

The Power Over Pain – Coaching Intervention Improves Functional Status in African Americans with Cancer Pain

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Improving Functional Status in African Americans with Cancer Pain

- Funded by the National Cancer Institute #R01 CA149432-01A1
- Power Over Pain – Coaching (POP-C)
- Randomized clinical trial
- Two-group randomized design with repeated measures

- Primary outcomes
 - Patient's pain, pain-related distress & functional status collected at enrollment, weekly during the 5-week intervention, and at 7 and 12 weeks
- Intermediate measures
 - Beliefs and perceived control over pain collected at baseline, 7 and 12 weeks

Introduction

- Pain occurs frequently in patients with cancer and is considered to be the most feared and distressing symptom experienced
- Distress is commonly experienced with cancer pain and may lead to a decrease in function
- Functional status is the ability to participate in activities that are meaningful or important to the patient
- Perceived control over pain has been related to improved functional status
- African Americans with cancer pain have been found to have higher levels of pain, more pain-related distress, and lower functional status than White non-ethnic cohorts.

Sample

- 256 patient/caregiver dyads (128/group)
- Inclusion criteria
 - Self-identified as African American
 - 18 years or older
 - Cognitively intact
 - English speaking
 - Report cancer-related pain in the past week of ≥ 4 on a 0 -10 scale
 - Caregivers identified by the patient as the person who helps most with their care



Results

- **236 Patients: 106 Control and 130 Intervention**
- **Gender: Female 60% Male 40%**
- **Age: 20 to 87; mean age 55 years**
- **Education:**
 - **Grade School – 6 (3%)**
 - **High School – 131 (58%)**
 - **College – 79 (35%)**
 - **Grad School – 9 (4%)**
- **Marital Status**
 - **Married – 51 (23%)**
 - **Single 112 (49%), Separated 8 (4%), Divorced 35 (15%), Widowed 21 (9%)**
 - ***Alone – 77%***



Cancer Demographics

- **Sites**
 - Breast 48 (21%)
 - GI 34 (15%)
 - Lung 34 (15%)
 - GU 31 (14%)
 - Oral 24 (11%)
- **Months since diagnosis – range 0-193;
Mean – 30 months**
- **Metastasized**
 - No – 139 (61%)
 - Yes – 82 (36%)



Pain Ratings

- Worst pain – mean = 7.59 (0-10 scale)
- Average pain = mean = 5.89 (0-10 scale)
- Least pain – mean = 3.55 (0-10 scale)

