Is Sow Well Really Going So Well?

A look at Newton North High School Students' experience with wellness topics

Sivan Avramovich

Capstones

May 6, 2018

Walking up the stairs, students groan internally because the person walking in front of them is bent-neck glued to their phone. The eyes of multiple students flutter shut during class, aching for the rest they are so desperately deprived of. These are all too common experiences. Why are teens living like this? None of these habits should be sustained for a whole lifetime.

Four main realms that prove importance in high schoolers health are nutrition, exercise, sleep, and cellphone usage. The conversation occurring all over the United States, and specifically in Newton, is about pushing back start times for high school. An article in Teen Vogue explains that teenagers' circadian rhythm, the natural body clock, makes teenagers get tired later in the night. Going to bed late and having to wake up early makes getting the 8.5 recommended hours extremely difficult. The article mentioned only 15% of teens get the recommended amount. The conversation about start times revolves around this point, as well as the dangers of sleep-deprived teenagers. Sleep deprived teenagers are more likely to drive drowsy and performance in school diminishes (McNamara, "Why Schools Should Start Later and Teens Should Sleep More"). Of course, the stereotype that teenagers are addicted to their phones has been a common sentence of parents and teachers. There is an understanding that the new culture of phones in teen's lives has affected mental health. Social media is supplementing teen's physical interaction with other teens. Since social media is not a sufficient connection, it leads to loneliness. With loneliness come feelings of being left out. In the article "Have Smartphones Destroyed a Generation", by Jean Twenge, it reports "forty-eight percent more girls said they often felt left out in 2015 than in 2010, compared with 27 percent more boys." In previous years, teens had fewer ways of knowing they were left out. Today, with posts on social media, everyone knows what everyone is doing and what they are being left out of.

When trying to find ways to live a healthier life and reading about these issues, the sources are directed towards parents of teens, not teens themselves. Teenagers are not doctors, but considering they are the ones living with the issues, they should be more involved in the discussion. Not to mention, teenagers will be raising the next generation, so they are the ones who need to be educated in these topics. Some might say that teens will not be motivated enough to make these changes for themselves. Although this is sometimes the case, when the teens do want to take it in their own hands, there are limited resources. In addition, professionals are having conversations with adults about how to cure their condition, not preventing the bad habits from a young age. If healthy habits are taught and practiced from a young age, then there would be no need for a cure. Prevention is a more effective approach that is lacking in the field. With the health concerns revolving around teens, and the issues with the conversations at hand, the question emerges; "How does Newton North High School (NNHS) students' exposure to health topics (sleep, exercise, nutrition, and cellphone usage) affect their habits?" While the question cannot be answered outright, guided research can provide insight for the Newton North community and conclusions for the four realms. This question also gets the whole NNHS community involved and thinking about what education and discussion has been with the four realms.

In addressing this question, there needs to be some expectations set. This question is meant to guide the research. Like mentioned, the question cannot be answered completely, but through research, steps will be taken towards approaching the answer. Depending on how one looks at research, a different story can be told. Since this paper is about observation, it allows the

readers to make their own conclusions and reflections before separate insight is given¹. To reiterate, this paper is about observing through research, not making definite conclusions. The question and research is still valuable, for some assumptions about the health of NNHS students might be shattered.

A main part of the question is discovering what NNHS students' habits are. In order to find out what the habits are with exercise, nutrition, sleep and cellphone usage, a survey was conducted. With the data came some expected and some unexpected conclusions. Exercise has truly scattered results, for 35% of students exercise 5-6 days per week and 10% of students never exercise. A majority of students get their exercise through sports. Logically, the number of days students are exercising is so high, for practice is usually five times a week. The motivation for exercising leans towards "to improve or maintain physical appearance". This curates the question "what motivates the decision to partake in sports?" When thinking about why teens do sports, most assume it is because they enjoy the sport, not to improve their appearance.

In the nutrition category of the survey, the amount of serving of vegetables and fruits truly varies. A conclusion could be made that the different environments teens live in and what is provided for them at home is the reason for this. A result that is surprising is how little teens eat out-more than half (52%) eat out only one to two meals a week. After reflecting on this unexpected percentage, the wording of the question may have affected how the question was answered. What "eating out" means to each person may varies and in the future caution will be

¹*<u>www.wellwehealthy.weebly.com</u> is a website meant to provide the author's insight and connections between the issues. It is not a ready source, but it is in the process of being completed.

practiced. The result for "how often teens think about what they are putting into their bodies" is high as well. Thirty-nine percent of students report thinking about it every meal.

