

# TIKTOK & ANXIETY among Macaulay Students at Brooklyn College

Research done by Kara Duclosel, Paris Ricketts,  
Paige Treiland, Samuel Paperman



# Research Question

**How does the use of TikTok as a social media platform have an affect on the anxiety of Brooklyn Macaulay undergraduates and their performance in school?**

**Brooklyn** The City  
University  
of New York  
**College**

**MACAULAY**  
**HONORS COLLEGE**





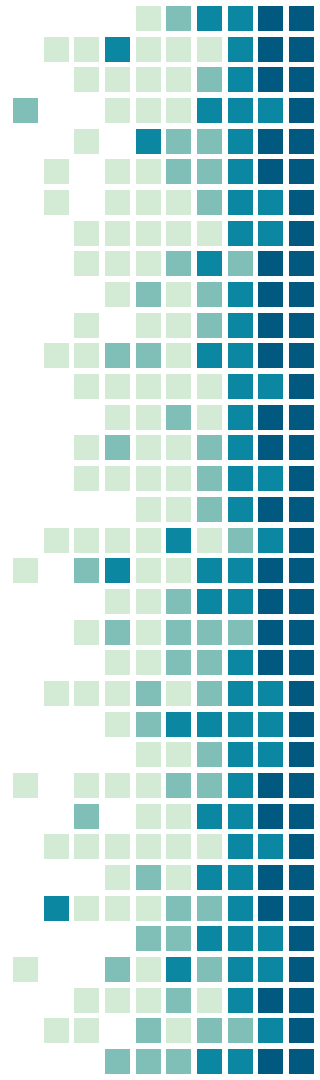
1.

# Background

General information about the topic we are going to be studying

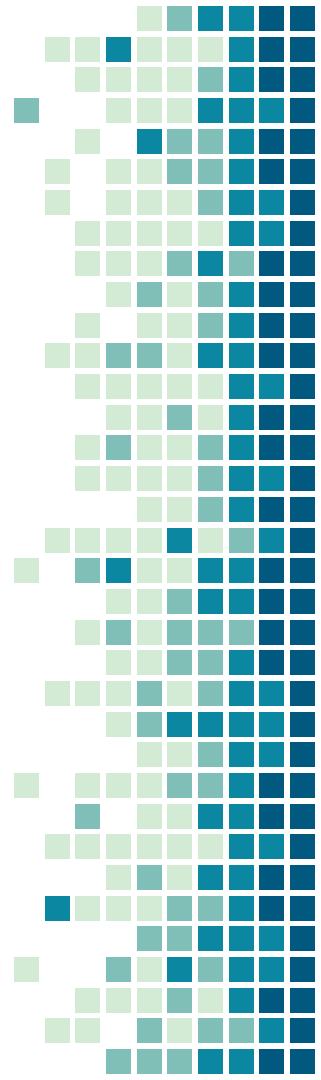
# Background

- Previous studies done on analyzing the effects of social media on anxiety have shown data of a general increase of social media usage through adolescents and young adults, despite the potential harms or benefits of using social media
- Many young adults use social media for communicating, entertainment, etc., making it “indispensable” especially to college students (He and Li 280).
- More studies have shown that social media can have negative effects on young adults and adolescents “psychological well-being” due to factors such as portrayed unrealistic body images negatively affecting academics and self-esteem (Kim et al.)
- Some studies mention that the overuse of social media could be do to FOMO (fear of missing out) in which case young adults (specifically college students) tend to soak up all the information they can- and in doing so spend less time on academics (Zhuang et al.)



# Why should we care about this topic?

- Social media is one of the leading causes of anxiety and depression among young adolescents and adults
- This can lead to some dangerous effects such as opioid use which are one of the leading causes of death in America, especially NYC
- The use of social media can be an addiction and may have negative impacts on mental health. With knowing the facts and statistics, you can be better informed of the effects of social media usage and act accordingly
- Social media can take away from productive activities that may benefit individuals and the decrease in productivity can be harmful



# 4.95 billion

people use social media across the world.



302 million

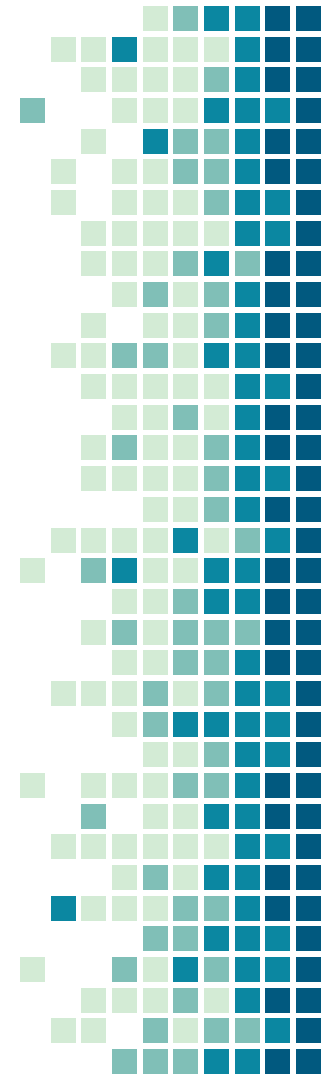
people use social media in the U.S as of 2023

102 million users

are using Tiktok

92%

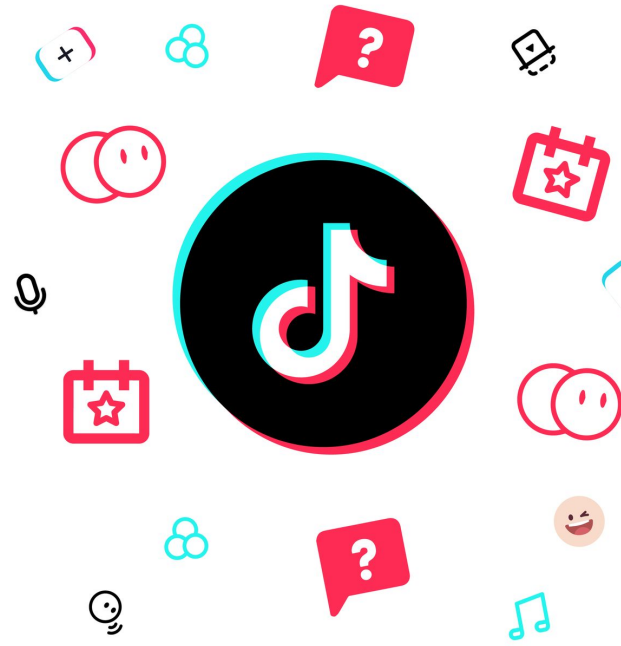
of internet penetration in the U.S



2.

