Effect of Positive Role Model on Young Girls

by

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Abstract

This project focuses on the effect that an older role model or mentor can have on a younger girl regarding her attitude toward health and self-image. It looks at attitudes toward exercise, eating habits, self-esteem, and various other health topics. The data was collected through Wildcat Wellness Coaching, and the subjects were young females generally between the ages of 8 and 12. Some of the girls were exposed to Wildcat Wellness Coaching that taught them how to prepare healthy snacks and make exercising more fun. The other girls were exposed to Wildcat Wellness Coaching that taught them about important health topics that may affect them in the future. This program allowed them to meet with a coach weekly for about an hour. Each semester the participants were different and their progress was monitored from start to finish. Results showed a change in attitude of the girls who participated in one of the interventions, but not in the other.

Introduction

Research indicates that body image and selfesteem can have an impact on the lives of children. "High self-esteem is associated with high academic achievement, involvement in sport and physical activity, and development of effective coping, and peer pressure resistance skills." This can be especially tough on young girls. Though we have made improvements in education about self-esteem and related factors, other areas such as the media have negatively impacted the body image of younger girls. According to a study done in 2010, "60 percent [of girls] say that they compare their bodies to fashion models, 48 percent wish they were as skinny as the models in fashion magazines, and 31 percent of girls admit to starving themselves or refusing to eat as a strategy to lose weight."² This dissatisfaction with their body can lead to negative effects such as eating disorders or decreased physical activity involvement. If a young girl has poor self-esteem she is less likely to be participating in any type of physical activity. The negative attitude that someone has toward himself or herself is likely to carry into other aspects of their life, including health.

There has also been extensive research done on mentoring as a positive tool. These mentors can be formal (set up by a program) or informal (assistance provided by friends or family). "Youth who feel supported and cared for by parents, teachers, and peers report feeling more efficacious in making healthy informed decisions and displaying features

of resiliency to potential life stressors." In mentoring programs, it is important to provide a supportive and friendly relationship as well as a professional learning relationship. This ensures that "children that have been mentored [show] a

series of positive outcomes, such as improved academic performance, greater self-confidence, better interpersonal relationships, and a higher level of pro-social behavior."³

There have been other studies done on physical activity programs in the home, which is a large part of this study. One of these studies suggests that "a home-based [physical activity] programme for obese youth, incorporating positive reinforcement, parental support, problem solving, and self-reinforcement via a pedometer is feasible"₄. A program that can be done at home is more accessible and convenient for people, especially children who have to be escorted by their parents wherever they go. While this study only discusses the effect on obese youth, there is no reason why it would not be feasible for a larger group including non-obese children as well.

It is noted, "girls' self-esteem plummets at age 12 and doesn't improve until 20." This shows that the issue of self-esteem may be something that can be prevented if approached at an earlier age. By putting mentors with younger girls to provide education and answer questions about healthy eating, physical activity, and various other health topics it is possible that poor self-esteem could be prevented and encourage the girls to have a more positive outlook regarding a healthy lifestyle.

The purpose of this study is to use mentoring as a tool to improve various aspects of their lives, including healthful snacking, self-esteem, social interaction, and involvement in physical activity. By improving their education on these topics via a positive role model, it is expected that their attitudes toward health and toward themselves will become more positive.

Methods

Participants

Participants were 7 girls between the ages of 8 and 13 years who attended schools around the region of Manhattan, Kansas. The girls differed in body composition. Some of the girls were considered obese while others were considered normal weight for their heights and age groups. Education levels and lifestyles differed between each participant.

Procedure and Ethics

The participants were signed up by their parents through a program called Wildcat Wellness at Kansas State University. They were recruited by flyers, ads in the newspaper, or by hearing about it from other people around the community. Participation was completely voluntary and the guardians gave informed consent. After sign up was completed, the participants were randomly placed in one of two interventions: Healthful Eating and Physical Activity (HEPA) or Health Education. The families were then notified by their Wildcat Wellness coach regarding meeting time and specific program information. Coaches met with the participants weekly for about 10-12 weeks. The coaches were female college aged students who voluntarily assisted with this program.