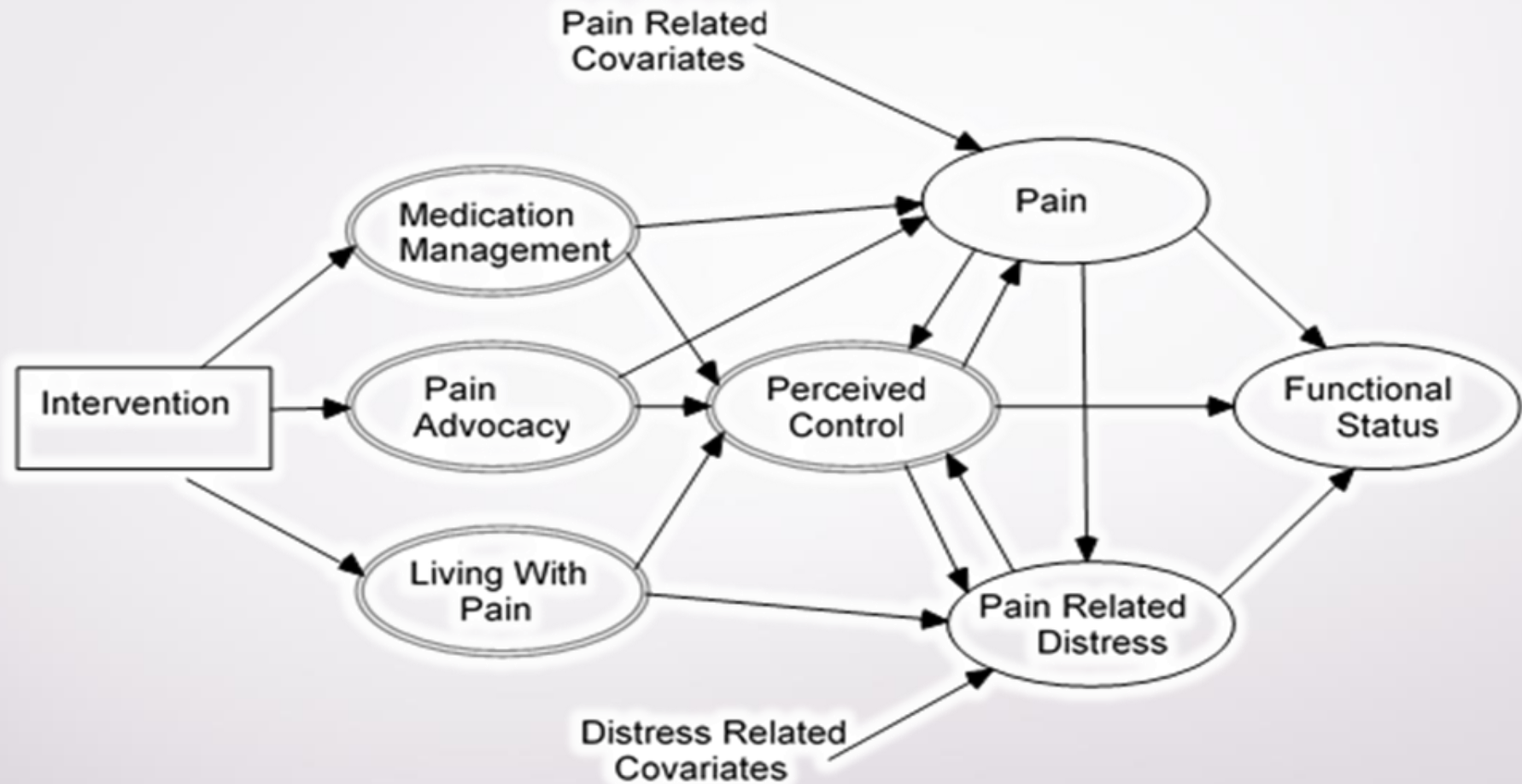
- Patients experience moderate levels of pain most of the time
- On good days, their pain drops to a low to moderate level
- On bad days, their pain is severe



Power over Pain – Coaching (POP-C)

This intervention focuses on medication management, pain advocacy, and living with pain. The aim of the intervention is to decrease pain and distress, increase the patient's perceived control over pain, and enhance functional status. The intervention is specifically tailored to African Americans and individualized to specific patient/caregiver needs.

Intervention Model



Covariates: Age, Gender, Co-morbidities
Metastasis, Opioid-related side effects

Double lined ovals represent constructs measured for both patient and caregiver. The primary outcomes are measured only for the patients (single line ovals).

