

## **Senior Honors Project Summary**

***“Our Health, Our Responsibility”***

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*For Health For People In Need Everywhere*

## Health4PINE Senior Honors Thesis

### Abstract

Health4PINE (People in Need Everywhere) is an organization that spreads health awareness and places an emphasis on mental, social, and physical fitness along with tips of how to achieve improved health without expensive measures. Youth's health has been declining over the past decade (Neighmond, 2010). In 2018, more than 3.1 million teenagers (12-17) in the United States reported some type of depression with 15 million reporting social anxiety (ADAA 2018). This increase in social anxiety has increased significantly over the past five years (ADAA 2018).

The current project was based around six interactive presentations with fourth and fifth graders at a Boys and Girls Club. Students were engaged in critical thinking about mental, social, and physical health through various activities. These presentations were approximately thirty minutes and consisted of games, arts and crafts, and discussions. Surveys for the parents and staff at the Boys and Girls club were distributed to examine the gain in health knowledge of the students before and after program.

### Introduction

Health4PINE (People in Need Everywhere) is a non-profit organization I started to spread health awareness of with an emphasis on mental, social, and physical fitness in the most interactive and effective way possible with tips of how to achieve health on a low budget. To reach more people, interactive presentations and peer to peer mentoring sessions are necessary to overcome unhealthy decisions (eating unhealthy snacks or pulling all-nighters) that are usually more popular than healthy ones. The Boys and Girls Club has many students in which these methods can be used to help promote healthy behaviors.

## **Background**

I was always interested in health and found it intriguing how we are able to control almost 70% of our own health through our choices. I visited India in 2014 and decided to take this opportunity to increase awareness of healthy practices to the poorer communities near my parents' hometown. After days of research, I contacted a local youth group, Akila Vida Barath Parishad (ABVP) in Andhra Pradesh, India and started a health campaign: "Our Health, Our Responsibility." Together, we scheduled presentations at 12 poorly funded schools, ranging from 400-1,000 students plus faculty, and eventually met the mayor as well. This experience taught me how to communicate the importance of health, which I also continued to do in Charlotte, NC until I graduated. After realizing that I have a passion of spreading health awareness, I started the organization Health4PINE.

After working on developing Health4PINE with the Innovation Design Lab at East Carolina University, I again traveled to India in winter 2017, and presented in 7 rural schools. Health4PINE was able to make health fun and interactive for the specific populations.

## **Purpose**

After becoming a student at East Carolina University, I realized that I can convey my message to more people by using the one tool that society values highly: the Internet. I want to start a website that promotes the mission of Health4PINE in a fun and relatable way to all ages, along with a YouTube channel that emphasizes living healthy on a budget for college students. Eastern North Carolina has one of the highest rates of health disparities in the state (Knopf 2017). It is easier to target students in school and universities, as younger people can make changes in their lifestyle more easily, possibly allowing for a decrease in health disparities in the future (Hulsegge 2016).

RQ1: What is the best way for Health4PINE to educate the local Greenville Community about the balance of Mental, Social, and Physical Health? Specifically, what medium is appropriate for the different population in local Greenville, North Carolina? (Mediums include Upcoming Health4pine.com, great presentations (PowerPoint and Prezi), Moviemaker, and YouTube channel Health4PINE)

**Methodology**

Different mediums will be used to interact with the different populations in Greenville, NC. The primary objective is to gain the appropriate connections with various community partners to organize presentations. In the 2018 fall semester, relationships were formed with the Jarvis chapter of the Boys and Girls Club. With this, a weekly Friday schedule was established to interact with fourth grade students from 3:30 p.m to 4:30 p.m. I was required to provide a weekly plan at the meeting and provide a detailed agenda for each week before the actual session. Volunteers from the Health4PINE organization were recruited to help run and be trained for future programs.

**Results**

A set curriculum was formed for the beginning of the Health4PINE program.