HEPA

Of the 7 participants, 3 were assigned to the HEPA program. This program focused mainly on eating healthy and exercising regularly. Each weekly session was about one hour long. During each session the coach brought a recipe for a healthy snack. This differed from week to week to show the girls that there are many different options when choosing to eat healthy. A few examples of healthy snacks are veggies and hummus, fruit smoothies with yogurt, and fruit parfaits made with yogurt and fresh fruit. Some snacks required more preparation, but none of the snacks were difficult or dangerous

to prepare without the help of an adult. The second portion of the session focused on physical activity. Participants and coaches wore a step counter to ensure that they were taking a good amount of steps. The goal was 2,000 steps per session. These were recorded after each session was complete. Physical activity was based on the interest of the participant, but it always took place outside. Some examples of preferred physical activity are walking, playing sports such as soccer or basketball, and jogging. Physical activity could change every week or stay the same depending on the preference of the participant. Many chose to do similar activities each week. If there was extra time at the end of the session the coaches and students could do various activities such as work on homework or just get to know each other better.

Health Education

The other program, health education, involved 4 out of 7 participants. This was more discussion-based rather than activity-based. These weekly sessions also lasted an hour, but no snacks were consumed and no physical activity was done with the coach. Each week there was a different topic to discuss and a list of activities that could be done to go with the topic. The coach had the option to do these activities or make one up. The health topics included goal setting, dental hygiene, bullying, physical activity/motor skills, healthy snacking, manners/table etiquette, online safety, self esteem, eating disorders, smoking, and breakfast. During this time the coaches or participants could also share stories about their experiences with each topic. The first session was focused on goal setting and getting to know each other and the last session was a recap of the semester and their feelings toward the program as a whole. If the topic was covered well enough or if the participant became uncomfortable with the topic the coach and participant could spend time doing other

things such as working on homework or getting come out of their shell and become more to know each other better.

Recording

At the end of each session, data was recorded on a specific sheet (Appendix A). The information recorded was different depending on the type of program they were involved in. All of the sheets have the date, name of the client, time arrived, and time departed. It is crucial to circle the type of program (HEPA or Health Education). If they are involved in the HEPA the steps were recorded following each session. Each session has activities listed for first activity description and second activity description, but the other activities section was not necessary. "Foods and amount tasted or eaten by client" and "PA level of client" were only filled out in HEPA participants. "Client level of understanding for health topic" was only filled out for Health Education participants. Concerns and topics of discussion were filled out on all of them and the overall section was for a summary of the session as well as the attitude of the client toward the topic or session as a whole.

Results

Health Education

There was a much less noticeable change in the health education group in terms of attitude toward a healthy lifestyle and self esteem. The girls who started out with a carefree attitude generally ended in the same manner, and the girls who started with a great attitude ended positively. There seemed to be no correlation between the mentoring and the attitudes of the participants. Most of these girls began with a positive self-image, which continued over the course of the semester. There were a few that had a more negative view of themselves, but the program did not drastically change this. The program generally helped these girls to

social

Health education participant #1 began with a shy demeanor and no serious interest in health topics. She did not seem confident at all. Throughout the sessions she became more social and open. She began to share personal stories that had affected her both mentally and physically. She openly discussed that she had been bullied, which had led to negative selfesteem. It was not apparent that she had gained interest in health topics, but it did help her to have someone to talk to. This program seemed to help her more emotionally.

Health education participant #2 was outgoing and excited from the beginning. She participated throughout the semester and was open about all discussions. She seemed interested in each of the topics. She would often use the information that she learned in the sessions and tell me about it each week. The only session that she became more reserved was in the self-esteem discussion. She had been bullied at school for an extended period of time and could not come up with many traits that she liked about herself. By the end of the program she had not seemed to change her mind about her self-image, but she still enjoyed all of the health information we learned throughout the semester. This program influenced her to talk to her parents about topics such as eating healthy, eating breakfast, and quitting smoking.

