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Green Study Places: Improving the Mental Health of College Students

Anh Do
*Worcester Polytechnic Institute*

William Lind

Gregory Martinelli

Peerapas Thongsawas

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The Need
To improve the mental health of college students at WPI in order to reduce depression rates and increase GPA among students.

Background Information

Depression/Anxiety rates
A study done on a broad range of US college students found that about 10% had a mood disorder and about 12% had an anxiety disorder3
A study done at a large public mid-western US university found depression rates of 12% to 16% and anxiety rates of 4% to 7% among students10

Effects of Depression/Anxiety
“Depression is a significant predictor of lower GPA and higher probability of dropping out, particularly among students who also have a positive screen for an anxiety disorder.”5

Combating Depression/Anxiety
Going outside is beneficial, since it means more exposure to UV light, leading to higher Vitamin D levels4 and thus higher levels of Dopamine4. Dopamine is a “feel-good chemical”8 and helps combat depression9

Studying inside with a natural element in view such as water, whether it be a painting or through a window can be restorative2,6, meaning students feel rejuvenated and can work for a longer period of time.

The Approach
To encourage students to spend more time outside by renovating Higgins Lawn or to renovate an area inside to include an aspect of nature.

Step 1
• Students study outside for 5-30 minutes a day - twice a week7

Step 2
• The increased UV light exposure causes more Vitamin D to be produced leading to an increase in Dopamine

Step 3
• Dopamine is described as a “feel-good chemical” and helps combat depression

Step 4
• As the severity of depression decreases, GPA will increase

Further Development
Students who utilize an area that includes an aspect of nature can study longer and feel better at the end of studying. This is because indoor areas that include an aspect of nature are found to be restorative or rejuvenating2,6. A future extension of this project could be exploring the possible development of an indoor study area at WPI with this in mind.

Statistics at WPI
At WPI several hundred students visit the Student Development and Counseling Center each year. Of those students approximately 1 in 5 visited because of depression and 1 in 6 because of anxiety.

It is also known that men seek out help at half the rate women due, and since WPI is about three-quarters male, we determined that this warranted attention.

Step 1
Step 2
Step 3
Step 4

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References