



# **Examining How Emotional Distress in Athletic and Non-Athletic Female College Students Manifests as Localized Non-Specific Chronic Pain**

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# Abstract

- Emotional distress can often manifest as localized non-specific chronic pain. This research focuses on female athletic and non-athletic college students and how they perceive pain. Theorizing that non-athletes will perceive chronic pain and emotional distress as more correlated than the athletic students. While the athletic students will perceive chronic pain as a result of physical strain rather than associating it with their emotional distress.

# Literature Review

- Goldbart et al. (2020) it was suggested that emotional distress and chronic pain are correlated.
  - Finding that pain often expressed itself in more than just physical pain, but that emotional distress would rise (Goldbart et al., 2020).
- Showing ultimately that a person's negative emotions correlated with chronic pain (Goldbart et al., 2020).

# Hypotheses

- Non-athletes will perceive a connection between chronic pain and emotional distress than the athletic students.
- Athletic students will perceive chronic pain as a result of physical strain rather than associating it with their emotional distress.

# Research Question

- Can emotional distress manifest as localized non-specific chronic pain?

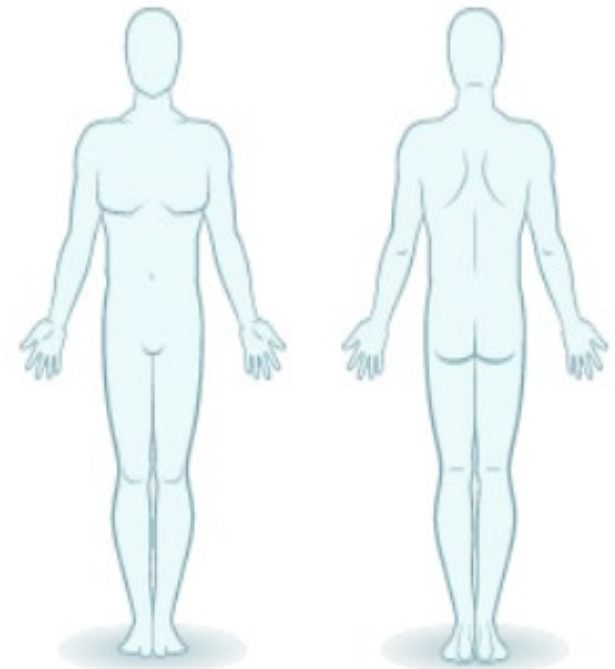


# Participants

- 40 total female college students
- 20 non-athletes
- 20 athletes
- Criteria:
  - Must not have any current extreme injuries or distress
  - Must answer a history question of any past traumatic injuries and/or distress that are still affecting them.

# Measures

- The Centrality of Events Scale (Berntsen & Rubin, 2005)
- Emotions Survey student made referencing the Feeling Wheel (Willcox, 1982)
- Chronic Pain questionnaire Get Healthy Stay Healthy (GHS) (Pfizer, 2017)
- The Pain Self-Efficacy Questionnaire (PSEQ) (Nicholas, M. K., 2007)



Body Map from the Chronic Pain Questionnaire (Pfizer, 2017)

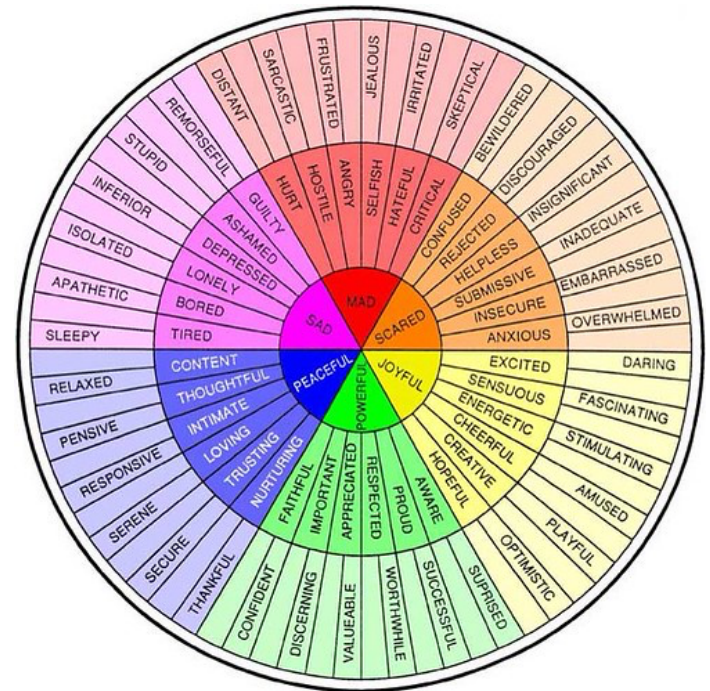
# Procedures

- Demographic questionnaire and consent forms
- Surveys will be taken in the following order:
  - The Centrality of Events Scale (Berntsen & Rubin, 2005)
  - Emotions Survey student made referencing the Feeling Wheel (Willcox, 1982)
  - Chronic Pain questionnaire Get Healthy Stay Healthy (GHS) (Pfizer, 2017)
  - The Pain Self-Efficacy Questionnaire (PSEQ) (Nicholas, M. K., 2007)
- Ending with participants being given a date for a pizza party and debriefing form.



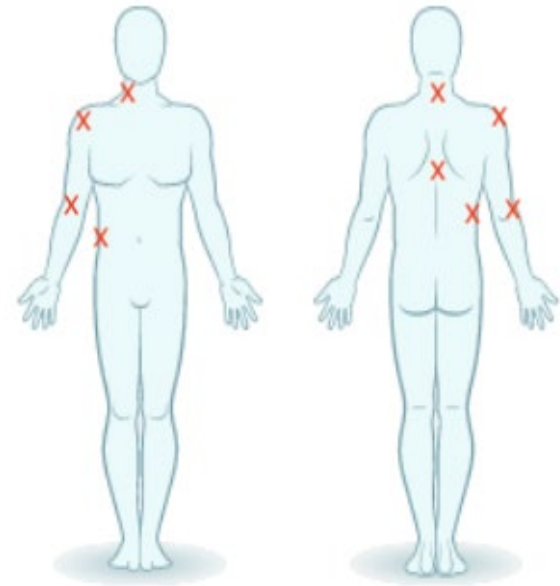
# Expected Results

- Marking on the higher end of experiencing emotions than athletes.
  - Displaying a wide variety.
- Body map showing more non-specific areas of pain



# Expected Results

- Marking specific areas on the body map to show more targeted areas of pain.
  - The body map markings being clustered together than non-athletes.



# Limitations

- This study is focusing on self-report of chronic pain and emotional distress recorded through surveys, this is dependent on the vulnerability of participants.
- There are limitations to the instruments that are available for this study, the use of surveys is heavily relied upon, rather than pain inducing or measuring instruments.
- This study is focusing on how Covid-19 may have had an impact on the participants' mental state and their pain, not looking further into the history of pain in the individual.

# References

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