# Childhood Obesity:

The Impact of Family, Community, and Socioeconomic Status on Children

Jeremy Rielley

American College of Education

Childhood obesity is getting worse and worse as the years pass. Even though there is a lot more information about the topic and what impacts it has on the livelihood of children we, as a society, still seem to be trending the wrong way. Even in the early 2000s it is said that 31% of children from six to 19 years old were at risk of being obese or overweight (Ventura, Savage, May, & Birch, 2005). There are many things that impact the chances of a child being overweight. The biggest impact has to be the environment the child has at home. Are both parents around? What is their socioeconomic status? Do they exercise? Where do they live?

The specific behavior that is going to be addressed is the impact of diet and exercise on obesity. There are many causes that can lead to a poor diet but the biggest ones have to deal with how the children's parents, grandparents, or anyone else living with them lives their daily life. If the family and community eat healthy, exercise, and live a healthy life the children are much more likely to lead the same life and then lower the chances of being overweight or obese. If the family leads a sedentary lifestyle with a poor diet the children will pick up those habits and be much more likely to continue those behaviors throughout their life.

#### **Behavioral Learning Theory**

Children are very good at adapting to situations and eating and doing what is available to them. So if there are healthy options and easy times to exercise they will more than likely enjoy them. The Pilot Fruit and Vegetable Project gave huge amounts of fruits and vegetables to schools around the country and 93% of those servings were

eaten (Shields, 2009). This shows that if it is easy and accessible children will make good choices. But if they go home and their parents are working late or live far from a grocery store they will, again, take the easy route and eat what is available to them. Childhood obesity needs to be addressed at the family level to really have an impact on the children (Shields, 2009). The strategies that are going to written about start at the family level first. Education of the parents can help give the parents the information they need in order to help make better choices for them and their children.

The first strategy that can be used in the target population is hold informational meetings and send out information to the families that are not able to make the meetings in person. Understanding that many parents are very busy with their own lives is important so making the access to information as easy as possible is crucial. If strategies can be given and ways to make eating healthy and exercising easy the parents will be more comfortable implementing those changes. If these are still hard for families to do then giving them information to make better choices when eating fast food is also very important. Exercising can help combat the impact of fast food on weight but adding sugary drinks to fast food negates most of the impact of exercise (Berry, Burton, & Howlett, 2017). This means that even if parents will take their children to Burger King, having them give their children water is one easy step they can take to combat childhood obesity.

The end goal for the strategies to lower childhood obesity is to continue to educate the children in school but also to educate the parents by holding open forums and information sessions, or by sending information home either from school or through

the mail. If the parents can change their daily lives and make some better choices then the children will benefit in the short and long term by being healthier and having those behaviors be part of their normal lives.

Another option that could be used for older students is to educate them then encourage them to get their parents involved. It is easier said than done but if the children can push cooking dinner at home or going out for a walk can go a long way to get the parents on the right track as well.

#### **Cognitive Learning Theory**

The cognitive learning theory is very relevant to the issue of childhood obesity. Not only does it impact the children but it also impacts the parents and family members that are making the food and exercise decisions in the household. In order to truly get through to the family and children they need to be an "active participant" in the learning process (Yilmaz, 2011). This means that they must be engaged in what they are learning to fully comprehend it and use it in their day to day lives. The family and children must use their prior knowledge and experiences when learning something new. To combat childhood obesity there are many levels that must be completed to really make a change. Going into schools and communities is vital but, as Piaget would say, to fully teach what is needed to be taught the teachers must be individualistic when teaching so the learners can use past experiences with the new learning (Yilmaz, 2011). The family environment is at the forefront of predicting a child's future chance of being overweight or obese (Moore, Wilkie, & Desrochers, 2017). The key to lower the rate of