Week	Lesson Plan	Goal(s)
1	<ul style="list-style-type: none"> <li>• Introduction of Health4PINE and the topic of the balance of health</li> <li>• Importance of Physical Health</li> </ul>	To introduce the program and learn about the students
2	<ul style="list-style-type: none"> <li>• Nutrition awareness and physical health reinforcement</li> <li>• Mental health introduction and yoga practice</li> </ul>	To provide awareness on nutrition in daily junk food, on how to read nutrition labels, and the importance of mental health
3	<ul style="list-style-type: none"> <li>• Physical and mental health reinforcement and social health awareness</li> <li>• Conversation about bullying</li> </ul>	To provide a safe environment for experiences about bullying

4	<ul style="list-style-type: none"> <li>• Egg in coke experiment, Mentos in coke experiment</li> <li>• Reinforcement of the balance of mental, social, and physical health</li> </ul>	To provide awareness on the effects of nutrition on dental health, and how dental health is a mirror to overall health
5	<ul style="list-style-type: none"> <li>• Slime experiment</li> <li>• Reinforcement of the balance of mental, social, and physical health</li> </ul>	To provide students with a stress free environment to make slime, and use it as a metaphor to show anyone can mold their lives accordingly.
6	<ul style="list-style-type: none"> <li>• Lazy exercises and winter nutrition along with slime experiment</li> <li>• Reinforcement of the balance of mental, social, and physical health</li> </ul>	To provide students with exercise routines that can be done without strenuous physical activity.

**Discussion:**

Based on how well the students were responding, the methods of presentation were deemed important. In order to keep the students engaged, it was necessary to move away from PowerPoint presentations and provide interactive sessions. The presentation style had to be changed to include live examples of nutrition, of practices of yoga, and real discussions of mental health regarding bullying. Faculty and student feedback have shown that students are retaining information presented to them, especially when activities such as experiments with egg in coke allowed the students to become engaged. This specific activity had students observing the effects of a hard boiled egg submerged in coke for over a week in order to demonstrate the negative consequences of soda and sugar as the shell of the egg deteriorated. Some students have made vows to “never eat a laffy taffy again” after seeing corn syrup poured out into a bowl. Others have promised to try meditation for at least 5 minutes a day. Students were asked to maintain a journal but that did not prove effective because of the age of the students. Journals would be more effective towards older students in high schools.

## **Future Directions**

Surveys will be distributed among faculty and parents to better understand the long-term effects of the curriculum on the students. Curriculum is being developed for the high school students of the Advancement Via Individual Determination (AVID) program at Innovation Early College at East Carolina University. This curriculum is being used to train future volunteers and will branch out to more Boys and Girls Clubs and high schools within Greenville, NC. Further research needs to be conducted on the various resources available for students which can all be compiled onto a single platform that is easily accessible.

When a child has to choose between a healthy food and junk food, for example an apple versus a pack of Goldfish, he or she is more likely to choose the Goldfish. My project's goal is to steer them towards choosing the apple through our motto: "Our Health, Our Responsibility" worldwide.

## **Bibliography**

- “Major Depression.” National Institute of Mental Health, U.S. Department of Health and Human Services, 2016, [www.nimh.nih.gov/health/statistics/major-depression.shtml](http://www.nimh.nih.gov/health/statistics/major-depression.shtml).
- “Facts & Statistics.” *Anxiety and Depression Association of America, ADAA*, 2018, [adaa.org/about-adaa/press-room/facts-statistics](http://adaa.org/about-adaa/press-room/facts-statistics).
- Hulsegge, G., Looman, M., Smit, H. A., Daviglus, M. L., van der Schouw, Y. T., & Verschuren, W. M. (2016). Lifestyle Changes in Young Adulthood and Middle Age and Risk of Cardiovascular Disease and All-Cause Mortality: The Doetinchem Cohort Study. *Journal of the American Heart Association*, 5(1), e002432. doi:10.1161/JAHA.115.002432
- Neighmond, Patti. “U.S. Youth Likely To Face Greater Health Issues.” NPR, 16 Mar. 2010, [www.npr.org/templates/story/story.php?storyId=124738305](http://www.npr.org/templates/story/story.php?storyId=124738305).
- Taylor Knopf. “CDC Report Details Health Disparities Between Rural Minorities.” *North Carolina Health News*, 28 Nov. 2017, [www.northcarolinahealthnews.org/2017/11/28/report-details-health-disparities-between-rural-minorities/](http://www.northcarolinahealthnews.org/2017/11/28/report-details-health-disparities-between-rural-minorities/).