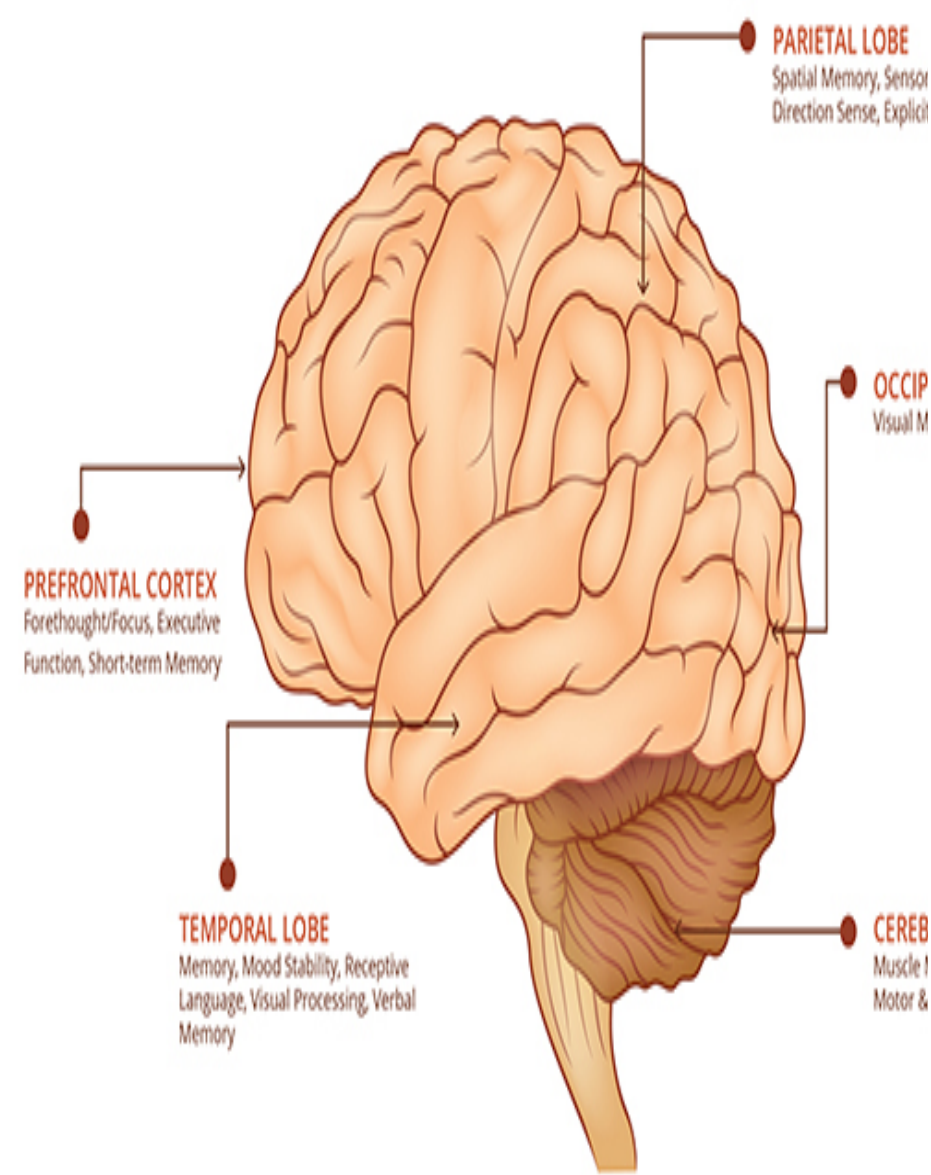
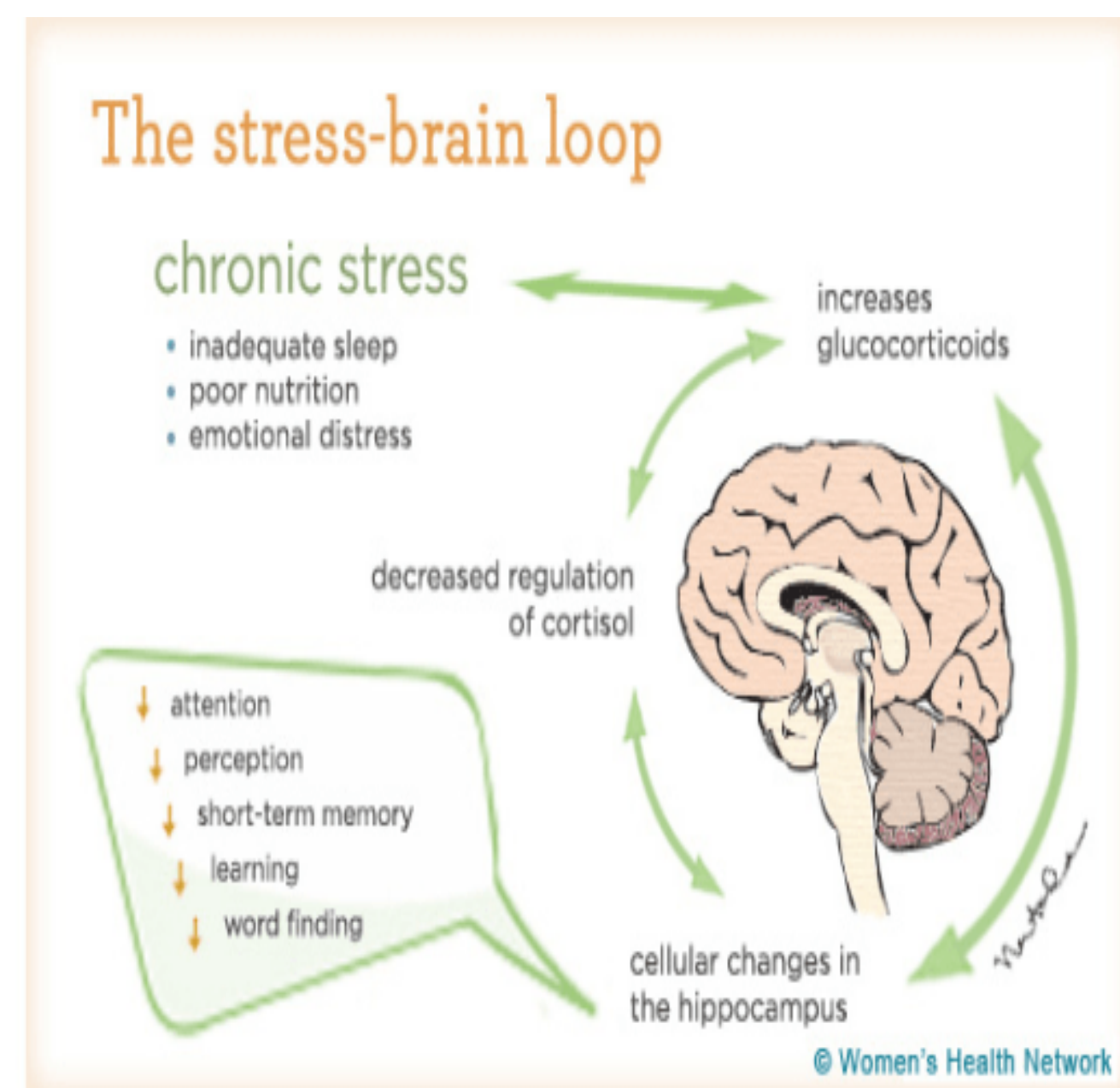


