Navigating the Digital Abyss

Exploring the Interplay Between Social Media, Procrastination, and Student Well-being

Presented by:-
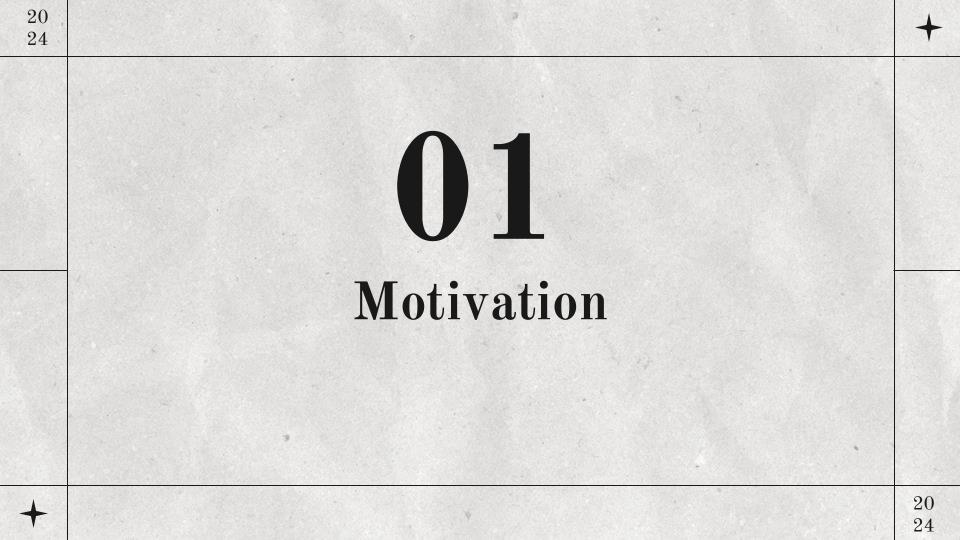Dongwan Hong, Mathan Mahendran, Upasana Bhattacharjee, Maya Iyer

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Introduction

In today's digital age, **social media** has become an integral part of daily life, **profoundly influencing how individuals interact**, communicate, and consume information. As such, **understanding the implications of social media usage** on **academic procrastination** is of paramount importance.

01

Motivation

Academic Performance

Shaping academic success and digital experiences is crucial for education, institutions, and the field of social computing.
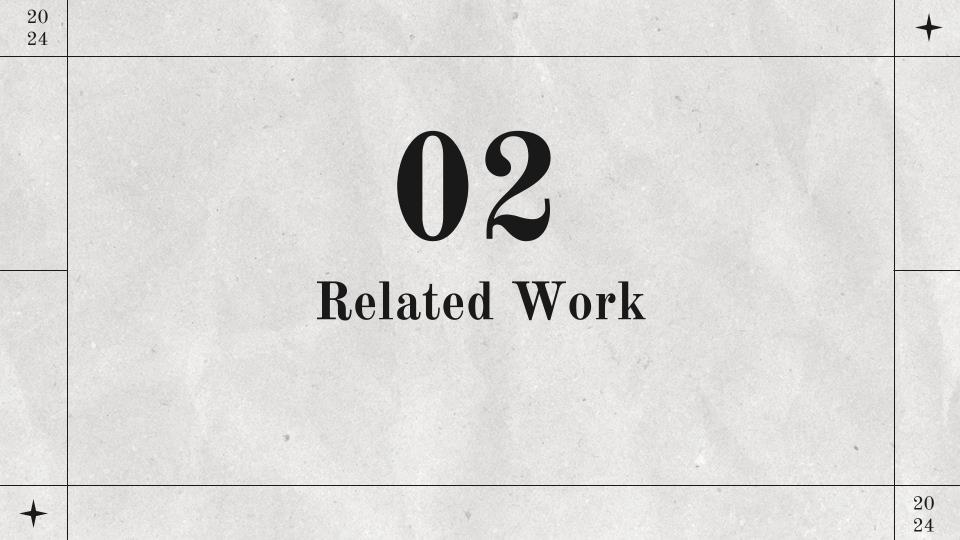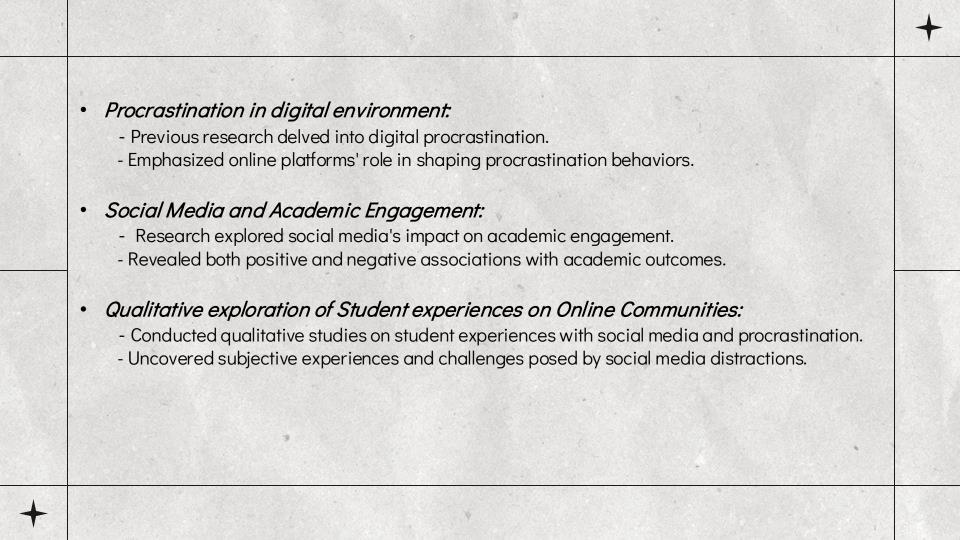
Psychological well-being