childhood obesity is to focus on teaching the leaders of the household since they are the ones making the decisions on exercise and eating habits. In order to do this different strategies will have to be used in order to get in touch with how everyone learns. Giving alternative solutions to "easy" meals by making healthy eating as easy as going to Burger King will be a substantial solution. But if they are not able to cook at all giving them ways to make fast food "healthier" is also important. Keeping soda and sugary drinks out of their house and ordering water when eating at a restaurant is one step in the right direction (Berry, Burton, & Howlett, 2017). Using an open forum or discussion will be vital to these adults learning new habits. Being a part of a group is very beneficial when learning something new. Having others in the same situation and coming up with solutions that way is also a great way to learn something new (Yilmaz, 2011). A great way to teach children proper nutrition is by using something they can relate to. A group at University of Oklahoma did a study with a group of students and adults and they used comic books to help teach healthy eating. They knew that the children would be interested in comic books and drawing so they used that to their advantage. The study showed that having the children create comic books about fruits and vegetables was enjoyable for them (Branscum, Houseley, Bhochhibhoya, & Hayes, 2016). Using learning tools that children, and adults, are interested in will allow the learners to better understand and comprehend new material. If this can be done the likelihood that better diet and exercise plans go way up and in turn lower the rate of childhood obesity. If the strategies listed in this paper and the first few modules are able to be used they can be very effective with the buy in from the families. If the families do not attend the

information forums or do not read the literature that is sent to them then the strategies will not be effective. By using the different ways to distribute information to the parents and community has a higher chance of being successful because of the different wants people learn (Wilson & Peterson, 2006). And if the parents and community take this seriously there will be a change in childhood obesity within this target population. It might take a while but the lasting effect will be well worth the time and effort it takes to get the interventions started.

#### **Social Constructivism Theory**

Social constructivism plays a large role in childhood obesity. According to Phan, the relationship between someone's home environment, and community, and their behavior work side by side in shaping that person's identity as they grow up (Phan, 2012). Because of this interaction the focus to lower the rate of childhood obesity needs to be on changing the way the people see this problem. Children are rarely, if ever, blamed for being overweight or obese which puts the blame onto their caregivers at home (Moffat, 2010). So even though it is the child that is overweight or obese they do not get the blame since they are seldom the ones who are making the diet and exercise decisions at home. Socioeconomic status is also at the front of this issue. Low income families, and non-white families, have a higher rate of childhood obesity and it can be linked to the low-nutrient foods they buy in order to feed their families (Moffat, 2010).

Education is the best strategy in preventing and lowering the rate of childhood obesity. But even with education it might not change without the support of the

community. The community must make it easier for families to get healthier foods, safely exercise, and make the right decisions when it comes to diet and exercise. The best intervention that can be used and sustain itself is one that fits the community as a whole. The community must feel they are a part of the decision making process and the implementation of the change (Shea et al., 2013). Coming up with a catchy and tailored plan and being able to get the support of the city is very important as well. If the community plays a big role in the creation and implementation of the new program the chances of it succeeding will rise as long as all groups within the community are involved. Poverty and low-income is a huge barrier that can prevent many strategies from being successful. Including those groups is much more important than the higher earning and more involved families since they are more likely to be making the correct choices for their children (Shea et al., 2013).

Another strategy that would focus more on the students is to continue education and modeling of good habits within the school setting. Students spend anywhere from 8-9 hours in school each day. That means they are with teachers and other students for most of their day. Since children love modeling behavior of those around them, if the schools can give the students the knowledge to help their parents make better food and exercise decisions the parents might be more willing to change their habits. Parent-child interactions at a young age help predict future behaviors it is important to educate and empower young students so they are able to advocate for themselves (Grossklaus & Marvicsin, 2014).

With the community involvement and support from the city that should happen in this area the implementation of these strategies have a very good chance of being successful. A lot of what needs to be created to make the community more healthy, grocery stores, bike lanes, parks, classes, low cost sports, is already in place so much of what needs to be done can be done through education of the programs already in place. Giving the parents the needed knowledge of how to be healthier and giving them more opportunities to be successful will in turn show their children that what they are doing is good and healthy. Children do a great job at modeling what they see around them, especially from their parents (Grossklaus & Marvicisn, 2014).

The difficulty with this change initiative is to be effective now and in the future there has to be a lot of buy in with the community and the people in charge of grants, funds, and other aspects of the local government. The great thing is this community is very active and would do just about anything if it would help the children be healthier. In the end data would have to be collected for the current population either by survey or physicals that were done for the school to get a baseline for the current children in the community.

To be even more effective there should be check ins with the parents to make sure they are on the right track with the things that are happening at home. But if that is too difficult then the programs that will be used for exercise and activities can have sign in sheets so tracking how many kids come in and how often can give a good gauge about the impact those programs are having and if it is sustainable. If the numbers are not as good as needed the programs can make adjustments to better suit the

populations. Since schools see every kid in the community that is a great place to take some polls or surveys with the students so they can tell their side. It would be extra data to use to back up, or contradict, the parents data about their kids depending on how it turns out.

