

The Effect of the Manipulation of Worry on Acute Pain in Self-described Worriers

Spring Research Symposium
May 14th 2010

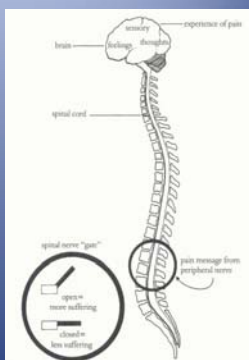
Lauren Holland
Michael McDonnell
Zachary Roman
Aubrey Thomson

Purpose & Background

- Test effect of manipulation of worry on acute pain
- Worry
 - A stream of negative thoughts
 - Negative Affect
 - Uncontrollable
- Catastrophising
 - A component of worry
 - Imagined outcome becomes worse

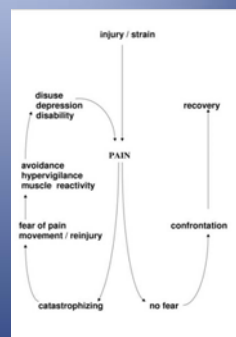
Gate Control Theory

- Pain is more than a physiological response
- Gating mechanism in spinal cord
 - Transmission cells
 - Descending pathways
- Influences on the gate
 - Affective states
 - Brain cognitions



Fear-Avoidance Model

- Fear-avoidance behavior remains without tissue damage
- Two reactions to injury
 - Adaptive
 - Maladaptive
- Catastrophizing about Pain
 - Pain-related fear
 - Avoidance
 - Depression
 - Disability



Hypotheses

- Pain and worry conditions would result in more catastrophizing steps than the happy condition
- Worry would cause participants to report higher pain values

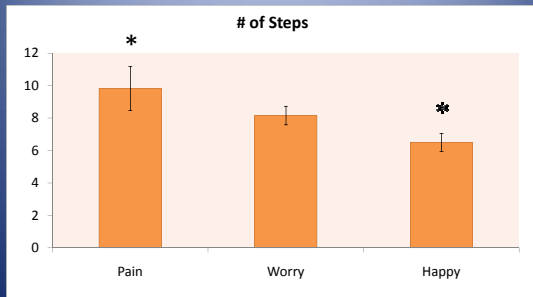
Methods

- Participants
 - 36 self-described worriers (21 women, 15 men)
- Questionnaires
- Finger pressure device
 - Four different weights:
 - Light, medium, heavy, extra heavy
- Catastrophizing interview
 - “What about makes you worry?”
- Finger pressure device
- Post-questionnaires
- Debriefed



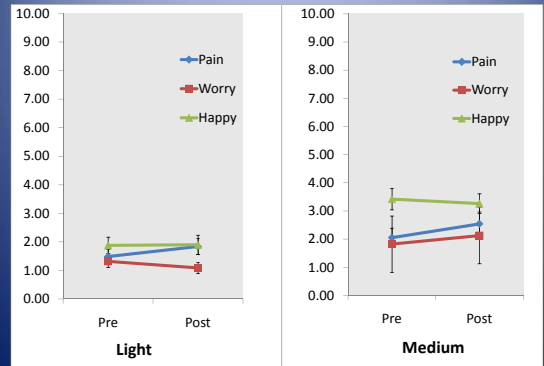
Forgione-Barber Device

Results

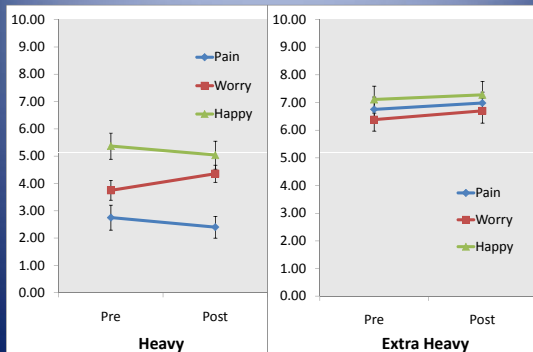


* indicates a significance of $p < 0.05$

Results



Results



Discussion

- **Hypothesis 1:** Catastrophic worrying would increase reported perception of pain
 - Partly supported
- No significant main effect but large effect size for light and medium weights
- Threshold of pain and catastrophic worry
- Ceiling effects

- **Hypothesis 2:** The pain and worry conditions would result in more catastrophizing steps than the happy condition
 - Supported

- Limitations
- Future Research