternoons. Each group of high school students delivered the program for one week.

The routine for program delivery was the same each week. The high school students began the afternoon in a classroom with the first author, their teachers, and the leader from the community program and the team reviewed the lesson for the day from the CHEE program manual. After

reviewing the lesson for the day, the high school students went to the gymnasium or a large group room at the Boys and Girls Club and met with children. The structure of the lessons was the same each day and involved beginning with an ice-breaker activity, followed by a healthy eating lesson, then goal setting, and finally an exercise session.

High school students worked with children to develop two daily health goals, typically one focused on healthy eating and one focused on engaging in exercise. The high school student helped his or her mentee or mentees identify road blocks to reaching healthy goals and then they identified ideas for overcoming roadblocks to goals. Each child took his or her goals home on a Healthy Goal Sheet that listed the goals, roadblocks to reaching goals, and ideas for overcoming roadblocks. The child was instructed to work on reaching these daily goals, because he or she would report on his or her progress toward goals the next day. The child took one goal sheet home each day and the coach kept a goal sheet so that he or she could discuss how the child did the next day. The icebreaker activity (allowing for introductions and general discussion), the healthy eating lesson, and the goal setting lasted for approximately 40–45 minutes. After this high school students reviewed the importance of exercise and introduced ideas for exercise (e.g., tag, baseball, kickball, sharks and minnows, and many types of relay races involving walking, running, skipping, bear crawls, etc.). The high school students and the children selected a group activity and played together the remainder of the session (about 15–25 minutes). After working with the children the high school students returned to their classroom and completed journals.

Healthy Eating Lessons during Weeks One and Two

Week 1. Healthy eating lessons were designed to review the Traffic Light Diet (Epstein, 2005). In diet, high school students taught the children about red, yellow and green foods. Red foods are relatively less healthy and high in fat and calories, while yellow foods are "mid-level" foods that could be eaten in moderation, such as pasta and wheat bread. Finally, green or "go" foods are foods low in calories and high in nutrition, chiefly fruits and vegetables. Children also reviewed the ideas in MyPlate and colored a MyPlate handout. They reviewed magazine pictures to identify red, yellow, and green foods. Children worked with their coaches (the high school students) to identify healthy foods they had in their refrigerators.

This helped high school students understand what types of healthy foods were available at home so they could devise appropriate healthy eating goals with their mentees.

Week 2. At the first session, children reviewed what they had learned with their new leaders (the second group of high school students). The second lesson for week two involved discussing healthy and unhealthy snacks and emphasizing eating healthy snacks. The other healthy eating lessons reviewed the following ideas: (1) the importance of eating a healthy breakfast and how to order a healthy meal at a restaurant, (2) learning about different food groups (grains, protein, vegetables, fruits, fats), and (3) learning how to read about fats and calories on food labels.

Data Collection

When sessions with the children were completed, the high school students returned to a separate classroom and completed their reflection journals. Daily reflection journals took about 10 to 15 minutes to complete. As previously mentioned, the two groups of high school students completed four days of journal entries. The first page of the journal required them to provide demographic information. The questions for each of the four days can be found in Table 1.

Data Coding

High school students’ journals were transcribed verbatim in word documents. Data were analyzed by the three authors, using a constant comparative

Table 1. Journal Questions for Each of the Four Coaching Days

Day 1	Day 2	Day 3	Day 4
What have you learned today as a coach?	What have you learned today as a coach?	What have you learned today as a coach?	What are the most important things you learned from participating in this program?
What have you learned today about teaching?	What is the meaning of this experience to you?	What types of improvements should be made to the lessons you taught today?	What’s the big picture from this program in your eyes?
What types of improvements should be made to what you taught today?	What types of improvements should be made to what you taught today?	What is the meaning of this experience to you?	How was this overall experience different from what you pictured before you began teaching and working with children?
What have you learned about yourself today?	What things have you learned about yourself today?	What personal challenges are you overcoming by participating in this experience?	How did children change as a result of participating in this program?
What things did you problem-solve about today?	What things have you learned about children today?		How did you change as a result of participating in this program? Will you be participating in community service in the future?