# Introduction

An opening to the study





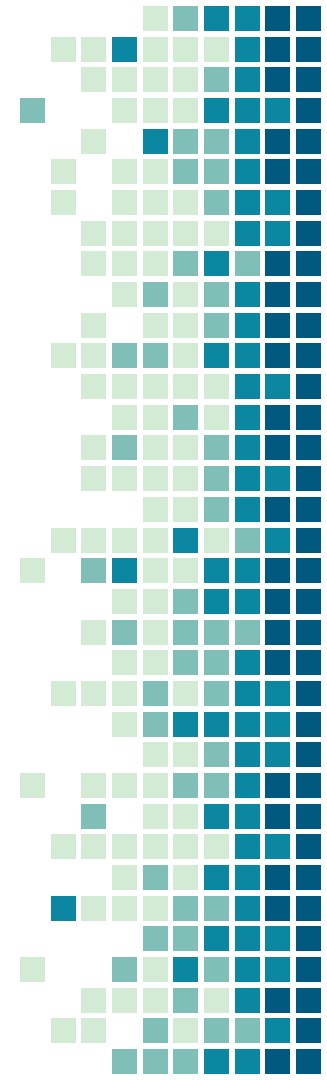
# What will we be comparing?

Independent variable:

**Screen Time Usage of TikTok  
during Midterm/ Final Season**

Dependent Variable:

**Reported trends on anxiety  
levels/ academics**



# HYPOTHESIS

Social media platforms such as Tiktok can have negative impacts on mental health, such as anxiety, on college undergraduate honor students.



# So... what is anxiety?

- Anxiety is the feeling of fear and uneasiness. This causes individuals to feel nervous, distracted, restless.
- General Anxiety- the fear of worrying about general issues, life, school, work, health, money, etc. (Research has shown that people with general anxiety disorder- have these fears generally every day!)
- Panic Attacks- having an immense amount of feelings of fear that leads to physical acts of fast breathing and an uneasy body feeling
- Social Anxiety- a fear of the feeling about being judged by others (NIH)



# Methods

1. Identified some questions we wanted to ask related to TikTok and anxiety symptoms.
2. Created a multiple choice survey with our questions.
3. Encouraged Brooklyn College Macaulay students to take our short survey.
4. Analyzed data.



# Methods

- We asked a total of 23 questions, looking for a well rounded data set with information about TikTok
- We included multiple choice options where we could, to help categorize the data, but some questions required a different answer from each respondent (Ex: Screen time reporting)
- Other information we thought to be important was the content viewed on the app (Tiktok), as well as other social media apps used, as well as the participants' habits pertaining to school and stress levels



# Methods

- We wanted as many respondents as possible, so we opened up the survey to all Macaulay students at Brooklyn College
- We employed the help of our seminar instructor as well as getting help from Lisa Schwebel, the director of Macaulay, to spread the word to as many people as possible.
- Google forms was the website we used to create the survey itself.



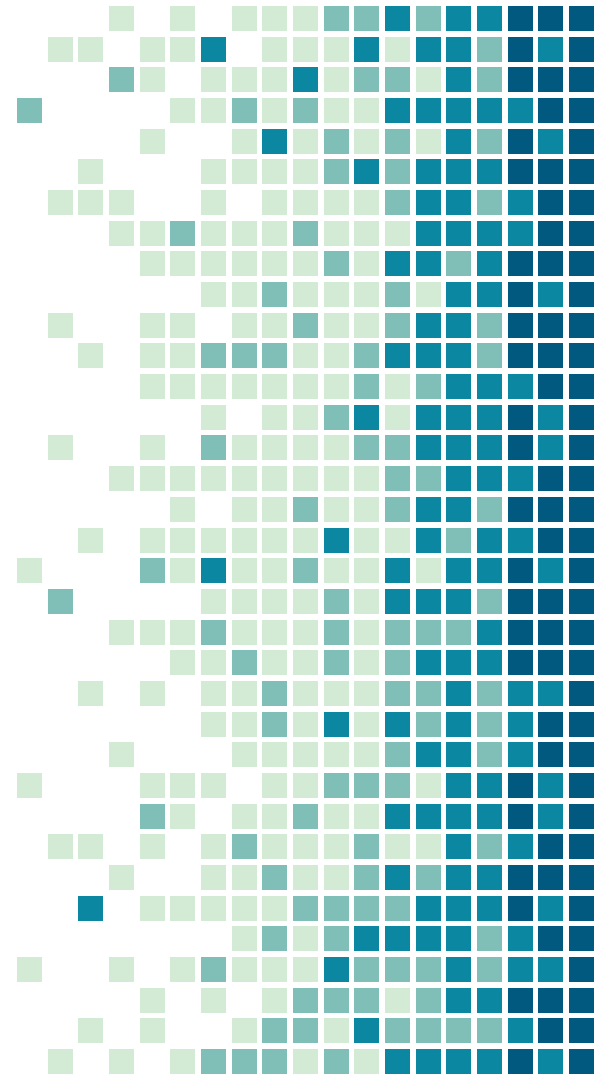
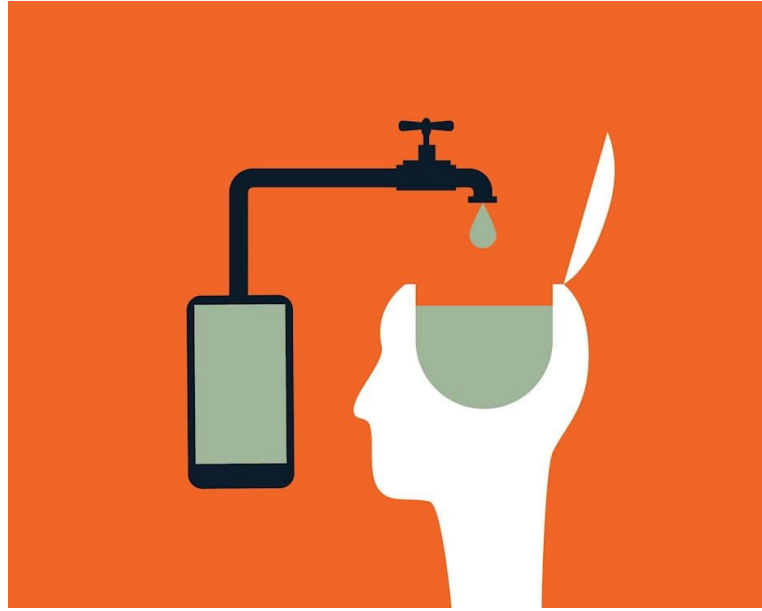
# Abstract

