

Psychological flexibility in adults with chronic pain: A study of acceptance, mindfulness, and values-based action in primary care

Lance M. McCracken*, Sophie C. Velleman

Centre of Pain Services, Royal National Hospital for Rheumatic Diseases, Bath, UK
Centre of Pain Research, University of Bath, Bath, UK

ARTICLE INFO

Article history:

Received 16 February 2009
Received in revised form 15 October 2009
Accepted 30 October 2009

Keywords:

Chronic pain
Disability
Acceptance
Mindfulness
Psychological flexibility
Cognitive behavioral therapy

ABSTRACT

There is an increasing number of studies of acceptance, mindfulness, and values-based action in relation to chronic pain. Evidence from these studies suggests that these processes may be important for reducing the suffering and disability arising in these conditions. Taken together these processes entail an overarching process referred to as “psychological flexibility.” While these processes have been studied in people with chronic pain contacted in specialty treatment centers, they have not yet been investigated in primary care. Thus, participants in this study were 239 adults with chronic pain surveyed in primary care, through contact with their General Practitioners (GPs), in the UK. They completed measures of acceptance of chronic pain, mindfulness, psychological acceptance, values-based action, health status, and GP visits related to pain. Correlation coefficients demonstrated significant relations between the components of psychological flexibility and the measures of health and GP visits. In regression analyses, including both pain intensity and psychological flexibility as potential predictors, psychological flexibility accounted for significant variance, $\Delta R^2 = .039-.40$ (3.9–40.0%). In these regression equations pain intensity accounted for an average of 9.2% of variance while psychological flexibility accounted for 24.1%. These data suggest that psychological flexibility may reduce the impact of chronic pain in patients with low to moderately complex problems outside of specialty care. Due to a particularly conservative recruitment strategy the overall response rate in this study was low and the generality of these results remains to be established.

© 2009 International Association for the Study of Pain. Published by Elsevier B.V. All rights reserved.

1. Introduction

It is widely understood that the experience and impact of chronic pain are determined to some extent by psychological processes. One relatively well integrated and theory-based set of processes for application to chronic pain are those that constitute what is called *psychological flexibility* [8,9,15]. The processes underlying psychological flexibility have been previously investigated in more than 30 published studies in patients with chronic pain in specialist treatment settings (e.g. [3,11,13–19,23,24,29]), but never outside of these settings.

Psychological flexibility is a process based in the interaction of cognition and direct environmental contingencies that allows a person's behavior to persist or change in line with their long term goals and values [8]. Relevant theory recognizes essentially two sets of influences on behavior: those arising from direct contact between the environment, behavior, and experienced consequences; and

those from verbal or cognitively-based sources, such as instructions or rules. Rigid and unworkable behavior that does not adhere to naturally occurring contingencies can arise particularly from the ways that verbal or cognitive influences can limit contact with direct experience, thus entailing distressed and restricted functioning [9]. Processes of psychological flexibility can counteract this. These include acceptance, contact with the present moment, values-based action, committed action, self-as-context, and cognitive defusion [8].

Previous studies of people with chronic pain provide support for role of the various components of psychological flexibility in their well-being and daily functioning, including the processes of acceptance of pain [3,13,14,16,19,23,24], mindfulness (a process that includes acceptance, contact with the present moment, self-as-context, and cognitive defusion [16,17]), value-based action [19,21], and general psychological flexibility itself [18]. Another recent study, focusing on the development of a new assessment instrument, provided evidence for negative impact of psychological inflexibility, including components of avoidance and cognitive fusion, also provides implicit support for the role of psychological flexibility [29].

Virtually every time a study is published on some component of psychological flexibility in chronic pain a particular limitation is noted. Study authors have repeatedly stressed that results from

* Corresponding author. Address: Centre of Pain Services, Royal National Hospital for Rheumatic Diseases, Upper Borough Walls, Bath BA1 1RL, UK. Tel.: +44 01225 473403; fax: +44 01225 473461.

E-mail address: L.McCracken@bath.ac.uk (L.M. McCracken).

specialty care samples may not generalize to patients with less complex difficulties, such as those seen in primary care. The purpose of the present study is to address this gap in the literature by investigating processes of acceptance, mindfulness, and values-based action in a sample of patients with chronic pain contacted in primary care. We predicted that we would observe the same results in primary care as have been observed in specialty care: positive relations between these processes and a measure of health, including emotional, physical, and social functioning. Secondly, we predicted negative relations between these processes and measures of pain and healthcare consumption.