## Introduction

Stress is commonly perceived as a hinderance to high academic performance, especially in complex fields. There is a general concordance of opinion amongst scientists on the matter; stress negatively impacts focus and academic performance. But what if medical students do not play by the rules?



<https://www.amencinics.com/the-science-about-your-brain/>



<https://www.fastcompany.com/3032513/6-scientifically-proven-ways-to-boost-your-self-control>

## Objective

To identify the relationship amongst an individual's perceived level of stress and their focus, academic achievement, and GPA. This relationship was examined among first and second year preclinical medical school students.

## Survey

Touro ID#: \_\_\_\_\_

1. Did you eat breakfast today?  
 Yes  No

2. How many times a week do you eat breakfast on average?  
0 1 2 3 4 5 6 7

3. What do you eat for breakfast? (Select all that apply)  
 Cereal/Cranola  Toast  Yogurt  
 Oatmeal  Bagel  Eggs  
 Eggs + Other Protein (ex: sausage, Bacon, Ham, Tofu)  Other (please specify) \_\_\_\_\_  
 Egg Sandwich

For the questions #4 and 5, please use the following scale:  
1 - worst health, 2 - below average, 3 - average, 4 - above average, 5 - best health

4. How would you rate your physical health?  
1 2 3 4 5

5. How would you rate your mental health?  
1 2 3 4 5

For the questions #6 and 7, please use the following scale:  
1 - extremely unlikely, 2 - unlikely, 3 - neutral, 4 - likely, 5 - extremely likely

