

2016/2017 Summer Studentship Project Application Form

Send to: Research Office, University of Otago Christchurch, PO Box 4345, Christchurch, by 5pm on **4 July 2016**

Supervisor Information (First named supervisor will be the contact):

First Supervisor's Name and Title: Dr Bronwyn Lennox Thompson

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Co-Supervisors Name and Title(s):

Research Category (Choose one category only – to be used for judging the students' presentations):

Clinical ✓

Laboratory

Community

Project Title (20 words MAXIMUM):

A New Zealand PHODA: A measure for identifying the perceived harmfulness of activities

Project Description:

Introduction:

Pain-related fear and avoidance strongly predicts disability in people with acute and sub-acute musculoskeletal pain, particularly low back pain [1-6]. The PHODA (Photographs of Daily Activities) is a series of photographs of daily activities developed to establish the perceived harmfulness of different physical activities and movements in people with low back pain [7]. The original instrument was developed in The Netherlands, and a subsequent version (PHODA-SeV) also used photographs depicting activities and contexts within a Dutch context [8].

This measure is used in two ways in clinical practice: the first is to establish and measure the range of activities an individual currently fears and/or avoids, and can be used at initial assessment and as a follow-up measure to determine changes in disability associated with low back pain; the second is as part of clinical intervention where patients are asked to generate a hierarchy of feared activities which are then used as part of a graded exposure approach to returning to activity [9]. Treatment using this approach has shown utility and effectiveness [1, 10], particularly in those patients reporting high levels of avoidance because of fear [11].

Unfamiliar or irrelevant contexts may limit the utility of the PHODA or PHODA-SeV in clinical practice. Unique contextual features of movements or activities are an essential element in developing a hierarchy or when rating perceived harmfulness [9, 12]. New Zealand conditions differ considerably from the environments and activities depicted in the original PHODA. For example, the Dutch PHODA depicts a person scraping ice from an exterior house window, while a cyclist is depicted riding over a cobble-stoned road. There are no images involving walking over sports fields, grocery shopping in a busy supermarket, or carrying out "DIY" activities, all of which are common activities undertaken in New Zealand. In addition, the original PHODA activities were selected on the basis of biomechanical movements, but do not necessarily reflect the activities or contexts of most concern to individuals with back pain [13, 14]. Finally, the images of individuals used in the PHODA and PHODA-SeV do not represent the New Zealand multicultural society because they only depict people of European background, risking lack of validity for this tool in the New Zealand context.

This project aims to develop a New Zealand version of this popular measurement tool, and will both refine the measure so that it more adequately reflects patient's concerns and contexts that are relevant to their daily life, and will ensure appropriate cultural representation is depicted in the images.

Aim:

To develop a New Zealand version of the PHODA ready for further psychometric testing.

Possible impact (in lay terms):

Graded exposure is a treatment with known effectiveness for reducing disability associated with back pain, and effective assessment is a foundation for this treatment. This project will initiate development of a culturally-relevant set of images for assessing pain-related fear and avoidance in people disabled by pain. By clinicians using an assessment tool that reflects the concerns and contexts of New Zealanders experiencing low back pain, the assessment will be more acceptable and sensitive to New Zealander's needs than the original Dutch instrument.

Method:

- Review the low back pain disability literature to identify the activities of daily living most often identified as a problem in daily life (disability assessment)
- Discuss contextual factors with clinicians who work with individuals experiencing sub-acute and chronic low back pain, to identify most relevant contexts in which photographs should be taken
- Photograph individuals from a variety of demographic backgrounds performing activities often avoided by people experiencing back pain
- Pilot test the images with clinicians to establish perceptions of clinical relevance, ensure photographs cover the range of usual activities and contexts, and to ensure the images are valid representations of the kinds of activities considered important to people with low back pain in New Zealand. This latter aspect refers to ensuring the images cover the range of activities from least demanding to most demanding from clinicians' perspectives.

A future project will address pilot testing the images with individuals living with back pain to ensure validity from a user perspective is addressed, along with determining reliability of the measure.