

A Comprehensive Examination of the Model Underlying Acceptance and Commitment Therapy for Chronic Pain

Kevin E. Vowles

University of New Mexico & Haywood Hospital

Gail Sowden

Julie Ashworth

Haywood Hospital & Keele University

The therapeutic model underlying Acceptance and Commitment Therapy (ACT) is reasonably well-established as it applies to chronic pain. Several studies have examined measures of single ACT processes, or subsets of processes, and have almost uniformly indicated reliable relations with patient functioning. To date, however, no study has performed a comprehensive examination of the entire ACT model, including all of its component processes, as it relates to functioning. The present study performed this examination in 274 individuals with chronic pain presenting for an assessment appointment. Participants completed a battery of self-report questionnaires, assessing multiple aspects of the ACT model, as well as pain intensity, disability, and emotional distress. Initial exploratory factor analyses examined measures of the ACT model and measures of patient functioning separately with each analysis identifying three factors. Next, the fit of a model including ACT processes on the one hand and patient functioning on the other was examined using Structural Equation Modeling. Overall model fit was acceptable and indicated moderate correlations among the ACT processes themselves, as well as significant relations with pain intensity, emotional distress, and disability. These analyses build on the existing literature by providing, to our knowledge, the most comprehensive evaluation of the ACT theoretical model in chronic pain to date.

Address correspondence to Kevin E. Vowles, Ph.D., Department of Psychology, University of New Mexico, Logan Hall, MSC03 2220, 1 University of New Mexico, Albuquerque, NM 87131; e-mail: k.e.vowles@gmail.com.

0005-7894/45/390-401/\$1.00/0

© 2013 Association for Behavioral and Cognitive Therapies. Published by Elsevier Ltd. All rights reserved.

Keywords: acceptance and commitment therapy; chronic pain; structural equation modelling; functioning; multivariate analysis

THE EXPERIENCE OF CHRONIC PAIN is often associated with substantial distress and disability. There is now a well-established database indicating that psychological and behavioral processes are strongly related to patient physical and emotional functioning (see [Gatchel, Peng, Peters, Fuchs, & Turk, 2007](#), for a review).

Over the past 15 years, there has been increasing interest in the theoretical and practical utility of Acceptance and Commitment Therapy (ACT; [Hayes, Strosahl, & Wilson, 1999](#)) as it applies to chronic pain. In brief, the focus of ACT for chronic pain is on assisting pain sufferers to engage in a flexible and persistent pattern of values-directed behavior while in contact with continuing pain and discomfort, particularly when efforts to control or reduce pain or discomfort have failed in the past or contributed to greater difficulties over the longer term ([McCracken, 2005](#); [Vowles & Thompson, 2011](#)). Treatment efforts involve assisting individuals with chronic pain to better achieve a more full, rich, and rewarding life, both when pain and discomfort are low, but importantly also when they are elevated or even at their maximum. The technical term for this overarching focus is psychological flexibility; its enhancement is the primary aim of ACT (see [Hayes, Strosahl, & Wilson, 2012](#), and [Hayes, Villatte, Levin, & Hildebrandt, 2011](#), for further discussion).

Originally, psychological flexibility was conceptualized as being composed of six overlapping

component processes (Hayes et al., 2012). Briefly, these processes include:

- (a) Acceptance: a broad-based willingness to have pain or discomfort.
- (b) Defusion: a lack of dominance of verbal, often cognitive, content or narrowing of perspective such that it is predominately focused on this content.
- (c) Moment-to-Moment Awareness: a purposeful, nonjudgmental, and fluid attending to present experiences.
- (d) Self-as-Context: a conscious perspective taking on the content of one's experience where a distinction is made between the person having the experience and the experiences themselves.
- (e) Values Orientation: freely identified (e.g., noncoerced) directions for activity that bring meaning, importance, or vitality to living.
- (f) Committed Action: a pattern of behavior that encompasses a flexible persistence oriented towards valued living.

More recently, Hayes and colleagues (2012) have discussed these six processes as three pairs of response styles, summarized as "Open" (Defusion/Acceptance), "Centered" (Moment-to-Moment Awareness/Self-as-Context), and "Engaged" (Values Orientation/Committed Action). This latter pairing of the ACT processes reflects their close relation to one another and was done to assist in clinical case conceptualization and treatment (Hayes et al., 2012). See also McCracken and Vowles (2014) for a discussion of these pairs of response options in relation to chronic pain specifically.

To date, there has been no examination of how data fit with either the three- or six-process ACT model. Instead, evaluation of psychological flexibility and its relevance to chronic pain has principally involved establishing the psychometric characteristics of measures and evaluating their relations with relevant aspects of patient emotional and physical functioning, as well as health-care utilization (e.g., analgesic medication usage, pain-related medical visits). At the present time, there are a number of measures of ACT processes (e.g., values success, defusion, acceptance, aspects of mindfulness) that have been used in a diverse array of pain settings or diagnostic groups (e.g., adults, children and adolescents, primary care, tertiary care, musculoskeletal pain, neuropathic pain, HIV-related pain). These studies have established a reliable pattern of results—essentially, it is now clear that measures of psychological flexibility are strongly related to various aspects of patient functioning and usually

account for a noteworthy amount of variance above and beyond other pain-related symptoms or cognitions (e.g., Elander, Robinson, Mitchell, & Morris, 2009; Kratz, Davis, & Zautra, 2007; McCracken, Gauntlett-Gilbert, & Vowles, 2007; McCracken & O'Brien, 2010; Vowles, McCracken, McLeod, & Eccleston, 2008; Wallace, Harbeck-Weber, Whiteside, & Harrison, 2011; Wicksell, Lekander, Sorjonen, & Olsson, 2010; Wicksell, Olsson, & Melin, 2009).

This consistency in results has provided important evidence with regard to the utility and generalizability of ACT measures in chronic pain. In addition, the diversity in clinical setting and sample has provided support regarding issues of generalizability and relevance of the model. There are, however, at least two difficulties that are presented by the analytic approach that has been utilized thus far.

The first concerns the potential for disorganized and fragmented development as separate measures of distinct ACT processes, or discrete subsets of these processes, are independently evaluated in relation to the overarching theoretical model. Unfortunately, it is difficult to conceptualize convergence or divergence among these related measures and, consequently, the specific process(es) they are meant to assess when they are utilized in separate studies. In essence, to those new or unfamiliar with the area, the development process can look haphazard or piecemeal and this may diminish clarity, increase confusion, or perhaps even heighten the probability of misapplication.

The second concern is principally statistical. The majority of studies that have investigated the relevance of these ACT-related processes have used an approach based primarily on linear regression, which has focused on the determination of the amount of variance in patient functioning that is accounted for by the ACT-related measures. While this approach has provided supportive evidence with regard to construct validity by indicating that these measures often strongly relate to patient functioning, the risk is that regression analyses are ill suited to independent variables that are highly correlated with one another, as these variables, in a sense, "compete" for shared variance and the statistical parcelling out of this shared variance can significantly affect the pattern of results (Tabachnick & Fidell, 2012). Reliance on regression approaches alone is therefore unlikely to allow for a comprehensive examination of the ACT model as the component processes share a conceptual overlap and can therefore be expected to both correlate with one another and share variance when used to statistically predict aspects of patient functioning. Statistical approaches that are more robust for use with correlated measures, such

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