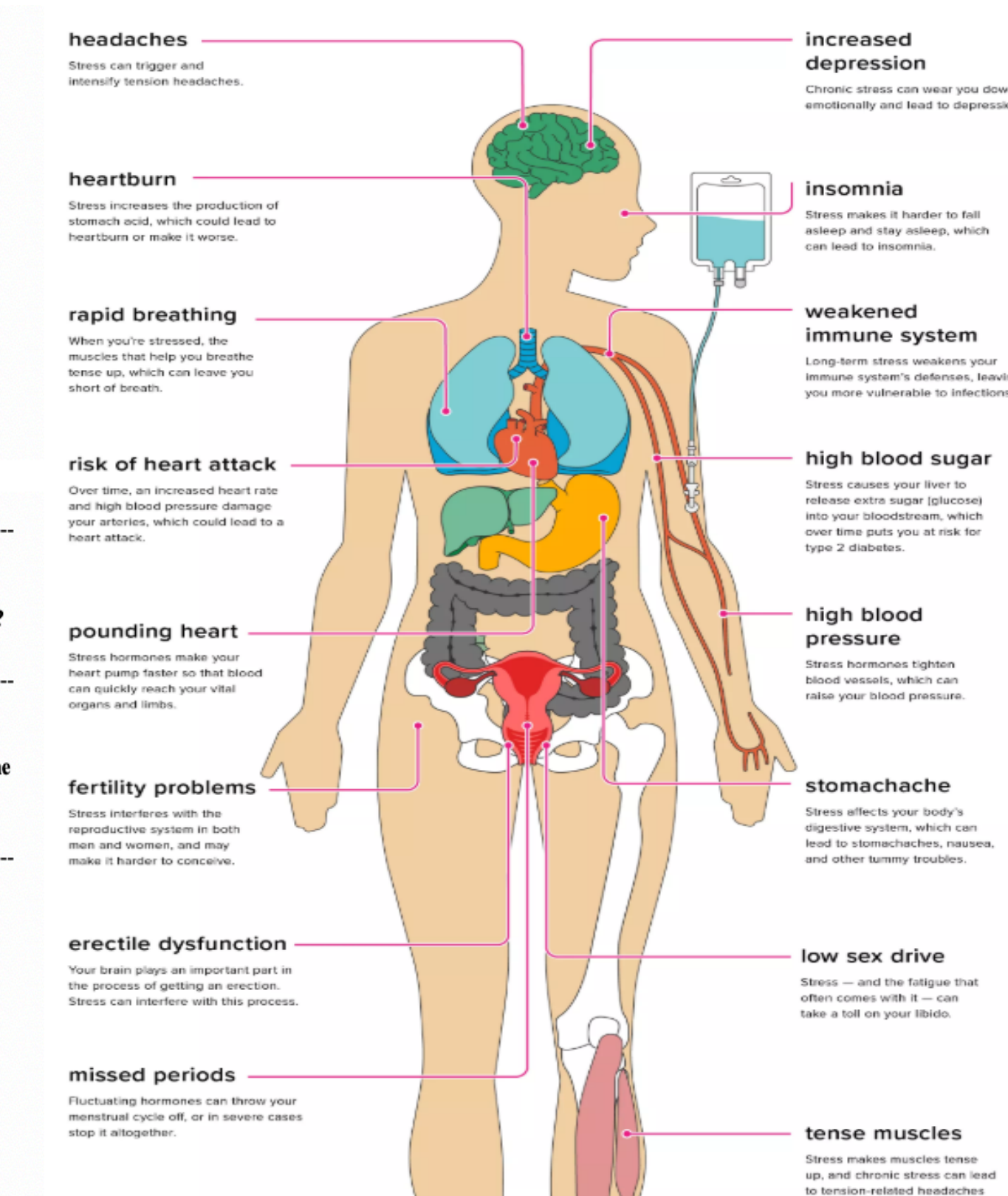
6. How likely are you to eat breakfast if you have a class at 10 am or earlier?  
1 2 3 4 5

7. How likely are you to eat breakfast on the day of an exam?  
1 2 3 4 5

8. How would you rate your daily stress level?  
(1 - least stress, 2 - below average, 3 - average, 4 - above average, 5 - most stress)  
1 2 3 4 5

9. How would you rate your ability to focus while studying?  
(1 - least focus, 2 - little focus, 3 - average, 4 - high focus, 5 - most focus)  
1 2 3 4 5