The association with stress, anxiety, and mental health informs educational practices.

Collaborative Impact

The study aims to enhance student well-being and learning environments by uncovering dynamics within social computing interactions, benefiting educators, social computing professionals, and technologists

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Related Work

- *Procrastination in digital environment:*
    - Previous research delved into digital procrastination.
    - Emphasized online platforms' role in shaping procrastination behaviors.

- *Social Media and Academic Engagement:*
    - Research explored social media's impact on academic engagement.
    - Revealed both positive and negative associations with academic outcomes.

- *Qualitative exploration of Student experiences on Online Communities:*
    - Conducted qualitative studies on student experiences with social media and procrastination.
    - Uncovered subjective experiences and challenges posed by social media distractions.
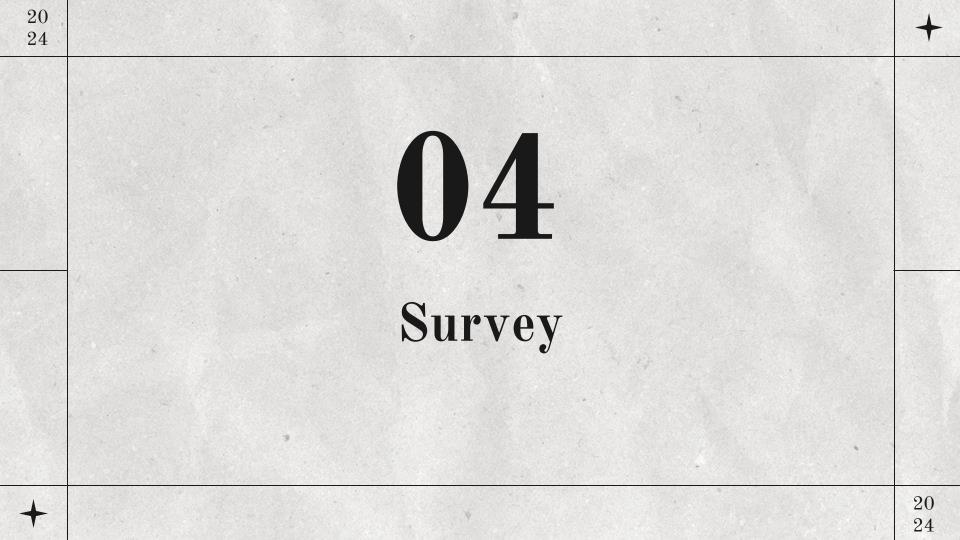
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Goals

Two hypothesis

Hypothesis 1

Subjects who engage in high social media use tend to procrastinate more academically.