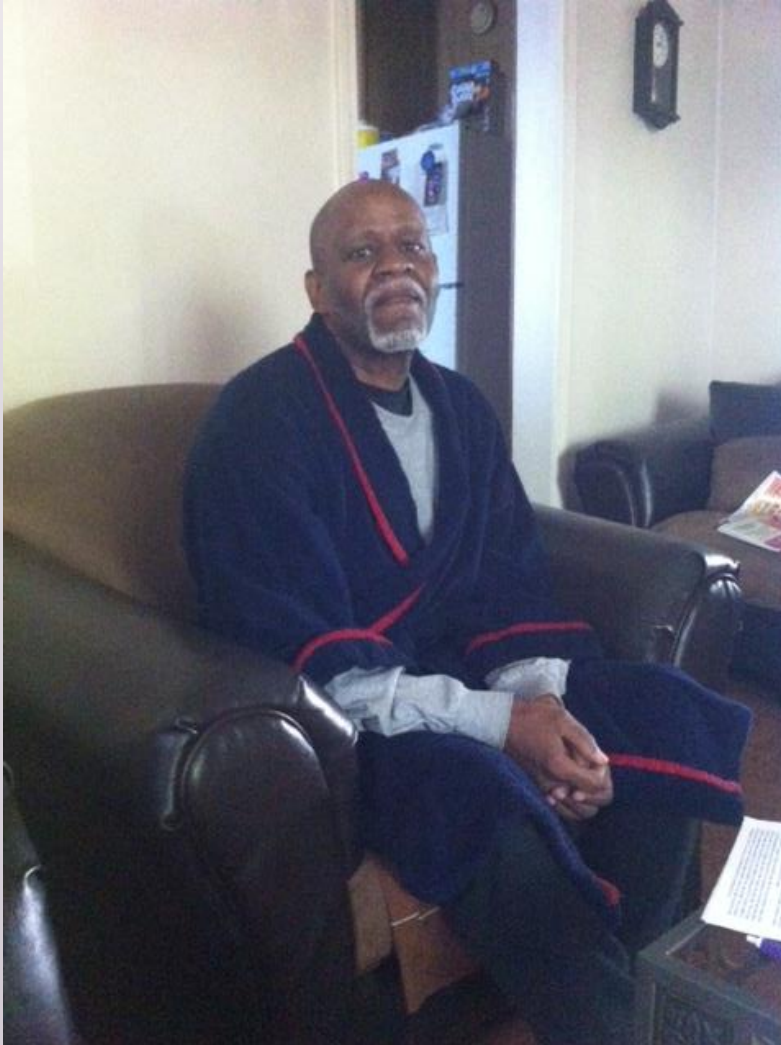
Medication Management

- Importance of pain management
- Misconceptions
- Types of analgesics
- Side effect management
- Effective use of analgesics
- Untried analgesic and adjuvant options
- More effective administration of prescribed Rx
- Changes in Rx to ↓ pain or side effects
- Community & economic barriers
- Community resources for prescriptions
- Safe-keeping of medications



Pain Advocacy

- Communication skills
- Role playing
- Advocacy training
- Suggestions for ↑ communication with health care providers
- Advocating for effective pain management
- Overcoming fear and mistrust
- Transcultural communication



Living with Pain



- Modifying patient's & caregiver's responses to pain
- ↓ pain-related distress
- Positive reactions to increased self-efficacy
- Remaining functional with pain under control
- Building confidence to manage pain
- Coping with changes in health status
- Acceptance of pain
- Spiritual / religious resources
- Use of nonpharmacologic modalities
- Use of complementary/alternative therapies

Perceived Control Over Pain

- Central element – the perception that ability to affect outcomes
- “The perception that one has a way of maintaining control over an adverse event, such as pain.”

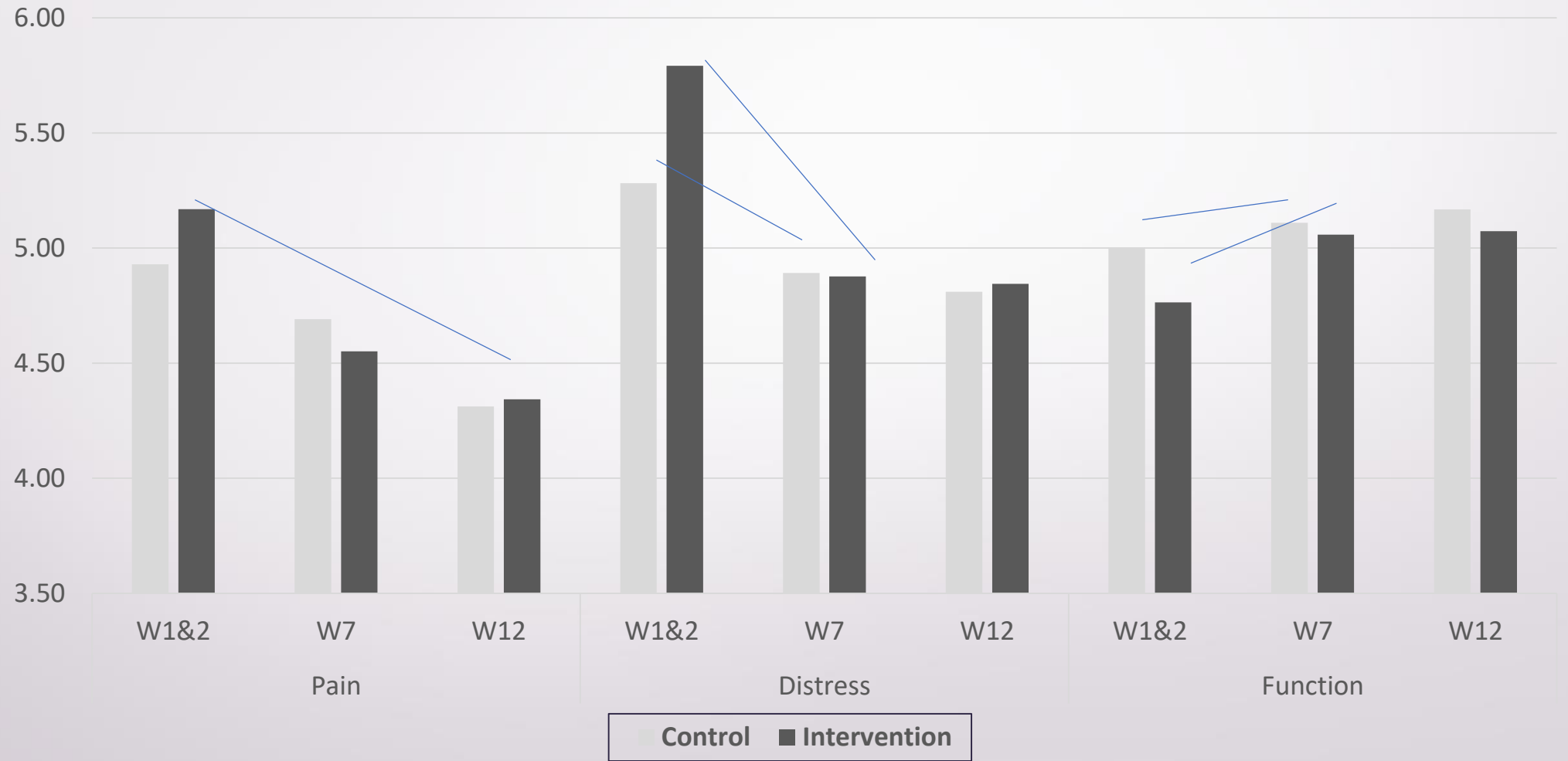
(Pellino & Ward, 1998, p.111)



Internal Consistency Reliability of Composite Variables Used in SEM Model

	Composite Variable	No. Items	Reliability
Primary Outcomes	Pain	5	.90
	Pain-related distress	4	.76
	Function	11	.82
Perceived Control	Pharmacological control	7	.68
	Cognitive control	10	.80
	Pain catastrophizing	13	.92
	Feeling of control	3	.71
Intervention Components	Medication management	35	.85
	Pain advocacy	22	.80
	Living with pain	15	.82

