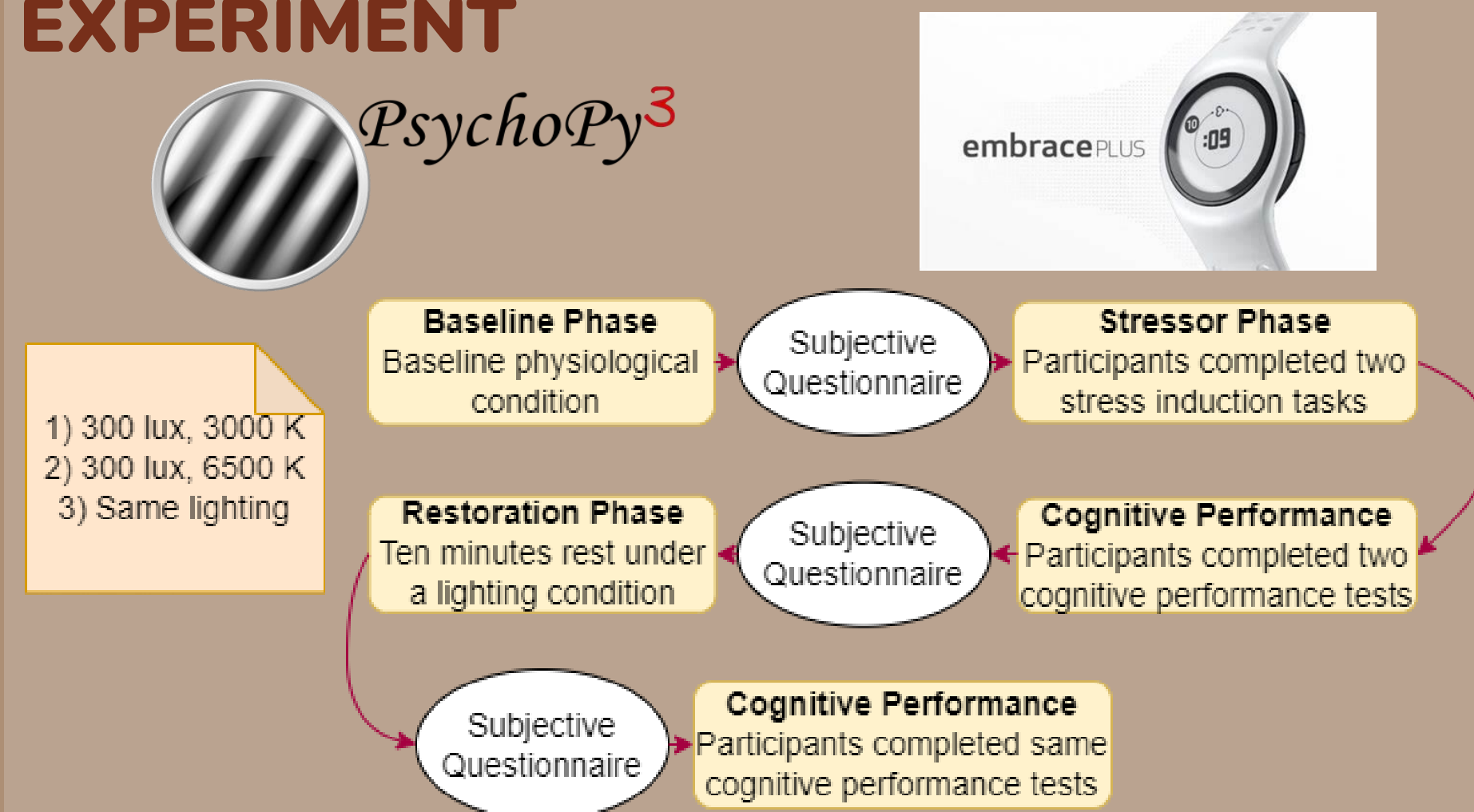


