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Childhood Obesity Prevention

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Childhood Obesity Prevention

Cover Page Footnote

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Childhood Obesity Prevention

With rising expectations to meet standards in the classroom, many schools are cutting back on physical activity to allow for more time for academics. This lack of play throughout the school day could possibly lead to childhood obesity and other health risks (Shroeder, 2009). Many professional organizations are providing parks and recreational areas for communities. They promote conservation of natural resources, health, wellness, and the inclusion of people of all races and abilities. The National Recreation and Park Association (NRPA) believes parks and recreational areas for the community are the doorway to promoting health and connectivity for the community. Boundless Playgrounds also encourages people to become active and live healthy lifestyles while promoting the inclusion of people of all abilities. In partnering with other programs like the American Heart Association, many organizations are working to create environments that will lead children to a healthier future.

BREC (Baton Rouge Recreation) was created in 1946 by a State Legislative Act to maintain and operate park activities for all people in the Baton Rouge area. BREC offers many programs to encourage people of all ages to get outside and get active. Some of these programs include inclusive baseball, kayaking sessions, virtual park days for schools, martial arts, and fitness trainings.

We volunteered through the BREC program with an inclusive baseball league. The league meets every Saturday morning for a couple hours at BREC Forest Park and has three different games: age six and under t-ball, age seven to fourteen coaches' pitch and fifteen and up softball. We had the opportunity to play coaches pitch with the seven to fourteen year old age group. There were twelve children split between two teams, and the majority of the players had special needs (ten of the twelve). We assisted the children by making sure they were in the right place, helping them catch and hit the ball, and running with them from base to base. This was a great opportunity for the players to become active and have fun with their peers while doing so.

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Rachel Ginn Mullet is a first grade teacher at Broadmoor Elementary in Lafayette. She follows the Pennington list for all snacks provided and provides healthy snacks for those who do not have them.

Noelle Hill is a third grade teacher at Mandeville Elementary in St. Tammany where she continues to promote healthy habits with her students. They participate in relay recess where they spend a day on healthy eating and exercise.

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To bring awareness of childhood obesity to our schools, we each taught two lessons on physical activity, a healthy diet, and the benefits of a healthy lifestyle. Our first lesson focused on the food pyramid where we used pictures to create the food pyramid as a class. We discussed the importance of each level of the food pyramid and how it applies to their daily lives and activities. At the end of the lesson, we introduced a food journal and challenged the students to record what they ate throughout the week and discuss healthy foods with their parents. Each page of the journal had a food pyramid and boxes to check each food group, with more boxes for healthier foods.

The second lesson we implemented focused on becoming active. We talked about how often to exercise and ways to do so. We also read the story *I.Q. Gets Fit*, and brainstormed other ways to exercise than the ones mentioned in the story. We acted out some of these exercises and brought the lesson outside to experience more ways to move. Again, in trying to encourage the students to bring these healthy habits home, we gave each child an exercise journal to fill in with their parents. Both of these lessons encouraged involvement at home in hopes to change some of the unhealthy habits of our students.

Background

Childhood obesity is a growing epidemic in the United States. According to the Centers for Disease Control and Prevention [CDC] (2014), one in every three children is overweight or obese. Early onset of this disease increases a child's susceptibility to diabetes, heart disease, and cancers (Pulgaron, 2013). Studies have reported that the following three factors play a vital role in children becoming overweight or obese: genetics, behaviors, and the environment (Karnik and Kanekar, 2012). Teachers and parents can encourage healthy development by understanding how these factors play a role in childhood obesity.

Behavioral factors related to childhood obesity include a child's diet, sleeping habits, and physical activity. Epstein, Gordy, Raynor, Beddome, Kilanowski, and Palcuh (2012) conducted a study that changed the eating patterns of parents and children who were obese. The results indicated that participants who increased healthy food intake lost more weight than those who decreased fatty food intake. Schools and parents should provide a variety of fruits and vegetables with every meal. Additionally, studies have found that children who experience restless sleep are more prone to eating empty calorie foods (Burt, Dube, Thibault, and Gruber, 2014). The CDC (2014) recommends that preschool children sleep for 11-12 hours a day and school-age children sleep about 10 hours a day. Teachers of preschool age children should set aside a portion of the day for naptime and provide parents with a record of how long their child slept to help determine a set routine for their child to go to bed. The last behavioral factor is frequency of physical activity. An increase in physical activity expends more calories and leads to a healthier lifestyle.

