

Environmental factors
and habits within
urban population and
their effect on ment...



We all are trying to be the best students, we plan our day, weeks, months for tests, midterms, and finals, but usually, we don't really think about our own health. In order to finish work on time, we forget about dinner and sometimes we are in such a rush that is being stressful and harmful for the body and brain. Some researchers found out that approximately 11.9% of college student suffers from anxiety disorder (Blanco C et. al.). If we open the book of anatomy and physiology we will find out that all system in organisms are connected with each other and if there is a problem in one part, the puzzle will not be completed. The goal of the immune system, for instance, is to protect the body from any substances and diseases that attack the organisms. Over time, the social, economic, and cultural changes and advancements have led to an exposure to harmful pathogens, pollution, and other factors that have weakened the immune system. There are many different mechanisms by which positive and negative are instantiated in the brain and interact with the immune system, but these mechanisms are not yet understood. Researchers are trying to investigate clear relationship among physiological measures of affective style, psychological well-being, and immune function. "There is data to support the hypothesis that individuals characterized by a more negative affective style poorly recruit their immune response and may be at risk for illness more so than those with a positive affective style" (Barak, 2012). Therefore, further researches are needed to gather a full picture of immune system interaction. Some researchers also noted the relationship between the immune system and multimorbidity, which defined as the presence of two or more chronic medical conditions in an individual. According to the World Health

Organization, people who suffer from immune deficiency have a greater risk of multimorbidity.

Thesis: Students with dense schedule who live in the urban area are more likely to have depression and therefore cause health diseases by lowering the immune status of an individual.

Depression is usually defined as a mood disorder that causes a persistent feeling of sadness and loss of interest. There are many factors causing depression naturally, but a citizen of the urban environment may not be aware of all risk factors he is influenced by while living in the modern industrial world. At the beginning of the 21st century, the World Psychiatric Association conducted an International survey that covered a variety of regions across the world. This was the first research that was focusing on urban areas its relation to mental health. Results showed that “ Depression and anxiety disorders are more common in the high- and middle- income group”(Giovanni, 2006) while The World Health report of 2001 shows that the rate of depression is higher among the poor. The difference can be explained by observing the fact that the first research focuses on the urban environment specifically. That limiting factor allows to understand the urban environment in particular and its specific effect on mental health. These reveals lead to the suggestion that big cities don't have enough resources to support all living groups and provide proper counseling. This research highlight significant problems that exist in big cities. Urban areas are troubled by the high prevalence of mental disorders, various forms of violence, inadequate mental health services, and lack of access to care.

In the research “ Mental health of college students and their non-college-attending peers: Results from the National Epidemiologic Study on Alcohol and Related Conditions,” Blanco proves the fact that college students, compared to non-college-attending peers, have a considerably higher risk of alcohol use disorder. Also, the authors emphasize that college students are not able to receive appropriate treatment for alcohol use disorder. At the same time, their non-college-attending peers were significantly more likely to receive treatment. (Blanco et. al) *PLUS* Results of another research also revealed the prevalence of alcohol and drug abuse among big cities. The harmful effect of alcohol on mental health is a well-known process. These researches suggest that presence of alcohol is one of the risk factors causing depression and anxiety disorder (Giovanni, 2006).

INTRO TOPIC SIn the paper “ Education, Health, and the Default American Lifestyle” Mirowsky, John, and Catherine E. Ross discuss the effect of the American lifestyle on mental and overall health. Authors discuss default American lifestyle and distinguish 3 elements of it: “ displacing human energy with mechanical energy, displacing household food produce with industrial food production, and displacing health maintenance with medical dependency”(Mirowsy et. al). They define new technologies as a tool that “ free individuals from old limitations but gradually eliminate the physical activity they render unnecessary”. As an example, they discuss elevators and the fact that there are buildings where it is impossible to use stairs. Nowadays, some building simply doesn’t have an open entrance for stairs. Instead, a person is required to take an elevator (Mirowsy et. al). That’s how the American lifestyle displaces human energy with mechanical energy. Also,

researchers discuss the concept of displacing household food produce with industrial food production. They mention that “ the industrial production of food provides an excess cheap calories always ready at hand” (Mirowsy et. al). That also affects the health of the individual. It is known that this food industry works for marketing and the goal is convenience rather than balanced nutrition. These displacements of human energy with mechanical energy and household food produce with industrial food production create the lifestyle of the new American generation. These elements create a “ legacy of too much food and too little physical activity” (Mirowsy et. al) that transfers to younger fellows and affects their lives. This correlation can be related to college students who have to spend a long time sitting while studying.