methodology to determine a dictionary of codes (Miles & Huberman, 1994). The dictionary of codes was entered as nodes into a coding scheme using the NVivo Program. Next, the word documents of the transcripts of journal entries for each high school student were loaded into NVivo. After this, each of the researchers reviewed all of the journals a second time. Then, they coded all the information in each journal using the nodes representing the dictionary of codes. New nodes were recorded if the researcher believed she had found a new category in the data. After all of the journals were coded in

NVivo, they met a third time to review the coding. The researchers discussed ideas for data reduction and consolidation. The researchers determined that there were cross-cutting themes, which applied irrespective of the type of journal question that the high school students were answering. Thus, a decision was made to determine cross-cutting themes rather than coding the multiple journal questions independently. The coders decided on a list of themes. They decided to review data independently to consider the list of themes and to find representative quotes that exemplified key themes in the data. Finally, they held a fourth meeting to determine a final list of themes with key quotes representing themes. Consensus was reached for the list of themes and quotes and disagreements were resolved by consensus.

The copies of the Healthy Goal Sheets collected by high school students also were coded. This analysis provided information on the types of goals that high school students and the children were developing. Moreover, information recorded on the Healthy Goal Sheets provided process information about barriers (roadblocks) to goals and ideas for overcoming barriers to achieving goals. The first and second author coded the goal sheets to determine common eating and exercise goals for the children, roadblocks, and ideas for overcoming roadblocks to achieving goals. They reached consensus on final lists of goals, roadblocks, and ideas to overcome roadblocks. They resolved disagreements by consensus.

Roles of the Researchers

The first and second authors, who served as coders, were aware that their biases based on being in the health field, working in the area of obesity prevention, and working in the community could influence their interpretations of categories in the data. The third author was not involved in the field, but had significant expertise in qualitative coding. Thus, potential bias was addressed and trustworthiness was improved through the use of a coder who was not familiar with the study procedures and data collection at the Boys and Girls Club. An audit trail was maintained by the first author and reviewed by the second author in a series of meetings throughout the study.

Results

Table 2 presents the themes reflecting high school students' perceptions of their learning.

There were three general categories reflecting the perceptions of what they learned through delivering the program and through working with children and what they learned about themselves.

Category 1: Learning through delivering the program. Several themes were revealed: (1) learning that activities had to be fun, (2) feeling that the experience was rewarding, (3) having opportunities to practice or showcase leadership skills, (4) ideas for improving the manual and delivery of lessons for the children, and (5) things learned from teaching the children (see Table 2). The high school students reported that fun was a necessary component for the CHEE program. Both the high school students and youth wanted to have fun. For instance, one female, age 15, reported that fun was important for the children, "The kids are willing to open up to you and have fun in any situation. It's not easy, but you have to be willing to make it fun.... The kids just need someone who will listen and make it fun."

Forty-five of the high school students reported that the experience was rewarding and that they wanted to engage in community service in the

Table 2. Themes for the Three Categories of Learning: Program, Children, and Self

Program	Children	Self
Learning that activities had to be fun	Learning new things about children	Changing one's own beliefs and behaviors about healthy eating and exercising
Feeling that the experience was rewarding	Voicing the idea that making a difference for children is important work	Learning new things about oneself
Having opportunities to practice or showcase leadership skills	Understanding a new culture and encountering others in a new way	Learning to be more patient
Developing ideas for improving the manual and delivery of lessons for the children	Building new attachments with children	Leaving one's comfort zone to coach the children
Learning from teaching the children		Liking coaching and working with the children

future. Only two of the high school students, one boy and one girl, did not want to participate in service in the future. The high school students reported that the experience was rewarding because they “liked community service,” “liked helping others,” and “loved giving and helping the community.” Others mentioned that teaching children opened their views to a new type of service opportunity—teaching children about health.

