

U.S. Department of Veterans Affairs

An Exploration of the **Implications of Sequencing Order** on Group Pain Interventions

David Cosio, Ph.D., ABPP

Madison Simons, MA

BACKGROUND: Does helping people develop a non-threatening primary appraisal of the pain condition via acceptance prior to teaching problem-focused coping strategies improve painrelated outcomes?

H1: Completing ACT before CBT for chronic pain will lead to better pain-related outcomes.

H2: Completing both ACT and CBT will lead to better pain-related outcomes than just one.

METHODS

- . n=168 veterans
- 2. Four conditions: ACT only, CBT only, ACT/CBT, CBT/ACT
- 3. Pre- and post-treatment measures for: pain severity, pain interference, disability, global distress, illness & wellness focused coping, and catastrophizing
- 4. 4 x 2 repeated measures MANOVA with "Intervention condition" and "Time"

RESULTS

- 1. No differences based on time*intervention
- 2. No differences based on intervention
- 3. Significant differences based on time (from

Variables	p-value for "Time"	Partial n ²
Pain severity (composite)	0.03*	.03
Pain interference	.01**	.05
Disability	.32	.01
Illness-focused coping	.27	.01
Wellness-focused coping ^a		.03
Global distress	.00**	.10
Catastrophizing	.00**	.11

DISCUSSION

- Findings confirm much of what is known about psychological treatment:
- Common factors theory (Rosenzweig, 1936)
- Law of diminishing returns

Veterans get better with psychological treatment. Type, length, and order of treatment do not make a difference for Veterans with chronic pain.



Measures:

- Readiness Questionnaire
- Brief Pain Inventory (BPI)
- Oswestry Disability Index (ODI)
- Coping Strategies Questionnaire
- Chronic Pain Coping Inventory
- Brief Symptom Inventory

Pre-intervention differences for **gender and age cohort** (females more ready for self-management approach and younger Veterans with higher distress, interference, and catastrophizing).

Figure 1. Transactional Model of Stress and Coping



Figure 2. Flowchart of Study Participants



References

Cosio, D. (2015). Practice-based evidence for outpatient, acceptance & commitment therapy for veterans with chronic, non-cancer pain. Journal of Contextual Behavioral Science, 5(1), 23-32.

Folkman, S., & Lazarus, R.S. (1988). Coping as a mediator of emotion. Journal of Personal and Social Psychology, 54, 466-475.

Lazarus, R.S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.

Rosenzweig, S. (1936). Some implicit common factors in diverse methods of psychotherapy: "At last the Dodo said, 'Everybody has won and all must have prizes." Am J Orthopsychiatry, 6, 412-415.

Wetherell, J., Afari, N., Rutledge, T., Sorrell, J., Stoddard, J., Petkus, A., ... & Atkinson, J. (2011). A randomized, controlled trial of acceptance and commitment therapy and cognitive-behavioral therapy for chronic pain. Pain, 152, 2098-2107.