

The Effect of Walking for Thirty Minutes a Day on Students Mental and Physical Health

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ABSTRACT: For many college students, there seems to be a perpetual state of mental strain, and the COVID-19 pandemic has only heightened the mental health crisis. Anxiety, depression, and suicidal thoughts have only increased throughout the past year, and students are faced with a struggle to healthily lessen this strain. One way to cope with stress and improve overall health is walking for thirty minutes a day every day. Regular walking has been proven to improve mental health and is also a source of exercise to provide the physical aspect of health.

INTRODUCTION

There are five aspects of health: physical, emotional, social, spiritual, and intellectual. These aspects help to ensure a healthy, well-rounded lifestyle. For many students, there are lapses in these categories, and this leads to a lower standard of self-care than necessary. The COVID-19 pandemic has especially impacted these findings, and students, more than ever, are experiencing a mental health crisis.

In fact, currently, 1 in 5 students have had suicidal thoughts in the past month, 68% of students suffer from either social isolation or loneliness due to the pandemic, 60% of students have a difficult time coping with stress, and 62% of students say their mental health is worse than before the pandemic (Survey). Considering these

statistics, the overwhelming question is how can we help improve student's mental health?

Being a current sophomore studying chemical engineering at the University of Kansas, I have also felt many of these struggles, and, especially over the past year, I have been extremely overwhelmed and anxious due to a strenuous course load and the added stress of life during a pandemic. I sought out a healthy way to deal with this stress and to provide a daily routine to benefit my overall health. Walking is a mindful way to get some exercise and relieve some stress. It even reduces one's risk for depression by 26% (Robinson). Walking every day can also reduce one's risk of cardiovascular events by 31% (Study). I sought out to research the effects of walking for 30-minutes a day on my overall

mental and physical aspects of health. This task was carried out for 21 days straight, and I recorded my overall mood as well as my average resting and sleeping heart rate per three days.

EXPERIMENT

My overarching goal throughout this process was to record the multiple health benefits that I observed from walking for 30 minutes a day, every day, for 21 days. In order to prioritize this task in my everyday routine, I would sit down and look at my schedule every night to plan exactly when I would have the extra 30 minutes in the day. All of the walks occurred outside on local sidewalks, walking trails, or nearby hiking trails. I logged all of the walks on my Apple Watch and tracked the time and distance I covered. To consolidate all of this information, I created a mood tracker to reflect my mental health state for the day. As indicated on the graphic, one color represents happy, one reflects mediocre, and one reflects unhappy.

I also elected to record my heart rate. Again, I used an Apple Watch to track my resting heart rate throughout the day, as well as my sleeping heart rate at night. For data recording, I took the average of each of the values from three days, giving me seven different sets of heart rate data.

RESULTS AND DISCUSSION

Throughout the 21 days, I recorded three unhappy days, 6 mediocre days, and 12 happy days. However, most of the “unhappy” and

“mediocre” days were at the beginning of the study, followed by a predominant number of “happy” days from the second half of the study.

Happy	Mediocre	Unhappy
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Day 1	Mediocre	Day 8	Unhappy	Day 15	Happy
Day 2	Unhappy	Day 9	Mediocre	Day 16	Happy
Day 3	Happy	Day 10	Happy	Day 17	Mediocre
Day 4	Happy	Day 11	Happy	Day 18	Happy
Day 5	Happy	Day 12	Unhappy	Day 19	Happy
Day 6	Mediocre	Day 13	Mediocre	Day 20	Happy
Day 7	Mediocre	Day 14	Happy	Day 21	Happy

This data highlights the positive impact on mood and overall mental health that walking for 30 minutes a day had for me. Specific benefits that I saw were a lessening of overall anxiety, a better sense of relaxation, and feeling better in my overall self. By prioritizing taking care of myself, other aspects of my life improved.

Mental health benefits

- Self-perception and self-esteem
- Mood and sleep quality
- Reduces stress and anxiety
- Improves mood and fatigue
- Can help to improve social relationships

* (Laskowski & Walking)

While my mental health greatly improved, my physical health also faced many benefits. I also found that in many ways the two are intertwined. By seeing positive changes in my body, my mental self was much more content with my physical self. I saw clearer skin and a lower resting heart rate. The study of walking daily has been conducted many times, and the overwhelming physical benefits found include increased cardiovascular and pulmonary fitness, reduced risk of heart disease and stroke, stronger bones and improved balance, increased muscle strength and endurance, reduced body fat, and many more (Robinson).

I chose to analytically measure my physical health improvements by recording my daily resting and sleeping heart rate. For the purpose of being concise, and to discover the overall improvements in my heart health, I took the average every three days to yield a total of seven sets of data.

Days	Sleeping HR	Resting HR
1-3	64 bpm	81 bpm
4-6	62 bpm	75 bpm
7-9	61 bpm	68 bpm
10-12	58 bpm	71 bpm
13-15	60 bpm	65 bpm
16-18	52 bpm	66 bpm
19-21	55 bpm	63 bpm

*bpm= beat per minute

*HR= Heart Rate

This set of data shows the improvement in cardiovascular health, and that is often indicative of overall physical health (Robinson).

At first, I found it hard to make this task a priority in my already very busy schedule and thought that cutting time from everything else would only add to my anxiety, and while it definitely did at first, I ultimately felt the benefits on my overall health. I actually felt my anxiety reduce after giving myself 30 minutes per day to simply breathe, relax, and focus on myself. In order to make this an enjoyable habit, I found a number of things that worked for me.

1. Establish a designated time for the stress-relieving activity.
2. Create a special music playlist that you can only listen to when you are walking to create an exciting environment.
3. Have multiple routes, so as not to get bored with the same walking path.
4. Create a walking group with friends.
5. Track your progress through some sort of fitness tracker (i.e. an Apple Watch)
6. If there is a busy day where you don't think you have the time, break the walking up into multiple shorter walks (i.e. three 10-minute walks).

CONCLUSION

Overall, I felt and saw improvements in my physical and mental health in relation to walking for 30 minutes a day. I am in a better and cleaner mental headspace and will continue this habit past the 21 days. I understand the extent of the student mental health crisis, being a student myself, and I recognize that while this method worked for me, simply walking once a day may not be enough for everyone. There needs to be a stronger mental health support system on college campuses to support students.

My results show a positive correlation between walking for 30 minutes a day and overall mood improvement. These results also yielded an improvement in cardiovascular health in the form of a lower resting and sleeping heart rate between the beginning and ending of the study.

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