

Experiment 1.

Exercise-Ischemic Pain: Multidimensional Pain Experience

Overview: You will be measuring Pain Threshold and Pain Tolerance. Have your partner record the time at which you experience these. You will need a stop watch to record time.

1. Place blood pressure cuff on left upper extremity
2. Exsanguinate the left arm by elevating it above ear level for 30 sec.
3. Keep arm overhead. Occlude the arm with a standard blood pressure cuff by inflating the cuff to 240 mm Hg. **START TIMER**
4. Open and close hand (squeeze tightly) continuously.
5. Record the time at which you first produced pain (ischemic pain threshold) and the time at which subjects no longer felt able to tolerate the pain (ischemic pain tolerance)
 - Pain threshold _____ seconds
6. Continue until the pain becomes intolerable.
 - Pain tolerance _____ seconds
7. Fill out the short-form of the McGill Pain Questionnaire about this pain experience.

Equipment:

Blood pressure cuff

Stop watch

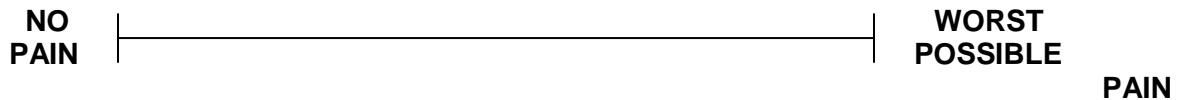
Experiment 1. McGill Pain Questionnaire

1. Check the column to indicate the level of your pain for each word.

	<u>NONE</u>	<u>MILD</u>	<u>MODERATE</u>	<u>SEVERE</u>
1. THROBBING	0)_____	1)_____	2)_____	3)_____
2. SHOOTING	0)_____	1)_____	2)_____	3)_____
3. STABBING	0)_____	1)_____	2)_____	3)_____
4. SHARP	0)_____	1)_____	2)_____	3)_____
5. CRAMPING	0)_____	1)_____	2)_____	3)_____
6. GNAWING	0)_____	1)_____	2)_____	3)_____
7. HOT-BURNING	0)_____	1)_____	2)_____	3)_____
8. ACHING	0)_____	1)_____	2)_____	3)_____
9. HEAVY	0)_____	1)_____	2)_____	3)_____
10. TENDER	0)_____	1)_____	2)_____	3)_____
11. SPLITTING	0)_____	1)_____	2)_____	3)_____
12. TIRING-EXHAUSTING	0)_____	1)_____	2)_____	3)_____
13. SICKENING	0)_____	1)_____	2)_____	3)_____
14. FEARFUL	0)_____	1)_____	2)_____	3)_____
15. PUNISHING-CRUEL	0)_____	1)_____	2)_____	3)_____

TOTAL: _____ Sensory (1-10) _____ Affective/Evaluative (11-15) _____

2. Indicate on this line how bad your pain is: the left end of the line means no pain at all, the right end means the worst pain possible.



3. Check the row to indicate how you would describe your pain (PPI).

- 0 NO PAIN _____
- 1 MILD _____
- 2 DISCOMFORTING _____
- 3 DISTRESSING _____
- 4 HORRIBLE _____
- 5 EXCRUCIATING _____

Experiment 2.

A. Central Excitability-Temporal Summation Test

1. Place arm in device and weight on the middle of the forearm extensor mass.
2. Do 3 times.
Rate Pain _____. (0 no pain and 10 worst pain imaginable)
3. Apply stimulus every 2 seconds for 60 seconds.
Rate Pain _____. (0 no pain and 10 worst pain imaginable)

B. Central Excitability-Temporal Summation Test

1. Using the von Frey filament apply to the ventral aspect of the wrist.
2. Do 3 times.
Rate Pain _____. (0 no pain and 10 worst pain imaginable)
3. Apply stimulus every 1 seconds for 60 seconds.
Rate Pain _____. (0 no pain and 10 worst pain imaginable)

Equipment:
Pressure pain device or von Frey filament

Experiment 3.

Central Inhibition-Conditioned Pain Modulation Test

You will be recording pain ratings and pressure pain threshold. You will need a stop watch to time how long you are in water bath.

1. Record Pressure pain threshold on the left forearm – put an X where you took measurement
2. Place right arm in ice water for 1 minute
3. Record pain ratings every 30 seconds on a scale of 0-10 with 0 being no pain and 10 being the worst pain imaginable.

PPT before _____

PPT after _____

Equipment:

Stop watch

Ice water bath

Pressure algometer

Experiment 3.

PCS

We are interested in the types of thoughts and feelings that you have when you are in pain. Listed below are thirteen statements describing different thought or feelings that may be associated with pain. Using the following scale, please indicate the degree to which you have these thoughts and feelings when you are experiencing pain.

	0	1	2	3	4
	Not at all	To a slight degree	To a moderate degree	To a great degree	All the time
1. I worry all the time about whether the pain will end.	0	1	2	3	4
2. I feel I can't go on.	0	1	2	3	4
3. It's terrible and I think it's never going to get any better.	0	1	2	3	4
4. It's awful and I feel that it overwhelms me.	0	1	2	3	4
5. I feel I can't stand it any more.	0	1	2	3	4
6. I become afraid that the pain may get worse.	0	1	2	3	4
7. I think of other painful experiences.	0	1	2	3	4
8. I anxiously want the pain to go away.	0	1	2	3	4
9. I can't seem to keep it out of my mind.	0	1	2	3	4
10. I keep thinking about how much it hurts.	0	1	2	3	4
11. I keep thinking about how badly I want the pain to stop.	0	1	2	3	4
12. There is nothing I can do to reduce the intensity of the pain.	0	1	2	3	4
13. I wonder whether something serious will happen.	0	1	2	3	4

TOTAL:

Experiment 4.

Pain Intensity and Unpleasantness-Pain Ratings

You will test each sauce and rat your pain on a scale of 0-10 with

1. Test the 3 sauces and rate your pain intensity and unpleasantness on a scale of 0 to 10. For intensity the anchors are no pain to worst pain imaginable. For unpleasantness the anchors are not unpleasant to most unpleasant imaginable

A.	Intensity _____	Unpleasantness_____
B.	Intensity _____	Unpleasantness_____
C. Hot	Intensity _____	Unpleasantness_____
D. Very Hot	Intensity _____	Unpleasantness_____
E. Warning, Extremely Hot	Intensity _____	Unpleasantness_____

2. Describe your pain to each
 - a. A.
 - b. B.
 - c. C. Hot
 - d. D. Very Hot
 - e. E. Warning, Extremely Hot
3. Did your ratings match the marketed “hotness”
4. Did knowing that ‘D’ was extremely hot stop you from trying it or increase your desire to try it? Were you most fearful of ‘A’, ‘B’, or ‘C’, ‘D’ or ‘E’
5. Fill out TSK (tampa scale of kinesiophobia).

Experiment 4. Tampa Scale for Kinesiophobia

1. I'm afraid that I might injury myself if I exercise	1	2	3	4
2. If I were to try to overcome it, my pain would increase	1	2	3	4
3. My body is telling me I have something dangerously wrong	1	2	3	4
4. My pain would probably be relieved if I were to exercise	1	2	3	4
5. People aren't taking my medical condition seriously enough	1	2	3	4
6. My accident has put my body at risk for the rest of my life	1	2	3	4
7. Pain always means I have injured my body	1	2	3	4
8. Just because something aggravates my pain does not mean it is dangerous	1	2	3	4
9. I am afraid that I might injure myself accidentally	1	2	3	4
10. Simply being careful that I do not make any unnecessary movements is the safest thing I can do to prevent my pain from worsening	1	2	3	4
11. I wouldn't have this much pain if there weren't something potentially dangerous going on in my body	1	2	3	4
12. Although my condition is painful, I would be better off if I were physically active	1	2	3	4
13. Pain lets me know when to stop exercising so that I don't injure myself	1	2	3	4
14. It's really not safe for a person with a condition like mine to be physically active	1	2	3	4
15. I can't do all the things normal people do because it's too easy for me to get injured	1	2	3	4
16. Even though something is causing me a lot of pain, I don't think it's actually dangerous	1	2	3	4
17. No one should have to exercise when he/she is in pain	1	2	3	4

1 = strongly disagree
2 = disagree
3 = agree
4 = strongly agree

Score is

calculated after inversion of the individual scores of items 4, 8, 12 and 16.
TOTAL items 1-3, 6,7, 9-11,13-15,17 and add the inverse items 4, 8,12, and 16.

SCORE: _____

Experiment 5. Prior Pain Experience: Biopsychosocial Model

Think of a prior or current pain experience. List one aspect about the pain experience for each component of the biopsychosocial model

Biological Component _____

Psychological Component _____

Social Component _____

Thinking of this pain experience, fill out the self-efficacy questionnaire

Experiment 5.

Please note how confident you are that you can do the following things at present, **despite the pain**. To indicate your answer, circle one of the numbers on the scale under each item, where 0=not at all confident and 6=completely confident. (*Total Score (sum of 1-10) _____*)

Remember, this questionnaire is not asking whether or not you have been doing these things, but rather **how confident you are that you can do them at present, despite the pain**.

1. I can enjoy things, despite the pain

0 1 2 3 4 5 6
Not at all Completely
confident confident

2. I can do most of the household chores (e.g. tidying up, washing dishes, etc), despite the pain.

0 1 2 3 4 5 6
Not at all Completely
confident confident

3. I can socialize with my friends and family members as often as I used to do, despite the pain.

0 1 2 3 4 5 6
Not at all Completely
confident confident

4. I can cope with my pain in most situations.

0 1 2 3 4 5 6
Not at all Completely
confident confident

5. I can do some form of work, despite the pain (work indicates housework, paid and unpaid work).

0 1 2 3 4 5 6
Not at all Completely
confident confident

6. I can still do many of the things I enjoy doing, such as hobbies and leisure activity, despite the pain.

0 1 2 3 4 5 6
Not at all Completely
confident confident

7. I can cope with my pain without medication.

0 1 2 3 4 5 6
Not at all Completely
confident confident

8. I can still accomplish most of my goals in life, despite the pain.

0 1 2 3 4 5 6
Not at all Completely
confident confident

8. I can still accomplish most of my goals in life, despite the pain.

0 1 2 3 4 5 6
Not at all Completely
confident confident

8. I can still accomplish most of my goals in life, despite the pain.

0 1 2 3 4 5 6
Not at all Completely
confident confident