As for sleep, the majority of students report going to bed between 10:30-11:30 pm. This is earlier than expected. Considering McNamara talks about school start times getting pushed back because of students delayed circadian rhythms, it is assumed the data would support that. Not surprisingly, most students get up between 6:30-7:30 am. In retrospect, the options for wake-up times should have been broken down into half hours increments instead of full hours. Unfortunately, the most responded answer for how teens feel after sleep is tired. Sixty percent of students feel this way, but the other 40% do not all respond positively about their sleep habits. Only 15% of the remaining 40% of students feel either good or rested. The rest of the 40% (25% of students) report other negative feeling associated with their sleep.

Once again, the data is inconsistent for how many hours teens are on their phone. This, after some reflection, is not so surprising, for each teen lives a different life and relies on their phones a different amount. Only 9% of students surveyed say they do not use social media on their phones. Of those who do use social media, equal amounts say social media makes them happy and bored. Considering most of the students have had a phone since 6th grade, and maybe had social media since then, they have been bored for 3-6 years, depending on the grade of the student.

These habits are developed by what is practiced at home, but they are also created through learning and discussion. Some NNHS students describe their experiences and feelings with learning about the four realms. Many of the sources of education for the four realms come from parents, doctors, the internet, and school. There is a common agreement that the cell phone

usage discussion is overdone and over demonized. Most of the education revolving around cell phones comes from doctors, some discussions in school, and adults commenting that teens are addicted to their phones. The accusations that are aggressively thrown at teens might be the reason why some of the respondents of the survey say they feel like phone addictions and phone usage is not that harmful. In this case, discussion and exposure to cell phone usage has actually made habits worse. Most of the frustration revolving around cell phones for these teens is the impact on their physical interactions with other teens. Many of their friends are on their phones when trying to have a conversation. Other than that observation, many teens feel okay with their cell phones usage and habits.

Logically, Physical Education (PE) is the main source of exposure to exercise. PE is incorporated in the school curriculum and has been consistent from kindergarten to 12th grade. Exercise habits tend to be better than the other realms. PE could be the reason why the percentage of North students who never exercise is so low. Throughout elementary school and middle school, it is mainly about getting movement into the school day. Even though teens are forced to move during the school day, that does not mean people know how to exercise on their own or are motivated to. High school allows for more choice with PE, which leads to more learning. Unfortunately, for the eight years of PE before high school, teens do not learn skills to develop habits because classes mostly consist of games. Habits with exercise are easier to develop, for it is more straightforward. Providing education on exercise would still be beneficial for teens.

Sleep is not part of the curriculum, but students would greatly benefit from education on the topic. Many students feel that discussions on sleep are a rare occurrence. Most discussions

come from parents and the internet, but rarely in school. From the lack of discussion, there is a lack of knowledge on sleep. Teens know it is important, but techniques for better sleep, how it works, possible harms of sleep deprivation and related topics are missing from teen's knowledge. After reviewing the data and seeing that most students are tired, the lack of education and discussions has hurt the development of sleep habits.

Teens generally have some knowledge on nutrition. Most of the knowledge comes from parents, media, and school. Some respondents also mention a dietician and sports, but those are not universal resources for teens. Media plays a big part in nutrition. A new diet is always promoted, and information is shared throughout the internet. This is dangerous because myths are planted in teen's heads and expectations are set. As one student says, "a person's outer appearance does not always represent how healthy their habits are, but from a young age that myth is instilled in our heads." So much conflicting information is shared with teens that knowing which to follow can becomes overwhelming and result in poor habits.

When inquiring about students experience with NNHS and these four topics, a variety of answers is given. Each student's experiences are different, so this conclusion makes sense. Students takes different classes, pays attention different amounts in those classes and cares about these topics in varying degrees. Some students want more discussions and others do not care. It is about developing extra resources for students when they need or want them, and making sure everyone is involved in some discussions. The ideas need to be placed in all teen's heads, even if they do not create any habits with them in the moment.

