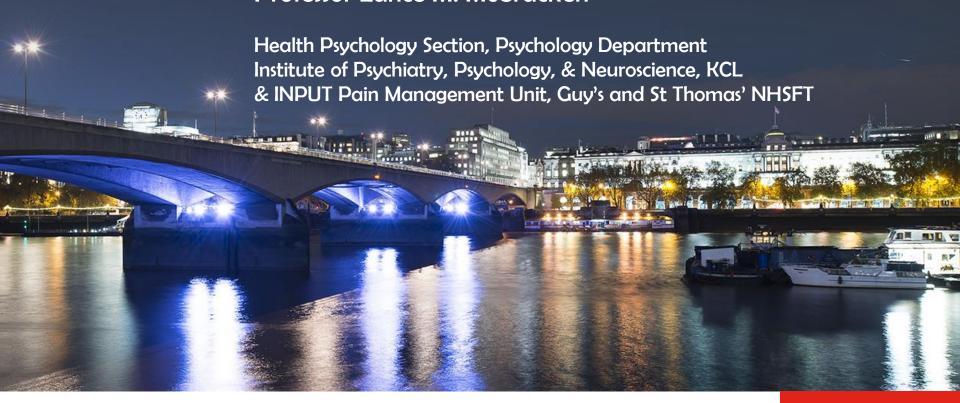
## Pain and Work - Lost in Translation?

Professor Lance M. McCracken







### **Main Points of this Talk**

- 1) Evidence for effects of psychological treatments on workrelated outcomes in chronic pain appears inconclusive.
- 2) Might the psychological flexibility model apply to this problem?
  - Probably, yes.
- 3) Preliminary evidence shows the following
  - Acceptance may reduce the effects of pain on work-related goals.
  - Positive work status may act as a predictor of better outcomes in ACT.



RESEARCH ARTICLE

## The Effectiveness of Cognitive Behavioural Treatment for Non-Specific Low Back Pain: A Systematic Review and Meta-Analysis

Helen Richmond<sup>1©</sup>\*, Amanda M. Hall<sup>1,2©</sup>, Bethan Copsey<sup>1©</sup>, Zara Hansen<sup>1‡</sup>, Esther Williamson<sup>1‡</sup>, Nicolette Hoxey-Thomas<sup>1‡</sup>, Zafra Cooper<sup>3‡</sup>, Sarah E Lamb<sup>1‡</sup>

- 1 Centre for Rehabilitation Research, Nuffield Department of Orthopaedics Rheumatology and Musculoskeletal Sciences, University of Oxford, Oxford, England, United Kingdom, 2 The George Institute for Global Health, University of Oxford, Oxford, England, United Kingdom, 3 Department of Psychiatry, Medical Sciences Division, Warneford Hospital, Oxford, United Kingdom
- These authors contributed equally to this work.
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PLOS ONE | DOI:10.1371/journal.pone.0134192 August 5, 2015



23 Studies; N = 3359 participants.

"Two studies reported work disability but the evidence remained inconclusive."



## Effectiveness of psychological interventions for chronic pain on health care use and work absence: systematic review and meta-analysis

Andrew Pike<sup>a</sup>, Leslie Hearn<sup>b</sup>, Amanda C. de C Williams<sup>a,\*</sup>

+ Corrigendum to: Effectiveness of psychological interventions for chronic pain on health care use and work absence: systematic review and meta-analysis, by Pike et al. PAIN 2016;157:777–785

Study or Subgroup	Intervention				Control			Std. Mean Difference	Std. Mean Difference	
	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI	
Van Eijk-Hustings 2013	1.2	0.8	108	2.5	1.2	47	25.4%	-1.38 [-1.75, -1.00]	-	
Marhold 2001	49.4	17.4	18	53.7	10.5	18	22.4%	-0.29 [-0.95, 0.36]		
Luciano 2013	472	1,383	90	410	1,243	86	26.1%	0.05 [-0.25, 0.34]	<del></del>	
Geraets 2005	2.5	9.7	87	0.9	4.12	89	26.1%	0.21 [-0.08, 0.51]	+	
Total (95% CI)			303			240	100.0%	-0.35 [-1.09, 0.39]		
Heterogeneity: Tau <sup>2</sup> = 0.5	2; Chi2=	47.88,	df = 3 (F	< 0.00	001); l²	= 94%			<u> </u>	
Test for overall effect: Z=	0.92 (P =	0.36)							Favours intervention Favours cont	rol

Figure 5. SMD for work loss: 4 studies and overall effect size. CI, confidence interval; SD, standard deviation; Std., standard.

"Analysis of work loss showed no significant effects of psychological interventions over comparisons,...

...but the use of many different metrics necessitated fragmenting the planned analyses, making summary difficult."

## **PAIN**

# Effects of daily pain intensity, positive affect, and individual differences in pain acceptance on work goal interference and progress

Chung Jung Mun\*, Paul Karoly, Morris A. Okun *PAIN 156 (2015) 2276–2285* 

- N = 132 adults.
- 21-day diary.
- Multilevel modelling analyses.
- Conclusion: "...it appears that high pain acceptance significantly attenuates pain's capacity to disrupt work goal pursuit."

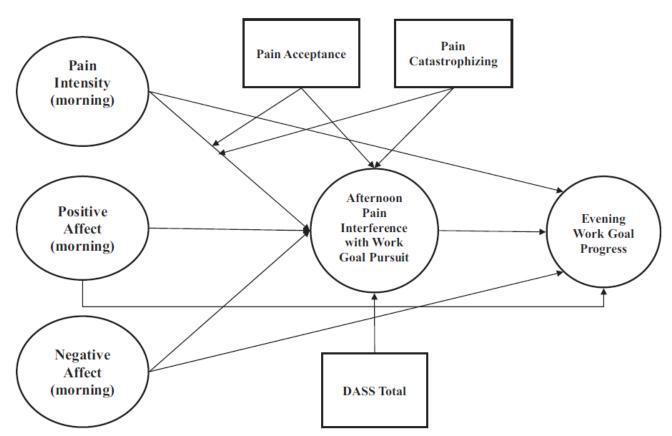


Figure 1. Hypothetical model. Variables with circular shape are level 1 (day-level) variables, and variables with rectangular shape are level 2 (person-level) variables.

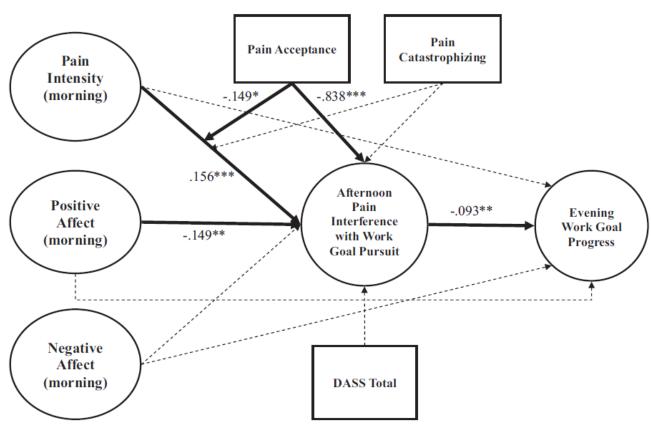
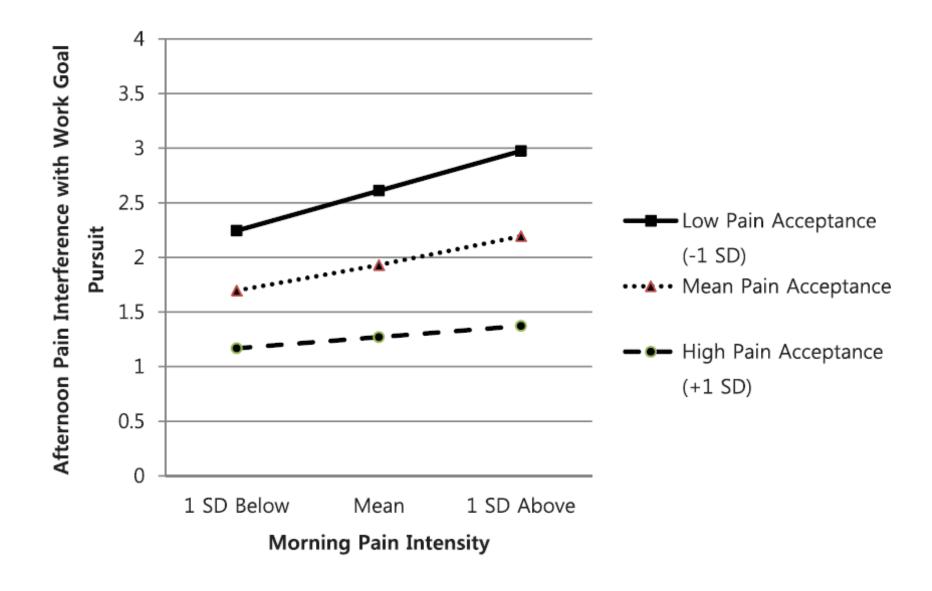