Education has a tremendous impact on students health in America. Varieties of researches show the frequency of gastrointestinal disorders as a result of unbalanced nutrition of students. Also, the lack of physical activities leads to a lowering of health status and therefore it has consequences on students lives. In the research “ Mental health of college students and their non-college-attending peers: Results from the National Epidemiologic Study on Alcohol and Related Conditions,” Blanco discusses the mental health of college students and their non-college-attending peers. The study revealed that “ almost half of college-aged individuals had a psychiatric disorder in the past year”(Blanco et. al). Another research “ Common risk factors associated with adolescent and young depression” suggests that “ one of every five young people will experience an episode of major depression during high school...and one out of every four college students”(Swenda et.

al). The reason for this correlation can be explained by the expectation that exists regarding educational success. Students strive to do their best, but often times may forget about their own mental health and life balance. This research also explains these numbers by the fact that at the age of 18-21 many adolescents go through the numerous changes that are occurring in their lives. (Swenda et. al) Many students are not prepared for the amount of hard work, time management and a social life that exist in college settings. The perfect student should be able to manage time in order to achieve all the goals. For example, it is well known that pre-med student is required to have many strong points in the resume. Medical schools are looking for extraordinary people, superhumans. The requirements include 4.0 GPA, 99th percentile on MCAT, strong letters of recommendation, 1000 hours of volunteering, etc. The list can be continued. Often times, students forget that the most important part is not the fulfilled requirement, but actually extend of student's ability to handle stress and ability to care. Eventually, the student end up with rejection and depression because he was not ready for such a huge life change. This is one of the reasons for depression among students.

Another risk factor of depression is lack of goal and boring routine a lot of people have to deal with. Swenda and O'lawrence define depression as "lack of interest in activities, strong feelings of worthlessness or guilt, and thoughts of suicide, that may disable or prevent a person from executing daily activities" (Swenda et. al). Indeed, if we check, around 50% of sophomore students in college will tell that they switch major because they were not interested in the first choice. It seems obvious that we should

choose what we want to do, but sometimes people are able to achieve goals while overcoming one's desires. A student may choose medical track because of future opportunities for a better life, but inside he would love to read books, draw and learn art history. A lot of people don't follow their heart and therefore don't enjoy their lives. Step by step, depression is coming up even though a person have done everything with no doubts about the future life. Mirowsky, John, and Catherine E. Ross state that " The automatic routines of twenty-first-century affluent society are set by the socioeconomic system and physical infrastructure"(Mirowsky et. al). This can be directly related to the higher rate of development of depression among citizens of industrial cities. Thus, how life choices in combination with environment can impact mental health.

Researchers suggest that one of the reasons for mental health problems among students is alcohol use disorders that are common among the college-aged population. Their statistics show that overall " fewer than 25% of individuals with a mental disorder sought treatment". This study emphasizes the importance of treatment and the impact of its absence within students (Blanco et. al). Significance of this data allows researchers to look at the root of the problem and decrease depression rates in students population.

Many researchers are trying to study health and in relation to different risk factors. In the study " The immune system and happiness. " Yorok Barak defines " healthy" as a state of being " vigorous, vital, and fit". He explains that the body's systems can work well together, as a result of which the individual feels healthy and can easily recover from damages, such as <https://assignbuster.com/environmental-factors-and-habits-within-urban-population-and-their-effect-on-mental-health-and-immune-systems/>

infections, injuries, and cellular errors. But the lifestyle of an individual can affect this perfect machine, especially in an urban environment and among students.

Human organism is not a machine and human body is able to feel emotions, whether negative or positive. Through the variety of events, one can say that feels good when is happy and is experiencing happiness. Another one feels bad when is unhappy and experience harmful events. Researchers have studied “ this complex interactions between the immune system and the central nervous system”(Barak et. al) on patient with serious mental health issues, such as schizophrenia and depression, but there are very few researches were made on “ effects of positive human emotions, on physiological parameters and immunity. Barak states that “ Emotions are intimately involved in the initiation or progression of cancer, HIV, cardiovascular disease, and autoimmune disorders.” He investigated existence of pleasant stimuli that induce specific physiological responses. Those stimuli are tightly connected with the immune and endocrine systems. Researchers were monitoring specific physiological responses, such as odors and at the same time were following emotional picture. The results revealed that “ an increase in secretory immunoglobulin A and a decrease in salivary cortisol were induced by pleasant emotions”(Barak et. al). This study is showing the relationship between mental health, immune system and lifestyle.