A benefit of participating in the program was learning by being a teacher. These lessons can be seen in Table 3, which presents sub-themes about what the high school students learned by being in a teaching role.

Many of the high school students discussed the importance of capturing children’s attention and engaging them in the lessons as being critical to the success of their teaching efforts. Several high school students also commented on the children’s love of learning. For instance, one 17-year-old female wrote, “I did not picture the children to enjoy learning as much as they did.” Most of the high school students viewed teaching as a rewarding experience. However, some felt teaching was challenging.

Teaching the children also provided new leadership experiences (“I learned that I can be a leader,” female, age 15) and afforded opportunities to solidify leadership skills (“I now know an easier and more approachable way of leading,” male, age 16). One leadership skill mentioned was learning to motivate others. A 15-year-old male stated, “... motivation can help the person do much better and it helps them to have self-confidence.” As leaders, the high school students often “problem-solved” to help children learn new material or to help them overcome barriers to reaching healthy eating and exercise goals. The high school students felt that they were role models for the children, as one 15-year-old female wrote, “The kids really do need a role model and I love being theirs.” High school students also wrote that they learned to speak in a more assertive and louder tone of voice. When asked about what was learned as a leader, one student (female, age 16) responded, “I need to speak up and out more.” Another part of leadership was learning to say “no” when necessary, which was typically to encourage positive group exchanges, motivate the children to feel happy with their growth, and encourage the children to engage in positive behavior. For example, a 15-year-old female said, “You can’t always be the nice guy. I need to know how to say ‘no’ to keep the kids under control.”

Table 3. Subthemes Within Learning by Being in a Teaching Role

Learning a new content area (about healthy eating and exercise)
Learning how to work “with the kids’ imaginations”
Learning to pay attention to the child and give specific information
Learning to repeat information from the previous lesson
Learning that children benefit from “visuals” or seeing visual examples
Learning that children like active play
Learning to be adaptive and go with the flow of the lesson and the child’s level of understanding when teaching
Learning that children are very energetic

Category 2: Learning through working with children. The second primary category represented learning about the children. There were four main themes: (1) learning new things about children, (2) voicing the idea that making a difference for children is important work, (3) understanding a new culture and encountering others in a new way, and (4) building new attachments with children (see Table 2). High school students learned that children love to learn (“they will try to make the best out of the lessons,” female, age 15) and were eager to learn about ways to eat healthy and become more physically active. A 16-year-old male wrote, “Some kids are very intelligent, but they don’t always show it and you wouldn’t know until you take the time to actually communicate with them.” Many of the high school students reported that the children had a lot more energy than they expected. Although they saw the children as energetic, this was tempered with attitudes of patience and caring. Others reported feeling very positive about working with children (“I like seeing the smiles on children’s faces,” female, age 17) and (“I’m more able to work with kids than I thought,” male, age 15). Thus, the high school students viewed teaching and making a difference for children as important work that would positively impact children’s lives in the future.

The high school students reported that they encountered a new culture, realizing that the children they served were residing in low-income families. On the other hand, they also found that the children were similar in terms of their values, love of learning, and desire to have fun. The high school students reported that they began to think about the children and their lives in new ways. Most reported working with the children was more fun than they had expected, because “they really enjoy us coming in. I’m able to make a small difference

in these kids life” (male, age 17); “they are really good kids if you get to know them” (female, age 14); “they get excited about the smallest things; playing with kids is fun” (male, age 16).

Encountering children in the community program was linked to theme four, which was the opportunity to build new attachments with children. The high school students reported that the service experience allowed the children to attach to them (“they grow attached to you,” female, age 14), and, in turn, allowed the high school students to build new bridges and attachments with the children they were teaching (“I’m going to miss the kid I taught all week,” female, age 15).

Category 3: Learning about the self. The third major category was learning about the self. There were five major themes: (1) changing one’s own beliefs and behaviors about healthy eating and exercising, (2) learning new things about oneself, (3) learning to be more patient, (4) leaving one’s comfort zone to coach the children, and (5) liking coaching and working with the children (see Table 2). Theme one reflected that the high school students learned new things about healthy eating and exercise through teaching the children. Teaching about being healthy thus helped the high school students improve their own eating and exercise habits (“I am eating better. I’m eating more healthy foods—more vegetables”).

