



Figure 1: Exercise ([Ahmed, 2019](#))



Figure 2: Meditation ([Cherry, 2020](#))

EFFECTS OF MEDITATION AND EXERCISE ON COLLEGE STUDENT STRESS LEVELS

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PICOT QUESTION

In college students, how effective is 30 minutes of exercise a day compared to meditation in relieving stress?



College students are faced with many stressors as they go throughout their college career and it is important to recognize signs of stress and what is the best way to relieve the stress.

RESEARCH STUDIES

- Evaluating mindfulness training for medical and PhD nursing students.
- A Quantitative Study on the Association Between Stress Tolerance and Exercise Habits among Students Enrolled in a College of Health Professions Program
- Differences between Undergraduate and Graduate Students in Stress and Coping Strategies
- The effects of mindfulness-based interventions for health and social care undergraduate students
- Mindfulness, stress coping and everyday resilience among emerging youth in a university setting: a mixed methods approach.
- Effect of Regular exercises and Health Benefits among College Students

CAUSES OF STRESS IN COLLEGE STUDENTS

- “Undergraduate students and graduate students undergo a great deal of stress throughout their college career. These daily stressors in life can come from personal relationships, education, finances, work experiences, and career decisions” (Brophy, 2017).
- Being a college student of any level comes with increased stress levels due to the demand of education requirements and family/friend pressure. It is important to recognize this and find a coping strategy.

WHAT ARE COMMON COPING MECHANISMS FOR STRESS IN COLLEGE STUDENTS ?



Researchers at the **University of Kentucky** wanted to see if college students cope with stress in similar ways.



These researchers gathered some sample data and analyzed it to see if there is a difference between graduate and undergraduate students and male and female students



Here's some of what they found

THE DATA!

Table 2

Difference between Undergraduate and Graduate Students on Coping Strategies (Chi-Square or Fischer Exact Test)

	Total	Under-graduate	Graduate	χ^2	<i>p</i>
Alcohol	474 (43.1%)	193 (42.9%)	281 (43.2%)	0.008	0.928
Caffeine	385 (35.0%)	151 (33.6%)	234 (35.9%)	0.668	0.414
Cigarettes/ Tobacco	163 (14.8%)	92 (20.4%)	71 (10.9%)	19.192	<0.001
Creative pursuits	232 (21.1%)	98 (21.8%)	134 (20.6%)	0.228	0.633
Drugs	84 (7.6%)	45 (10.0%)	39 (6.0%)	6.069	0.040
Exercise	728 (66.1%)	273 (60.7%)	455 (69.9%)	10.110	0.001
Food	625 (56.8%)	255 (56.7%)	370 (56.8%)	0.003	0.956
Herbal remedies	54 (4.9%)	25 (5.6%)	29 (4.5%)	0.691	0.406
Hobbies	508 (46.1%)	219 (48.7%)	289 (44.4%)	1.955	0.162
Medication	122 (11.1%)	51 (11.3%)	71 (10.9%)	0.049	0.824
Meditation/ Mindfulness	123 (11.2%)	46 (10.2%)	77 (11.8%)	0.691	0.406
Pets	394 (35.8%)	140 (31.1%)	254 (39.0%)	7.237	0.007
Relaxation/ Breathing	305 (27.7%)	128 (28.4%)	177 (27.2%)	0.209	0.647
Self-injury	9 (0.8%)	6 (1.3%)	3 (0.5%)	---	0.171
Sex	339 (30.8%)	144 (32.0%)	195 (30.0%)	0.523	0.470
Sleep	763 (69.3%)	326 (72.4%)	437 (67.1%)	3.536	0.060
Social support	506 (46.0%)	182 (40.4%)	324 (49.8%)	9.316	0.002
Spirituality/ Religion	326 (29.6%)	123 (27.3%)	203 (31.2%)	1.892	0.169
Therapy/ Counseling	74 (6.7%)	37 (8.2%)	37 (5.7%)	2.735	0.098
Yoga	126 (11.4%)	51 (11.3%)	75 (11.5%)	0.009	0.924