As seen, teens learn to develop habits through discussion, education and from adults. The adults interviewed play a big part in teen's exposure to health topics. Dr. Vana, a general

pediatrician specializing in primary care, discusses health topics with teens daily, through wellness visits and other meetings. Ms. Albert, a PE teacher for 16 years at NNHS teaches freshman PE, Personal Group Awareness, dance, and Health 2. Through her Freshman PE, she discusses fitness and weaves discussions on health topics into her classes. In a few of her classes, she implements goal setting in relation to wellness topics. She welcomes having individual conversations with students. She also carries discussions with the teams she coaches. Ms. Baugher a PE teacher at North for 21 years teaches and discusses the four topics with students. Similarly, to Ms. Albert, she sets up meetings with students individually. She also stimulates discussion through the variety of classes she teaches. Ms. Malkin, a prevention and intervention social worker for 29 years conducts a few stress management groups and three coping skills groups. She works with students individually on a variety of issues: sleep; test anxiety; stress; substance use disorders; violations of school policy; depression; other mental health topics. She disseminates knowledge by teaching to classes to address a number of topics and facilitated parent evenings on stress, vaping, and substance use. Many students exposure to health topics have been through these adults, for they provide many resources and insight.

When conducting discussions and educating teens, there are a few things these educators keep in mind. When developing habits, it is important to remember they will not be perfect. Some habits may be stronger than others, but as long as progress is being made, strides towards healthier living are being made. When making habits for exercise, thinking outside the box helps people love the exercise they do. If someone enjoys doing their exercise, they are more likely to do it. Many people enjoy playing sports for exercise, but they are missing the opportunity to develop habits. Exercise is built into athletes everyday routines, but once they stop playing and

the high activity diminishes, many athletes do not have the discipline or the motivation to exercise on their own. This idea mentioned in the interview is supported by a Teen Vogue article, "How to Cope with School Sports Ending". It explains "whether you have to stop playing sports because of an injury or you're just graduating from high school or college and don't plan to continue your game, it can be a hard transition away from constantly training, hanging with your team, and having a set fitness regimen. According to Dr. Hillary Cauthen, PsyD, of the Association for Applied Sport Psychology, it's not uncommon for athletes to feel a loss of identity after they stop playing their sport of choice at a competitive level" (McNamara, "How to Cope with School Sports Ending"). Another habit that comes with sports is hyper-specialization. Many athletes play one position and repeat the same move repetitively. This can cause stress on the part of the body through overuse and weaken the body overall by not being well rounded. Sports are still a habit to include, but be thoughtful about the risks.

Motivation that causes the habits to develop is just as important as the habit. Many students want to look a certain way and that is why they exercise. This is not just unhealthy for their mental health, but it may affect their physical health as well. Thirty-eight percent of NNHS students do exercise "to maintain or improve physical image". Dr. Vana explains many students mindset is "I'm gonna lift weights and not even worry about cardio because all I care about is my muscle build" but that is "not actually improving your heart health." In addition, keep in mind when developing habits that everyone's genetics are different. This relates to exercise, for some people's genetics will make getting a six-pack only achievable by dangerous measures. It relates to nutrition as well, for each person processes food in a different way. No matter the genetics, when eating, it is important to practice being mindful. Do not obsess over habits, but also do not

lack habits. For nutrition, it is about being thoughtful about what is eaten, but not letting it control oneself.

To have a healthy relationship and sustainable habits with phones, honesty with oneself is necessary. Phones should not have power over a person. Ms. Malkin advocates that a person should be able to "put it away and not be tempted". It is a difficult habit to develop, for phones are addictive. People say that phrase casually, but when broken down they are the same thing as an addictive substance. As Ms. Albert explains, the brain gets a hit of dopamine and continues to use the phone to get the "feel-good" hormone. The phone is rewiring and hijacking the brain. She mentions the issue with cell phone usage is that it is not regulated, compared to drugs, which are. Many students do not think they are addicted to their phones, but checking for these unhealthy habits might help people be more thoughtful. Some days are better and worse when being on the phone. On days when it is more impactful, stay away from it. This approach is helpful with phone placement when sleeping. Some people are not tempted to check their phones with it right next to them, and in that case, they can sleep with it in the room. If sleeping through the night is an issue, phone placement is something to reflect on. No matter the relationship and habits with the phone, going on the phone right before bed affects people in ways they cannot feel. It unknowingly ruins their quality of sleep. Dr. Vana explains going on the phone right before bed is like "exercising and getting your heart rate up and then trying to fall right to bed, you just can't do it".

Developing habits comes from being honest with oneself and reflecting on how one feels. Since somethings, like going on the phone before bed, doesn't directly affect the person, it may be hard to find motivation to eliminate habits. Ms. Albert brings up the point that as teenagers,

the frontal lobe of the brain is not fully developed yet. The frontal lobe controls decision-making and impulsiveness, which makes seeing the risks of the future hard to keep in mind. Ms. Albert acknowledges "taking care of your body is recognizing that your life is continued 40 years down the road". Dr. Vana believes teens need to have self-worth in order to take care of themselves. Teens' mentality needs to be "I am worth being taken care of and taking care of myself". "Really truly caring about yourself" "is a really big ask" but it makes all the difference (Melkonian). When trying to develop healthy habits, keeping these aspects in mind is beneficial.

The adults who gave this advice are there to support students/teens and help them create these habits. It is about discussing the topics and teens are bound to gain some intuition on how to advance healthy habits. Although a lot still needs to be taught to teens, a good amount of information has been shared with the teen population. The teachers are not coming home with teens to enforce the habits, so teens have to use what they learn and take it into their own hands.

Apart from what the data and adults said about teen health, there are some other aspects to consider. Judging that the main reason for working out is for appearances, teens' mindsets need to change. There is an expectation to look a certain way, both males and females, that teens put their body at harm. Even if people are achieving their looks in a healthy way, the mindset should revolve around being a healthier person and not physical appearance. The data shows that in general, exercise is not of major concern. That might have to do with the motivation. Like mentioned earlier, Ms. Albert says teens do not think about themselves 40 years down the road. The difference with exercise is the present teen gets a benefit of looking good. With the other aspects, those require being thoughtful and proactive with health. In addition, seeing tired be the most answered response for "how do you feel after sleeping" is worrisome. Struggles come with

getting good and enough sleep, but overall teens underestimate the benefits of good sleep. There is a tendency to push tiredness aside. Phone usage and social media usually is toxic and unhealthy. Teens need to be strong enough to delete their social media accounts and not feel like they are missing out. For nutrition, teens should have a good relationship with food. Approaching food as a nice way to treat the body may help develop that relationship. Looking at the culture at NNHS, there needs to be more discussions and understanding of where students stand with their health. Creating more discussions will lead to more health conscious thinking.

Overall, the health of NNHS students is a lot better than anticipated. When compared to the averages of Massachusetts, supplied by State of Obesity (a database), NNHS conversations, although limited, have proved to be beneficial to students health. Five point eight percent of students in Massachusetts did not have fruit seven days before the survey, while 2.8% of North students report eating zero servings of fruit. As for vegetables, North out does the Massachusetts average of 6.9% of student not eating vegetables for the seven days before the survey. North reported 3.5% of students eating zero servings of vegetables. Although eating habits are better than Massachusetts average, exercise is lacking. Twenty-two point seven percent of students in Massachusetts said they exercise seven days a week, while only 12% of students at North said they did so (The State of Obesity). Looking at North as a community, a guess could be made as to why the comparison occurred like this. North students tend to have consistent access to fruits and vegetables, while access is far more limited in other areas of Massachusetts. The accessibility makes the habit of eating fruits and vegetables easy to complete. Exercise, not having to do with accessibility, lacks because of what North values as a community. Grades and school are generally emphasized before health in North's competitive environment, pushing

aside time for exercise. When compared to other high schools and how much time students put into education there, exercise might fit more into their schedules. North is still doing well with exercise habits, but compared to Massachusetts as a whole they are lacking. Phone usage and sleep results are not provided by The State of Obesity website, so comparisons are not available. Even though North is a healthy school, improvements can be made not just for the students individually, but also for North as a community.

Many people put their body at the bottom of the list of things that are important to them. It should always be number one. That is a very difficult mindset to adjust to. Without a person's body, they cannot get anything done. Tasks that fall higher on the to-do list will be removed from the list, but their body is with them their whole life. Hurting it over and over, it eventually will not forgive. In general, people need to figure out what works for them. Living a healthy lifestyle is a lifelong process, which is hard to digest and accept. Obviously, someone is not going to suddenly eat perfectly or be able to run a marathon, but it is hard to accept that it is going to take more time than desired.