Theme two represented the notion that while teaching the children, the high school students also learned many new things about themselves. For instance, some learned that they could make connections with children and these connections facilitated their abilities to teach the children. They learned that they could hold conversations with the children and were excited to “learn things about them (children)” (female, age 15). Along with learning how to connect, many of the high school students also stated that they learned to be patient and flexible as teachers of young children to “give them time to open up” (female, age 17) and grasp new material. Several mentioned changing their views, in a positive way, about children as they enjoyed working with them (“I changed my look on children and how they can be super cool,” female, age 15). Another 15-year-old female stated, “I thought that the kids would be a problem [difficult to work with], but they are really amazing.” A female, age 16, learned that, “I really like kids and I am capable of holding their attention.” Several of the high school students learned that they were kinder, more patient, and more accepting of children than they had first

believed. Thus, working with the children allowed opportunities to form more positive views of the children, and the act of working with and teaching children (“making an impact in their lives”) was the third theme for personal growth and change.

Additionally, a common theme was coming “out of my comfort zone” or “coming out of my bubble” and doing something new, often referring to teaching or leading children’s groups. The high school students felt that they could be friends with the children and accomplish more, in terms of teaching others and making a positive difference in their lives, than they originally thought would be the case. In coming out of their comfort zones, the high school students gained self-confidence. A subtheme in the area of coming out of one’s comfort zone was overcoming shyness in order to lead a class and assist children as they set healthy goals.

High School Students’ Suggestions for Improving the Program

The high school students had suggestions for improving program delivery and the lessons provided in the CHEE manual. They recommended more structure in terms of having a clear amount of time for each activity. They requested more fun games to play with the children in the event they completed lessons quickly. Some of the high school students felt they worked best with just one child and did not like having multiple children to work with during a teaching session. Others wanted more ice breaker activities so they could spend more time getting know the children at the beginning of each lesson. Others wanted to improve the Traffic Light Diet. They wanted other ways to teach about healthy and unhealthy foods rather than discussing red, yellow, and green foods.

Children’s Goal Sheets

Exercise goals. Children’s exercise goals were coded into three categories according to their specificity: very specific, intermediate level of specificity, and non-specific. Specificity was defined as whether the goal detailed an exercise (intermediate level) or whether the goal provided a number of repetitions needed or specified a time involved in exercising (very specific). An example of a non-specific goal was to “exercise more.” A goal at an intermediate level of specificity would be to “run more.” Other exercises mentioned by the children were interests in playing sports or playing with others, including siblings. A few of the children reported they would like to dance during commercials while watching television, which was

something discussed in their lessons with their high school leaders. A specific goal would be to do “10 jumping jacks every day.”

Eating goals. The coders identified the same three levels (very specific, intermediate, and non-specific) for eating goals. An example of a non-specific eating goal was “eating healthy.” If the child identified a specific healthy food to eat this was an intermediate goal. Examples included “eat fruit” or “eat veggies.” Other intermediate goals were to “not eat candy,” “eat strawberries,” “eat fewer chips,” or “drink less soda.” Examples of very specific goals listed an amount to eat and examples were “eat one slice of pizza, not two” and “eat three fruits and one vegetable every day.”

Roadblocks to goals and ideas for overcoming them. The high school students and children were able to determine roadblocks to attaining healthy eating and exercise goals and ideas for overcoming these roadblocks. Roadblocks recorded by coders included: “having junk food at home” and “not having healthy food available.” The children lived in an urban environment and did not have much outdoor space to be active. Also, weather and safety could be significant barriers to exercising. Finally, time spent playing video games and watching television were roadblocks. Ideas for overcoming roadblocks were to help parents buy health foods, turn off the TV, go outside to play more, control portion sizes (i.e., eat smaller portions at meals), find healthy snacks in the refrigerator (rather than potato chips or candy), and play more sports with friends and siblings.