This initiative will have a massive impact on the target population and the future populations within the community with the buy in from the whole family. It will give parents the knowledge to teach their kids how to live a healthy lifestyle which in turn will teach their kids the value of being healthy and then it will be much more likely to continue for future generations. As important as it is to fix the childhood obesity problem right now it is also vital to fix it so that future generations are not impacted by this as children are now. Having childhood obesity become a generation by generation issue will end up negatively impacting our society more than we can ever imagine.

Shields, A. (2009). Examination of the obesity epidemic from a behavioral perspective. *International Journal Of Behavioral Consultation And Therapy*, *5*(1), 142-158. <a href="http://dx.doi.org/10.1037/h0100876">http://dx.doi.org/10.1037/h0100876</a>

Ventura, A., Savage, J., May, A., & Birch, L. (2005). Early Behavioural, Familial and Psychosocial Predictors of Overweight and Obesity. In *Encyclopedia on Early Childhood Development*. Pennsylvania State University.

Berry, C., Burton, S., & Howlett, E. (2017). Double Trouble: Commingled Effects of Fast Food and Sugar-Sweetened Beverage Consumption and the Intervening Role of Physical Activity on Childhood Obesity. *Atlantic Marketing Journal*, *Vol. 6, No.* 2(Summer 2017), 55-65. Retrieved from <a href="http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?vid=8&sid=e33e8329-f431-4c19-be50-29282976d820%40sessionmgr4007">http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?vid=8&sid=e33e8329-f431-4c19-be50-29282976d820%40sessionmgr4007</a>

Moore, E., Wilkie, W., & Desrochers, D. (2016). All in the Family? Parental Roles in the Epidemic of Childhood Obesity. *Journal Of Consumer Research*, ucw059. <a href="http://dx.doi.org/10.1093/jcr/ucw059">http://dx.doi.org/10.1093/jcr/ucw059</a>

Lu, C., & Montague, B. (2015). Move to Learn, Learn to Move: Prioritizing Physical Activity in Early Childhood Education Programming. *Early Childhood Education Journal*, 44(5), 409-417. <a href="http://dx.doi.org/10.1007/s10643-015-0730-5">http://dx.doi.org/10.1007/s10643-015-0730-5</a>

Lewis, C. (2017). Childhood Obesity: Physiological and Psychological Implications and Ethical Responsibilities. *Online Journal Of Health Ethics*, *13*(1). <a href="http://dx.doi.org/10.18785/ojhe.1301.05">http://dx.doi.org/10.18785/ojhe.1301.05</a>

National Research Council. (2002). *Learning and understanding: Improving advanced study of mathematics and science in U.S. high schools*. Washington, DC: The National Academic Press. 117-129.

Wilson, S. M., & Peterson, P. (2006). *Theories of teaching and learning: What do they mean for educators?* National Education Association.

Murphy, C. (2011). Why games work and the science of learning. Conference paper, Modsim World 2011, Virginia Beach, VA.

Lee, I., Bang, K., Moon, H., & Kim, J. (2016). Comparison of Obesity Rates in Early Childhood (4 to 80 months) by Parental Socioeconomic Status Using National Cohort

Dataset in Korea. *Asian Nursing Research*, *10*(4), 305-311. http://dx.doi.org/10.1016/j.anr.2016.10.005

Banks, G., Berlin, K., Rybak, T., Kamody, R., & Cohen, R. (2015). Disentangling the Longitudinal Relations of Race, Sex, and Socioeconomic Status, for Childhood Body Mass Index Trajectories. *Journal Of Pediatric Psychology*, *41*(4), 453-461. <a href="http://dx.doi.org/10.1093/jpepsy/jsv062">http://dx.doi.org/10.1093/jpepsy/jsv062</a>

Sullivan, D. (2014). From Food Desert to Food Mirage: Race, Social Class, and Food Shopping in a Gentrifying Neighborhood. *Advances In Applied Sociology*, *04*(01), 30-35. http://dx.doi.org/10.4236/aasoci.2014.41006

Branscum, P., Housley, A., Bhochhibhoya, A., & Hayes, L. (2016). A Formative Evaluation of Healthy Heroes: A Photo Comic Book-Social Cognitive Theory Based Obesity Prevention Program. *Journal Of Health Education Teaching*, *7* (1), 52-63.