Environmental factors include safe homes, schools, and communities that support healthy living and exercise. Healthy environments provide nutritious food options and appropriate structures for active lifestyles. Rahman, Cushing, and Jackson (2011) write, “There is strong evidence to show that long-term solutions to the childhood obesity epidemic can be achieved by modifying the built environment to increase children's physical activity and access to healthful foods, and reduce their access to unhealthy foods.” Schools and families should provide accessibility to a wide variety of foods and physical activity in order to promote healthy living for students.

To promote healthy lifestyles at an early age, preschool students should participate in two hours of exercise a day including 60 minutes each of structured and unstructured play, typically broken up in 10-15 minute increments. While research has shown this is more beneficial for young children, there are not many policies to ensure schools provide their students with this time (Mazzeo, Arens, Germeroth, Hein, 2012, p.11).

Recommendations from the Field

Multiple organizations recommend practices in support of childhood obesity prevention and increase of playground play in children’s daily lives. Boundless Playgrounds, Healthy Kids Healthy Communities, and a local organizations such as Baton Rouge Recreation, advocate for the prevention of obesity by educating those on the factors listed above that lead to obesity.

Boundless Playgrounds is a non-profit organization that encourages children to improve their physical activity by installing inclusive playgrounds available to the public. Often, community parks are not appropriate or accessible to children with disabilities; however, Boundless Playgrounds hopes to change that by installing playgrounds where, “every child can reach the highest play deck, swings and bouncers have back support and sensory-rich activities let the imagination soar” (“Boundless playgrounds,” 2013). Their mission is to encourage people of all abilities to play and learn in a welcoming environment. Boundless Playgrounds’ mission states:

To create a world where all children have the opportunity to gain the developmental and health benefits derived from unstructured play in an inclusive environment. To provide a learning and growing environment so children can develop a lifelong respect for and appreciation of individuals of all abilities (“Boundless playgrounds”).

The organization created their own criteria for designing inclusive playgrounds to meet the needs of the communities they build in. Currently there are two playgrounds in Louisiana built by Boundless Playgrounds—one in Mandeville and the second in Shreveport.

Similar to Boundless Playgrounds, Healthy Kids, Healthy Communities (HKHC) is a national organization that promotes healthy and active living by supporting communities and encouraging families and children to stay active. HKHC targets children susceptible to obesity. They provide funding and social supports in the community and help communities implement new playgrounds in order to encourage healthy lifestyles.

Baton Rouge Recreation's (BREC) main focus is to develop programming that helps families and children stay active outdoors. They offer classes, community events, and sports leagues in order to support active outdoor lifestyles. BREC provides camps in the summer and on school holidays, which aim to keep children active while they are away from school ("Baton Rouge Recreation," 2014). BREC works to reduce the percentage of childhood obesity by encouraging families to stay active and providing safe environments for physical activity.

Divergent Perspectives

Both parents and teachers were surveyed on the issue of childhood obesity (see Appendix A). A preschool teacher, who participated in the survey, stated, "I once had a child in my class who was so overweight I was scared if he'd wake up at naptime. He weighed 140 pounds at four years old" (A. Crawford, 2014). While 50% of teachers rated the urgency of childhood obesity as "extremely urgent," only 83% of teachers rated their general knowledge of obesity, understanding of the risks associated with it, and knowledge of preventative measures as proficient. These teachers do not feel that they are knowledgeable enough to educate parents and families on the subject. Therefore, we must educate teachers and encourage them to model healthy lifestyles to their students.

The media describes obesity as the greatest health risk for children today. Media sources such as *PTOToday* and *Examiner* suggest that in order for this trend to end, children must become more active. *Examiner* described that obesity can have long term effects, even if the children manage to lose weight later in life (Finch, 2014). *Auburn Reporter* indicated that these issues can begin at birth and believe that schools and parents should be the ones who set healthy habits for the children (Gustafson, 2014). *PTOToday* presented research that displays that physical activity in schools is decreasing and children are not compensated for this time at home (Brown, Sutterby, Thorton, 2014).

Though articles describe obesity as an increasing issue among children, *PTOToday* stated that pediatricians believe schools are attempting to increase "physical education, recess and development of community parks and playgrounds, especially in low-income areas (Brown et al., 2014)." Programs such as Healthy Buddies and pro athletes like Jacksonville Cornerback Alan

Ball are also supporting childhood obesity prevention. Ball is involved in the program NFL Play 60, which supports 60 minutes of play a day for children. In addition, *DailyPress* described an initiative in 4 states that hopes to reach 7,500 children in order to improve healthy habitats in early childhood centers. Research states that childhood obesity is increasing, but politicians, schools, doctors and athletes throughout the United States are working together to combat the issue and increase healthy living for children.