Hypothesis 2

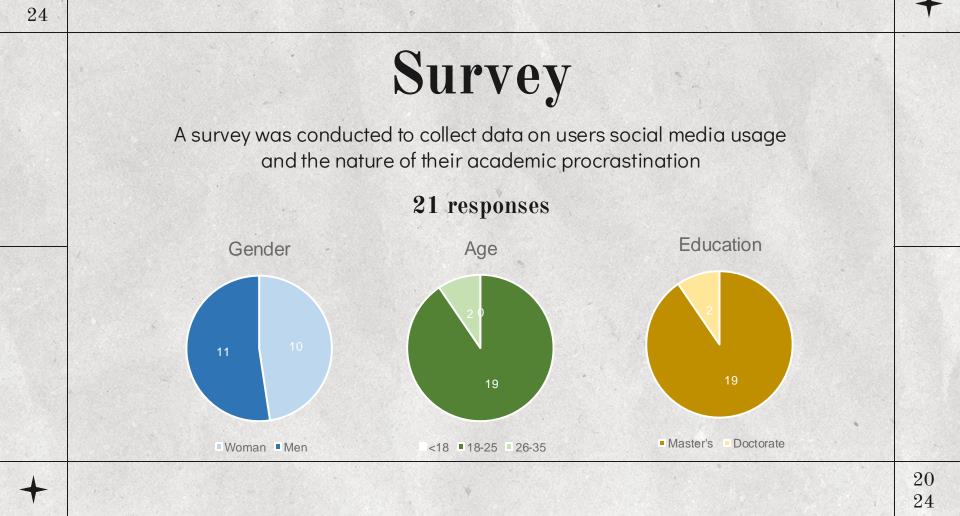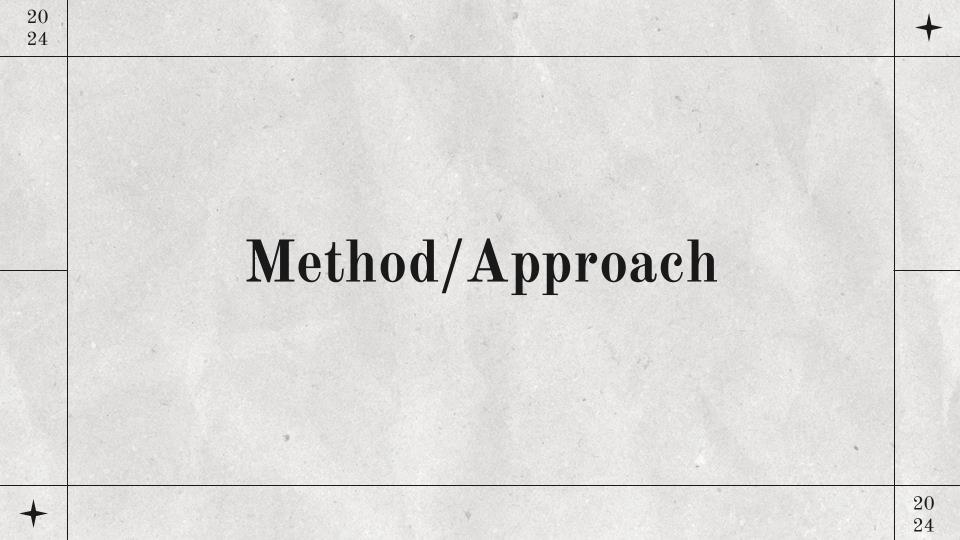Academic Procrastination negatively correlates with Self-efficacy

04

Survey

Data

Survey

A survey was conducted to collect data on users social media usage
and the nature of their academic procrastination

21 responses

Gender

11 | 10

□ Woman ■ Men

Age

2 0

19

□ <18 ■ 18-25 □ 26-35

Education

2

19

■ Master's □ Doctorate

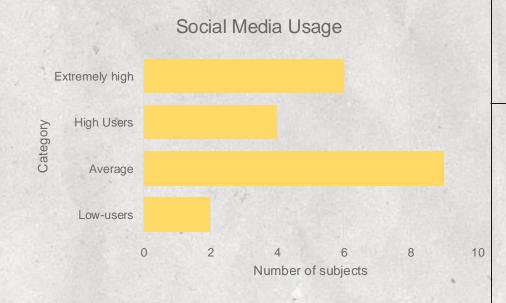| Questions		
📱	**Screentime/GPA**	• "What is your current GPA? (E.g. 3.8/4.0) " • "What is your Daily average screen time? "
🔍	**BSMAS**	• "You feel and urge to use social media more and more." • "You use social media to forget about personal problems."
✏️	**MMMS**	• "How often do you check notifications or messages on social media platforms while studying?"
🚩	**APS**	• "I put off projects until the last minute." • "I have found myself waiting until the day before to start a big project."
🔬	**Self-Efficacy**	• "I am confident that I can achieve all targets that I set for myself." • "Even in most difficult situations, I can strategize to resolve and deal with it."