Instead of expecting easy health, try to adapt the mindset and put it into action. Like mentioned earlier, be thoughtful with food. To be physically thoughtful, writing down what meals were eaten throughout the day is beneficial. It may seem like a big task, but "keeping a food diary doesn't have to be a formal thing. Just the act of... sending yourself a text message will suffice. It's the process of reflecting on what you eat that helps us become aware of our habits, and hopefully change our behavior" (Permanente). In one study, "142 people self-monitored their diets through an online behavioral weight control program over a 6-month period." The most successful patients lost 10 percent of their body weight. What surprised the

researcher was not "that frequent self-monitoring was related to weight loss success. [They] were surprised that 15 minutes a day is all that's necessary" (Mastroianni). A habit that requires little effort can bring big changes.

To improve exercise habits, like mentioned in the interviews, finding an enjoyable form of exercise will be beneficial. Once that is determined, for some people writing out a workout plan makes the person more accountable. Having it on the calendar and seeing it every day will be a great reminder as well.

A new habit to get to bed earlier could be setting alarms at a time to start getting ready for bed. Often time passes quickly and people do not realize how late it gets. By having a physical reminder and acknowledging it is late helps a person be more cognizant of their sleep habits. Even if people get enough sleep and quality sleep, waking up in the middle of a sleep cycle causes everyone to be groggy. The body "ideally... should progress from slow-wave sleep back up to REM sleep in 60- to 90-minute cycles. Any interruptions to this make [the] body start over, in a sense, which means you might never reach the most restorative, deeper phases of sleep" (Mercola). A website to help prevent waking up in the middle of a sleep cycle is https://sleepyti.me/. It calculates the right time to fall asleep or wake up to prevent waking up mid-cycle, and therefore prevent grogginess.

An app that helps people be more conscious about their phone time, but also physically prevents them from being on their phone is Moment. There is a feature that allows people to go screen free for an interval of time and lock down their phone. This is one way to decrease screen time. The app also sends updates on how many minutes of screen time recorded, enforcing the user to be thoughtful.

Those habits that can be practiced will help create a healthier person, but it all comes back to the person having a desire to be healthier. Some people just do not care about their health, and unfortunately, their bodies will pay. Once people are ready to try new habits and invest the time into them, the habits can be used to become healthier. The process of getting healthy will always require more time and effort than people want to put in. Although this may be discouraging, that is how it is. This logic might only connect with five percent of the people who are reading this, but then those five percent will have a new way to approach their health habits. Albert, Courtney. Personal Interview. 8 April. 2019

Baugher, Lauren. Personal Interview. 10 April. 2019.

Malkin, Alison. Personal Interview. 10 April. 2019.

- Mastroianni, Brian. "Why a Daily Food Diary Is Still the Ultimate Weight Loss Hack." *Health Line*, 3 Mar. 2019. Available at: www.healthline.com/health-news/ most-effective-way-to-lose-weight-takes-less-than-15-minutes-a-day. Accessed 7 May 2019.
- McNamara, Brittney. "How to Cope With School Sports Ending." *Teen Vogue*, 6 Feb.
 2019. Available at: www.teenvogue.com/story/how-to-cope-with-school-sports-ending.
 Accessed 8 Mar. 2019.
- ---. "Why Schools Should Start Later and Teens Should Sleep More." *Teen Vogue*, 4 Jan. 2019. Available at:

www.teenvogue.com/story/why-schools-should-start-later-and-teens-should-sleep-more.

Accessed 7 Mar. 2019.

Melkonian, Vana. Personal Interview. 5 April. 2019.

Mercola. "Study: Interrupted Sleep May Be as Harmful as No Sleep at All."
Mercola, 24 July 2014. Available at: articles.mercola.com/sites/articles/archive/ 2014/07/24/interrupted-sleep.aspx#_edn1. Accessed 7 May 2019.

Permanente, Kaiser. "Keeping A Food Diary Doubles Diet Weight Loss, Study Suggests." *Science Daily*, 8 July 2008. Available at: www.sciencedaily.com/releases/2008/ 07/080708080738.htm. Accessed 7 May 2019.

The State of Obesity. 2017. Available at: www.stateofobesity.org/. Accessed 5 May. 2019.

Twenge, Jean. "Have Smartphones Destroyed a Generation?" The Atlantic, Sept.

2017. Available at: www.theatlantic.com/magazine/archive/2017/09/

has-the-smartphone-destroyed-a-generation/534198/. Accessed 7 May 2019.