Below are reflections of our experiences.

Reflection 1

Prior to our advocacy project, I thought we knew a lot about childhood obesity and prevention; however, through reading research and discussing the problem with our stakeholders I learned more than we thought we would. Current research taught me the magnitude of this problem and how important it is to promote healthy lifestyles at a young age. I was surprised by the results of our stakeholder survey because I had predicted that the majority of teachers would think this is an urgent issue that is relevant to their lives. I was shocked when only half the teachers stated that. Reviewing the survey results guided me in planning and implementing an effective action plan that promoted healthy living.

One obstacle that I overcame was finding time to teach our healthy eating and exercise lessons. Although teachers understand the importance of this issue, they are currently under an immense amount of pressure to raise their test scores, and during this time of year, they are focused on “reading” their children for the next grade. As a group, we recognized these stresses and created short, simple lessons that can be taught in fifteen minutes at the end of a day.

Through volunteering, I learned how to keep children active regardless of disabilities. I also realized how crucial volunteers are. Without the support from the volunteers at BREC, the inclusion softball league would not be possible. I hope to find similar opportunities in the future that promote exercising on the weekends.

I noticed disconnects when reviewing our surveys. For example, one parent rated their knowledge of preventative measures of childhood obesity as a ten or “extremely knowledgeable;” however the same parent scored a four for “On a scale of 1-10 [one being not important and ten being extremely important], rate the importance of children spending 60 minutes a day exercising through unstructured play on appropriate playground equipment.” To eliminate this disconnect, I want to educate parents on how important an active lifestyle truly is. Additionally, I had talked with many of the teachers who said this is an issue that needs to be advocated for but I continued to witness these teachers use candy as a reward in their classroom.

If I were to do this project again, I would change the questions of our stakeholder survey to multiple-choice rather than a numbered scale. I would also survey more families and teachers than those in my classroom. Overall, I found that our project has been successful thus far, and I plan on continuing advocating for this issue in the future.

Reflection 2

I knew some information and research about childhood obesity going into the project, but I learned a lot throughout the process. One interesting thing I learned was “pediatricians believe schools are attempting to increase physical education, recess and development of community parks and playgrounds, especially in low-income areas (Brown et al., 2014).” Throughout my student teaching placements, I was under the impression play and activity outdoors was being taken away in order for schools to focus on academics. I also found it interesting that, “a study done at the University of Colorado Cancer Center showed that childhood obesity can have long term effects on children, even if they manage to lose weight later in life (Finch, 2014).” This was interesting and a little disheartening to me, because often times obesity starts from birth and its sad to think that a child may have health problems from birth on, from something they could prevent. Along with the research, I found out about multiple organizations such as *Shape Up America!* and *Louisiana Organizations Fight Against Childhood Obesity* that work to prevent childhood obesity and help children and families become more active.

During the project, there were a couple of obstacles we met. Our first obstacle was figuring out exactly what we wanted to advocate for and what we would be the most passionate about. We began wanting to advocate for playground play, but through research we became more interested in and passionate about childhood obesity. Therefore, we switched our main issue to childhood obesity, but focused on active play in order to incorporate our initial playground interest. Another obstacle we came across was our volunteer opportunity falling through. We initially wanted to volunteer to help build a playground with the civil engineer department at LSU, but there was no playground building opportunity for this semester. Thus, we got in touch with BREC and volunteered with their inclusive baseball league, which was very rewarding.

There was quite a difference in the information the media provided and the information advocacy groups provided on childhood obesity. The media offered a variety of statistics on childhood obesity, along with well-known people who are involved in change, such as Michelle Obama and famous athletes. The media also provided recommendations for how much healthy foods should be eaten daily and how much physical activity children should receive, but not much information on how to accomplish this. The advocacy groups provided the same type of information with much more information on how these things can be accomplished. These groups also provided children and families with ways to eat healthier and get more active. Some of the organizations

provided gardening days, recipes, and work out programs, to help families change their lifestyle to a healthier one. The main difference between the media and the advocacy organizations was that the media provides information and striking statistics, while the advocacy groups provide this information along with resources on how to change the statistics.

Through my volunteer experience at BREC I learned a variety of things. The main thing I learned was how far a little encouragement can go for a child. The children were so easily discouraged as soon as something went wrong in their game, but as soon as someone said “way to go” or “you can do it” they suddenly become completely capable of completing the task at hand. I thoroughly enjoyed volunteering with this team and plan to return in the future.