- Based on information collected from our surveys we found that people who generally spend time on social media reported having high stress
- A change in academics turned out to not be a big factor in our experiment (most reported GPAs remaining the same)
- Anxiety levels fluctuate depending on the person but there is a general trend of moderate- high anxiety levels positively correlating with time spent on social media



# 3. Findings

What we learned





# THE DATA (Tiktok users)

Amount of Time spent on Tiktok (hrs per week)	0-6 hrs	7-10 hrs	11+ hrs
Number of participants for each hour range	<b>23</b>	<b>6</b>	<b>8</b>
High/ Medium Stress	<b>21</b>	<b>6</b>	<b>8</b>
Low stress	<b>2</b>	<b>0</b>	<b>0</b>
Low anxiety (0-3)	<b>9</b>	<b>5</b>	<b>4 (moderate)</b>
High Anxiety (4-5)	<b>14</b>	<b>1</b>	<b>4</b>



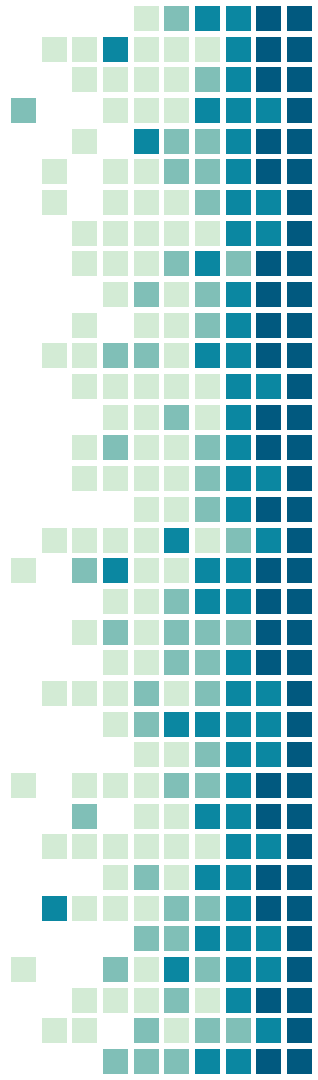
# THE DATA (Users of Other Social Media)

Amount of Time spent on Social Media (hrs per week)	0-6 hrs	7-10 hrs	11+ hrs
Number of participants for each hour range	<b>8</b>	<b>2</b>	<b>0</b>
High/ Medium Stress	<b>8</b>	<b>2</b>	<b>0</b>
Low stress	<b>0</b>	<b>0</b>	<b>0</b>
Low Anxiety (0-3)	<b>6</b>	<b>2</b>	<b>0</b>
High Anxiety (4-5)	<b>2</b>	<b>2</b>	<b>0</b>

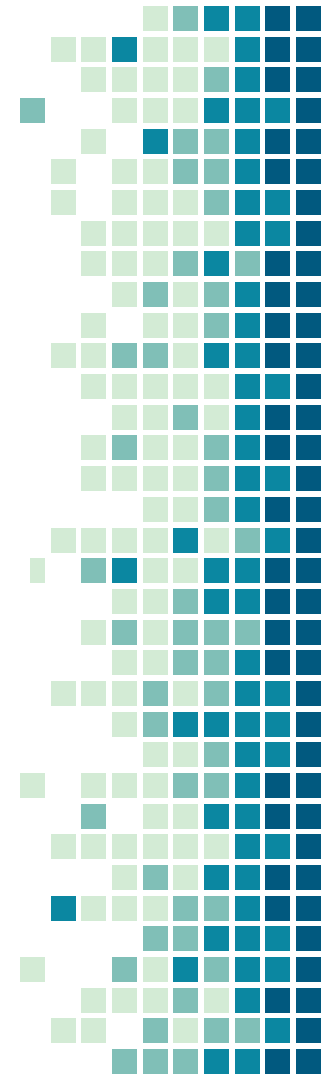


# Analysis

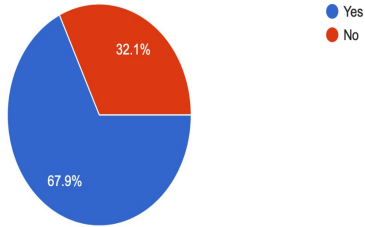
These data tables show that despite the social media app being used, typically people with lower screen time spent on social media reported higher levels of stress and anxiety. This part of our data disproves our hypothesis as we expected to see an increase trend of higher anxiety associated with more time spent on social media. However, we do have a limitation of a small sample size for 7+ hrs on social media.



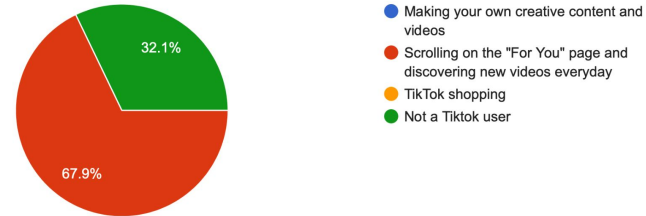
# The Majority of our participants use TIKTOK



Do you use TikTok?  
56 responses

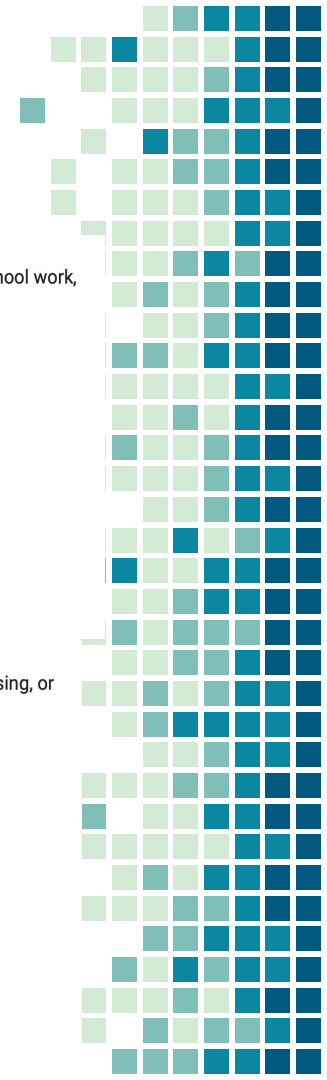


If you are a frequent TikTok user what would you say keeps you returning to the platform?  
56 responses



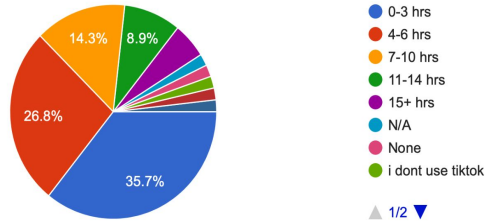
Most of our participants report using Tiktok for social media. Specifically, for the purpose of scrolling for our Tiktok users. None reported using Tiktok for other purposes.

# PIE GRAPHS



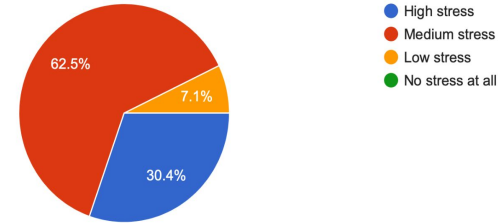
What is your weekly average screen time for Tiktok if you have your screen time on from last week?

56 responses



Would you say your college life is stressful? (i.e: an overwhelming schedule, managing school work, etc.)

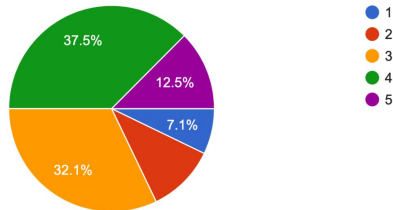
56 responses



How would you rate your anxiety this time of the year (November -December)? 1= little to no anxiety

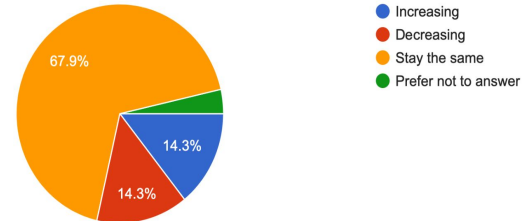
5= severe anxiety

56 responses



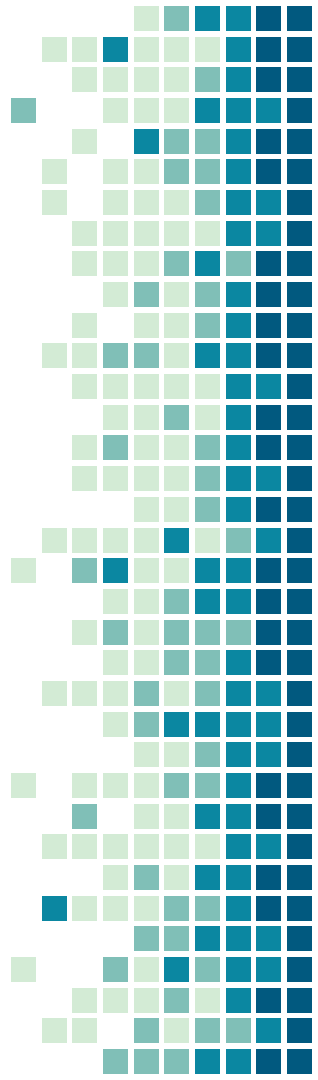
How about academic life? Would you say your grades/ college GPA are increasing, decreasing, or remaining the same? (THIS IS ANONYMOUS)

56 responses

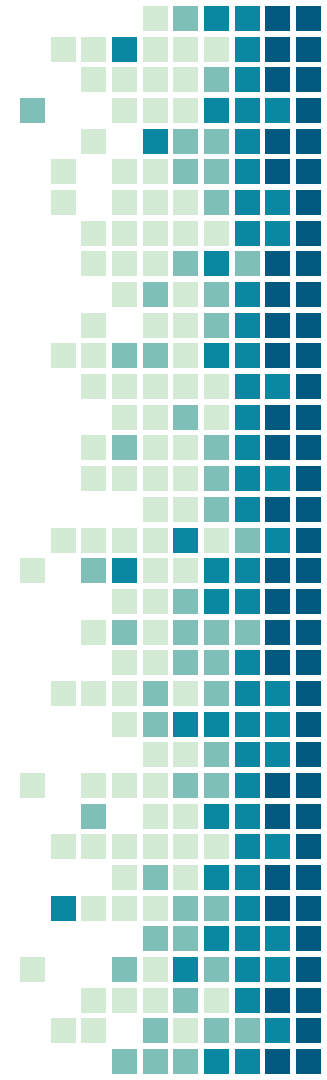


# Analysis

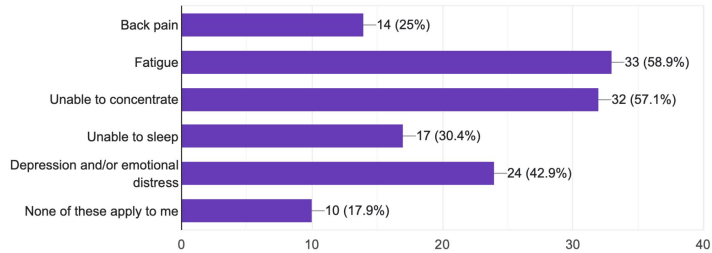
Despite the data disproving our hypothesis about a positive correlation between the increase of screen time leading to the increase of anxiety and stress, we see from this data that the majority of participants use social media and reported having anxiety. No participant put 0 mins when asked for specific screen time in the survey, so all of them do visit social media even if it's for 50 mins a week. We also see that school is the major factor of participants' general feeling of stress and that overall, majority of our participants reported having high anxiety.



