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The feasibility and acceptability of groups for pain management in methadone maintenance treatment

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Abstract

Objectives—Effective and safe pain management interventions in methadone maintenance treatment are needed.

Methods—We examined the feasibility (i.e., single session attendance) and acceptability (i.e., patient satisfaction, booster session attendance) of cognitive-behavioral therapy-informed groups for pain management: *Coping with Pain*, *Relaxation Training*, *Group Singing*, and *Mindful Walking*. Pre- and post-session measures were collected.

Results—349 (out of a census of approximately 800) methadone-maintained patients attended at least one of the groups. Group satisfaction was high. Booster session attendance was numerically lower in Mindful Walking (15%) as compared to the other groups (at least 40%). Repeat attendance at Coping with Pain was associated with reduced characteristic pain intensity and depression, while repeat attendance at Relaxation Training was associated with decreased anxiety.

Conclusions—Coping with Pain, Relaxation Training, and Group Singing are transportable, affordable, adaptable, and tolerated well by patients with pain and show promise as components of a multimodal pain management approach in methadone maintenance treatment.

Keywords

Pain; methadone; opioid-related disorders; cognitive-behavioral therapy; feasibility studies

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INTRODUCTION

Effective pain management in methadone maintenance treatment (MMT) is a clinical challenge (Dhingra et al. 2013). Chronic pain, defined as non-cancer-related pain lasting at least three months, is common among patients in MMT, associated with medical and psychiatric comorbidity, and its treatment in this patient population can be complicated by the presence of opioid addiction (Jamison et al. 2000; Rosenblum et al. 2003; Peles et al. 2005). Drug counselors report difficulties treating patients with chronic pain and opioid dependence, in part due to the absence of evidence-based interventions and appropriate treatment referrals for these comorbid conditions (Barry et al. 2008).

Proposed strategies for managing chronic pain in MMT patients have focused on pharmacologic interventions (Wachholtz et al. 2011; Alford et al. 2013); less attention has centered on psychological treatments that may have several potential advantages. First, there is substantial evidence that psychosocial treatments are effective in treating chronic pain (Hoffman et al. 2007), substance-related disorders (McHugh, Hearon, & Otto, 2010), and associated psychiatric conditions such as anxiety and depression (Hofmann et al. 2012). Second, pilot studies have demonstrated the feasibility and preliminary efficacy of psychosocial treatments for co-occurring pain and substance use disorders (Currie et al. 2003; Ilgen et al. 2011). Third, psychological interventions avoid the potential risks associated with pharmacotherapy, including medication interactions, side-effects, and misuse. Fourth, unlike office-based medical settings, psychological treatments are already part of regular treatment in MMT. However, the provision of psychological treatments in MMT is potentially encumbered by high clinician turnover, large caseloads, and variable levels of counselor training (Ball and Ross 1991; Kidorf et al. 2006); thus, there is a clear need to evaluate the feasibility and efficacy of practicable psychosocial treatments for managing chronic pain in MMT.

The goal of the present study was to collect preliminary feasibility and acceptability data on four psychosocial group interventions (*Coping with Pain*, *Relaxation Training*, *Group Singing*, *Mindful Walking*). These interventions were selected because they were low-cost, practicable, and disseminable; each was informed by the cognitive-behavioral therapy (CBT) model of pain management (the first two are components of traditional CBT for pain management, while the latter two are somewhat novel and are based on coping skills involving behavioral activation combined with distress tolerance, and participation in a non-drug-related pleasurable activity to distract attention from pain) (Kerns et al. 2011). As a Phase I therapy development trial (Rounsaville et al. 2001), we set out to examine one primary feasibility-related research question: When groups for pain management are offered to MMT patients under routine clinical conditions (i.e., in a busy opioid treatment program where patients are free to choose which groups they frequent), would they attend at least one session? Although group counseling interventions are common in MMT, limited patient interest often results in poor to moderate attendance (Kidorf et al. 2006). Additionally, we had two acceptability-related research questions: First, would participants report satisfaction with the groups? Second, when invited to return for a booster session, would attendees return? Finally, we examined whether repeat group session attendance was associated with

changes in pain (i.e., characteristic pain intensity, recent pain-related disability) or state-related anxiety and depression.

METHODS

Participants and Setting

Participants were 349 patients with opioid dependence who were enrolled in MMT at the Legion Clinic of the APT Foundation, Inc., in New Haven, CT, a private not-for-profit community-based organization that specializes in the treatment of opioid dependence. When the first pain group began, the Legion Clinic had a census of approximately 800 MMT patients, who were required to attend at least one counseling group of their choosing every month. Ten to twelve open groups were typically available daily, Monday to Friday; attendance at any of the four groups examined in this study fulfilled the clinic's monthly attendance requirement.

Procedures and Measures

MMT clinicians were informed about the groups at staff meetings and were encouraged to refer patients with pain. Participants also self-selected in response to flyers posted at the clinic, which noted the purpose of the group: Coping with Pain group was to help patients "better cope with their pain"; Relaxation Training group was to assist patients "better manage their stress and their pain"; Group Singing was to "sing along to your favorite songs, make requests, and discuss musical strategies for coping with pain"; and Mindful Walking was to teach patients to "better manage pain by meditating while walking." Coping with Pain, Relaxation Training, Group Singing, and Mindful Walking ran weekly from September 2008 to August 2011 (131 sessions offered), May 2009 to August 2011 (104 sessions offered), November 2009 to September 2011 (84 sessions offered), and August 2011 to March 2013 (83 sessions offered), respectively. The targeted enrollment for each group was 100. Participants completed brief preand post-session measures. The study received appropriate Institutional Review Board and institutional approval (at Yale University School of Medicine and at APT Foundation).

Format and Description of Psychosocial Groups

Groups were manual-guided and designed as single sessions. Participants were invited to attend booster sessions; the same material was covered in each session within a specific group. Sessions lasted approximately 50 minutes and attendees had little interaction with each other.

Groups began with a 5-minute introduction and orientation that centered on (a) providing a description and rationale for the intervention, including its potential salutary effects on managing pain with co-occurring psychiatric and medical conditions and augmenting well-being, (b) discussing the importance of practice in gaining proficiency, (c) reviewing practice assignment completion from the previous session (if applicable), and (d) establishing group regulations (i.e., turn off cell phones, no extraneous chatting).

For Coping with Pain, Relaxation Training, and Mindful Walking, the introduction was followed by a skill acquisition phase (about 35 minutes). The Coping with Pain group included psychoeducation about the distinction between models of acute and chronic pain, suitably paced physical exercise, and non-drug-related pleasurable activities in promoting abstinence from illicit drugs and optimal management of pain (Otis 2005). Participants reviewed a list of free or low-cost pleasurable activities adapted from existing psychosocial treatment manuals (Linehan 1993; Otis 2005). Relaxation Training comprised instruction in relaxation skills adapted from a CBT manual for chronic pain: diaphragmatic breathing, progressive muscular relaxation, and guided visual imagery (Otis 2005). The skill acquisition phase of Mindful Walking began with a brief training on mindfulness followed by a walk outside of the clinic during which attendees practiced mindfulness, and finished with an onsite debriefing (Kabat-Zinn 1994).

Group Singing was designed to offer participants an opportunity to engage in an onsite, fun activity, while refraining from criticisms of their own or other attendees' musical abilities (Baker et al. 2007). Lyric sheets were provided. Musical genres covered included classic rock, folk, funk, soul, reggae, and traditional. Songs varied in musical characteristics, such as musical key (e.g., major, minor) and tempo (e.g., fast, slow).

In the last 10 minutes of sessions (with the exception of Group Singing), participants set individual goals for the upcoming week that related to the specific group attended (e.g., paced walking, non-drug-related pleasurable activity), discussed possible obstacles (and solutions) to completing their goals, and were provided with a wallet-sized goal-reminder card. In Group Singing, the skill acquisition phase lasted 45 minutes, and there was no goal-setting.

Group Leaders

Groups were conducted with female and male co-leaders. We followed standard protocols for training therapists on psychosocial treatments, including didactic workshops, opportunities to observe expert providers, supervised practice with structured feedback, and ongoing supervision (Rounsaville et al. 2001; Martino et al. 2011). Therapists in the Coping with Pain, Relaxation Training, and Mindful Walking groups were clinical or counseling psychologists, addiction psychiatry fellows, or pre- or post-doctoral psychology fellows at the Yale University School of Medicine. Co-leaders in Group Singing were a methadone counselor and a research assistant with a background in music.

Measures

Demographics, Clinical History, MMT Characteristics, and Pain

Characteristics—Prior to their first group session, attendees provided information about demographics (i.e., age, gender, race/ethnicity), clinical history (i.e., pain duration, disability status [receipt of income for a physical disability like supplemental security income or social security disability insurance]), MMT characteristics (i.e., duration of current MMT episode, daily methadone dose), and pain characteristics: On an 11-point 0 to 10 scale (where 0 indicated “no pain” and 10 indicated “pain as bad as you can imagine”), participants rated three facets of pain experienced in the past seven days (i.e., “pain at its worst,” “typical level

of pain,” “current pain”) and five pain interference items from the *Brief Pain Inventory* (BPI)(Cleeland 1991; Cleeland and Ryan 1994) that assessed the extent to which their pain in the last seven days had interfered with their “general activity,” “mood,” “relationships with other people,” “sleep,” and “enjoyment of life.” As previously done (Garnet et al. 2011), following the scoring system from the *Graded Chronic Pain Scale* (GCPS)(Von Korff et al. 1992), the mean of the three pain intensity ratings by 10 was calculated to determine the characteristic pain intensity, and the corresponding mean of the pain interference items by 10 was calculated to measure recent pain-related disability. Pain intensity and interference were assessed prior to each session attended.

Group Treatment Satisfaction—After each session, participants rated four Likert-type items related to group satisfaction, which were adapted from the *Primary Care Buprenorphine Satisfaction Scale* (Barry et al. 2007) and the *Client Satisfaction Questionnaire-8* (Attkisson and Zwick 1982): group helpfulness [ranging from 1 (not at all helpful) to 6 (extremely helpful)]; group enjoyability [ranging from 1 (not at all enjoyable) to 6 (extremely enjoyable)]; willingness to recommend the group to a friend with pain [ranging from 1 (definitely not) to 5 (definitely yes)]; and degree to which the group met participant expectations [ranging from 1 (not at all) to 6 (completely)].

State-related Anxiety and Depression—After each group session, participants were asked to rate on an 11-point scale [ranging from 0 (“none”) to 10 (“maximum”)] their current mood by circling the number that best described their current levels of “anxiety” and “depression.”

Data Analysis

Descriptive statistics (means, standard deviations, proportions) were calculated to examine group attendance rates, participant characteristics, and satisfaction ratings. ANOVA and chi-square data analytic strategies were also used to examine changes in pain-related (i.e., characteristic pain intensity, recent pain-related disability) measures and state-related anxiety and depression associated with attendance of 2 or more group sessions. We evaluated participants independent of the specific group session they attended because the format and delivery of the group interventions were standardized, each group was designed to have limited patient-to-patient interaction, and novice attendees were mixed with those who were repeat attendees. Statistical significance was set at $p < .05$. Statistical analyses were performed using IBM SPSS Version 19.0 for Windows (IBM Corporation).

RESULTS

Participants

Demographic, clinical history, and methadone maintenance treatment and pain characteristics of the 349 adults who attended one or more groups are summarized in Table 1. Overall, a majority of attendees was male, white, and reported current chronic pain, and 23% reported current work disability. On average, participants had been in methadone maintenance treatment for more than two years, had a daily methadone dose exceeding 80

mg, and reported average characteristic pain intensity and recent pain-related disability scores of 47.3 (SD=30.2) and 45.9 (SD=30.5), respectively.

Group Characteristics

Of the 349 unique participants, 260 attended one type of group, 65 attended two types of groups, and 24 attended three types of groups. Attendance data for each of the four groups are presented in Table 2. As these were drop-in groups, not every session offered was attended: 102 of 131 (77.8%) sessions offered in Coping with Pain had at least one participant, 62 of 104 (59.6%) in Relaxation Training, 60 of 84 (71.4%) in Group Singing, and 46 of 83 (55.4%) in Mindful Walking. On average, participants in Coping with Pain, Relaxation Training, and Group Singing attended between 2 and 3 sessions, while those in the Mindful Walking group attended fewer than 2 sessions. Whereas the maximum number of sessions attended in Mindful Walking was 6, it ranged between 18 and 26 for the other groups. On average, the number of attendees per group was numerically lower for Mindful Walking (2.9) as compared to the other groups (which ranged between 3.7 and 4.8).

Group Satisfaction

Overall, participants reported relatively high levels of group treatment satisfaction: participants, on average, had numerically higher ratings of “helpfulness,” “enjoyability,” “recommend group to friend,” and “met expectations” for Coping with Pain, Relaxation Training, and Group Singing, as compared to Mindful Walking (see Table 2).

Repeat Session Attendance

Of the 130, 116, 110, and 107 participants who attended Coping with Pain, Relaxation Training, Group Singing, and Mindful Walking, the repeat session attendance rate was 43% (n=56), 43% (n=50), 40% (n=44), and 14% (n=15), respectively. As summarized in Table 3, whereas repeat attendance at Group Singing was not associated with changes in pain, anxiety, or depression, repeat attendance at Coping with Pain was associated with decreased characteristic pain intensity (66 vs. 59, $p < .05$) and depression (4.9 vs. 3.8, $p < .05$), while Relaxation Training was associated with reduced anxiety (4.3 vs. 3.4, $p < .05$). Changes associated with repeat Mindful Walking attendance were not calculated because of the low number of participants who attended two or more sessions.

DISCUSSION

Studies to date that have examined pain management in methadone maintenance treatment have generally focused on pharmacologic interventions (Wachholtz et al. 2011; Alford et al. 2013). The current study extends possible treatment options by examining the feasibility and acceptability of providing CBT-informed drop-in groups for pain management in a busy opioid treatment program with minimal counseling attendance requirements. The primary findings of this study are that while all four groups examined were feasible, only three (Coping with Pain, Relaxation Training, Group Singing) had adequate acceptability.

Feasibility and Acceptability of Pain Management Groups

Three hundred and forty nine methadone-maintained patients (out of a total of 800) attended one or more types of pain groups. Based on the rates of chronic pain reported in prior studies, we estimate that between 296 and 496 of the methadone maintenance treatment program patients had chronic pain (Jamison et al. 2000; Rosenblum et al. 2003; Barry et al. 2009a). Given that prospective participants had multiple competing groups to choose from, had minimal group attendance requirements, and were offered no financial incentives to attend any of the groups examined in this study, the relatively high rates of attendance suggest the feasibility of conducting CBT-informed groups for pain management in this setting and contrasts with some providers' characterization of patients with co-occurring chronic pain and opioid dependence as being "medication seeking" or solely focused on pain relief via medications, especially opioid medications (Barry et al. 2008; Barry et al. 2010).

The demographics of group participants were consistent with those reported in prior research of patients with pain at the same treatment facility: On average, attendees were in their late 30s, were receiving moderately high maintenance doses of methadone [approximately 80mg daily], and had been in maintenance treatment for over two years (Barry et al. 2009a). Women and racial or ethnic minority members were well represented among group attendees: Prior to the startup of the first pain management group, women comprised 41% of the MMT clinic census, and they constituted 45% of group attendees. The proportion of participants who self-identified as non-White was numerically higher than that in the overall clinic population (32% vs. 25%, respectively). Interventions associated with treatment engagement among racial minority patients may be particularly important for program planners to consider given recent concerns about the relatively high rates of MMT attrition among African American patients (Mancino et al. 2010). The proportion of attendees with current chronic pain (59%) is consistent with that documented in a prior study that used a similar 3-month pain duration criterion (61%) (Jamison et al. 2000), and suggests that the groups attracted a cross-section of methadone-maintained patients with pain.

Overall, participants reported high levels of group treatment satisfaction: On average, participants rated the helpfulness and enjoyability of the groups between "moderately" and "considerably," reported the likelihood that they would recommend the groups to a friend with pain as between "probably yes" and "definitely yes," and rated the extent to which the groups met their expectations as between "moderately" and "a lot." Patient satisfaction has increasingly been viewed as an important healthcare outcome and as a measure of quality of care in different health care settings, including opioid agonist maintenance treatment (Perez de los Cobos et al. 2004). Moreover, methadone maintained patients with pain are less likely than those without pain to rate their health care as satisfactory or to perceive their methadone dose as sufficient (Jamison et al. 2000). While the booster session attendance rates were adequate (40% or above) for Coping with Pain, Relaxation Training, and Group Singing (especially since the groups were not designed as a sequence and did not provide new information or teach new skills in subsequent sessions, and participants were not incentivized for returning), the rate for Mindful Walking was relatively low (15%), suggesting that unlike the other groups, the latter intervention demonstrates comparatively

low acceptability. The reason for this numerically lower booster session attendance is currently unclear and merits further research. Possible explanations include dislike for the physical activity dimension of the group or pain-related fear avoidance (Vlaeyen and Linton 2000). However, irrespective of the cause, the low booster session attendance points to a challenge in implementing behavioral activation, a potentially key component of pain management in this clinical population.

Initial Efficacy of Pain Management Groups

Some initial efficacy of Coping with Pain and Relaxation Training is suggested by the diminution of characteristic pain intensity, depression, and anxiety associated with repeat attendance of these respective groups. Given that pain reduction and mood improvement are important outcomes in clinical trials of chronic pain (Dworkin et al. 2005), Coping with Pain and Relaxation Training represent potentially important and inexpensive interventions for pain management among methadone-maintained patients with pain. Both groups can be easily incorporated into interdisciplinary treatment approaches, which have demonstrated efficacy in addressing chronic pain (Institute of Medicine 2011; Turk et al. 2011) and may be attractive to program managers since they are likely to require few training or supervision resources. We are currently offering Coping with Pain and Relaxation Training as part of a sequential series of pain management groups in the methadone clinic where this study was conducted, and are exploring means of procuring remuneration for these groups outside of the “bundled” rate allocated to patient slots.

Limitations

Several potential limitations are worth noting. Participants self-selected for group participation based on flyers and clinician referrals; thus, it is unclear if patients with pain who participated in the groups were different from those who did not. We did not use pain-related inclusion criteria (e.g., back pain lasting at least 6 months); thus, participants varied in terms of their chronic pain status (e.g., current and lifetime episodes of chronic pain were reported by 59% and 74% of participants, respectively). However, the demographic characteristics of attendees were similar to those reported in a previous study of patients with pain from the same opioid treatment program (Barry et al. 2009a). Participants were enrolled in treatment at a not-for-profit community-based opioid treatment program in a city in the Northeast; thus, our findings may or may not generalize to other programs in different geographic regions. Although participants were informed that their answers would not affect their treatment, the questionnaires were completed at the treatment facility and this may have influenced the responses of participants concerned about how staff might react to their answers. No independent assessments of participants’ self-reported responses—including pain status—were conducted. Given the absence of validated measures of methadone maintenance treatment pain-related group treatment satisfaction, we developed our own measure, which although face-valid, has not been formally validated. We did not collect data on variables that may have affected pain ratings (e.g., methadone dose, compliance with program, substance use status) and are thus potential cofounders in interpreting study findings. The study was not designed to evaluate the efficacy of the pain management groups, the number of sessions that patients would need to attend in order to obtain significant or lasting benefit, or the durability of treatment response. Instead the focus of the

study was an initial examination of the feasibility and acceptability of CBT-informed groups for pain management. However, the potential promise of both Coping with Pain and Relaxation Training is suggested by findings indicating that among those who attended two or more sessions, there was an associated decrease in characteristic pain intensity, depression, and anxiety, respectively, from the first to second sessions. It should be noted, however, that we did not assess patient motivation for group attendance; thus, the reasons why patients did not return to any particular group are unclear. We did not examine substance use disorder variables; future studies may benefit from such an investigation given the possible relationship between pain and substance use in this population (Barry et al. 2009b).

CONCLUSIONS

Despite these limitations, this exploratory study represents an initial investigation that demonstrates the feasibility and acceptability of CBT-informed group interventions for pain management in methadone maintenance treatment. The major components of the Coping with Pain group, such as psychoeducation, behavioral activation, and practice assignments, are standard components of CBT approaches for substance use disorders and chronic pain (Carroll 1998; Otis 2005) and are consistent with current biopsychosocial models concerning the occurrence, maintenance, and treatment of chronic medical conditions such as chronic pain and opioid dependence (McLellan et al. 2000; Gatchel et al. 2007). Behavioral activation, such as paced physical exercise and non-drug-related pleasurable activities—core features of the Coping with Pain group—has been shown to ameliorate psychiatric distress in different clinical populations, and to improve pain outcomes in patients with chronic pain (Chou et al. 2007; Krogh et al. 2011). Similarly, components of Relaxation Training, such as diaphragmatic breathing, progressive muscular relaxation, and visualization, dovetail with a key recommendation of the recent Institute of Medicine report concerning the importance of self-management approaches of chronic pain (Institute of Medicine 2011). One advantage of Relaxation Training and Group Singing is that they can be offered (and may be beneficial) to MMT patients regardless of their pain status, and thus could be easily folded in to existing MMT programs without singling out those with chronic pain. Future research on pain management in methadone maintenance treatment might benefit from examining the therapeutic dose of Coping with Pain and Relaxation Training (and possibly Group Singing) required as either stand-alone interventions or as part of a multimodal treatment to enhance pain management and/or decrease pain intensity.

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Table 1

Demographics, clinical history, methadone maintenance treatment and pain characteristics.

Participant characteristics	Group Participants N = 349 Mean (SD)
<i>Demographics</i>	
Age	39.0 (10.8)
Gender, % male (N)	54.7 (191)
Race, % white (N)	68.2 (238)
Pain status, % current chronic pain (N)	58.5 (204)
Pain status, % lifetime chronic pain (N)	74.2 (259)
<i>Clinical History</i>	
Number of major surgeries	1.6 (2.4)
Disability status, % yes (N)	22.9 (79)
<i>MMT Characteristics</i>	
Current MMT episode, months	28.3 (41.9)
Daily methadone dose, mg	80.5 (28.7)
<i>Pain Characteristics</i>	
Pain intensity in past 7 days	
Worst pain intensity	5.5 (3.4)
Typical pain intensity	4.8 (3.1)
Current pain intensity	3.9 (3.1)
Characteristic pain intensity	47.3 (30.2)
Pain interference in past 7 days	
General activity	4.4 (3.3)
Mood	4.6 (3.3)
Relationships with other people	4.1 (3.4)
Sleep	5.0 (3.5)
Enjoyment of life	4.9 (3.6)
Recent pain-related disability	45.9 (30.5)

* MMT = Methadone Maintenance Treatment

Table 2

Group size, session attendance, and session satisfaction.

	Coping with Pain N = 130		Relaxation Training N = 116		Group Singing N = 110		Mindful Walking N = 107	
	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	Range
Average group size	3.7 (3.0)	1-13	4.3 (3.5)	1-17	4.8 (3.3)	1-15	2.9 (2.3)	1-9
Session attendance	2.7 (3.6)	1-26	2.3 (2.8)	1-20	2.4 (3.3)	1-18	1.3 (0.8)	1-16
Satisfaction measures								
Helpful ^a	4.6 (1.1)	1-6	4.7 (1.2)	2-6	5.0 (1.2)	1-6	4.1 (1.3)	1-6
Enjoyable ^a	4.7 (1.1)	1-6	4.9 (1.2)	2-6	5.3 (1.0)	2-6	4.6 (1.2)	1-6
Recommend ^b	4.5 (0.8)	1-5	4.5 (0.7)	1-5	4.4 (0.9)	1-5	4.2 (0.8)	2-5
Expectations ^c	4.5 (1.2)	1-6	4.7 (1.2)	1-6	4.9 (1.1)	1-6	4.3 (1.3)	1-6

^a scored on a scale from 1 "Not at all" to 6 "Extremely"

^b scored on a scale from 1 "Definitely not" to 5 "Definitely yes"

^c scored on a scale from 1 "Not at all" to 6 "Completely"

Table 3

Change in pre- and post- session measures for repeat group attendees.

	Coping with Pain			Relaxation Training			Group Singing		
	Session 1 N = 56 Mean (SD)	Session 2 N = 56 Mean (SD)	p	Session 1 N = 50 Mean (SD)	Session 2 N = 50 Mean (SD)	p	Session 1 N = 44 Mean (SD)	Session 2 N = 44 Mean (SD)	p
<i>Pre-Session Measures</i>									
Pain									
Intensity ^a	66.1 (20.1)	59.0 (22.5)	.037	51.7 (27.7)	51.3 (26.4)	.857	49.6 (32.1)	45.7 (26.7)	.348
Interference ^b	60.1 (24.5)	59.9 (21.6)	.928	55.2 (23.9)	52.5 (23.8)	.300	48.3 (31.1)	42.8 (24.7)	.239
<i>Post-Session Measures</i>									
Mood									
Anxiety	5.2 (2.9)	4.9 (2.4)	.395	4.3 (2.8)	3.4 (2.8)	.033	2.5 (3.0)	2.7 (3.1)	.592
Depression	4.9 (3.0)	3.8 (2.8)	.003	4.0 (3.0)	3.6 (2.8)	.310	2.5 (3.1)	2.5 (3.0)	.938

* Bolded p-values are significant at p<.05

^a Intensity = average of "pain at its worst," "typical level of pain," and "current pain," scored on a 0-100 scale

^b Interference = average of pain interfering with "general activity," "mood," "relationships with other people," "sleep," and "enjoyment of life," scored on a 0-100 scale