Method/Approach

Social Media Usage

The descriptive statistics on the Social Networking time use scale reveal four types of SNS users, i.e., low, average, high, and extremely high users,
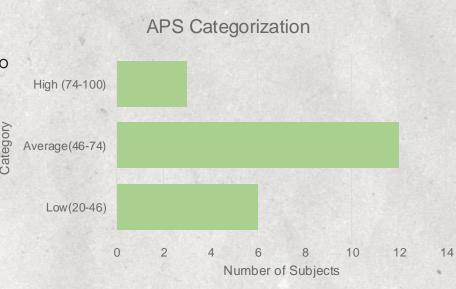
- Majority of the subjects being average users (~43%)

Social Media Usage

Academic Procrastination Scale

The Academic Procrastination scale also shows three levels of academic procrastination: low, average, and high academic procrastination.

- Majority of the subjects being average users (~57%)
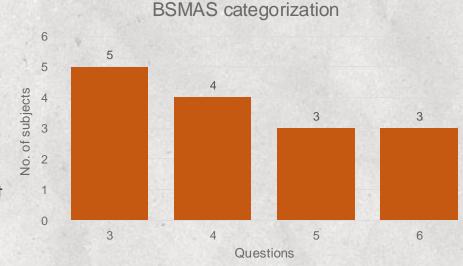
- Mean score of 60.

- Standard Deviation of 14.5

APS Categorization

Bergen Social Media Addiction Scale

In terms of interpretive guidelines, it's generally believed that scoring more than 3 on at least 3 out of the 6 items could indicate an addiction to social media.

- 15 out of 21 subjects (~71%) answered more than 3 on at least 3 out of the 6 items.
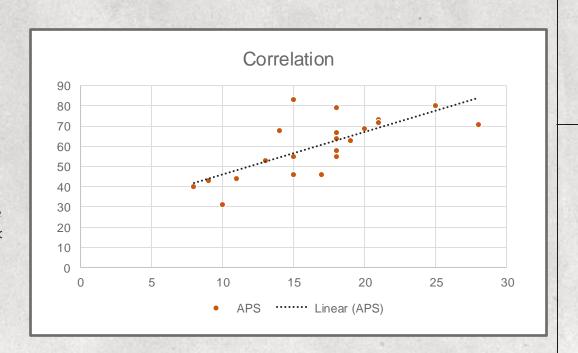
BSMAS categorization

Correlation between BSMAS and APS

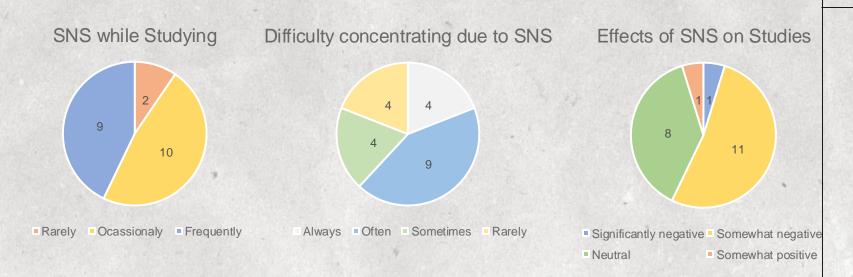We analyzed the BSMAS and APS scores by finding a correlation between the two variables.

- Positive correlation of **0.72**

- **p-value** of **0.000233**. the result is significant at p< .05

Self-efficacy and Grades

.
- Possible self-efficacy score : 5-25
- Average self-efficacy score: 17
- Standard deviation: ~5
- Average CGPA: 3.9