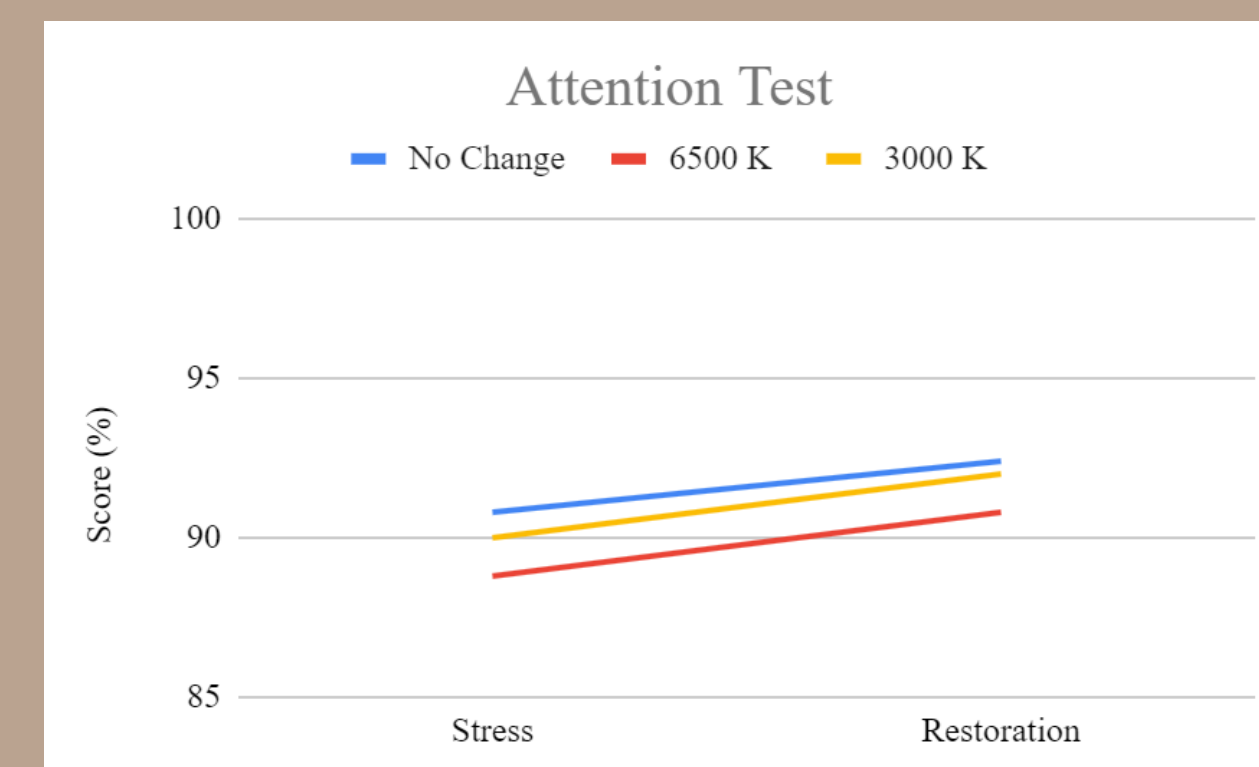
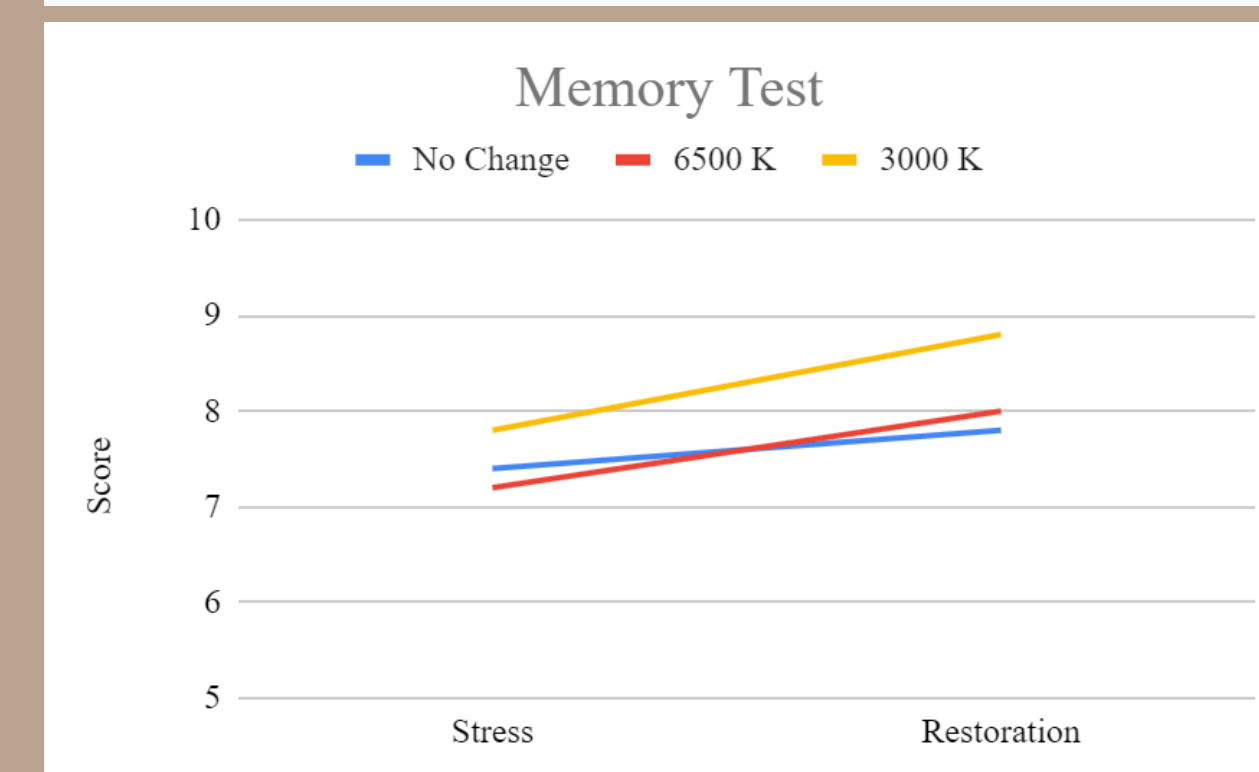