Studies also confirm that “ Combination of genetics, biological and environmental risk factors may increase the probability of acquiring depression”(Swenda et. al). This confirms the necessity of further

<https://assignbuster.com/environmental-factors-and-habits-within-urban-population-and-their-effect-on-mental-health-and-immune-systems/>

investigation and understanding the relationship between lifestyle, depression, and health.

In 2018 year survey was conducted by the group of Brooklyn college students. 107 people at the age 17 to 25 years old were chosen to answer 20 questions about their lifestyle and health. They were divided by four groups: Students living in urban environment, Students living in suburban environment, Non-students living in urban environment, Non-students living in suburban environment. Data of each group were carefully analyzed and results were calculated by percentage (graphs and figures at the end). Results have showed that students that live in urban areas overall have a lower smoking rate compared to non-students, but non-students have a slightly lower rate when it comes to the consumption of alcohol compared to non-students. When observing students specifically and their environment, students who live in urban areas have an increased rate of smoking and consumption of alcohol compared to non-students.

When observing the results, the percentage of people that consider their nutritional habits as moderately healthy is lower in the student's group that live in an urban environment (63%) compare to non-students who live in the same area (16. 5%). The average percentage of people that consider their nutritional habits as unhealthy is higher in the student's group(24. 5%) compare to non-students (16. 5%). This brings us back to the research of Mirowsky, John, and Catherine E. Ross. They showed the effect of the American lifestyle on mental and overall health through explaining 3 elements of this default American lifestyle, one of which is displacing household food produce with industrial food production. These studies <https://assignbuster.com/environmental-factors-and-habits-within-urban-population-and-their-effect-on-mental-health-and-immune-systems/>

emphasize effect of lifestyle on nutrition and therefore on the mental and overall health.

Another data of Brooklyn College survey have showed that non-student who live in urban and suburban areas feel healthier than students who live in same areas. The frequency of doctor visits per year is higher in the group of students living in an urban environment (3-5 times per year-37. 3% and 1-2 times per year for 53. 5%). For the non-students living in the same environment, the frequency of doctor visits is lower compared to students (or 1-2 times for 79% per year and 3-5 times per year for 15. 7%). In general, students living in urban environments are in need of more frequent doctor visits than non-students. Both students and non-students who live in urban environments have more reasons and health complaints than people who live in suburban areas. In the experiment, it was observed that people, in general, have different reasons for visiting doctors such as; coughing, sneezing, pain, headaches, chest pains, blurred visions, etc. The highest rate of coughing were observed in the group of students (45%). It can be suggested that such a high percentage of coughing occurs due to weaker immune system among students that among non-students. Also, headache tends to be more typical symptom for students. Researchers suggested that this is due to constant stress because of school. Blurred vision is observed in 10% in the group of students living in an urban environment and 5. 3% in the group of non-students living in an urban environment. Along the two groups of people that live in a suburban environment, there was not detected any complaints of blurred vision. Such a results may be observed due to constant reading of the material, using modern technologies and constant tension of

eyes while doing this. Higher rate was observed among students, who typically are more influenced by those factors. Thus, the research showed rate of symptoms that are typical for students. Using this data, it can be suggested that students are more influenced by modern lifestyle and urban environment. They are more likely to have health and immune issues than non-students.

It is known that during education student goes through many changes. Brooklyn college survey showed that students are less likely to go to the gym, do any physical activities. Generally, students become more sleep deprived and less energized and excited. Swenda and O'lawrence describe symptoms of depression that can be: " loss of interest of activities, insomnia or excessive sleeping, poor appetite, impaired concentration, irritability/restlessness, persistent sadness or hopelessness, significant weight loss or gain, withdrawal from friends and family, fatigue or decreased energy, tearfulness or frequent crying, persistent aches or pains, feeling of worthlessness and guilt, thoughts of death or suicide"(Swenda et. al). Of course, symptoms are not the same, but very similar. It can be suggested that students are influenced by factors that cause particular symptoms resembling with depression. Further investigation are needed to be done on this process. But, question is, which came first, chicken or egg. In one way, students may be influenced by factors that cause depression, and therefore symptoms of it. On another hand, students may be influenced by factors that lead to symptoms and therefore, these symptoms may cause depression. These processes not yet understood, but variety of researches clearly show

relationship between environmental factors and habits that exist urban population and their effect on the mental and overall health of students

Brooklyn College survey helped create results that is a useful basis for further research on the comparison of student's and non-students in different environments and observe the habits of each group separately. Also, this experiment helped observe a potential effect of environmental factors and lifestyle on the health and therefore immune system. It can be concluded that the environment and nutritional habits that one has, is a potential trigger for the health complaints that patients have during the doctor's visit. Further observations are needed in order to prove the relationship and correlations between student's lifestyle and health.