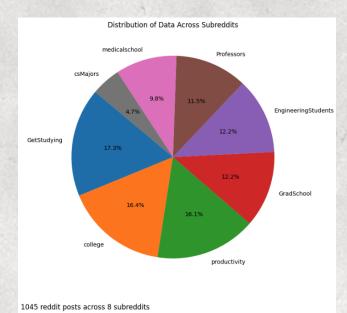### SNS while Studying

2
9
10

■Rarely ■Ocassionaly ■Frequently

Difficulty concentrating due to SNS

4   4
4
9

■Always ■Often ■Sometimes ■Rarely

Effects of SNS on Studies

1 1
8
11

■Significantly negative ■Somewhat negative
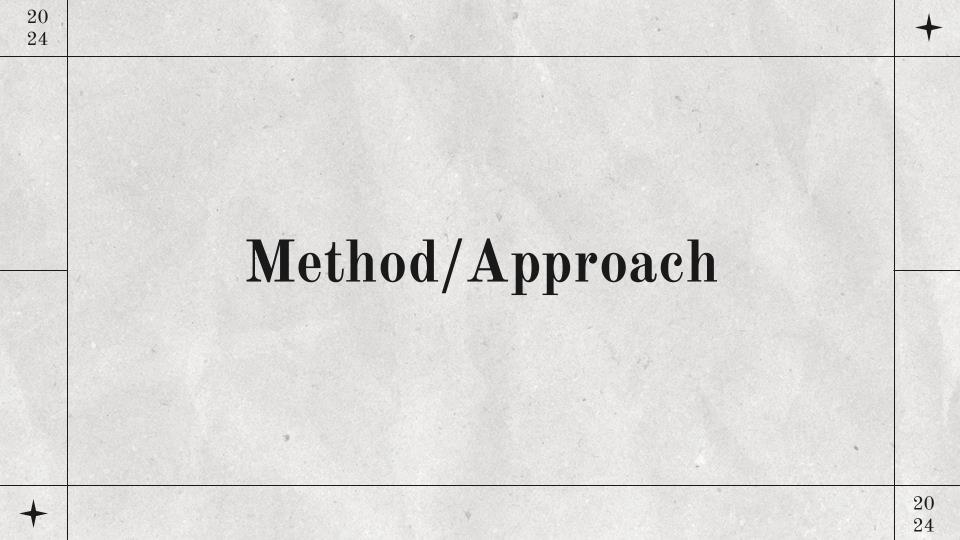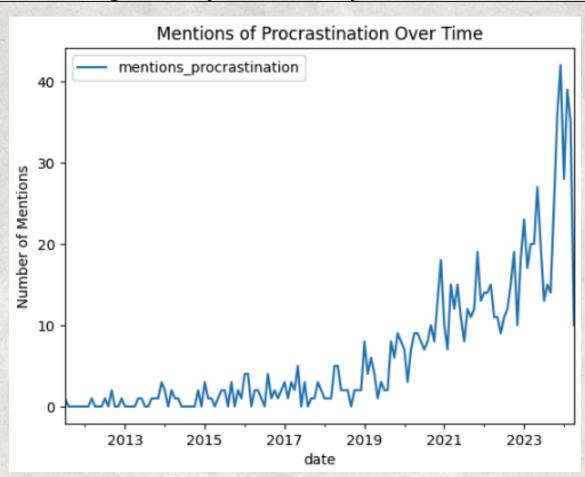■Neutral ■Somewhat positive

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Reddit Exploration

Data

Reddit Dataset

1. Scraped Reddit posts for mentions of procrastination among 8 different subreddits
2. Queried keywords associated with procrastination such as social media, assignments, social life, classes, covid etc.

