

# High Intensity Physical Activity Improves Sustained Attention When Compared to Cell Phone Use

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## BACKGROUND

Taking short breaks is beneficial to mental functioning (Albulescu et al. 2022).

10-minute, intense physical activity (PA) may improve mental functioning and may be used as a good study break (Neidermeier et al., 2022).



Cell phone use during breaks seems to be detrimental to attention (Kang and Kurtzberg, 2019).

However, not all findings come to the same conclusion on high intensity PA and attention, some find it ineffective (Znazen et al., 2022).



The purpose of this study was to discover what students do on study breaks, and to find out if acute, high intensity PA was an effective study break.

## PROCEDURE

### Survey



### Experiment



## RESULTS

Only **55%** of students do any kind of Physical Activity (PA) during their 5 minute to 1-hour long study breaks.

Non-kinesiology students scored on average **1 POINT HIGHER** on the Media Multitasking Measure-Short.

Perceived attention and emotion scores **DID NOT CHANGE** within individuals or between conditions (PA and cell phone use).

### 5 Most Popular Activities for 5 Minute-30 Minute Breaks

- **SOCIAL MEDIA (85%)**
- Bathroom (73%)
- Eating (72%)
- In-Person Conversations (55%)
- Drinking Caffeine (48%)

### 5 Most Popular Activities for 30 Minute-1 Hour Breaks

- Eating (78%)
- **SOCIAL MEDIA (75%)**
- Bathroom (66%)
- In-Person Conversations (62%)
- Watching TV (53%)



Non-Kinesiology Students Engaged in More...

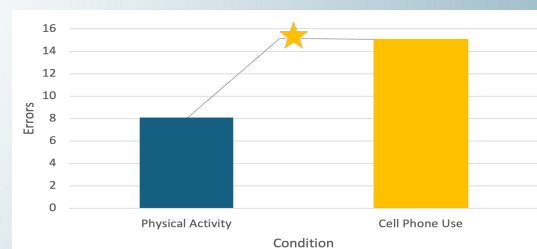
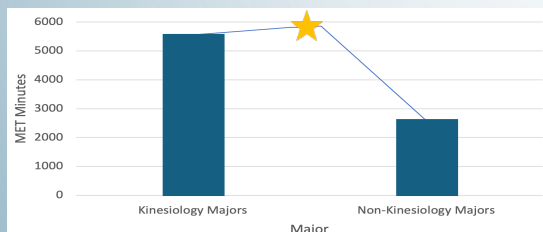
TV + Messaging

TV + Social Media

Messaging + Social Media



Kinesiology students had **DOUBLE** the Metabolic Equivalent of Task Minutes on average, meaning they did more activity of higher intensity than typical students.



There were significantly **MORE ERRORS** in the cell phone use condition, compared to the high-intensity physical activity condition.

## CONCLUSION AND RECOMMENDATIONS

Different groups should be studied to discover which populations benefit from PA.



Social media is becoming more pervasive and needs to be studied more.

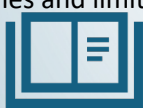


PA is a better study break for attention than cell-phone use.

Different activities should be compared: Mindfulness, spending time with family...



Strategic study breaks are essential for enhancing attention, especially for students with demanding study schedules and limited time.



Invest time in being active, especially when time seems most elusive.



### References