Conclusion

We all are trying to be the best students, we plan our day, weeks, months for tests, midterms, and finals, but usually, we don't really think about our own health. In order to finish work on time, we forget about dinner and sometimes we are in such a rush that is being stressful and harmful for the body and brain. Some researchers found out that approximately 11.9% of college student suffers from anxiety disorder (Blanco C et. al.). If we open the book of anatomy and physiology we will find out that all system in organisms are connected with each other and if there is a problem in one part, the puzzle will not be completed. The goal of the immune system, for instance, is to protect the body from any substances and diseases that attack the organisms. Over time, the social, economic, and cultural changes and advancements have led to an exposure to harmful pathogens, pollution,

<https://assignbuster.com/environmental-factors-and-habits-within-urban-population-and-their-effect-on-mental-health-and-immune-systems/>

and other factors that have weakened the immune system. There are many different mechanisms by which positive and negative are instantiated in the brain and interact with the immune system, but these mechanisms are not yet understood. Researchers are trying to investigate clear relationship among physiological measures of affective style, psychological well-being, and immune function. “ There is data to support the hypothesis that individuals characterized by a more negative affective style poorly recruit their immune response and may be at risk for illness more so than those with a positive affective style” (Barak, 2012). Therefore, further researches are needed to gather a full picture of immune system interaction. Some researchers also noted the relationship between the immune system and multimorbidity, which defined as the presence of two or more chronic medical conditions in an individual. According to the World Health Organization, people who suffer from immune deficiency have a greater risk of multimorbidity.

Bibliography:

1. Blanco C et al. Mental health of college students and their non-college-attending peers: Results from the National Epidemiologic Study on Alcohol and Related Conditions. *Arch Gen Psychiatry*. 2008; 65(12): 1429-37.
2. Yorok Barak. The immune system and happiness. Psychogeriatric Department, Abarbanel Mental Health Center, Bat-Yam and the Sackler School of Medicine, *Tel-Aviv University, Bat-Yam, Israel*. 2006:
<https://www.sciencedirect.com/science/article/pii/S1568997206000279?via%3Dihub>

<https://assignbuster.com/environmental-factors-and-habits-within-urban-population-and-their-effect-on-mental-health-and-immune-systems/>

3. Mirowsky, John, and Catherine E. Ross. " Education, Health, and the Default American Lifestyle." *Journal of Health and Social Behavior* , vol. 56, no. 3, 2015, pp. 297–306., www.jstor.org/stable/44001141 .
4. MOREH, SWENDA, and HENRY O’LAWRENCE. " COMMON RISK FACTORS ASSOCIATED WITH ADOLESCENT AND YOUNG ADULT DEPRESSION." *Journal of Health and Human Services Administration* , vol. 39, no. 2, 2016, pp. 283–310. *JSTOR* , www.jstor.org/stable/44504679 .
5. Negura, Lilian, and Jean-Martin Deslauriers. " Work and Lifestyle: Social Representations among Young Fathers." *The British Journal of Social Work* , vol. 40, no. 8, 2010, pp. 2652–2668. *JSTOR* , www.jstor.org/stable/43687642 .
6. Galea, Sandro, et al. " Urban Built Environment and Depression: A Multilevel Analysis." *Journal of Epidemiology and Community Health (1979-)* , vol. 59, no. 10, 2005, pp. 822–827. *JSTOR* , www.jstor.org/stable/25570855 .
7. Anderson, Philip M., and Judith P. Summerfield. " CHAPTER EIGHTEEN: Why Is Urban Education Different from Suburban and Rural Education?" *Counterpoints* , vol. 215, 2010, pp. 273–283. *JSTOR* , www.jstor.org/stable/42980451 .
8. Caracci, Giovanni. " Urban Mental Health: An International Survey." *International Journal of Mental Health* , vol. 35, no. 1, 2006, pp. 39–45. *JSTOR* , www.jstor.org/stable/41345154 .