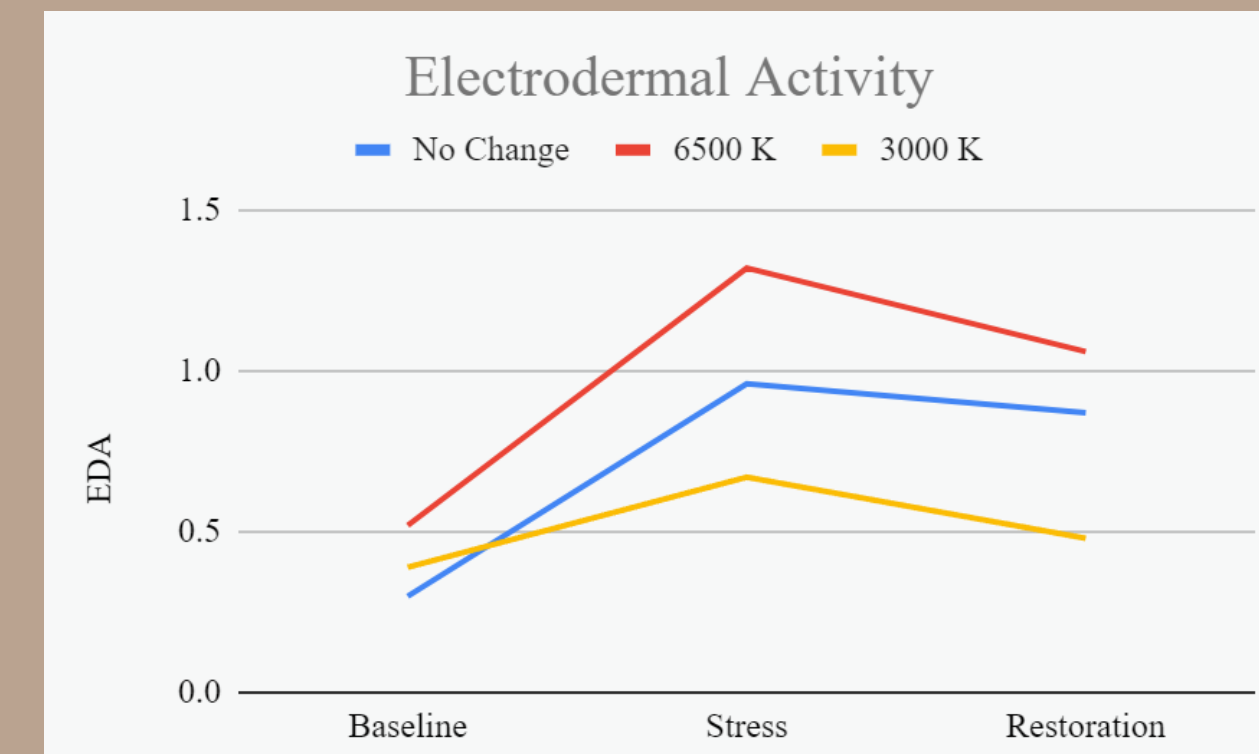
## INTRODUCTION