Health education participant #3 was excited about this program, but did not seem as excited to learn about health issues as she was about having someone to spend time with. She showed very limited interest in the topics and rarely became engaged in discussion. She was bullied by other girls at school and expressed that she thought she was 'chubby' and needed to lose weight. She did not seem to care about a healthy lifestyle as much as weight loss, which

is concerning for such a young girl. She brought this up at multiple sessions. This program helped her by giving her someone to talk to about problems at school and self esteem issues, but it did not help with her selfimage or interest in health.

Health education participant #4 was more introverted and quiet. She opened up greatly for topics she was interested in, but barely talked for the other topics. She had learned about most of the topics in school and expressed that she did not like having to learn about it again. She was very physically active outside of the program and ate a healthy diet that was enforced by her parents. She had been bullied, but stood up for herself. She had no issues with self-esteem and was especially confident about her participation in physical activity and sports. This program helped her socially, provided her with emotional support, and provided her with education to also improve physically.

These participants tended to end with the same attitudes and self-image as they began with.

HEPA

The HEPA results were much different than the results of health education. All of these girls started out with a worse attitude and were harder to work with, but by the end they seemed excited to do the activity. In the first few sessions there were often complaints about the snacks and exercise, but in the last few sessions they greeted the coach at the door and they were excited to start the session. They became more creative with their snacks, had more ideas of snacks they wanted to try, and became more engaged in the physical activity that they did. As they got further into the semester the sessions stayed at an hour or increased by 10 to 15 minutes. This showed their interest in the activities that were being

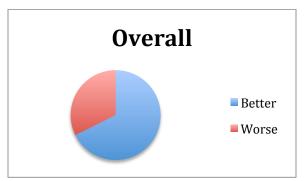
done and the increased engagement they were having with the coach.

HEPA participant #1 began with a negative attitude about living a healthy lifestyle and about herself in general. She refused to do physical activity and complained extensively. She also complained about making healthy snacks and never seemed to like them. She would also bring up that she thought she was fat and her family openly told her that she was overweight. Over time, she began to enjoy the sessions more and would participate in physical activity and snacks. By the end she had discovered that she loved to go on walks and bananas became one of her favorite foods. She became more positive about health. At the end of the program we discussed what she had learned and she was excited to incorporate healthier snacks and regular exercise into her life. This program benefitted her mainly in a psychological aspect. After she felt that I enjoyed being around her, her self-esteem increased as well as her participation and attitude.

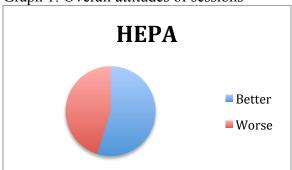
Participants #2 and #3 had their sessions together because they were sisters. They both started out very excited about the program, but would often compete for attention. They started by wanting to go on walks and talk, but by the end they wanted to play more rigorous sports such as softball and soccer. They also became very creative about snacks that they wanted to try and they were willing to try all of the different snacks. They had positive attitudes throughout the program. They did not share many issues about body image. Participant #2 occasionally stated that she was too skinny but had issues putting on weight. They did not have the pressures of being bullied at school because they were homeschooled.

The pie charts below (graphs 1, 2, and 3) represent the number of sessions that went well overall versus the number of sessions that did

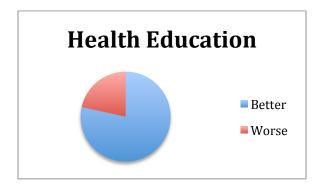
not go well. This was determined by tallying the information from the recorded data (refer to appendix A). Specifically, the question of "Overall, how did it go?" was used. The HEPA group had a closer ratio of better to worse because they generally started off with worse attitudes and it got better over the course of the semester. On the other hand, participants of health education generally started off with a positive attitude and ended with a positive attitude. Their worse sessions were due to other factors such as being tired or having a bad day. Overall, there were many more sessions that went well and led the participants to have a positive attitude.