Distribution of Data Across Subreddits

1045 reddit posts across 8 subreddits

Method/Approach

Mentions of Procrastination Over Time
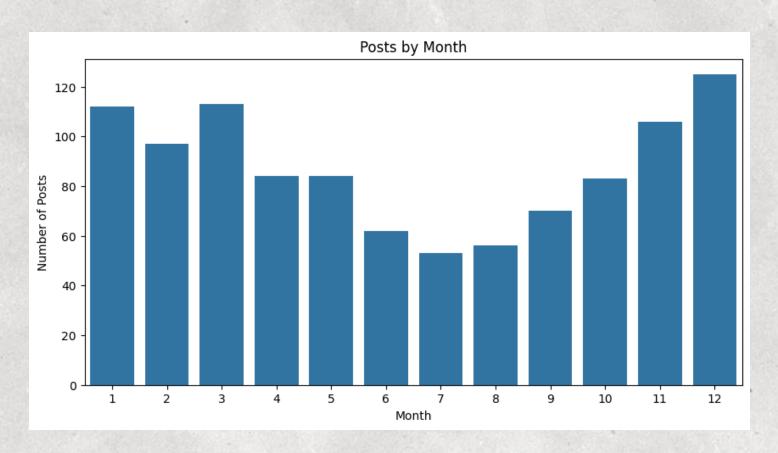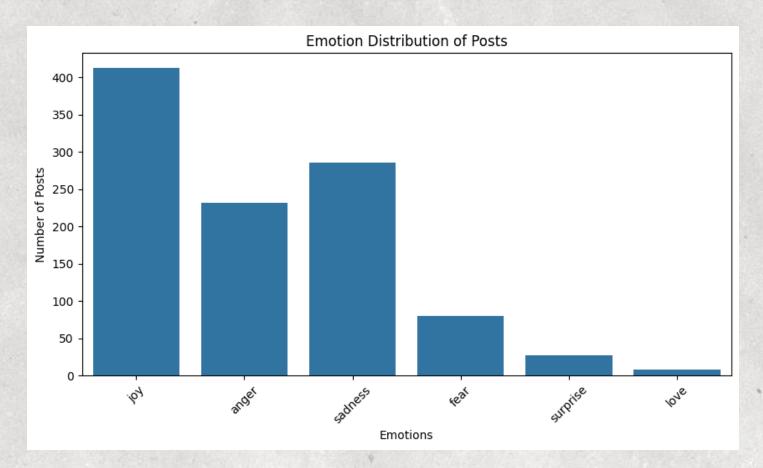
Exploratory Data Analysis - Temporal
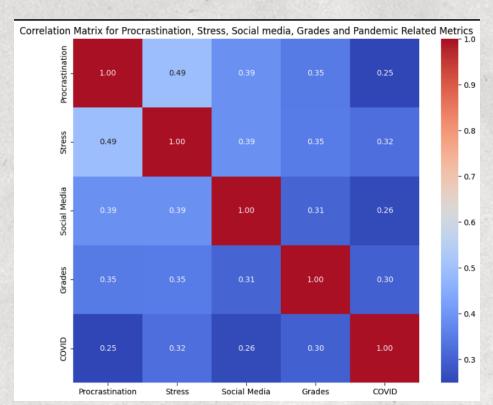
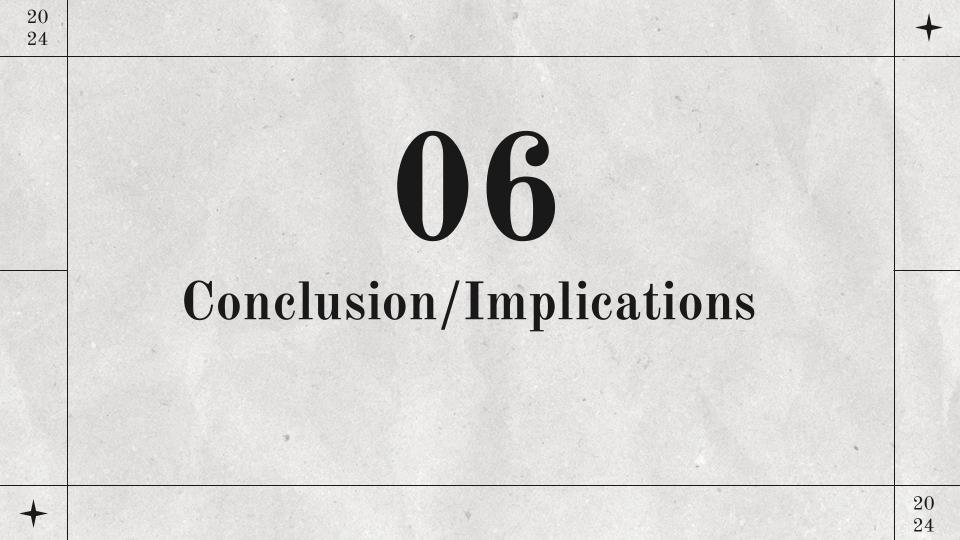# Exploratory Data Analysis –Emotion Keywords

Correlation Analysis

1. Identify keywords associated with each feature in procrastination, stress, social media, grades and pandemic.

2. Use lemmatization to standardize variations of keywords in the post text and search for mentions of each feature.

3. Calculate correlation between pairs of features.

4. Positive correlation found with procrastination and all features among stress, social media, grades and pandemic, with low P-values.

Correlation Analysis

Correlation Matrix for Procrastination, Stress, Social media, Grades and Pandemic Related Metrics

Feature Comparison	P-values
Procrastination and Stress	2.79E-65
Procrastination and Social media	3.44E-39
Procrastination and Grades	7.11E-31
Procrastination and Covid	3.07E-16

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Conclusion/Implications

Conclusion

Social Media Usage and Academic Procrastination have a positive correlation

Positive correlation between procrastination and stress, grades, social media use and the pandemic.

Burnout to counter academic procrastination effects

Students perform well academically despite procrastination due to high self-efficacy

Implications

Policy and Guidelines

 Educational Intervention

Parental Guidance

 Technological Design

Mental Health Support

Questions?

Thank you!!