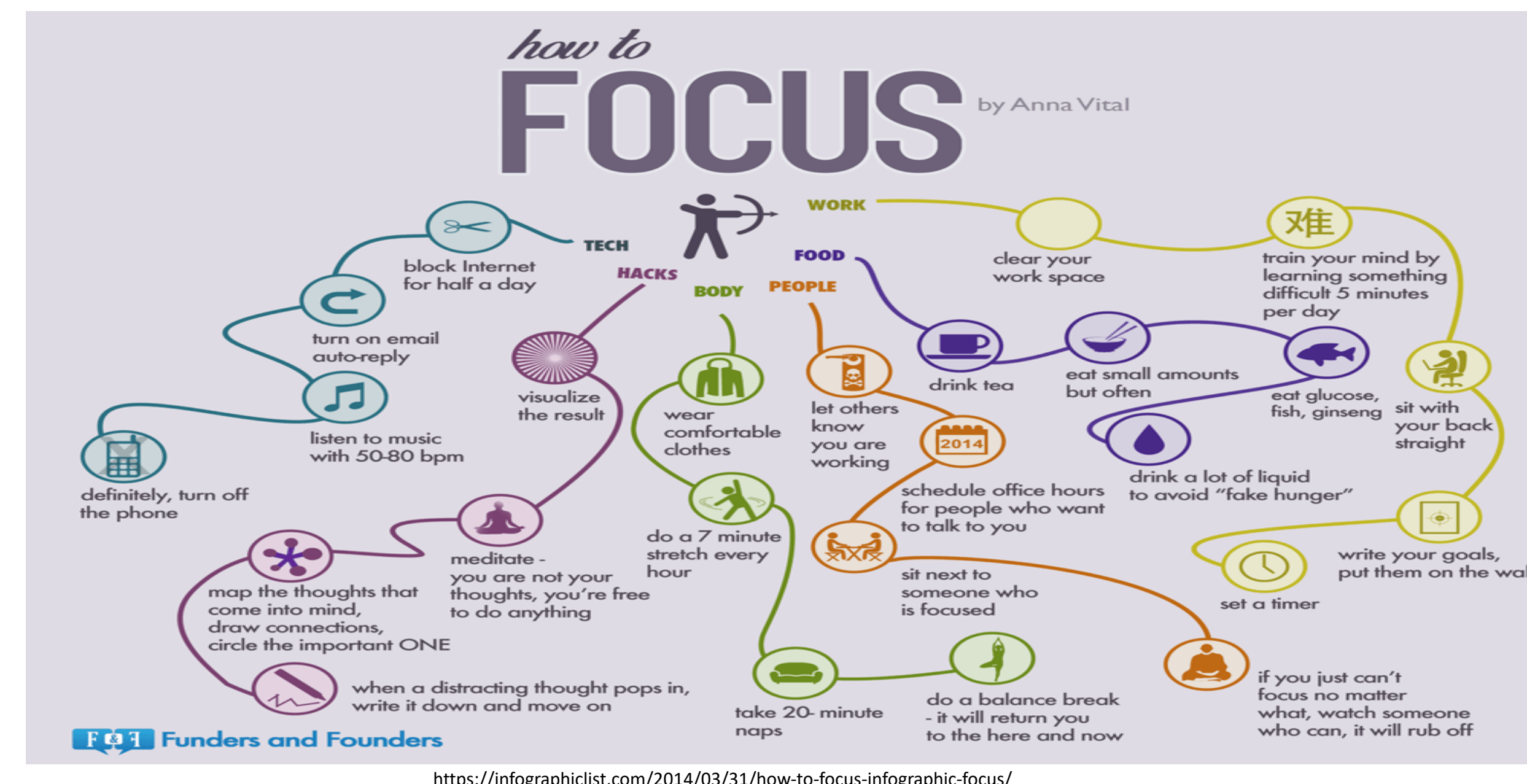
10. How would you rate your academic achievement in medical school?  
(1 - very poor, 2 - below average, 3 - average, 4 - above average, 5 - very good):  
1 2 3 4 5



[https://www.stress.org/stress-effects#lightbox\[1b429cceb45911e7be6\]](https://www.stress.org/stress-effects#lightbox[1b429cceb45911e7be6])

## Methods

A voluntary, confidential survey was used to harvest information on the perceived levels of stress, focus, academic achievement, and GPA of first and second year medical students. Participants indicated their perceived stress level (1-5), focus level (1-5), academic achievement (1-5), and recorded their I.D. number. Precise GPAs were gathered using each student's I.D. number.



<https://infographicist.com/2014/03/31/how-to-focus-infographic-focus/>

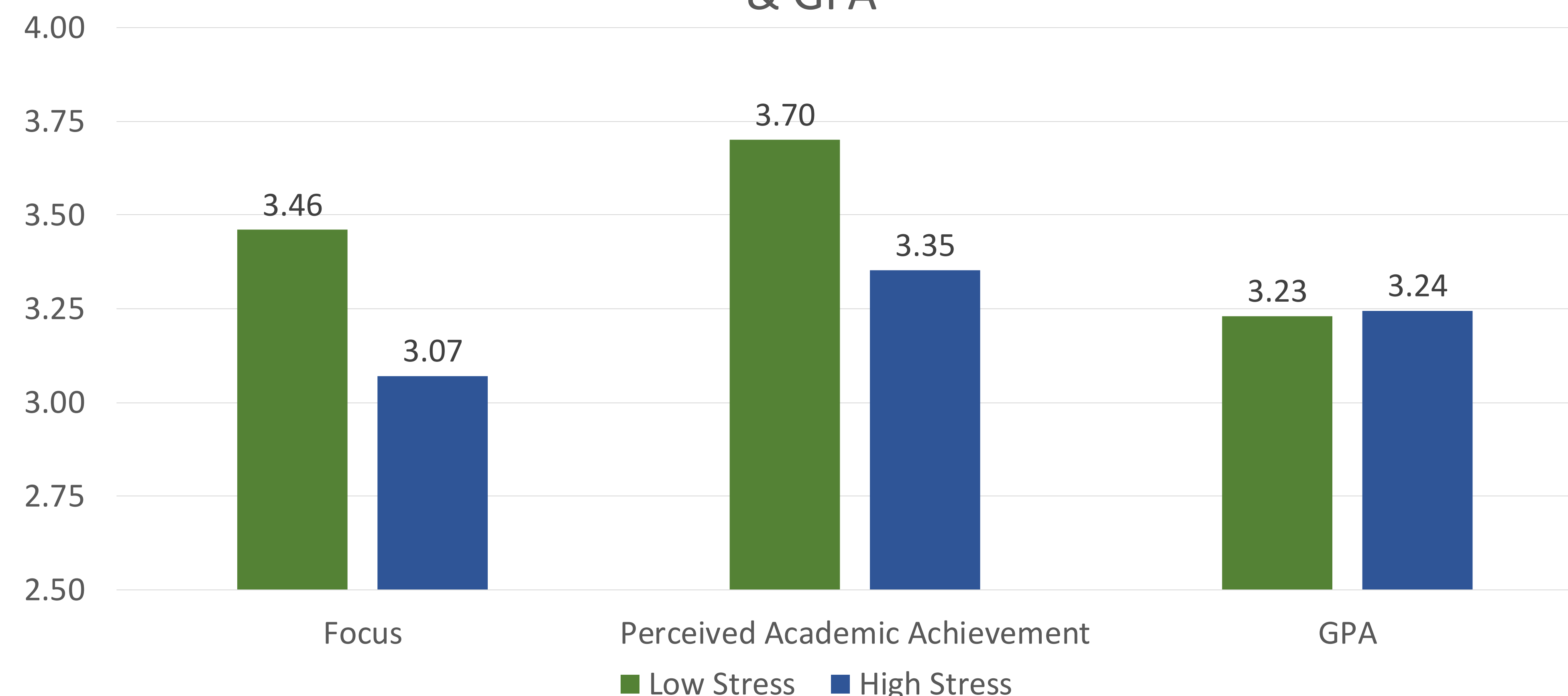


<https://cavevalleyfamilymagazine.com/poor-academic-performance-vision-problem/>

## Results

121 surveys met the inclusion criteria. The results are divided based on a low stress level group (N=50) (stress level 1-3) and a high stress level group (stress level 4-5) (N=71). The average perceived level of focus was 3.46 in the low stress group and 3.07 in the high stress group (p=0.016). The average perceived level of academic achievement was 3.70 in the low stress group and 3.35 in the high stress group (p=0.030). The average GPA was 3.23 in the low stress group and 3.24 in the high stress group (p=0.871).

Low & High Stress Levels vs. Focus, Academic Performance, & GPA



## Conclusions

Students in the low stress level group had a significantly higher level of focus than students in the high stress level group; stress level and level of focus are negatively correlated. It is quite remarkable that there is no significant difference in GPA between students in the low stress category vs the high stress category. This suggests that no matter how stressed a student may be, it will not have any effect on GPA. Interestingly, although students of both low and high stress levels performed equally well, their perceived level of academic achievement is negatively correlated with their level of stress. This may be because a high stress level negatively impacts a student's positive self-regard and feelings of accomplishment.

## Future Research

Future research could include investigation into the specific stress factors of medical students. It can also explore the causative factors in the disparity between perceived and actual academic achievement. Variability in the levels of stress, focus, academic achievement, and GPA can also be compared between first and second year medical students to explore whether there is a difference due to class year. Finally, we would like to explore medical students' strategies on coping with stress.

## References

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