# MORE DATA (All Responses)

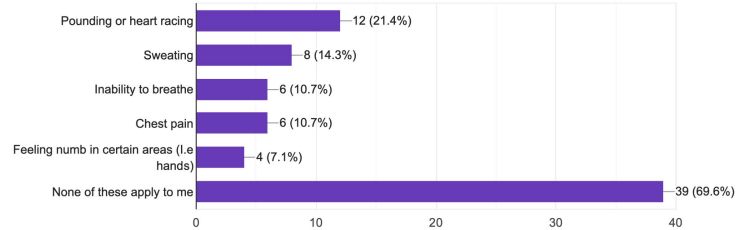


In terms of health, please choose all the symptoms you've been feeling lately since school started (Pt. 1 Check all that apply)  
56 responses



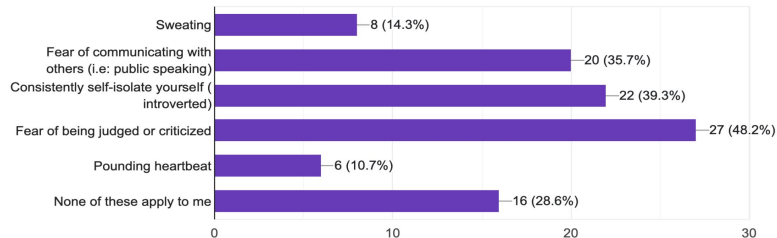
## General Anxiety

In terms of health, please choose all the symptoms you've been feeling lately since school started (Pt. 2- Check all that apply)  
56 responses



## Panic Attacks

In terms of health, please choose all the symptoms that you have been feeling lately since school started (Pt. 3- Check all that apply)  
56 responses



## Social Anxiety

# Analysis

Interestingly enough, it was found that every participant that used social media reported some symptom of general anxiety. Moreover, many participants also reported having a symptom of social anxiety as well. The least selected health issue was panic attacks associated with anxiety. Looking at this data, our hypothesis still proves that social media users may have some underlying health issues of anxiety correlated with the use of social media despite the amount of hours spent per week on the platforms.

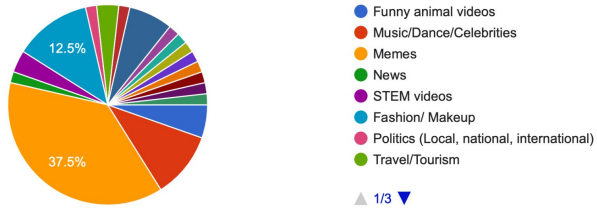




# MORE DATA

What type of content do you watch on TikTok the most (or like to watch the most)?

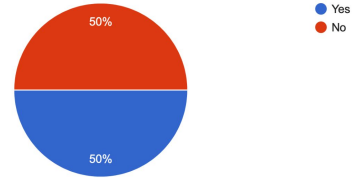
56 responses



- Funny animal videos
  - Music/Dance/Celebrities
  - Memes
  - News
  - STEM videos
  - Fashion/ Makeup
  - Politics (Local, national, international)
  - Travel/Tourism
- ▲ 1/3 ▼

Do you feel as though you have been visiting social media (such as Tiktok) often when school tends to get more stressful?

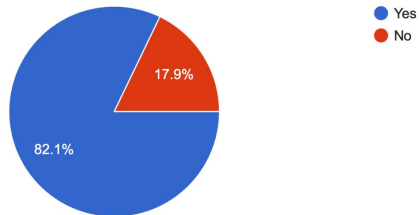
56 responses



- Yes
- No

Would you say you procrastinate a lot?

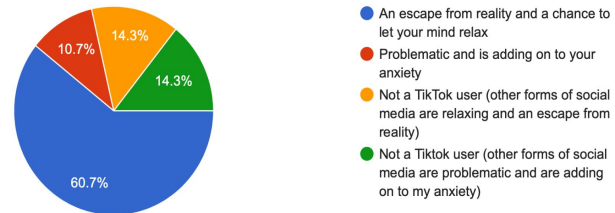
56 responses



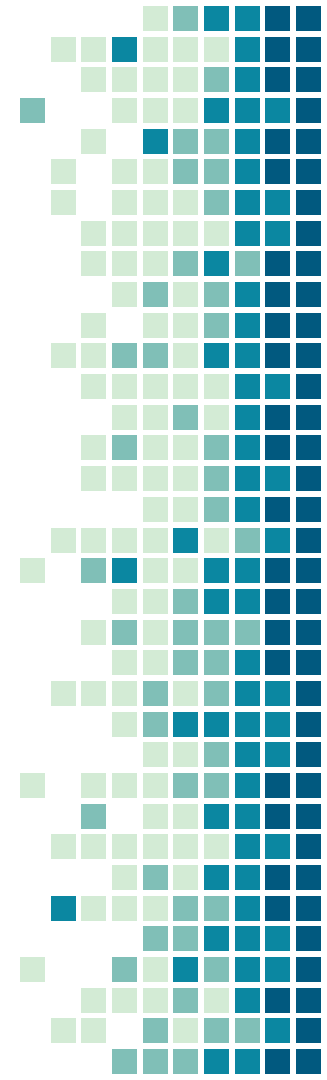
- Yes
- No

How would you describe TikTok in terms of your mental awareness? (Choose the best answer)