Discussion

The high school students gained valuable skills from their service experience. For example, they learned how to teach the children and how to be leaders of children’s groups. As such, they felt that the experience was an opportunity to improve upon their abilities as leaders, a phenomenon that is common through participation with service-learning activities (Colby et al., 2003; Chung & McBride, 2015; Zeldin et al., 2013). The high school students’ reflections indicated that they felt relatively comfortable in teaching the material, and many indicated finding the experience enjoyable and fun. This supports the value of the coach model for those doing the teaching (Sanders et al., 2015). Participating in the program also improved the high school students’ knowledge about nutrition and reaffirmed the importance of daily exercise as a healthy activity. In fact, several of the high school students mentioned that they learned

new information about physical activity and nutrition in the process of learning what to teach the children. Thus, the leaders were also learners and gained valuable insights and new information (Camino, 2000; Zeldin et al., 2005).

Reflective Journaling

The high school students’ journals provided a more in-depth description of the meaning of their experiences. They reflected on their lessons learned and experiences in working with children, which was a new experience for many of them. They described their participation as being rewarding and meaningful. Consequently, the high school students gained insight into the experiences of the children they served and knowledge that allowed a “valuing” the community (Bringle & Hatcher, 1999; Eyler & Giles, 1999; Giles & Eyler, 1994). The social interactions that occurred between the high school students and the children with whom they worked resulted in a bonding experience, and the high school students reported having a newfound appreciation for children. The high school students gained an appreciation of the socioeconomic status of the area and the commonalities between themselves and the children. Many of the high school students described how their thoughts and feelings about children and the area of town in which they were volunteering were transformed through this experience, thus increasing their social awareness (Chung & McBride, 2015; Flanagan & Christens, 2011; Zeldin et al., 2013). The children were learning from the high school students, who were also learning from the children, allowing a reciprocal exchange of culture and a shared experience promoting the social and emotional learning of the teachers (Colby et al., 2003; Flanagan & Christens, 2011; Zeldin et al., 2005, 2013).

Fostering Civic Engagement

This experience encouraged enthusiasm for continued community service and civic engagement (Colby et al., 2003, Eyler & Giles, 1999; Giles & Eyler, 1994), with all but two of the high school students reporting they would continue to find and participate in service opportunities. In addition to inspiring future work within the community, acting as coaches for the children seemed to be effective in helping the high school students to identify teaching either as a possible future career or as an activity that they did not wish to pursue in the future. Some students reflected upon their experience with an appreciation for the challenges of teaching and an understanding that it “wouldn’t

be ‘right’ for them,” while others appeared to have had their eyes opened to the possibility of teaching as something they would enjoy as a future career. High school students and their teachers were able to share critical information about food insecurity and the impact of poverty for children, and this improved their sensitivity in working with the children. Moreover, having high school coaches residing in different economic environments allowed them to share information to enhance understanding.

Healthy Eating and Exercise Goals

The collection and evaluation of the healthy goal sheets served as a validity check, allowing high school students and leaders of the service program to ensure that children were discussing healthy eating and exercise with the high school students. Moreover, this data showed that the coaches were working with children to develop goals during the goal-setting time. This data also provided a window on goals and roadblocks to healthy goals for children in our urban setting. Critical information about barriers to physical activity and healthy eating for the children also was gained, which will allow for improving lesson planning in the future. For example, many of the children set goals to eat healthier, but acknowledged the environmental barrier of seeing junk food at home deterred healthy eating. The high school coaches had a good understanding of the children’s issues, in terms of food insecurity, and were able to frame coaching to meet the children “where they were” in terms of realistic goal setting based on what types of foods were available at home.

