## Oct 19, 2023 | [data play](https://www.google.com/calendar/event?eid=M25iaGhpcnBuNWFoZWJxMmNqdDhobWhlaG4gZ3VvZmFuZy5tYS5nckBkYXJ0bW91dGguZWR1)

Attendees: [Joseph Nano](mailto:joseph.nano.gr@dartmouth.edu) [J H](mailto:jane.han.gr@dartmouth.edu) [Freya Ma](mailto:guofang.ma.gr@dartmouth.edu)

**Meeting Agenda (30-45 minutes)**

* Data clean-up - Excel
* Create a data dictionary

**Copied from proposal**

**Aim 1:** **Visualization of insomnia symptomatology in adolescents by subgroups**

1.1. Visually identify distinct subgroups among adolescents based on demographic variables (e.g., **Age, Race**) and their distribution on the **GCTI, ASHS, ASQ** battery tests.

1.2. Utilize data visualization techniques (e.g., **heatmap analysis**) to depict the relationship between identified subgroups and psychological factors. Provide an intuitive representation of how diverse psychosocial factors contribute to varied sleep patterns in adolescents.

**Aim 2:** **Statistical Analysis of Sleep Quality and Habits in Adolescents**

2.1. Use **sleep quality** to predict **mental health and habits** among adolescents with regression analyses.

2.2. Investigate if the interaction effect of significant predictor factor(s) above and the race factor is statistically significant.

**Chosen Variables to play around**

* **Joe:** 
  + ISI\_total, BDI\_total : pearson correlation (r = 0.597, t = 7.1751, df = 93, p-value = 1.721e-10)
* **Jane:** 
  + ISI - GCTI\_total: pearson correlation
* **Freya:**
  + Age/Race, **GCTI, ASHS,**  cope\_growth & ISI\_total (something that shows negative correlation)

**Completed task today**

* Created a metadata sheet
  + Created data dictionary (variable names with data descriptions)
* Cleaned the ‘Raw data’ further to make sure there are no empty cells (deleted empty columns)

**Action items**

* Each play around with the chosen variables (R) and discuss the results next week
* Come up with a detailed timeline for each aims and subsections
* **Future meetings:** 
  + ~~Thursday, Oct.19th, 4pm-5pm (or 4:30pm)~~
  + Tuesday, Oct.24th, 4pm-5pm (or 4:30pm)
  + Thursday, Oct.26th, 4pm-5pm (or 4:30pm)
  + Tuesday, Oct.31st, 4pm-5pm (or 4:30pm)
  + Thursday, Nov.2nd, 4pm-5pm (Draft one presentation? & TA feedback)
  + Tuesday, Nov.7th, 4pm-5pm (\*\*Practice Presentation\*\*)
  + **Thursday, Nov.9th: FINAL PRESENTATION**