Hypotheses
BLISP laboratory experiment data

Emotional state and regulation focused

- **Hypothesis 1:** Participants exposed to blue light will report higher calmness compared to participants exposed to white light.
- **Hypothesis 2:** Participants exposed to blue light will exhibit greater increases in positive valence and high-arousal emotional states compared to participants exposed to white light.
- **Hypothesis 3:** Participants with greater anxiety, stress, and depressive symptoms will exhibit stronger changes in state emotions in response to blue light exposure compared to white light exposure.

Suicidality focused

- **Hypothesis 4:** Participants exposed to blue light will exhibit greater decreases in suicide related emotions compared to participants exposed to white light.
- **Hypothesis 5:** Participants with higher levels of suicide ideation will exhibit larger decreases in suicide related emotions than participants with lower levels, in response to blue light exposure.
- **Hypothesis 6:** The suicide-related emotions (hopeless–hopeful, worthless–worthy, burdensome–valuable, lonely–connected, resigned–determined) will across participants fit consistently into the circumplex model, meaningfully connecting to state emotions in valance and activation domains

Behavioural persistence focused

- **Hypothesis 7:** Participants exposed to blue light will have higher behavioural perseverance compared to participants exposed to white light.
- **Hypothesis 8:** Negative emotional state and suicidality will be negatively associated with behavioural perseverance.
- **Hypothesis 9a:** The negative association between emotional state and behavioural perseverance will be lower for participants exposed to blue light
- **Hypothesis 9b:** The negative association between emotional state and suicidality will be lower for participants exposed to blue light

Psychophysiology

- **Hypothesis 10:** Increases in sympathetic activity will be associated with higher emotional arousal (activation) within the circumplex model of affect.
- **Hypothesis 11:** Increases in parasympathetic activity will be associated with lower emotional arousal (activation) within the circumplex model of affect.