Measuring Physiological Reactivity to Everyday Events in Anxiety and Depression
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I spent this summer working in the Boundaries of Anxiety and Depression Lab under the co-mentorship of Dr. Ayelet Ruscio and Dr. Danielle Mathursul. The Ruscio Lab aims to better understand anxiety and depression, and why they occur together so frequently. My project focused on studying research subjects' physiological responses to events occurring in daily life. Participants were given smartphones, and at regular intervals throughout the day, were asked to report about significant events that had occurred and also completed attitude scales. At the same time, the participants wore wrist sensors for a full week continuously; these wrist sensors tracked their arousal levels throughout the day. The goal of my PURM project was to investigate various methods for processing and analyzing all of the data that we collected. These methods of data collection are fairly novel, so there was not much previous research to refer to.

I aimed to determine the most efficient way to process the arousal data we received, the best way to label a "baseline" arousal measurement, and the best way to label an "event" arousal measurement. Since participants had self-reported the times that significant events took place during the day, I was not sure if this reporting would be entirely accurate, and I wanted to investigate if there were clues in the wrist sensor data to help us determine the participants' accuracy.

My research experience taught me a great deal about the field of clinical psychology, and the research methods involved. As my project was methodologically oriented, I was able to test my own ideas on the best ways to define an "event" and a "baseline" arousal measurement. After I had compiled a list of the different methods of defining an event and a baseline, I ran statistical tests to compare these methods and determine which produced the most reliable results.

Overall, my PURM experience taught me how to think critically about research in the clinical psychology field. I was challenged to come up with various ways to analyze the data, and I was given the opportunity to actually test my ideas. I'm very excited to be continuing working in the Ruscio lab this upcoming year, and to use my data processing programs on the data collected through the study.