Reflection 3

In beginning our advocacy project to prevent childhood obesity, I was astounded to find out nearly 43 million children in the world who are overweight (Rishardson, Paulis, Middelkoop, Koes, 2013). After seeing how childhood obesity affects the students in my placements, it was very interesting to find more information about how these families feel. Research shows children should have almost two hours total between structured and unstructured physical activity throughout the day, although we know that does not always happen in schools. Teachers are often over stressed from trying to meet grade level standards and feel time in the classroom is more beneficial in trying to meet those standards. In all actuality, providing students with time to get active and use some of that pent up energy is not only beneficial to their health, but has shown to have academic benefits as well (Schroeder, 2009). Fortunately, the media and literature have very similar stances on childhood obesity and ways to prevent this problem such as encouraging healthy eating habits and becoming more active. Although many of our stakeholders did not think this issue applied directly to their lives, they too have a basic knowledge of what childhood obesity is, that it is a problem, and ways to help prevention. Because most people are on the same page with understanding that it is an issue, I feel we did not face many obstacles throughout advocating for prevention of childhood obesity.

We partnered with BREC to volunteer with their inclusive baseball league. The league meets every Saturday and plays t-ball, coach’s pitch, and softball with people of all abilities ages six and up. This was an amazing experience to get active with children who were so excited to be out playing with their friends. We worked with coach’s pitch ages seven to fourteen which had twelve children playing, all but two with disabilities. The league is set up to be very encouraging and seems like they have created their own family, even with the players that were playing other versions of baseball. As soon as someone showed up, everyone was saying hello and already knew their name because of the wonderful community they had created. Although there were probably only two or three children who struggle with weight, it was a great to see the other children encouraging and getting active with them.

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Most stakeholders recognize childhood obesity as at least somewhat of a relevant problem, many did not see how it really connected to their lives, all the risks associated with childhood obesity, or preventative measures. This disconnect lead us to informing children and their families of ways to get healthy and active. Students in my classroom had great ideas for healthy eating and exercises they could do at school or at home. I also sent home food and exercises with students to fill out with their parents, and although I didn't receive a few back, the ones I did receive were pretty similar in some of their eating habits except one student. I expected this one student's journal to be very different due to the prior knowledge I had of his eating habits. He only eats chicken nuggets and French fries for dinner. For lunch, he typically brings Cheetos puffs, goldfish, Hershey kisses, about ¼ of an apple, a special treat such as a laffy taffy, a capri sun, and boxed Hershey's chocolate milk. Although my teacher has talked with his parents about the lack of nutritional value in his lunch, his parents have not changed what they provide for unknown reasons. I hope in teaching the student about healthy eating habits, it at least has some effect on his diet.

I am very pleased with the way our advocacy project turned out. We were able to get involved in organizations such as BREC that I would like to continue with in the future, and I felt we were able to reach many of our students and their families. Even if it caused one of our students, their families, and their teachers focus more on healthy habits; I feel we have been successful in our advocating for prevention of childhood obesity.

Appendix A

Teacher Parent

1. How much do you know about childhood obesity?

1	2	3	4	5	6	7	8	9	10
Nothing									A lot

2. How much do you know about the risks associated with childhood obesity?

1	2	3	4	5	6	7	8	9	10
Nothing									A lot

3. How much do you know about the preventative measures for childhood obesity?

1	2	3	4	5	6	7	8	9	10
Nothing									A lot

4. Do you think this is an urgent issue that should be advocated for?

1	2	3	4	5	6	7	8	9	10
No									Yes

5. How relevant is this issue to your life?

1	2	3	4	5	6	7	8	9	10
Irrelevant								Extremely relevant	

6. How influential are playgrounds for preventing childhood obesity and promoting healthy development for gross motor skills?




































1	2	3	4	5	6	7	8	9	10
Nothing									A lot

7. Rate the importance of children spending 60 minutes a day exercising through unstructured play on appropriate playground equipment (including jungle gyms, swings, bikes, jump ropes, monkey bars, etc.).

1	2	3	4	5	6	7	8	9	10
Not important							Extremely important		

Appendix B

Exercise is FUN! - Track your Move-It Minutes:

Color the box every time you exercise	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
15 Move-It minutes							
15 Move-It minutes							
15 Move-It minutes							
15 Move-It minutes							
Extra Move-It minutes							

My favorite Move-It activities are:



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Sweets					
Dairy					
Protein					
Fruit					
Vegetable					
Grain					

(2005)

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