56 responses



- An escape from reality and a chance to let your mind relax
- Problematic and is adding on to your anxiety
- Not a TikTok user (other forms of social media are relaxing and an escape from reality)
- Not a Tiktok user (other forms of social media are problematic and are adding on to my anxiety)

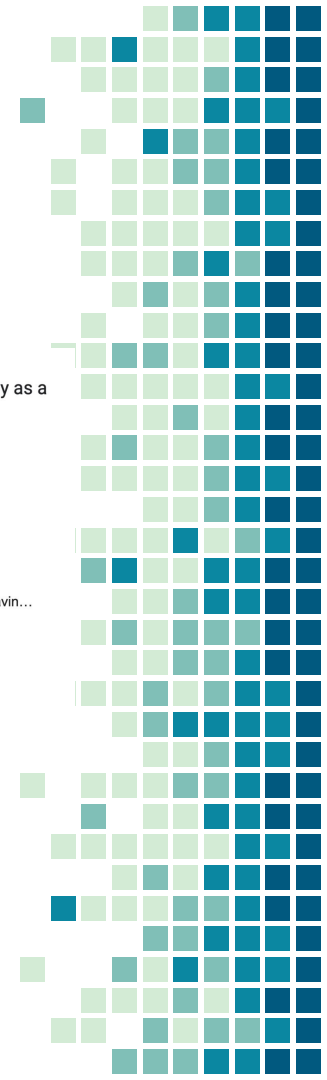


# Analysis

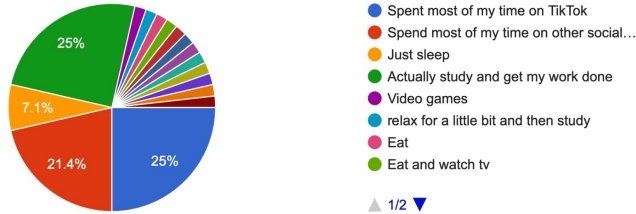
Our results were inconclusive or (50/50) in determining whether or not people tend to visit social media more or less during a stressful college period. However, conversely a staggering 80% of our participants report that they procrastinate and a majority say that social media “ is an escape from reality.” Our participants depend on social media to bring sort of comfort or relaxation to these students during stressful times by watching memes (generally funny videos) or other content. This being said, it can be argued that the usage of social media overtime, despite watching it under 6 hrs a week, can have physical health effects of anxiety that can impact your mental health, stress levels, attention span, and overall productivity.



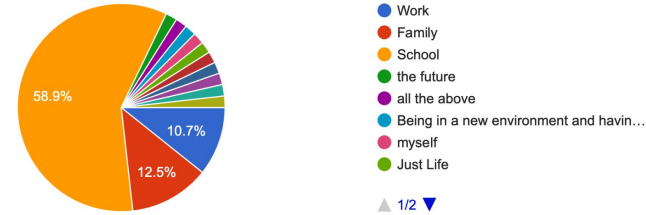
# FINAL CHARTS



What would you ACTUALLY do the second you get home from a long day of school (knowing you have exams and assignments to prepare for)?  
56 responses



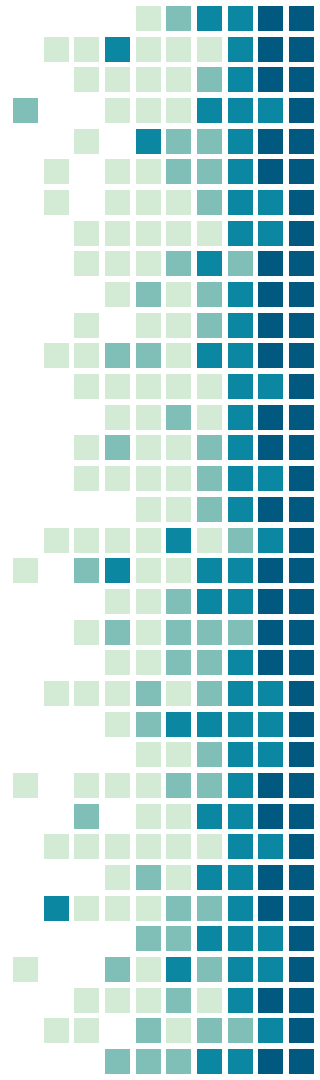
Finally, what would you say is the MOST leading cause of your stress and/or possible anxiety as a college student?  
56 responses



Majority of our participants report that they are stressed or anxious from school. Also, the majority of our participants report turning to social media or relaxing as a way to unwind from a long day of school.

# Interesting Finding in Survey

Another question in our survey asks what participants like to do on their free time. It was expected that they would say things like, watching TV, spending time on social media, or sleeping. While some participants reported this, many said the opposite. Some participants said they would spend their free time biking, dancing, swimming, running, etc. These are all active and productive activities to pursue. This shows that maybe social media usage isn't the problem or what is blocking college students from being unproductive; it may be school or work. It may be the fact that they generally don't have time to pursue many of these activities.



# Interesting Findings

- 1. The time of day TikTok was used may have an effect on anxiety.**
  - 24 of the 48 of our respondents that use TikTok reported that the first thing they do after a long day of classes is open TikTok
- 2. Instagram is the second largest culprit when it comes to Social Media usage among participants**



# Interesting Findings



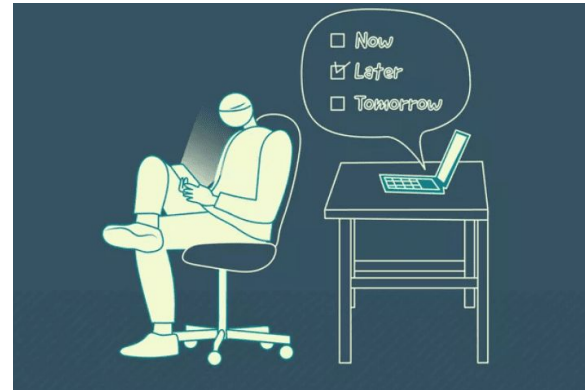
**3. Finally, some data that we found to be interesting is the content on the app... are some kinds of videos more addicting and easier to keep scrolling on?**