- Americans, on average, spend 90% of their time indoors, highlighting the importance of human-building interaction.
- Previous research has shown negative association with light in indoor environments and stress levels.
- By analyzing human interactions and physiological conditions associated with specific light environments, it is possible to discover ways to build workspaces that boost productivity and overall happiness of workers.

## EXPERIMENT

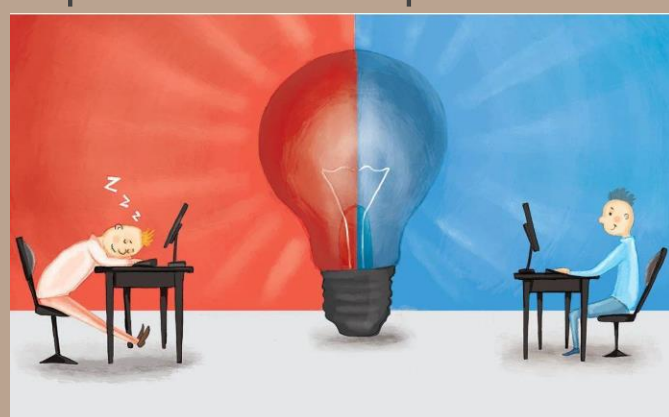


## RESULTS



## OBJECTIVE

- Dr. Berckerik-Gerber's research** at i-Lab focuses on studying human-building interaction with user-centered environments.
- Vital Impact:** Human-centered, responsive buildings can address user's needs in numerous environments, such as office spaces and hospitals.



- Objective of experiment:** To analyze how light elements in an indoor environment affect a person's physiological conditions and performance from stress recovery.
- Significance:** This study's outcomes can offer guidelines for optimizing lighting conditions to enhance office workers' performance and well-being.

## SKILLS

- Technical:** Utilization and creation of an experiment using **PsychoPy**
- Research:** Organizing, planning, and scheduling an experiment and analyzing acquired statistics/data
- Communication:** Research participation interaction
- Contribution:** Teach high school students about the process of research

## NEXT STEPS

- Continue** to challenge myself with difficult courses to explore the various fields in STEM
- Utilize** my skills to engineer programs, systems, and devices to make an impact in people's lives
- Advice for future SHINE students:**
  - Continue to expand out of the STEM boundaries and to pursue STEM challenges
  - Avoid setting limits on what you can accomplish

## ACKNOWLEDGEMENTS

We would like to express our earnest gratitude and appreciation to the following people, all of whom made our SHINE experience possible, to **Professor Becerik-Gerber** for allowing us to participate in i-Lab, and to our **Ph.D. mentor Mohamad Awada**, for guiding and mentoring us throughout our research project