Grossklaus, H., & Marvicsin, D. (2014). Parenting Efficacy and its Relationship To the Prevention of Childhood Obesity. Pediatric Nursing, 40(2), 69-86.

Moffat, T. (2010). The "Childhood Obesity Epidemic": *Medical Anthropology Quarterly*, 24(1), 1-21. http://dx.doi.org/10.1111/j.1548-1387.2010.01082.x

Shea, S., McIntosh, B., Daly, A., Collet, J., Higgins, J., & Amed, S. (2013). Sustainable Childhood Obesity Prevention Through Community Engagement (SCOPE): Development of a Social Media Resource for Communities. *Canadian Journal Of Diabetes*, 37, S265-S266. <a href="http://dx.doi.org/10.1016/j.jcjd.2013.03.256">http://dx.doi.org/10.1016/j.jcjd.2013.03.256</a>

Grills, C., Villanueva, S., Subica, A., & Douglas, J. (2014). Communities Creating Healthy Environments: Improving access to healthy foods and safe places to play in communities of color. *Preventive Medicine*, *69*, S117-S119. http://dx.doi.org/10.1016/j.ypmed.2014.10.026

Phan, H. P. (2012). A sociocultural perspective of learning: Developing a new theoretical tenet. Australian Association for Research in Education (NJ1), Paper presented at the Joint Australian Association for Research in Education and Asia-Pacific Educational Research Association Conference (AARE-APERA 2012) World Education Research Association (WERA) Focal Meeting, Sydney, New South Wales.

#### Appendix A

Shields, A. (2009). Examination of the obesity epidemic from a behavioral perspective. *International Journal Of Behavioral Consultation And Therapy*, *5*(1), 142-158. <a href="http://dx.doi.org/10.1037/h0100876">http://dx.doi.org/10.1037/h0100876</a>

This article might end up being one of the most useful articles I have read on my topic so far. It gives a lot of great statistics that backs up my theory that the home environment is vital to teaching and reteaching bad habits in hopes of preventing obesity. The article brings up screen time, lack of exercise, greater reliance on fast food, and lack of balanced diet at home and away from home as the key factors in childhood obesity. The article also writes on different ways that behavior can change to a more positive outcome. The biggest point Shields tries to make is that it all starts and ends with the family environment and how children react to situations at home.

Ventura, A., Savage, J., May, A., & Birch, L. (2005). Early Behavioural, Familial and Psychosocial Predictors of Overweight and Obesity. In *Encyclopedia on Early Childhood Development*. Pennsylvania State University.

This encyclopedia article delved into the topic of childhood obesity and how different factors in growing up can help or hurt the chances of a child being overweight or obese. It focused on how the parents impact the decisions the children will end up making and how what is taught and modeled at home shapes the way the children associate food. The paper talks about many different factors ranging from feeding as an infant to the restriction of food and how it impacts the likelihood that a child will be overweight or obese

Berry, C., Burton, S., & Howlett, E. (2017). Double Trouble: Commingled Effects of Fast Food and Sugar-Sweetened Beverage Consumption and the Intervening Role of Physical Activity on Childhood Obesity. *Atlantic Marketing Journal*, *Vol. 6, No.* 2(Summer 2017), 55-65. Retrieved from

http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?vid=8&sid=e33e8329-f431-4c19-be50-29282976d820%40sessionmgr4007

This research studied how fast food and sugary beverages impact the likelihood that younger children will be overweight or obese. It writes about the correlation of those two things when combined with exercise and also the impact of either fast food and exercise vs. fast good and sugary drinks and exercise. I am using

this as my baseline data for my behavior since part of what my change initiative will be is educating parents so they can make better choices for their children to lower the impact of childhood obesity.

Moore, E., Wilkie, W., & Desrochers, D. (2016). All in the Family? Parental Roles in the Epidemic of Childhood Obesity. *Journal Of Consumer Research*, ucw059. http://dx.doi.org/10.1093/jcr/ucw059

This journal article is probably going to be a central piece to my work. It goes into great detail about the role of the family and community structure and how it impacts childhood obesity. It talks about the circle of obesity and how the parents' influence is so crucial to the lifestyle of their children. The socioeconomic status of families also have a massive role in childhood obesity. The article also gives strategies and studies to give reasoning behind their work. Focusing on the parent-child interaction and how to reteach the adults the proper behavior and encouragement is vital to the children's wellbeing.