# Conclusions from Survey

## Students who spend at least 7 hours on TikTok a week..

- Spend most of their free time on TikTok
- However, participants prefer to spend their free time doing more productive activities
- Experience medium to high amounts of stress due to college
- Procrastinate a lot
- Feel tired and exhausted all the time



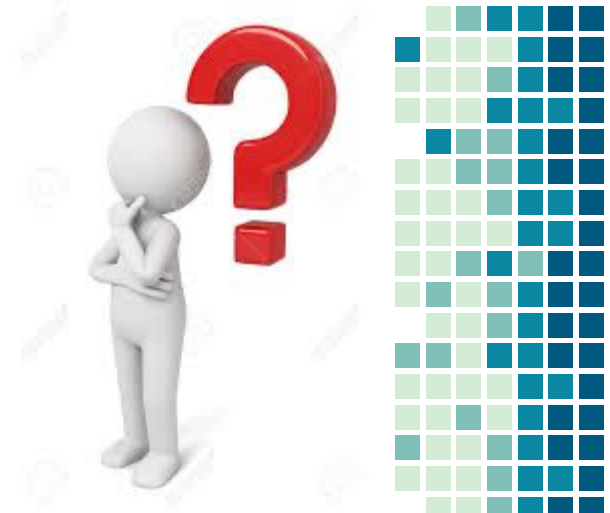
# Limitations

## 1. Number of Responses

**(Small sample size)** 48 individuals for specific data as the rest of the data was not clear

## 2. Vague Responses

Despite instruction, many participants reported screen time for other social media sources and some did not report their screen time at all





# Reporter Bias

**“The selective revelation or suppression of information”**

**-Catalogue of Bias**

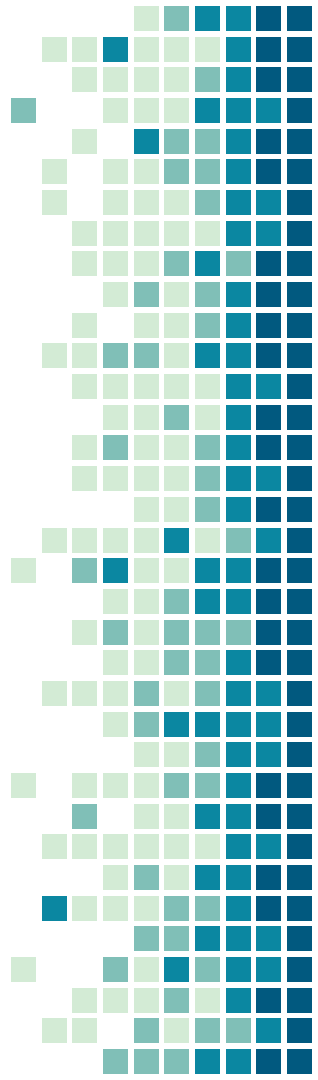


# DISCUSSION OF RESULTS

- Based on the data, it is quite clear that any extended TikTok usage has a positive correlation with increased stress.

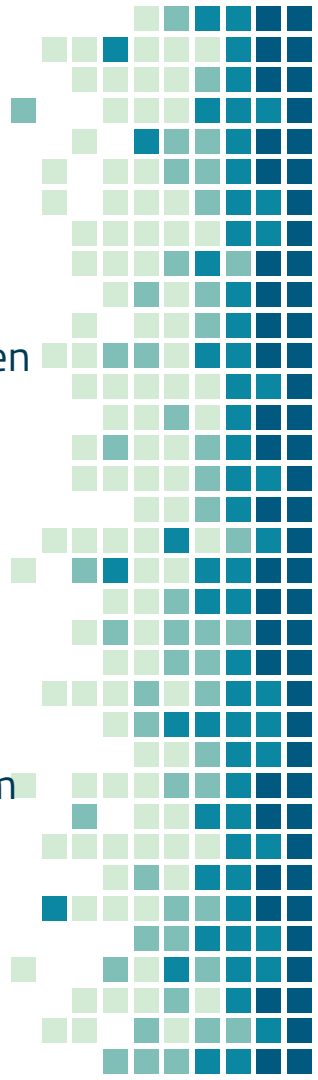
-Although correlation does not lead to causation, such results are impossible to ignore. No matter how many people responded to the survey and no matter how much time they spent, nearly all participants reported high anxiety levels.

-This can naturally lead to one presuming that social media is a negative source of stress in people's lives, and that students' immediate instinct to go on TikTok after a long, stressful day at school is a serious problem.



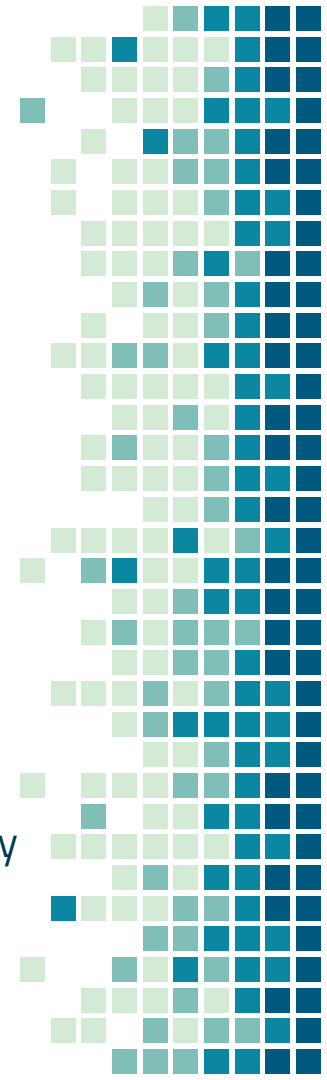
# IMPLICATIONS & THEORIES

- What social media then does, upon observation of results, is create a kind of vicious feedback loop, whereupon one returns from school at peak anxiety and open TikTok.
- There, they are exposed to addictive content that distracts them from their temporary struggles, giving the illusion of relief, while also magnifying their emotional state by exposing them to anxiety inducing content.
- This is because social media is only a temporary fix that allows them a break from their college schedules.
- Once TikTok use is temporarily terminated, students become way more anxious and return to school, restarting the feedback loop (no more temporary fix).



# PROBLEMS

- First, one must ask the question, is it social media that generates anxiety, or is the world one enormous source of anxiety that social media is just one aspect of and does not propagate?
- Does social media truly provide a small window of relief that is so crucially needed and so addictive for students? Or, does it provide a kind of relief withdrawal, where the relief provided by social media amplifies the anxiety of real life, increasing overall anxiety levels.
- There is also the question of whether social media itself is the problem or what it represents, namely the hyperstimulation of the mind, something that is already very common in society, is the real problem.



# EXPERIMENT PROPOSAL

- There are also numerous limitations to this experiment that stem from the structure of the study.

-One thing not addressed is if there is a significant increase of anxiety directly due to the Tik Tok usage, ie., does correlation equal causation. In order to address such a concern, one would need to conduct an experiment.

-A proposal for such an experiment would entail selecting at random a group of people specifically selected for experiencing a lack of stress or anxiety, essentially a blank slate. These subjects cannot be habitual users of social media.



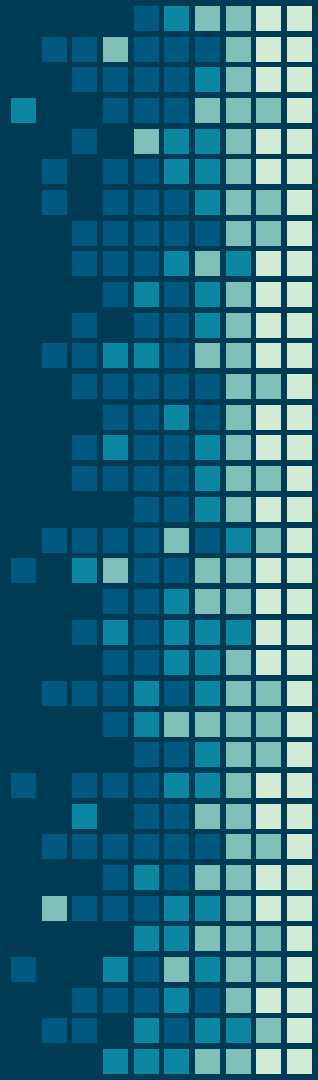
# CONTINUED

- The subjects would then be exposed to TikTok for various periods of time, watching various types of videos. There would also be a control.
- This experiment would take place in a neutral environment like a lab facility where people can be easily monitored. Then, stress and anxiety levels would be observed by professional scientists and doctors, as well as when there were periods of relief and spikes of anxiety.
- It would also be important to test what exactly causes the anxiety, the content of the videos, or the structure of social media apps themselves and the way of receiving the content being through a phone (or other technology).



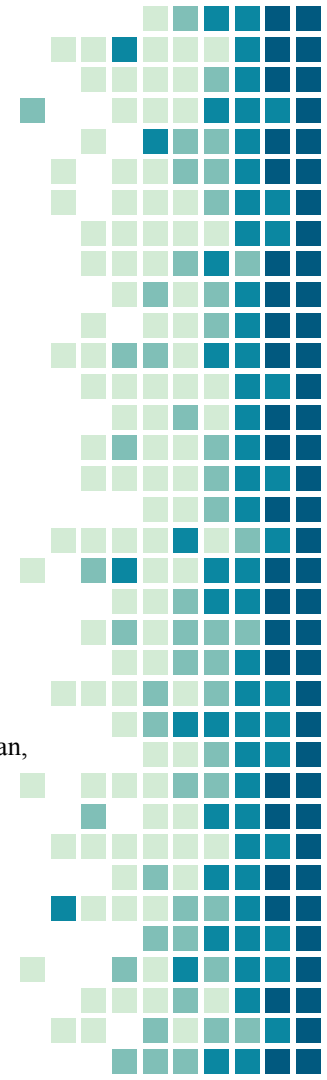
THANKS FOR  
LISTENING!

Any questions?



# Bibliography

- ---. *Anxiety*. medlineplus.gov/anxiety.html.
- He, & Li, M. (2022). Executive Function and Social Media Addiction in Female College Students: The Mediating Role of Affective State and Stress. *The Journal of Genetic Psychology*, 183(4), 279–293.
- “Global Social Media Statistics — DataReportal – Global Digital Insights.” *DataReportal – Global Digital Insights*, datareportal.com/social-media-users.
- Kim, Yonghwan, Yiben Liu, and Zhou Shan. "Beyond touchdown: College students' sports participation, social media use, college attachment, and psychological well-being." *Telematics and Informatics* 34.7 (2017): 895-903.
- Statista. “TikTok: Number of Users in the United States 2023-2027.” *Statista*, 23 Oct. 2023, www.statista.com/statistics/1100836/number-of-us-tiktok-users.
- “Social Anxiety Disorder: More Than Just Shyness.” *National Institute of Mental Health (NIMH)*, www.nimh.nih.gov/health/publications/social-anxiety-disorder-more-than-just-shyness#:~:text=Social%20anxiety%20disorder%20is%20an,to%20make%20and%20keep%20friends.
- Yu, & Zhang, G. (2023). College Students' Social Media Addiction and Sleep Problems: Chain Mediating Effects of Fear of Missing Out and Nocturnal Social Media Use. *Social Behavior and Personality*, 51(6), 1–9.
- Zhuang, Mou, Q., Zheng, T., Gao, F., Zhong, Y., Lu, Q., Gao, Y., & Zhao, M. (2023). A serial mediation model of social media addiction and college students' academic engagement: the role of sleep quality and fatigue. *BMC Psychiatry.*, 23(1).





# Acknowledgements

We would like to acknowledge and thank the following people for their involvement in distributing the link to the survey to our student body:

- Our professor Betina Zolkower
- Lisa Schwebel, Director of the Macaulay Honors Program