Analysis of roadblocks discussed by the high school students and children also indicated that some children mentioned that there was limited availability of healthy foods at home. The children expressed an interest in having healthier foods and alternatives to unhealthy snacks in their homes to help in reaching their nutritional goals. One idea for future programming will be to develop a newsletter for parents with recipes for cooking on a budget. Incorporating parent input into the program, through offering parent meetings to discuss the program and healthy eating, may help to open discussion about healthy foods at home. Moreover, in the next iteration of the program, our team will add lessons about healthy snacks that can be purchased and available in the refrigerator and add handouts for children to share with parents about healthy snacking.

Study Limitations

Several factors may have limited the generalizability of study findings. It may be that the themes were positive in nature because of a social desirability bias. However, several of the high school students offered suggestions for improving the program, which indicated that they felt they could express negative impressions. High school students’ positive impressions may also have been influenced by the scheduling of their service activities. Specifically, the high school students arrived to the Boys and Girls Club after having volunteered at a nearby homeless shelter for adults. Anecdotal information from field notes indicated that they thought working with the adults was “more sad” in comparison to their time with the children. Volunteering with multiple organizations throughout their day may have influenced high school students’ answers. On the other hand, the ability to compare experiences at different sites may be positive in that the high school students had experiences for comparison, allowing them to make clearer judgments of their experiences with the children. The high school students volunteered to participate in the experience. Hence, a potential limitation is that the volunteers in this study were predisposed to having positive attitudes about service learning; but, this is the typical process for gaining volunteers for service projects. In a similar manner, the elementary school students were volunteers, and thus a positive selection bias could be influencing study results. Finally, the supervisors on site may have had a large role in the success of the program and our team did not assess their role. Thus, in future studies it will be important to assess the role and impact of supervisors assisting the high school students.

Lessons Learned and Conclusions

The service program provided a large teaching team to reach and engage with young children. Development of a university/community partnership was at the core of delivering an evidence-based intervention on what might be considered “a shoe-string budget.” The instruction was free of charge and the only program costs were purchasing crayons and paper and making copies of the manual for the high school students. The high school teachers were paid a stipend through their schools and the leader of the community program was a staff member; the first author volunteered to work with the children as did the high school students. Although there was some information

about goals for the children, more information about their perceptions and the impact of the program for children should be examined in future research.

There were some lessons learned from delivering the program. For example, the lack of space (rooms large enough to hold all the children) necessitated that nutrition lessons be delivered to some of the children in the gymnasium, which amplified noise, at times making it difficult to hear. Moreover, this setting did not allow high school students and the children privacy or a place to sit at a table when working with the children to set goals. This might have impacted their ability to discuss roadblocks to reaching goals. Moreover, the children had different levels of knowledge about nutrition and different amounts of support, in terms of having healthy foods at home and parents who provided healthy meals. This could complicate goal setting and achievement of goals selected by children. However, the high school coaches were flexible and discussed alternatives with children and emphasized that they were learning critical information about health that they could use at any time, even a later date, which made the discussion comfortable and fostered learning for the children. Being flexible and “meeting the children where they are” was an important lesson learned for both fostering child engagement and ensuring that the healthy goals were appropriate and achievable for the children.

In summary, partnering with the high schools where students volunteered to participate in a service-learning experience was an effective partnership for providing health education for young children. The high school students viewed the program positively. They learned about leadership and teaching while improving their own health knowledge. Most of the high school students anticipated participating in service in the future. They also learned to reach out to young children and greatly valued the opportunities to build relationships with them. They had “fun” during their service and also thought that the children had fun, which made the experience a positive one fostering cultural exchange and building long-term positive views for high school students and children. In the future, researchers should examine the long-term impact of the service experience for the high school students and the children and gathering more information about the influence of context and socioeconomic status (of the high school students and children) on perceptions should be examined. More information from the

mentees’ perspectives will provide a well-rounded view of the experience. The project allowed for a broadening of high school students’ understanding of teaching younger children from an urban area. The high school students gained wisdom in the sense of gaining practical intelligence for helping others (Sternberg, 2000). The program may be portable in that it has the potential to be implemented with college students, and this is a new population that could be engaged to help youth in summer programs.

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