Figure 3. Summary of the present findings. The dashed lines represent nonsignificant paths.  $^*P < 0.05, ^{**}P < 0.01, ^{***}P < 0.001$ . DASS Total, DASS total score (level 2 covariate).





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#### Critical Reviews

# Predictors of Treatment Outcome in Contextual Cognitive and Behavioral Therapies for Chronic Pain: A Systematic Review



Helen R. Gilpin, \*,† Alexandra Keyes,† Daniel R. Stahl,† Riannon Greig,‡ and Lance M. McCracken\*,†

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<sup>&</sup>lt;sup>†</sup>Department of Psychology, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, London, United Kingdom.

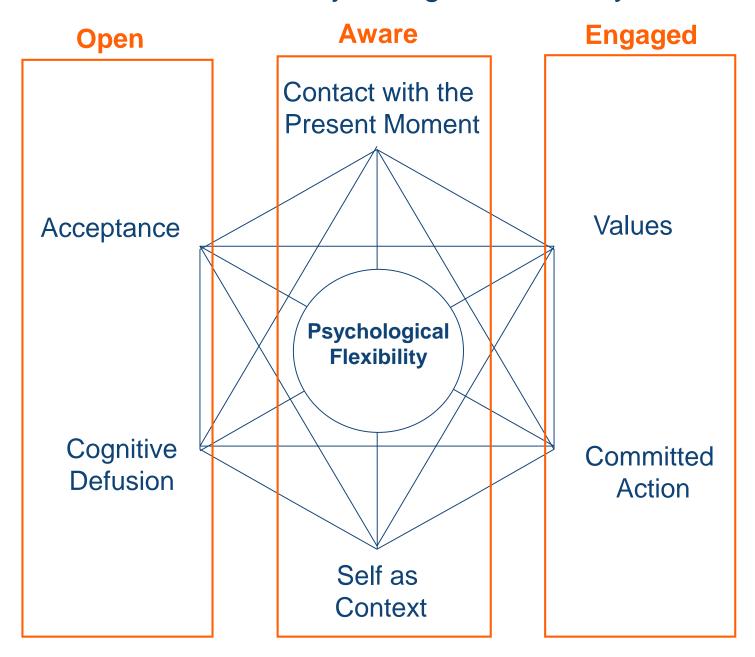
<sup>‡</sup>Royal Holloway, University of London, United Kingdom.

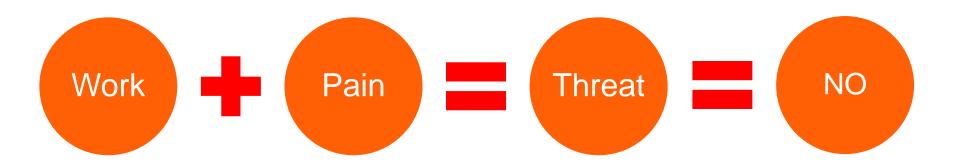
## A theoretically guided approach to identifying predictors of treatment outcome in Contextual CBT for chronic pain

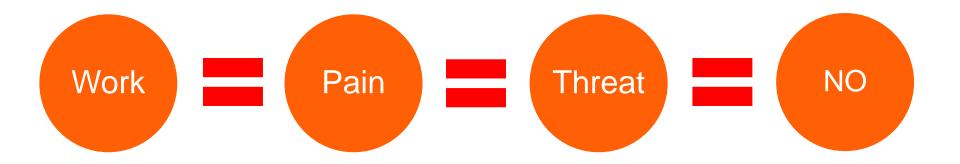
Helen R Gilpin<sup>1,2</sup>, Daniel R Stahl<sup>3</sup>, Lance M McCracken<sup>1,2</sup>.

- <sup>1</sup> INPUT Pain Management, Guys and St. Thomas NHS Foundation Trust Hospitals, London, UK
- <sup>2</sup> Department of Psychology, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, London, UK
- <sup>3</sup> Department of Biostatistics and Health Informatics, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, London, UK
- METHODS: 609 people who attended a residential, interdisciplinary, pain management programme based on ACT.
- RESULTS: **Employment status\***, level of distress, decentering (a process like cognitive defusion), and acceptance significantly contributed to the model above and beyond the effects of other baseline variables.
- \*This included analyses for mental health, physical functioning, social functioning, and pain.

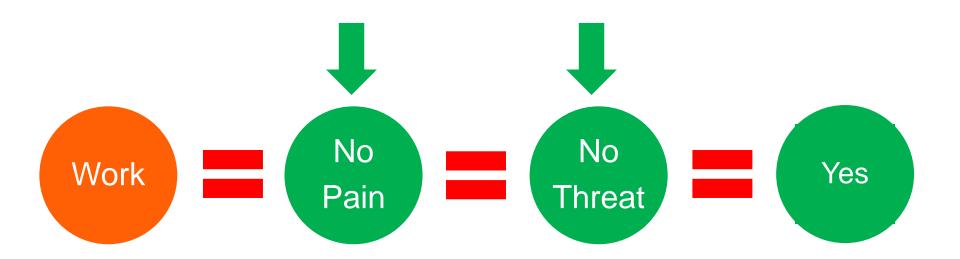
#### Facets of Psychological Flexibility

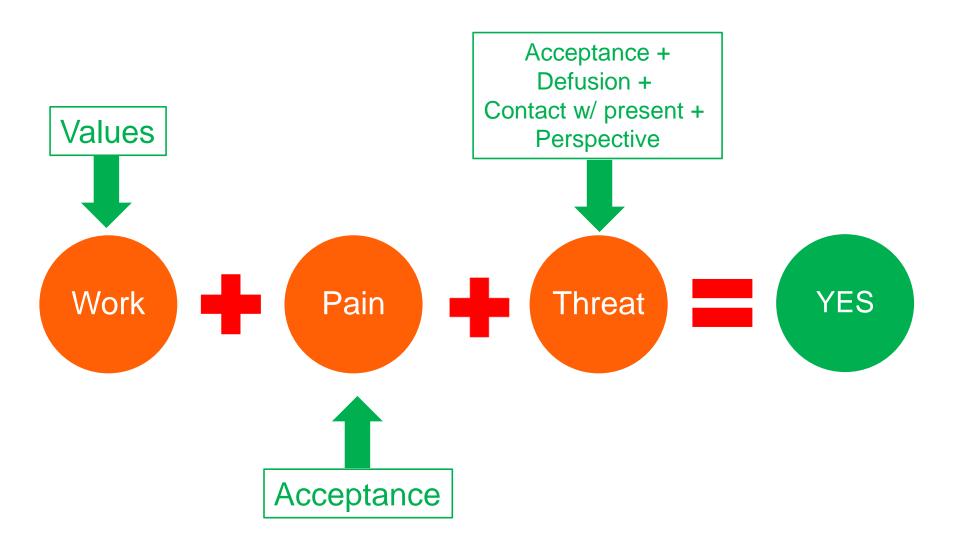












## **Summary of Points Presented**

- 1. Work is a notoriously difficult outcome in the context of chronic pain.
- Results from meta-analyses do not show conclusive results.
- 3. The barriers to work are varied.
- 4. Preliminary evidence suggests that newer process-focused variants of CBT may help.

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