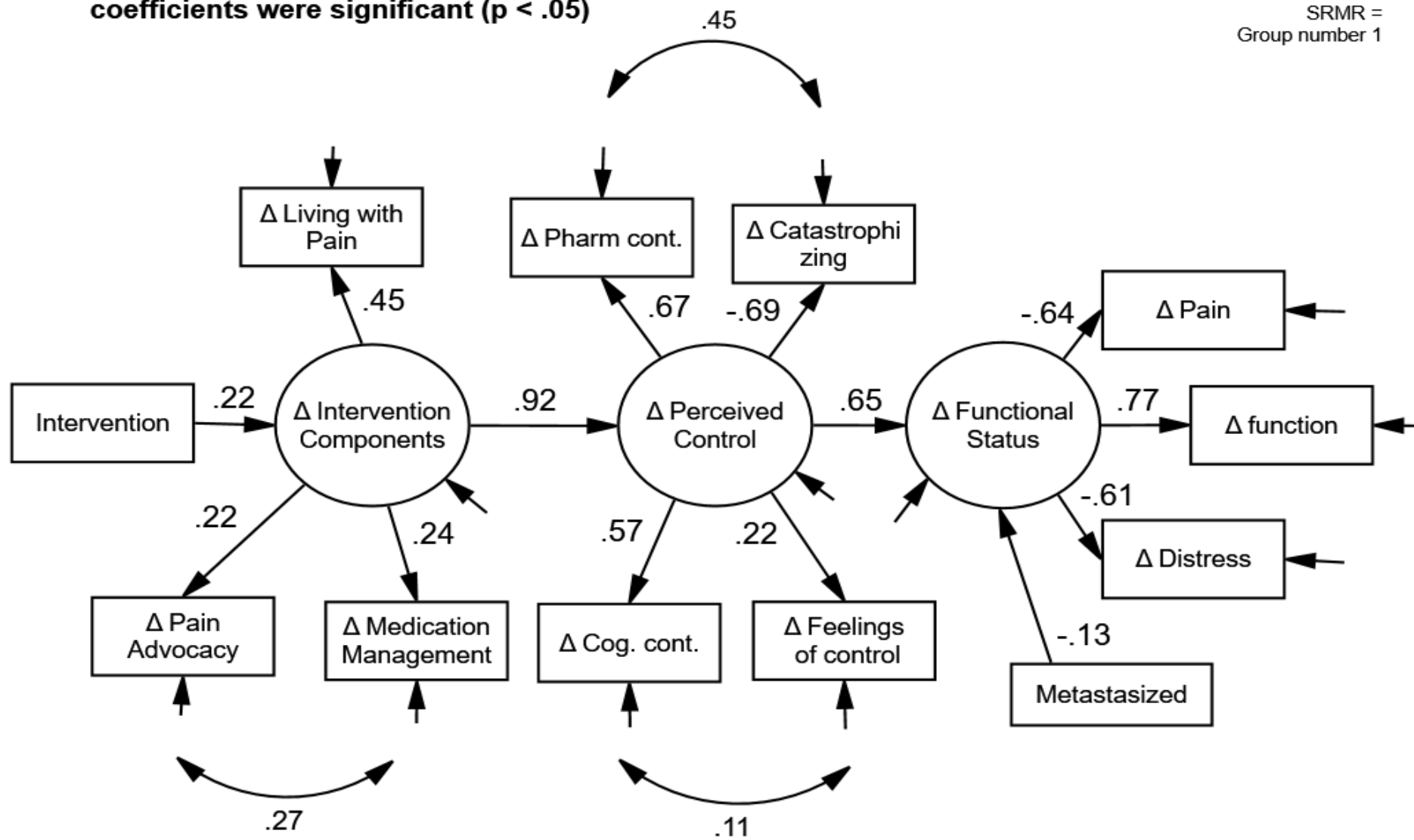
Results



Three Component Latent Change Score Model

The model fit well and bootstrapped estimates of standardized path coefficients were significant ($p < .05$)

File = Model 2 (3 latent constructs)ver(a)poster
 N = 236
 Chi Square (75.375) / DF (49) = (1.538)
 Chi Square Probability = .009
 RMSEA = .048, 90%CI = (.024, .068),
 CFI = .931
 SRMR =
 Group number 1



Conclusions and Implications

- These results support the POP-C intervention and the model it is based on, validating the effects of the POP-C intervention for African Americans with cancer pain
- Interventions to increase perceived control over pain have the potential to improve functional status by decreasing pain and pain-related distress

Research Team

- April Hazard Vallerand, PhD, RN, FAAN – PI
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POWER OVER



Research Study

Wayne State University
College of Nursing