Acceptance and Commitment Therapy (ACT) and Chronic Pain

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Outline of Talk

- Propose that psychological approaches to chronic pain are developing
- Describe an ACT model.
- Summarize the state of outcome literature on ACT for chronic pain.
- Suggest that
 - Suffering is normal
 - control is often unworkable
 - your mind cannot be trusted

The Evolution of Clinical Psychology

Underlying Framework	Processes of Pathology	Target	Therapy Processes
Operant	Conditioning	Behavior	Conditioning
Cognitive Behavioral	Conditioning, attention, cog bias, thinking, believing	Behavior and symptoms (physical & emotional)	Skills training, exposure, cognitive therapy
Contextual (MBSR, ACT)	Avoidance, cog fusion, self, values, commitment, loss of present	Behavior	Acceptance, defusion, mindfulness, values, skills training, relationship



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Do we need to challenge thoughts in cognitive behavior therapy?

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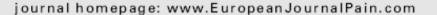
"...there is little empirical support for the role of cognitive change as causal in symptomatic improvements achieved in CBT."

(Longmore & Worrell, 2007)



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Cognitive-behavioral therapy for persistent pain: Does adherence after treatment affect outcome?

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ABSTRACT

It is a tenet of cognitive behavioral treatment of persistent pain problems that ex-patients should adhere to treatment methods over the longer term, in order to maintain and to extend treatment gains. However, no research has quantified the causal influence of adherence on short-term outcome in this field. The aims of this study are to assess determinants of adherence to treatment recommendations in several domains, and to examine the extent to which cognitive and behavioral adherence predicts better outcome of cognitive behavioral treatment for persistent pain. Longitudinal data from a sample of 2345 persistent pain patients who attended a multicomponent treatment programme were subjected to structural equation modeling. Adherence emerged as a mediating factor linking post-treatment and follow-up treatment outcome, but contributed only 3% unique variance to follow-up outcomes. Combined end-of-treatment outcomes and adherence factors accounted for 72% of the variance in outcome at one-month follow-up. Notwithstanding shortcomings in the measurement of adherence, these findings question the emphasis normally given to adherence in the maintenance of behavioral and cognitive change, and clinical implications are discussed.

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Method

- N = 2,345 people attending treatment for chronic pain.
- Measures of outcome administered pre-, post, and 1 month follow-up.
- Measures of adherence to treatment methods measured at 1 month followup.

Results

- Adherence to pacing, thought challenging, stretching, and exercise had very small relations with outcome variables.
- Variance in wellbeing at follow-up accounted for by adherence factors ranged from 1 to 2%.

"If taken at face value, the findings suggest that both theory and practice of recommending adherence to treatment methods require reexamination if not overhaul." (p 187)

Therapist Drift

- Therapists often to not fully implement CBT.
- This usually includes shifting focus from <u>doing</u> to <u>talking</u>.
- This arises from therapist cognitive distortions, emotional reactions, and avoidance.

Waller G. Evidence-based treatment and therapist drift. BRAT 2009; 47: 119-127.

"Our biggest single problem in implementing CBT is that many clinicians fail to push for behavior change (e.g., exposure, behavioral activation, ...) despite the evidence that these elements of treatment are the most important."

"Our being 'nice to' or 'protective of' the patient can worsen the problem."

Mindfulness-Based Stress Reduction for Health Care Professionals: Results From a Randomized Trial

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The literature is replete with evidence that the stress inherent in health care negatively impacts health care professionals, leading to increased depression, decreased job satisfaction, and psychological distress. In an attempt to address this, the current study examined the effects of a short-term stress management program, mindfulness-based stress reduction (MBSR), on health care professionals. Results from this prospective randomized controlled pilot study suggest that an 8-week MBSR intervention may be effective for reducing stress and increasing quality of life and self-compassion in health care professionals. Implications for future research and practice are discussed.

Keywords: mindfulness, stress, health care professionals, meditation



- 15% to 30% of adults have chronic pain.
- 19% to 30% of the population suffers from a diagnosable psychological disorder in any given year.
- The lifetime prevalence of psychological disorders is nearly 50%.

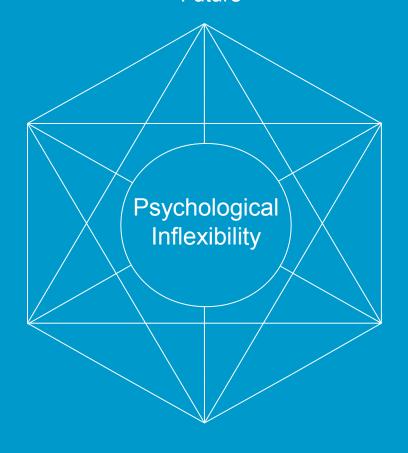
Kessler et al. Arch Gen Psychiatry 2005; 62: 593-602.

The ACT model of Psychopathology

Dominance of the Conceptualized Past and Feared Future

Experiential Avoidance

Cognitive Fusion



Lack of Values
Clarity

Inaction, Impulsivity, or Avoidant
Persistence

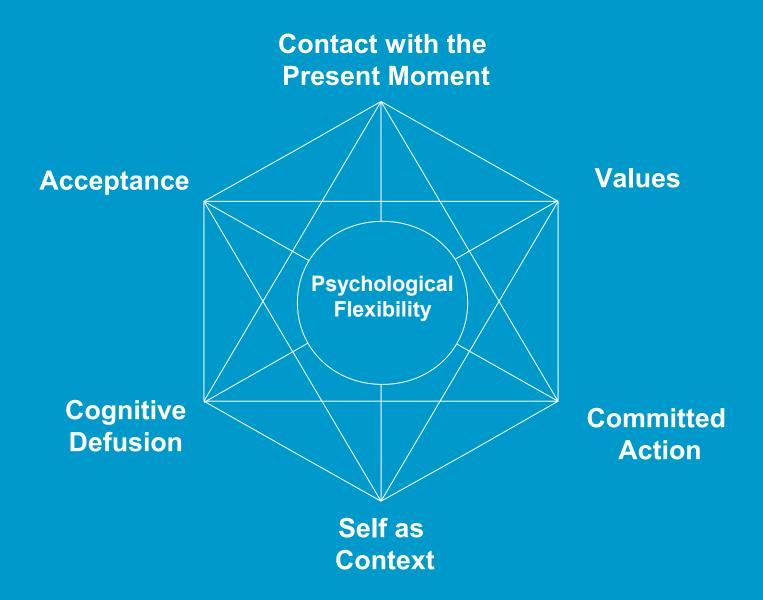
Attachment to the Conceptualized Self

"Psychological Inflexibility"

• A process based in interactions of language and cognition with direct experiences that produces an inability to <u>persist</u> in, or <u>change</u>, a behavior pattern in the service of long term goals or values.

From: Hayes et al. Behav Res Ther 2006; 44: 1-25.

ACT Treatment Processes

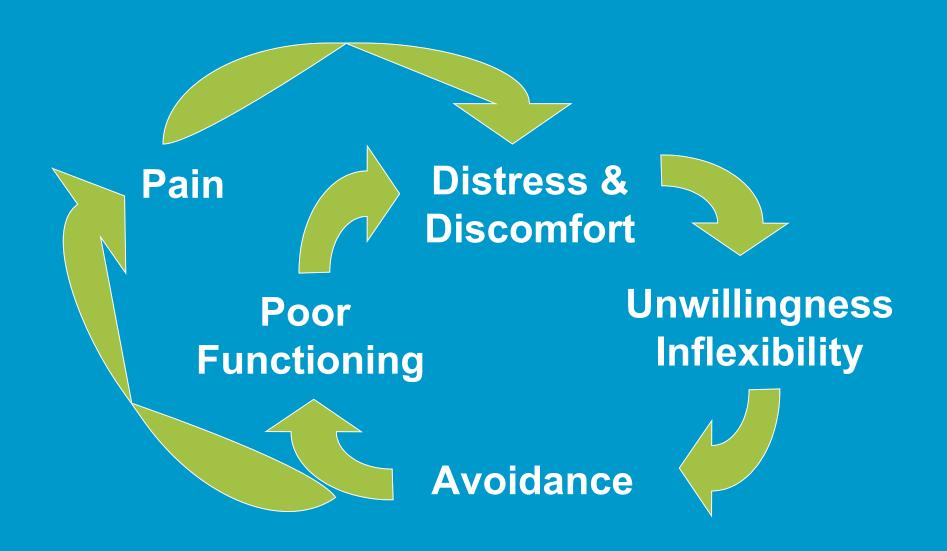


Experience Thoughts and Feelings

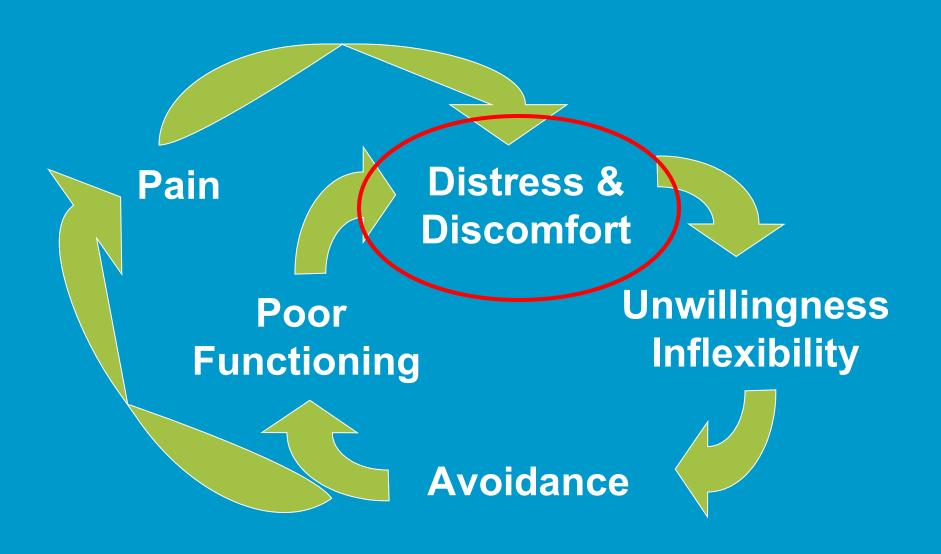


- Detect
 - know a thought or feeling is present
- Register the content
 - understand the message of the experience
- Believe/heed
 - take it as true
- Fuse
 - contact it as the only experience present

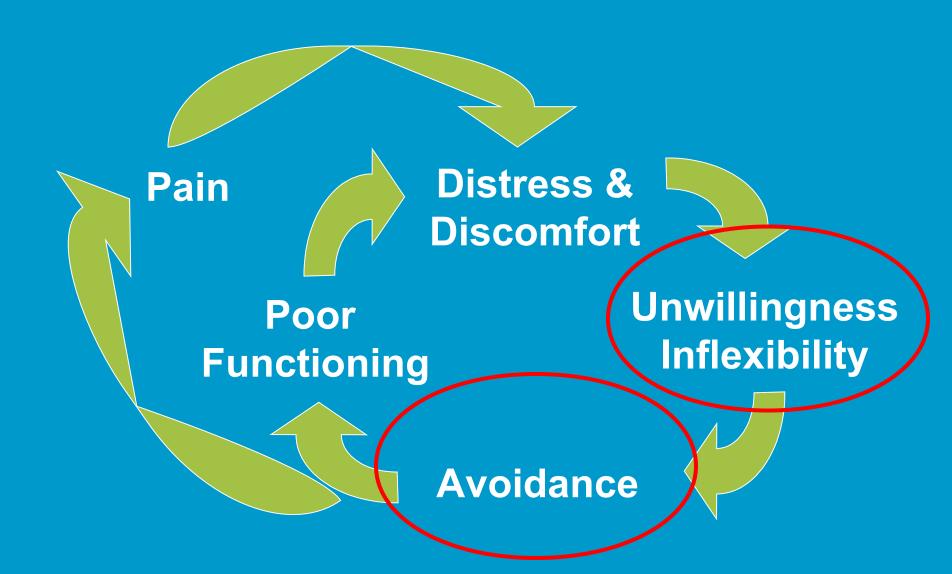
Chronic Pain and Suffering



Chronic Pain and Suffering



Chronic Pain and Suffering



ACT-Based Treatment for Chronic Pain

- Dahl et al., 2004. Behav Ther
- McCracken et al., 2005. Behav Res Ther
- McCracken et al., 2007. Eur J Pain
- Vowles & McCracken, 2008. J Consult Clin Psychol
- Wicksell et al., 2008. Eur J Pain
- Vowles et al. 2009. Cog Behav Practice

Acceptance and Values-Based Action in Chronic Pain: A Study of Treatment Effectiveness and Process

Kevin E. Vowles and Lance M. McCracken University of Bath and Royal National Hospital for Rheumatic Diseases

Developing approaches within cognitive behavioral therapy are increasingly process-oriented and based on a functional and contextual framework that differs from the focus of earlier work. The present study investigated the effectiveness of acceptance and commitment therapy (S. C. Hayes, K. Strosahl, & K. G. Wilson, 1999) in the treatment of chronic pain and also examined 2 processes from this model, acceptance and values-based action. Participants included 171 completers of an interdisciplinary treatment program, 66.7% of whom completed a 3-month follow-up assessment as well. Results indicated significant improvements for pain, depression, pain-related anxiety, disability, medical visits, work status, and physical performance. Effect size statistics were uniformly medium or larger. According to reliable change analyses, 75.4% of patients demonstrated improvement in at least one key domain. Both acceptance of pain and values-based action improved, and increases in these processes were associated with improvements in the primary outcome domains.

Keywords: acceptance, values, chronic pain, contextual cognitive-behavioral treatment, acceptance and commitment therapy

3 Year Follow-up Survey in Bath

- N = 90 (61% of those contacted)
- 64% women
- Pain Duration M = 135 months (SD = 104.

Note: Thanks to Kevin Vowles & Jane Zhao-O'Brien

Measures

- 0-10 rating of pain
- Sickness Impact Profile
- Pain Anxiety Symptoms Scale
- British Columbia Major Depression Inventory
- Medical Visits (past six months)
- Chronic Pain Acceptance Questionnaire

• • Outcome at 3 Years

	Pre-Tx	3 Yr F-up	Sig	Effect Size (d)
Pain	6.97 (1.84)	6.37 (1.84)	<.05	.33
Physical Disability	.19 (.12)	.12 (.10)	<.001	.60
Psychosocial Disability	.28 (.16)	.18 (.14)	<.001	.63
Anxiety	46.52 (18.69)	32.88 (22.14)	<.001	.73

...continued

	Pre-Tx	3 Yr F-up	Sig	Effect Size (d)
Depression	27.51 (12.74)	15.74 <i>(12.6)</i>	<.001	.92
Medical Visits	5.27 (5.06)	2.75 (2.89)	<.001	.50
Acceptance	50.61 (15.12)	69.55 (25.36)	<.001	1.25
MEAN				.71

d > .2 small, > .5 medium, > .8 large.



- Participants were 28 people seeking treatment for depression or interpersonal problems.
- Matched pairs randomly assigned to be treated for 10 session of either ACT or CBT.
- Therapists: 14 master's students with 3-4 years study in psychology with little or no prior treatment experience.
- Each therapist treated one ACT and one CBT case.

Lappalainen et al. Behavior Modification 2007;31:488-511.

Therapist Training

CBT

- 12 hours lecture in CBT
- 85 pages reading
- weekly group supervision

ACT

- 6 hour lecture in ACT
- 39 pages reading
- weekly group supervision

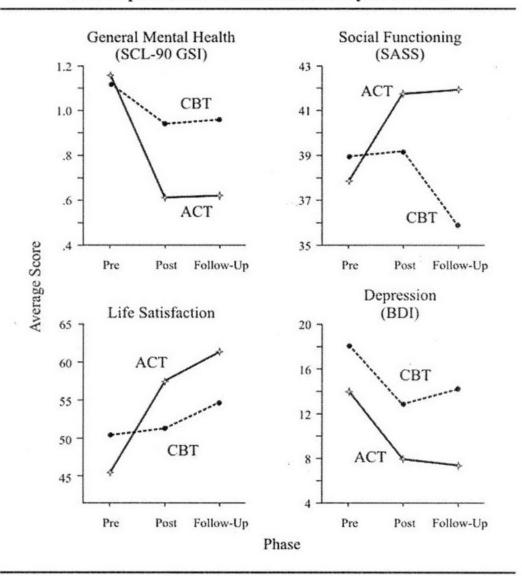
Note: Both training conditions were embedded in a one semester ordinary Clinical Teaching program consisting of 20 hours lecture and 30 hours clinical case Supervision. The course emphasized evidence-based approaches.

Primary Client Outcome: GSI of SCL-90

Group	Effect at post Tx	Effect at follow-up
ACT	1.11	1.04
CBT	.56	.28

Note: Calculated as Cohen's d. (small > .20; medium > .50; large > .80)

Figure 1
Results for Primary and Secondary Outcome Measures on
Which at Least Some Group Differences Were Found in Either
the Nonparametric or Parametric Analyses or Both



Other Results

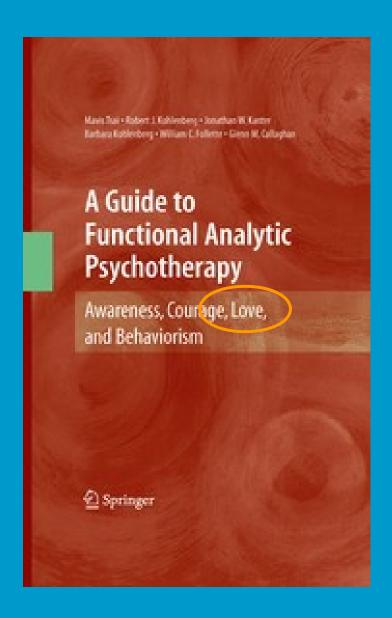
- Acceptance appeared to be the most important process to outcome in both groups.
- At the start of treatment therapists reported less knowledge of ACT.
- Therapists fear and tension during treatment decreased in CBT but not in ACT.











More Impactful Treatment in the Future

- Contextual
 - Able to experientially manipulate functional active influences outside of talking and thinking
- Compassionate
 - Able to include empathy, intimacy, and caring
- Courageous
 - Able to radically contact pain and suffering, and to learn to sit with it, openly, without resistance, whenever required.

• • • Summary

- Psychological approaches to chronic pain are developing and now include the notion of psychological flexibility
- They emphasize that suffering is normal, and include acceptance.
- These approaches require treatment providers to
 - face discomfort
 - act with awareness and flexibility
 - enter caring relationships with people with pain.

Thank you

