

Socially-Induced Placebo Analgesia as a Potential Reinforcer of Non-Suicidal Self-Injury



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Background & Goals

Background:

- **Non-suicidal self-injury (NSSI):** the intentional and direct injuring of one's body without suicidal intent (e.g., cutting or burning one's skin)
- Research literature has emerged to define and classify NSSI, as well as explore why people engage in the behavior.
- The literature generally posits that emotion regulation is the primary function of NSSI. It seems paradoxical that something painful could make someone feel better, but the opponent process theory helps explain why something initially painful becomes less painful with repetition. In fact, research has demonstrated that many who engage in NSSI report experiencing no pain while doing so.
- Our lab previously conducted an experiment and found that in response to a painful task, individuals who engaged in NSSI experienced improved information processing and improved emotion regulation, consistent with other research.
- Though research offers a general understanding of why individuals continue to engage in NSSI, little research has addressed how the behavior is acquired, given the pain that is initially associated with it.

Goals:

- The goal of this project was to explore the initial acquisition of NSSI, particularly as influenced socially.
- **Socially-Induced Placebo Analgesia (SIPA)** – Pain literature demonstrates that when individuals are primed to expect more pain, they report experiencing more pain. Similarly, when they are primed to expect less pain, they report experiencing less pain. We explored this concept as it relates to NSSI; if an individual does not expect NSSI to be painful because of social influence, he or she may actually experience less pain, helping to explain the initial acquisition of the behavior.
- We informed three randomly assigned groups of participants that cold water, an often-used experimental pain stimulus, was going to be either: (1) very painful; (2) relaxing; or (3) moderately painful. We then measured their physiological response following the cold water task.

Results

- In accordance with the experiment we previously conducted, we expected the following results:
 - 1.) Pain Group – following the pain task, we expected those in this group to experience a decrease in emotion regulation and poorer information processing, resembling the responses of individuals in our previous study who did not engage in NSSI.
 - 2.) Relaxing Group – following the pain task, we expected those in this group to experience an increase in emotion regulation and improved information processing, resembling the responses of individuals in our previous study who did engage in NSSI. Furthermore, we expected this effect to become more pronounced with repetition of the pain task, in accordance with the opponent process theory.
 - 3.) Control Group – following the pain task, we expect those in this group to react similarly to the pain group.
- We are still in the data collection phase, and plan to meet our goal of collecting data from 90 participants by the fall semester.