Table 3

Popular Coping Strategies by Sex and Student Status

Males	Females	Undergraduate	Graduate
1. Exercise (67.8%)	1. Sleep (69.9%)	1. Sleep (72.4%)	1. Exercise (69.9%)
2. Sleep (53.0%)	2. Exercise (65.8%)	2. Exercise (60.7%)	2. Sleep (67.1%)
3. Food (44.8%)	3. Food (57.2%)	3. Food (56.7%)	3. Food (56.8%)
4. Alcohol (43.7%)	4. Social support (56.5%)	4. Hobbies (48.7%)	4. Social support (49.8%)
5. Hobbies (43.7%)	5. Alcohol (41.4%)	5. Alcohol (42.9%)	5. Hobbies (44.4%)

WHAT DOES THIS MEAN?



These researchers found the undergraduate and graduate students tend to cope with stress in similar ways.



Across these groups exercise sleep in food for most commonly reported regardless of student status.



However there was a distinct difference between undergraduate students and their likeliness to use tobacco and or other drugs compared to graduate students.



Graduate students were more likely to report social support as a integral coping mechanism.

THE EFFECTS OF
MINDFULNESS-
BASED
INTERVENTIONS
FOR HEALTH AND
SOCIAL CARE
UNDERGRADUATE
STUDENTS

Effects of mindfulness-based interventions for health and social care undergraduate students

What did they find?

How can this help Students?

WHAT ARE ENDORPHINS AND HOW DO THEY HELP IN THE REDUCTION OF STRESS.

- Physical activity such as exercise allows to produce endorphins. The production occurs when your heart rate is accelerated.
- Endorphins are chemicals released from the brain that act as natural painkillers- reason behind why people have called them natural opiates.
- Besides relieving pain, endorphins improve one's ability to sleep, therefore, reducing stress.

ACTIVITIES THAT ALLOW TO PRODUCE ENDORPHINS



According to the Anxiety and Depression Association of America (ADAA), meditation, acupuncture, massage therapy, and deep breathing can also cause your body to produce endorphins.



Once released, they will provide you with both a mood and energy boost for up to 3 hours.

IS THERE A TIME LIMIT WITH EXERCISE THAT SUPPORTS THE PRODUCTION OF ENDORPHINS?

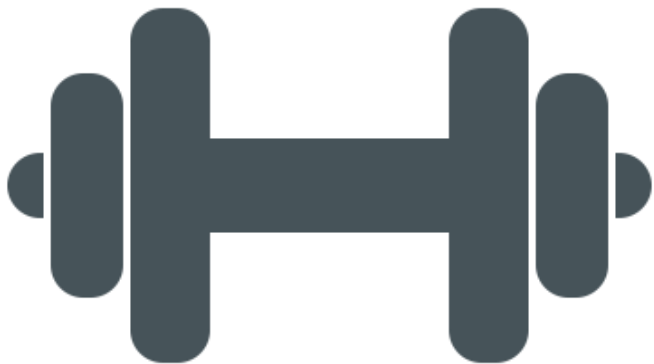
Yes, it is said that after 20 to 30 minutes of hard aerobic exercise, the neurotransmitters in your brain are produced.



Aerobic exercises include the following:

- Cardio machines
- Cycling
- Swimming
- Walking or running
- Kickboxing

WHY IS EXERCISE IMPORTANT TO ME?



- A positive activity
- Promotes the relief of stress
- I like the act that I'm working towards a goal
- Makes me feel productive
- Increases my health
- Helps keep me balanced throughout my day.

STRESS LEVELS OF COLLEGE STUDENTS: INTERRELATIONSHIP BETWEEN STRESSORS AND COPING STRATEGIES.

- The students stress scale confirms the dominant stressors in the student's lives are parents and expectations of their parents.
- It was found that academic stress had a high degree of correlation with social stress and financial stress. Thus, it can be explained that if students had high academic stress, they were not able to socialize or if students were having problems socializing, their academic performance would be affected. It can also be interpreted that if students had financial stress their performance was expected to decline.
- Positive vs. Negative coping: Pos. Meditate, sleep, tv, music, talking with parents or family members, pursuing hobby or interest, exercise or yoga, prayer. Neg, alcohol, smoking, drugs, social networking sites. Used more by males than females.
- therefore concluded that academic stress was highly correlated with social and financial stress.

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