Graph 1: Overall attitudes of sessions



Graph 2: Attitudes of HEPA sessions



Graph 3: Attitudes of Health Education Sessions

Discussion

As previously noted, self-esteem can be linked to increased physical activity. This study helped to solidify that statement. The girls who began with poor self-esteem tended to enjoy the physical activity and snacking much less than the girls who felt better about themselves. There was improvement in attitude seen with the HEPA program, but not with the Health Education. This may have been because the girls involved with HEPA were becoming more active and receiving more praise than the girls who were simply having discussions or doing smaller activities each week. It is also worthwhile to note that the mentoring made the biggest impact on these young girls. They had someone to talk to and receive praise from other than their family, which helped them in multiple aspects of their lives. Those who were involved with the HEPA program tended to have families who were going through struggles, which may make the informal mentoring difficult. They might have had more improvement because there was someone new who was able to focus on them each week. The families of the Health Education participants were generally average families with both parents and a few siblings. This provided them with more attention since their family did not seem to be going through as much conflict. These parents often tried to be more involved in the program than the parents of the HEPA participants. The fact that the Health Education participants had indirect and direct mentoring while the HEPA participants only had direct mentoring may have had the biggest difference. This would mean that more mentoring is better for the child because they can have the mentors at different times in their daily routines.

The type of mentoring may also have played a role. According to a 2011 study by Castro et al,

"compared to trained professional staff, the volunteer mentors were at least as (if not more) effective in encouraging meaningful increases in physical activity among their assigned participants"5. This study, as in Castro's study, used mentors that were voluntary and not professionally trained by any means. The only training they had regarding health and physical activity was from their college degree. The study may have not gone as well with professional mentors. The young girls probably felt like they could be more open with an average college girl rather than if they were sitting with a coach who was much older and trained in this area.

There are a few limitations with this study. First, there were only 7 participants that were studied, which makes the sample size very small. Second, This study was completed using the same mentor for all 7 participants. The results may have differed using multiple mentors with more participants. Lastly, there were minimal numerical values associated with this study so it was mainly qualitative.

Overall, the mentoring program that was more physically involved (HEPA) had a positive impact on the participants while the Health Education program showed no change.

References

¹ King, K.A., Vidourek, R.A., Davis, B., & Mcclellan, W. (2002). Increasing Self-Esteem and School Connectedness Through a

Multidimensional Mentoring Program. *Journal of School Health*, 72(7), 294-299.

² NYC Girl's Project- The Issues. (n.d.). Retrieved April 10, 2016, from http://www.nyc.gov/html/girls/html/issues/issues.shtml

3 Komar, M., & Ivana, J.B. (2015). GENDER ASPECTS IN MENTORING CHILDREN – THE MENTORS' PERSPECTIVE. Kriminologija & Socijalna Integracija, 22(2), 147-169.

4 Conwell, L.S., Trost, S.G., Spence, L., Brown, W.J., & Batch, J.A. (2008). The feasibility of a home-based moderate-intensity physical activity intervention in obese children and adolescents. *British Journal of Sports Medicine*, 44(4), 250-255. doi:10.136/bjsm.2008.046359

⁵ Castro, C.M., Pruitt, L.A., Buman, M.P., & King, A.C. (2011). Physical activity program delivery by professionals versus volunteers: the TEAM randomized trial. *Health Psychology*, 30(3), 285-294. doi:10. 1039/a0021980



Wildcat Wellness Coaching Session Report

Dat	re Client name Condition (circle one): Health Educ / HEPA skills
Tim	ne arrived # steps (coach)
1.	First activity description
2.	Second activity description
3.	Other activities
4.	Foods & amount tasted or eaten by client (describe)
5.	PA level of client (describe, include steps)
6.	Client level of understanding for health topic (describe)
7.	Client concerns or topics of discussion (describe)
8.	Overall, how did it go?
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