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Cortland Psychophysiology Laboratory

Participant Information

About Our Research

The Cortland Psychophysiology Laboratory (CPL) researchers study personality, affect, and cognition. We are interested in understanding how personality characteristics, cognitive processes, and emotion are related with psychophysiology.

Individuals who volunteer for CPL research are directed to this presentation, where they can receive more information about sessions in the laboratory.



Introduction

This presentation will provide a brief introduction to participation and the psychophysiology measurements taken in the laboratory.

During this presentation you will discover that participation is simple and straightforward. Our research involves no deception, it requires little preparation on your part, and it involves no special risks or discomforts beyond those that college students normally encounter in their daily life.

Note: The CPL uses no latex or other supplies, materials that are known to be common allergens; the laboratory is rigorously cleaned before and after every participant, using hospital grade products.



Appointments

- Appointments are scheduled through a researcher or research assistant, in accordance with the study procedures approved by the IRB
 - Appointments are normally scheduled in the afternoon, in 2-hour time blocks; ideally, appointments are scheduled for times when individuals have 3-hours free. We advise that participants plan a short between the time they participate and the time when they need to arrive for class, work, or other activity
 - Students should not miss class, a team practice, other extracurricular activities, or work to participate
 - If an appointment must be cancelled or rescheduled, please let us know as soon as possible. Advanced notice allows us to schedule another student in that time slot. Please email: <u>physiopsych@cortland.edu</u> or call (607) 753-5437 to cancel or reschedule. If you do not want to be rescheduled for another time, please let us know.

All CPL research is preapproved through an Institutional Review Board (IRB) functioning in compliance with federal, state, and local laws, rules, and regulations. CPL researchers also ensure that their work complies with the ethical guidelines of the American Psychological Association (APA). CPL researchers hold doctoral degrees in psychology or related fields, and all research assistants are trained in research methodology, psychophysiology, and human research participant protections.

Before a Laboratory Session

- Even when participants know where the laboratory is located, the research assistant will meet all participants at **Old Main 134-F**
- If you can, please arrive at the laboratory
 - with clean hair (without hairspray, gel, or other hair products)
 - with no cosmetics applied to the face or ears
 - I2-hours free from alcohol or drugs (please continue to take medications prescribed by your physician)
 - feeling comfortable (not hungry or thirsty)
 - without any valuable jewelry (procedures require that jewelry around the eyes, ears, neck, and one hand need to be removed before measurement)
 - free from illness

Note: In the fall, all CPL researchers and research assistants working with participants voluntarily receive seasonal flu immunizations

Arriving to a Laboratory Session

- After meeting the research assistant, you will be asked to
 - view a slide show orientation to the laboratory, which describes the space and equipment and details the procedures
 - review informed consent with the research assistant
 - a description of research participant rights can be viewed in advance of your appointment at:

http://web.cortland.edu/physiopsych/surveys/rights.html

CPL Research Activities

- Participants are asked to
 - complete surveys
 - that help us to protect participants' welfare,
 - to ensure the integrity of the scientific information reported by CPL researchers, and
 - to measure personality, cognitive, social, and emotional characteristics
 - participate in a psychophysiology measurement session
 - Dr. Eaton's research involves viewing a set of pictures (some positive, some negative, and some neutral)
 - the pictures contain images commonly appearing in mainstream media (TV dramas and movies) and are images familiar to college students



Psychophysiology (EEG)

- EEG is the acronym for electroencephalography, which refers to the measurement of brain waves through small sensors that rest on top of healthy, clean skin
- EEG is one of the oldest methods used for measuring CNS activity, its use dates back almost 100 years; it continues to be used in thousands of research laboratories and hospitals worldwide
- If you are familiar with EEG from a doctor's office or a hospital setting, the use of EEG in the CPL is different from clinical use



Psychophysiology (EEG)

- In our laboratory, we use a red or blue cap (see picture above)
 - the sensors are located inside of white plastic discs,
 - the cap allows us to place all of the EEG sensors in one application, without needing to tape each sensor to the scalp,
 - a tiny amount of saline gel fills the gap between the sensor and the scalp, providing a connection for measurement (the space to be filled is very small, about ¹/₂ the size of a pencil eraser)
 - participants report that the cap feels like wearing a swimming cap.

As you can see, the space is much smaller than a dime and smaller than a standard pencil eraser





Psychophysiology (EEG)

- EEG is noninvasive, which means that it <u>does</u> <u>not</u> involve procedures that "tend to infiltrate or destroy healthy tissue"
- For example,
 - EEG <u>does</u> <u>not</u> involve drinking any solution
 - EEG <u>does not</u> require instruments, methods, or procedures that enter the body
- Because EEG is noninvasive and it involves no special risk or discomfort, it is used for brainwave measurement with participants from any age group (from infants to aging populations)



Final notes

- Your comfort is very important to us. Please feel free to ask questions about our research at any time (contact us at <u>physiopsych@cortland.edu</u> or at 607-753-5437)
- Students currently receive 2-hours of extra credit in their psychology class for participating in the laboratory portion of our research

The CPL researchers and research assistants would like to thank you for your time considering participation in our research