Branscum, P., Housley, A., Bhochhibhoya, A., & Hayes, L. (2016). A Formative Evaluation of Healthy Heroes: A Photo Comic Book-Social Cognitive Theory Based Obesity Prevention Program. *Journal Of Health Education Teaching*, *7 (1)*, 52-63.

These authors had a really great study about the impact of teaching children and parents through the use of comics. They really focused on what the students enjoy and use their prior knowledge to teach them more about healthy eating and exercise. The children got to create their own comics with the new information they learned. It showed that when students are interested in what they are learning they will learn a lot more. So connecting the new information with what they have done in the past, and enjoy, is pivotal to the learning of new information.

Grossklaus, H., & Marvicsin, D. (2014). Parenting Efficacy and its Relationship To the Prevention of Childhood Obesity. Pediatric Nursing, 40(2), 69-86.

Grossklaus and Marvicsin focus on the parental aspect of childhood obesity. They write a lot about the thoughts and feelings of the parents and how that affects the way they teach their children about diet and exercise. They write about that the parent-child interaction as one of the most important predictors to how the child behaves. Health literacy in the parents is also a huge predictor into how and what they teach their children. Reteaching certain things is a big part

and making it easy and comfortable for the parents goes a long way for them to teach it to their children.

Moffat, T. (2010). The "Childhood Obesity Epidemic": *Medical Anthropology Quarterly*, 24(1), 1-21. http://dx.doi.org/10.1111/j.1548-1387.2010.01082.x

Moffat goes into great detail about the rise of childhood obesity in the USA and Canada. She writes about the different health risks that are associated with this issue. Much of what is written about childhood obesity ends up blaming the primary caregiver or their home environment for this issue. This goes hand in hand in what I want to do for my change initiative so her research and writing is very much in line with my topic.

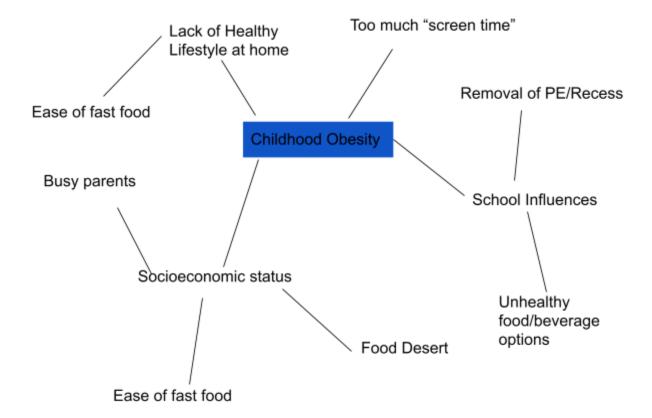
Shea, S., McIntosh, B., Daly, A., Collet, J., Higgins, J., & Amed, S. (2013). Sustainable Childhood Obesity Prevention Through Community Engagement (SCOPE): Development of a Social Media Resource for Communities. *Canadian Journal Of Diabetes*, 37, S265-S266. <a href="http://dx.doi.org/10.1016/j.jcjd.2013.03.256">http://dx.doi.org/10.1016/j.jcjd.2013.03.256</a>

The study that was done in this paper worked on different ways to work with the community to help ensure that everyone had access to the same activities and food as a way to prevent and lessen the chances of childhood obesity. Gaining community trust and involvement was huge in their minds because without that nothing would be sustainable in the long run and thus not impact future children.

Grills, C., Villanueva, S., Subica, A., & Douglas, J. (2014). Communities Creating Healthy Environments: Improving access to healthy foods and safe places to play in communities of color. *Preventive Medicine*, *69*, S117-S119. <a href="http://dx.doi.org/10.1016/j.ypmed.2014.10.026">http://dx.doi.org/10.1016/j.ypmed.2014.10.026</a>

The social environment has a massive impact on childhood obesity. The authors go into detail about how the home environment and community impact the chances of certain groups and races to develop childhood obesity. This is very important to my community because of the racial diversity and different socioeconomic statuses of my community. The fact that lower socioeconomic status and non white races have a higher likelihood of childhood obesity is alarming.

## **Concept Map**



### **Childhood Obesity Graphic**

