

A.P.S

(Anxiety Perceived as a Society)

Team:19

By: Renee Petrie, and Natalia Godin- Davis

Executive Summary

We had a good friend who suffered from mental illnesses last year. We wanted to understand what she was going through so we decided to do a project on it. We had also seen the lack of knowledge in the 8th grade year about anxiety disorders, so we wanted to help.

Our team has started learning the software program Lua, which is a great language to use for beginners, and also is great for writing video games. We thought a video game to help people understand and cope with anxiety disorders could be a way to help.

All 8th grade students were surveyed through our English class at Jackson Middle School and here is what we found: almost all 8th graders know about anxiety. The people who don't know about anxiety do not care to learn about anxiety disorders through a game, but more than half of the 8th graders who know about anxiety would like to learn more through a game. We have an idea of what the game would look like if we completed the game. It would've started with the game character beginning an adventure of coping mechanisms, such as breathing, telling yourself that you did turn off the stove, or using five senses. We have learned so much about anxiety disorders, and we feel our peers should learn more about this.

Problem Statement

There is a large gap in our knowledge, as a society, concerning anxiety: it's a problem we face as a whole, reaching all ages. Although some people go through anxiety every day, knowledge about anxiety disorders is minimal. We have known about this problem for a while and we've decided to act on it, targeting teens.

Problem Methods

We started with the idea of programming an app, but soon realized this would be a difficult task with our lack of knowledge in programming. So we simplified that idea to a website, this website is a safe space where people can look at what anxiety disorders are, and how they can deal with some of the things that come with anxiety through ways of coping which would be through the video game. We would use the knowledge of the anxiety disorders and their effects to educate teens. We would like next year to continue with this project by programming the video game, this would be a great way to reach 8th grade students because we all play video games even educational ones at school. We would like to finish the game and create the website as well. Our idea is to keep their attention in a fun and natural way. We want to create something that can help people our own age learn and cope with anxiety.

Data Collection and Results

In each 8th grade English class at Jackson Middle School, students were given a survey with three questions. The results are as follow:

Question 1	Yes	No
Do you know anything about anxiety?	75	14

Question 2	Yes	No
Would a game help you learn about anxiety disorders?	48	40

Question 3	Generalized Anxiety Disorder	Obsessive-Compulsive Disorder	Panic Disorder	Post-Traumatic Stress Disorder	Social Phobia (or Social Anxiety Disorder)
Do you know any of these anxiety disorders? Check the boxes you know.	43	43	56	63	62

Conclusions

With question one we found that 84% of 8th grade students knew something about anxiety. In question two only 54% would like to learn about anxiety disorders through a game. In question three we found that 48% of 8th grade students understand what Generalized Anxiety Disorder is. 48% of 8th grade students know what Obsessive-Compulsive Disorder is, but I think if we had put the abbreviated version (O.C.D), more 8th graders would know what it is. 63% of 8th graders know what Panic Disorder is. 71% of this group knows what Post-Traumatic Stress Disorder is, it helped I think that we put the abbreviation (P.T.S.D.). Last Social Phobia (or Social Anxiety Disorder) 70% of 8th graders know about Social Phobia.

At Jackson Middle School all students take 7th grade health class where we discuss these main anxiety disorders. We also have a counselor who comes to our science class in every grade and explains mental health information through a PowerPoint presentation. They are available

during the day if students need to discuss their mental health. The counselor talks about how to cope with these main anxiety disorders through specific exercises.

References

1. Digital Communications Division. "What Are the Five Major Types of Anxiety Disorders?" *HHS.gov*, 21 Aug. 2015, www.hhs.gov/answers/mental-health-and-substance-abuse/what-are-the-five-major-types-of-anxiety-disorders/index.html.
2. "Home." *Anxiety and Depression Association of America, ADAA*, adaa.org/.
3. Lutz, Charlene, counselor for Jackson Middle School. Work interview. 8, Nov 2019.
4. Petrie, Dr. Jennifer Associate Professor. Phone interview. 28, Oct 2019.
5. Game Development With PICO-8 by: Dylan Bennett (Book)

Biggest Achievement

I'm Renée Petrie, and I think my biggest achievement this year in SuperComputing would have to be getting through the very beginning. When we started there were five people in the group including Natalia, and me. We had decided to work together because we all liked each other. We went to KickOff as a five member group. After talking with the adults at Meet the Scientist my teammate and I decided we'd be a better team just the two of us. We had almost quit but after a long conversation with each other and an adult we decided we could make a great

team just the two of us, so we began working together on what we had discussed. The two of us getting past that bump was my greatest accomplishment this year.

My name is Natalia and I'm proud of the code we have worked on even though it's not much. The fact that we were able to understand the code not knowing anything about it only knowing what it was going to do, I find that as a great achievement. I also didn't think we were going to get as far as we got, which adds more to the feeling. I'm especially happy that we had Geoff Petrie (Renee's dad) as a mentor. He had already known how our thought processes worked which made it easy to learn. My team member, Renee, kept me focused. I don't think I could have done this without the Petrie family or mine.

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