2. Method

2.1. Participants

This study included 239 adult participants with chronic pain contacted through their primary care provider in the Southwest of England between May 2007 and May 2008. The average age of study participants was 61.5 years ($SD = 13.7$; range 25–94 years), and 58.2% were women. The median pain duration was 120 months (range 4–600 months). Nearly all of the participants, 96.2%, saw their pain as a long term problem, and 64.6% of the participants experienced their pain constantly. The majority of the participants were married, 61.8%, and the remaining were widowed, divorced or single, 16.4%, 15.5% and 6.3%, respectively. Most participants described themselves as White, 98.7%, with a very small proportion reporting Indian, 0.4%, Pakistani, 0.4%, or other, 0.4%. The largest single group of patients was retired, 31.4%, followed by retired specifically due to pain, 21.3%, not working due to pain (but not considering themselves retired), 14.6%, working full time, 13.4%, working part time, 10.5%, or other, 8.8%. A large proportion of participants, 43.1%, was receiving benefits. Most participants, 99.7%, identified a source of their pain. The single most common precipitant was arthritis, 53.1%, and other common conditions included spine or disc injuries, 42.6%, muscular pain, 19.8%, or other diseases, 7.2%. (*Note:* These categories were not exclusive.) A total of 38.4% of the participants reported a history of surgery related to their pain. The most common primary site of pain was low back, 33.1%, followed by lower extremities, 28.5%, upper extremities, 14.2%, generalized pain, 8.4%, neck pain, 5.0%, or other, 10.9%.

2.2. Procedure

This study was approved by the Local Ethics Committee and written consent was obtained from all participants. People with chronic pain were contacted through 20 GPs from 10 primary care trusts throughout southwest England. A search by each GP practice using their electronic medical records was conducted to identify patients in the practice with chronic pain (those with current analgesic medications and having three repeat prescriptions of these in the past six months). Each GP wrote to a randomly selected set of between 20 and 40 patients asking for their permission to be contacted directly by the research team from the Centre for Pain Research ($N = 664$). Nearly half of these ($n = 323$; 48.6%) agreed to be contacted directly for purposes of the study. Using standard mail survey methods questionnaires were sent to these 323 people. One follow-up reminder was sent to non-responders. Fully completed questionnaires and consent forms were received from 239, giving an overall response rate of 36.0% of those initially contacted by their GP and 74.0% of those who provided consent.

2.3. Measures

Each person surveyed provided information regarding their background characteristics such as age, gender, education level,

and pain circumstances. They also provided a rating of their pain in the past week on a 0 (no pain) to 10 (worse possible pain) scale, and an estimate of the number of times they had seen their GP in the past six months related to their pain. Their survey packet included a short series of measures of the primary psychological variables of interest in this study: acceptance of chronic pain, mindfulness, psychological acceptance, and values-based action; and a multidimensional measure of health.

The Chronic Pain Acceptance Questionnaire (CPAQ) [20] is a 20-item measure of acceptance of pain. It includes two components: Activity Engagement and Pain Willingness, and thus reflects acceptance as including behavioral qualities of carrying on with activity in the presence of pain and an absence of pain avoidance responses. The CPAQ has been repeatedly demonstrated to have good internal consistency and construct validity as well as a confirmed two-factor structure [26]. The Cronbach's alpha values for the subscales and total scale from the current sample were each above .84, suggesting very good internal consistency.

The Mindful Attention Awareness Scale (MAAS) [2] is a 15-item measure of mindfulness. The item content was designed to reflect the opposite of the construct of mindfulness, or "mindlessness," and thus endorsing the item content at a lower frequency is taken to mean a higher level of mindfulness (for further information on this please refer to Brown and Ryan [2]). Each item is rated on a scale from 1 (almost always) to 6 (almost never) in relation to respondent's "everyday experience," and there is no specified time frame for these ratings. The item ratings are averaged to form the total score. The initial development studies of the instrument demonstrated that scores from the MAAS achieve alpha reliability levels above .80, appropriately correlate with measures of emotional distress and physical symptoms in students and general adult samples, distinguish individuals based on their history of mindfulness training and practice, and correlate with measures of enhanced self-awareness [2]. The Cronbach's alpha value for the total scale from the current sample was .90.

The Acceptance and Action Questionnaire (AAQ) [10] is a measure of general psychological acceptance, sometimes also referred to as a measure of psychological flexibility. There are several versions available and we used the 10-item version. The items generally reflect the respondents' willingness to remain in contact with private experiences such as bodily sensations, emotions, thoughts, memories, or urges without attempting to alter, avoid them, or allow them to unnecessarily determine unhealthy action (e.g. "It's OK if I remember something unpleasant," "I worry about not being able to control my worries and feelings"). Each item is scored on a scale from 1 (never true) to 7 (always true). The AAQ is internally consistent, demonstrates expected correlations with measures of avoidant coping and emotional distress [10], and has demonstrated reliability and validity in a previous study in patients with chronic pain [22]. The Cronbach's alpha value for the AAQ from the current sample was .88.

The Chronic Pain Values Inventory (CPVI) [21] is a 12-item measure of values-based action for use with people with chronic pain. It asks respondents to consider their values in domains of family, intimate relations, friends, work, health, and growth or learning. It then asks them to rate the importance of the values they hold in each domain on a scale from 0 (not at all important) to 5 (extremely important) and then rate how successfully they have lived according to their values on a similar scale from 0 (not at all successful) to 5 (extremely successful). Previous study supports the internal consistency and construct validity of the success items as a reflection of values-based action [21]. The Cronbach's alpha value for the success scale from the current sample was .84.

The Short-Form Health Survey (SF-36) [27] is a 36-item measure of health status designed for clinical practice and for general population surveys. The items of the SF-36 include eight aspects

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات