

Project 2: Physical Exercise Predicts Improved Attitude to Chronic Pain

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- Research Purpose:** This longitudinal project aims to examine the effect of physical exercise on the attitudes and beliefs of chronic pain sufferers with regard to their pain.
- Research Description:** Chronic pain sufferers tend to engage in avoidant behaviour when attempting to cope with their pain, fearing that physical exercise will worsen their condition. Pain specialists however tend to encourage sufferers to engage in an often demanding and painful regimen of physical exercise on the assumption that without such a regimen sufferers' muscles will become de-conditioned, leading to less support for the affected area and ultimately to a worsening of the pain. This study aims to explore the effect of physical exercise on the beliefs and attitudes of a sample of pain sufferers with regard to their pain, on the hypothesis that not only will exercise improve sufferers' physical condition but also their cognitive and affective state. In order to control for variables such as the effects of medication, surgical intervention, or psychological pain management on attitude to pain regular monitoring of pain intensity will take place via a simple visual/analog scale.
- Participants:** Approximately 30 participants will be required, drawn from a cohort of patients attending the *Toowoomba Pain Management* clinic. Enthusiastic permission has already been given orally by the medical pain specialist who runs the clinic. Participants will be interviewed at the beginning of their course of treatment, and at several points during their treatment.
- Methodology:** Questionnaires to be used include:
1. Survey of Pain Attitudes (SOPA; Jensen, M.P., & Karoly, P., 2007), which provides a profile based on the domains of *control, emotion, disability, harm, medication, solicitude, and medical cure*.
 2. Survey of adherence to physical exercise regimen as recommended by the medical pain specialist, adapted to each participant
 3. Visual/analog pain intensity scale
 4. Demographic questionnaire
 5. Outcome Questionnaire 45.2 (OQ 45.2; Lambert et al., 1996), which provides an outcome measure in three domains: *Symptom distress, Interpersonal relations, and Social role*.
- The questionnaires will be administered by the medical pain specialist and/or by the supervisor, at least three times during the year.
- Data Analysis:** No pre-existing dataset is available. The student will be responsible for the study design and analysis using standard multivariate techniques.

Student friendliness: This is a new study so its student-friendliness has not yet been tested. It requires a motivated student with an interest in health psychology. Weekly meetings should be programmed with the supervisor in the first month or so, and then according to the student's needs meetings will be regular but can be held using a combination of face-to-face meetings, email and phone contacts.

Expected research outcomes: Depending on the quality of this study it may be part of a journal article or conference presentation.

Further reading: Jensen, M.P., Turner, J.A., & Romano, J.M. (1991). Self-efficacy and outcome expectancies: Relationship to chronic pain coping strategies and adjustment. *Pain, 44*, 263-269

Jensen, M.P., Turner, J.A., & Romano, J.M. (1994). Correlates of improvement in multidisciplinary treatment of chronic pain. *Journal of Consulting and Clinical Psychology, 62*, 172-179.S

Ethics: This acts as a check for the supervisor

- Ethical approval will be sought by supervisor;** or
- Ethics approved – number _____

Resources: This acts as a check for the supervisor

- Project able to be funded within \$150 departmental limit. Supervisor willing to contribute to cost of measures.**
- Project not able to be funded within \$150 departmental limit – additional funds will come from:
