

Chronic Pain in Patients with Alcohol or Drug Use Disorders

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Overview

- Background information on overlap between pain and substance misuse
- Discuss strategy for intervening in drug and alcohol patients with pain
- Highlight the potential utility/feasibility of this approach:
 - Case examples
 - Pilot results
- Applying these findings to your clinic

Chronic Pain in Health System Users

- Chronic pain is common and problematic in individuals who use the US healthcare system:
 - ~50% of patients experiencing pain on a regular basis (Kerns et al. 2003).
 - Patients with pain report use more services (Kaur et al. 2007; Kerns et al. 2003).
 - Patients with pain have poor functioning and more psychiatric problems (Haskell et al. 2006; Kaur et al. 2007; Kerns et al. 2003).

Overlap between Chronic Pain and Substance Misuse

- In the general population, those with pain are more likely to have drug/alcohol use disorders and vice versa (Demyttenaere et al., 2007; Von Korff et al., 2005).
- Up to ~50% of patients in addictions treatment report chronic pain and up to 19% of patients seeking treatment for pain report a current substance use disorder (Polatin et al., 1993; Rosenblum et al., 2003).
- In addictions treatment, those with pain typically report more severe patterns of substance misuse, psychopathology and function limitations.

Impact of Pain on Addictions Treatment Outcomes

- Chronic pain is associated with a poorer course of post-treatment outcomes following SUD treatment (Larson et al. 2007).
 - In a large addictions treatment program patients with pain were more likely to drop out of treatment and were less likely to be abstinent at 1-year than those without pain (Caldeiro et al. 2008).

Pain and the treatment of substance use disorders in clinical settings

- About CPI
 - Established in 1968, Community Programs, Inc is one of the largest treatment centers serving the metropolitan areas surrounding Flint, Saginaw & Detroit, MI.
 - In addition to providing medically monitored detoxification for approximately 650 patients yearly, CPI also provides separate residential services to approximately 1,380 men and 400 women each year.
 - In this program, approximately 70% of these participants were Caucasian, 26% were African American, 8% were married and the average age was 35.
 - Participants typically stay in residential treatment at CPI for 60 days - over 77% complete their intended course of residential treatment.
- Example of patient with pain at CPI.

Frequency of pain and pain medication misuse at CPI

- Almost 100 CPI patients were screened:
 - over 53% reported pain of at least 5 or greater on a 0 – 10 scale.
 - Of those with pain, 85% reported at least some misuse of pain medications in the past 30 days.
 - 49% of those with pain would likely meet abuse or dependence criteria for pain medications.
- At the Ann Arbor VA Substance Abuse Clinic, approximately 62% of the patients reported moderate or higher pain during the past month.

Treatment of Pain

- Opiates are widely used to manage chronic pain.
- However, concerns in all patients due to:
 - Risk of abuse or diversion
 - Lack of data on long-term efficacy
 - Evidence that long-term use could decrease pain tolerance (e.g., Doherty et al. 2001).
- These concerns are magnified in those with substance use disorders.

CBT for Pain and Substance Use Disorders

- Psychological interventions such as CBT have demonstrated efficacy for reducing pain and improving functioning in persons with a broad spectrum of pain-related conditions (McCracken and Turk 2002; Turk and Okifuji 2002).
- Prior studies have typically excluded those with substance use disorders.
- Only one existing study has explicitly examined the effects of CBT for pain in those with substance use disorders (Currie et al. 2003) and found significant reductions in pain, pain-related interference, medication misuse and more general measures of maladaptive coping from baseline to 12-month follow-up.
- The goal was to examine the effectiveness of an integrated pain management (IPM) intervention for pain and substance misuse in patients treated for substance use disorders.

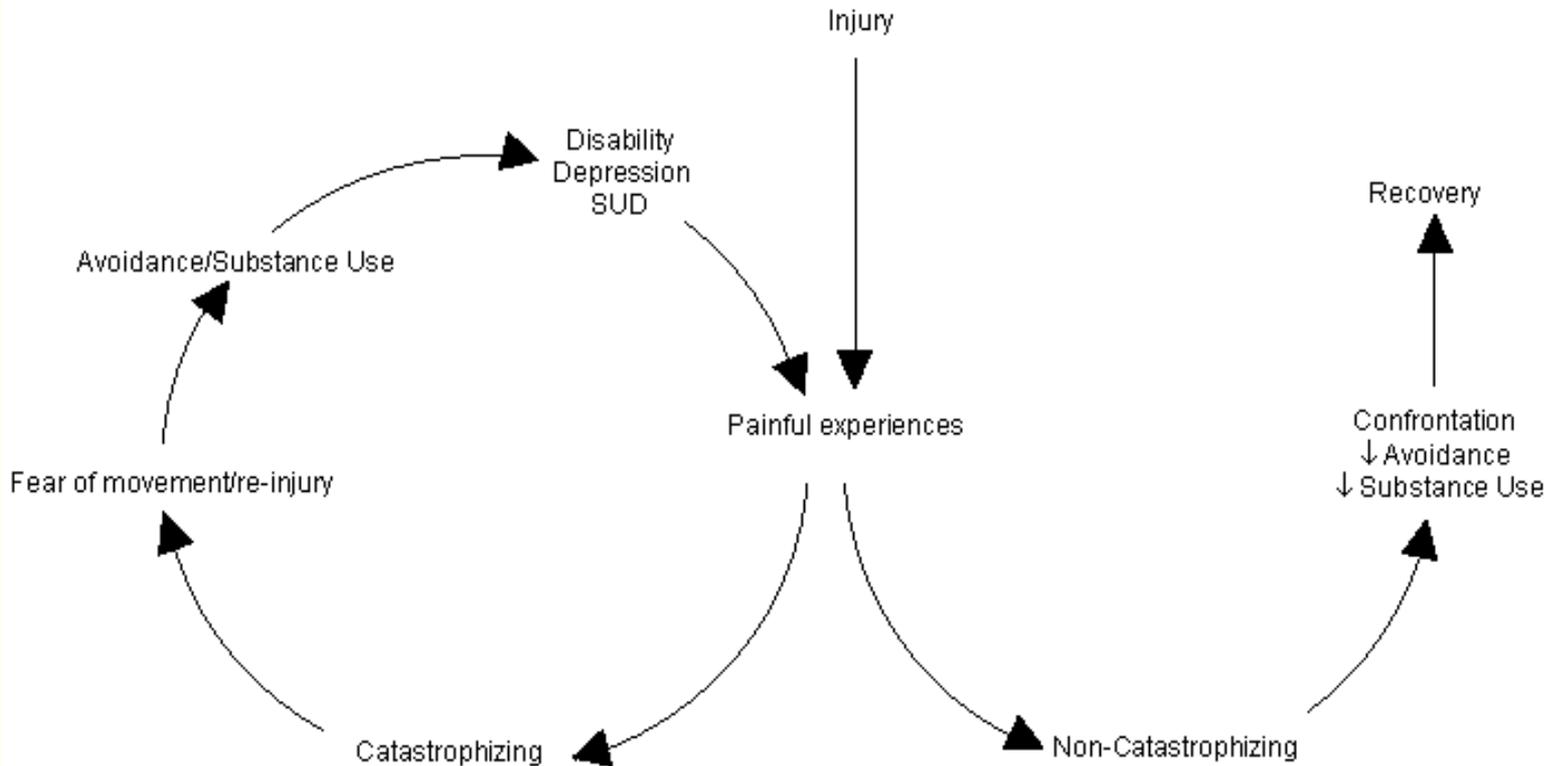
Case Example

- Older male patient
- Axis I: MDD, Cocaine Dependence, History of Alcohol Dependence, and Opioid Abuse.
- Problems:
 - Chronic Pain (Knees and back)
 - Unemployed, inadequate income
 - Feelings of inadequacy
 - Medication noncompliance
 - Poor relationship with prescriber
 - Poor relationship with children and grandchildren
- How do you conceptualize treatment in this patient?
- Where do you begin???

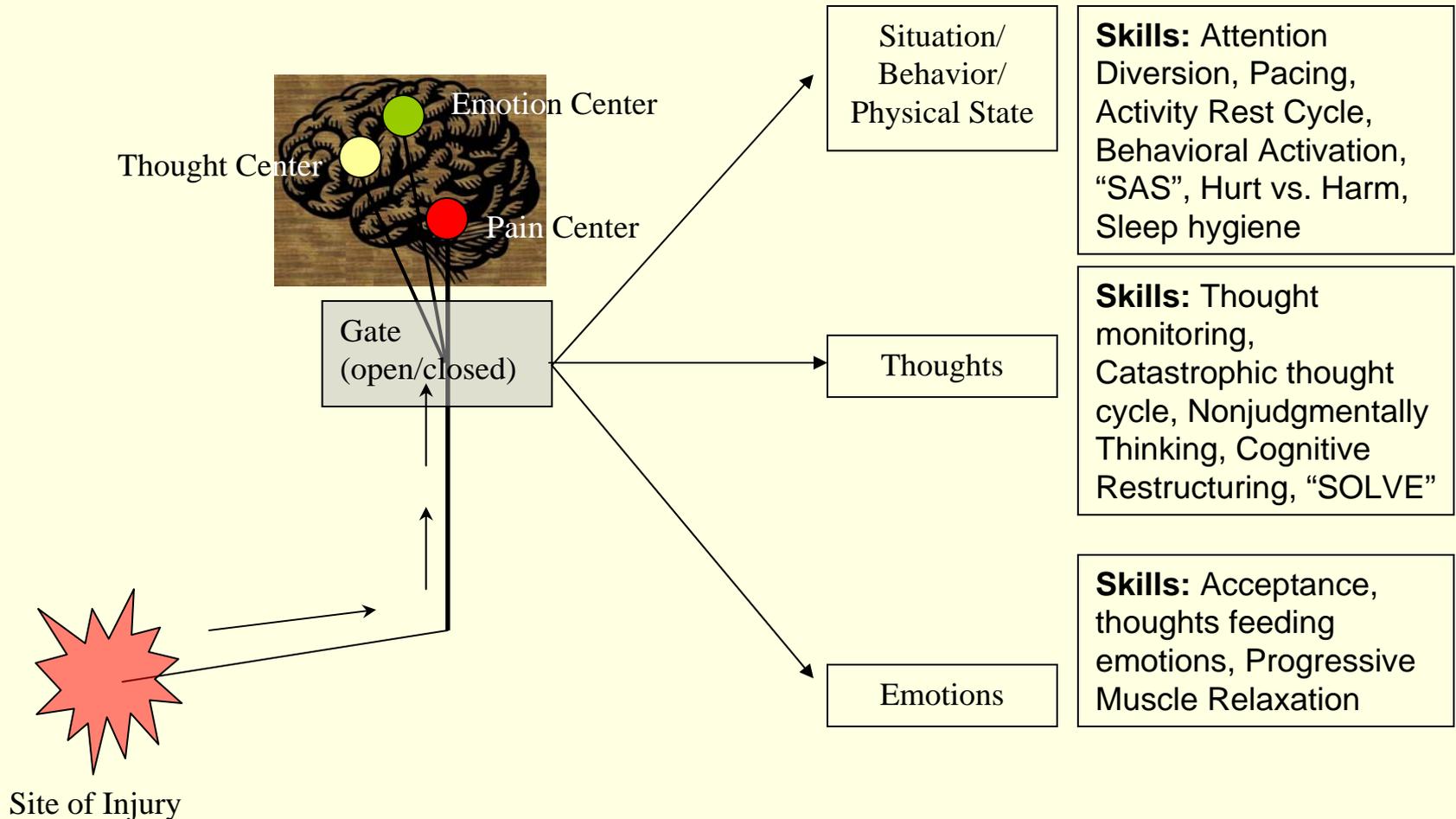
*Patient information disguised to protect confidentiality.

Conceptualizing Treatment: Fear Avoidance Model

■ Pain Perpetuation and Exit Strategy



Where to begin: Gate Control Theory Of Pain



Integrated Pain Management Group Intervention

- Cognitive Content
 - thought monitoring, cognitive reconceptualization and cognitive restructuring
- Behavioral Content
 - pacing, behavioral activation, and attention diversion
- Life Skills Content
 - problem-solving, sleep and exercise management, and communication skills
 - Integrated both cognitive and behavioral components in life skills sessions
- Acceptance
 - Learning to adapt to pain

Substance Use Disorders in IPM

- No single session focused exclusively on substance use.
- SUD coping skills were integrated into each session's specific pain-related focus.
- Conceptualized as a maladaptive coping response.
- Treatment goal: Manage pain without substance use by increasing healthy coping skills and improving self-efficacy.

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Cognitive Reframing: Defining Your Pain Continuum

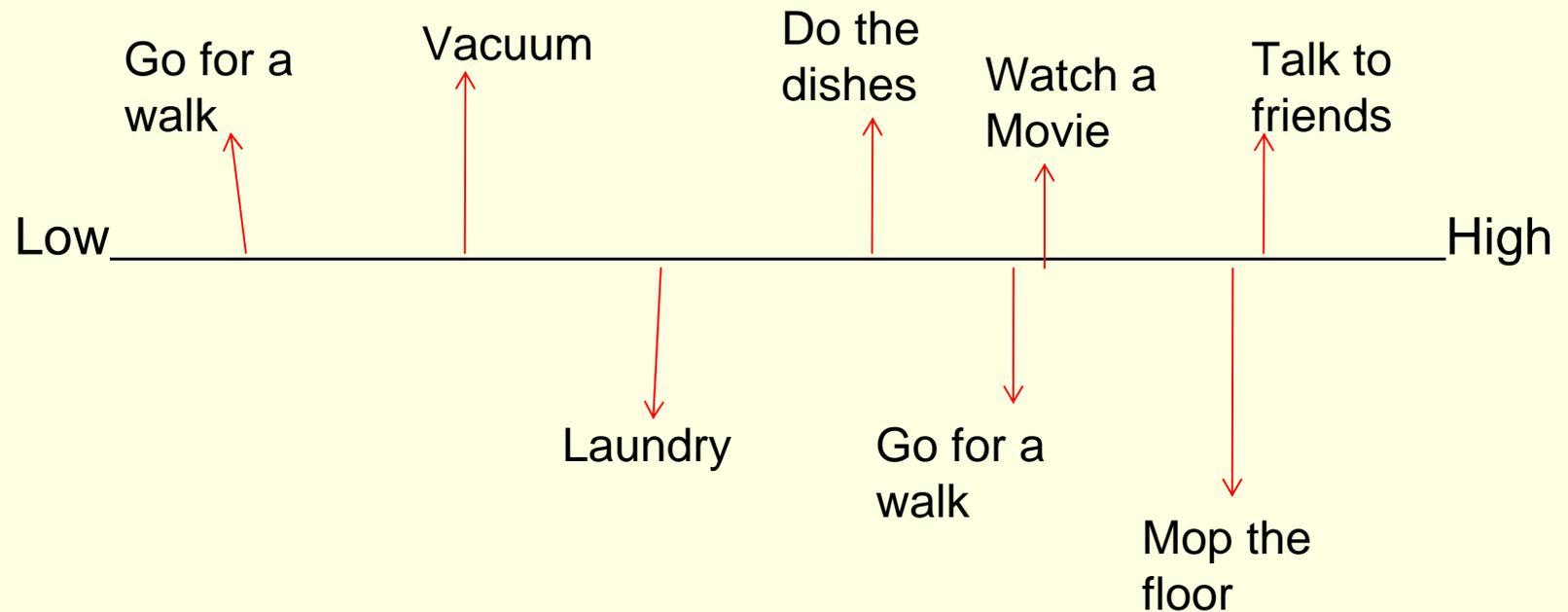
Above this line identify what you are able to do at a certain point on the continuum and mark that point with an X.

Low _____ High

Below this line identify what you are not able to do at a certain point on the continuum and mark that point with an X.

Defining Your Pain Continuum

Above this line identify what you are able to do at a certain point on the continuum and mark that point with an X.



Below this line identify what you are not able to do at a certain point on the continuum and mark that point with an X.

Cognitive Restructuring

- Identifying negative thought cycle
- Truth of initial thoughts/reaction thoughts
- Nonjudgmental thinking

Cognitive Restructuring

Situation	Negative/Catastrophizing Thought	Emotion	Rate the Truth of the Negative Catastrophizing Thought (0=No truth to 10=very true)	Nonjudgmentally describe the situation as it occurred.	Challenge the Negative Thoughts	Rate the truth of the challenge thought(0=No truth to 10=very true)	Outcome Emotion
My back is killing me and every time I pick up my grandkids my pain spikes.	They will never love me. I am a poor grandfather. My children won't want to bring them around.	Depressed Hopeless Worthless	1	I cannot lift my grandkids from the floor due to increased back pain.	Just because I cannot lift them does not mean I cannot spend time with them and influence their life in other ways.	10	Hope

Integrated Pain Management Group Intervention

■ Cognitive Content

- thought monitoring, cognitive reconceptualization and cognitive restructuring

■ Behavioral Content

- pacing, behavioral activation, and attention diversion

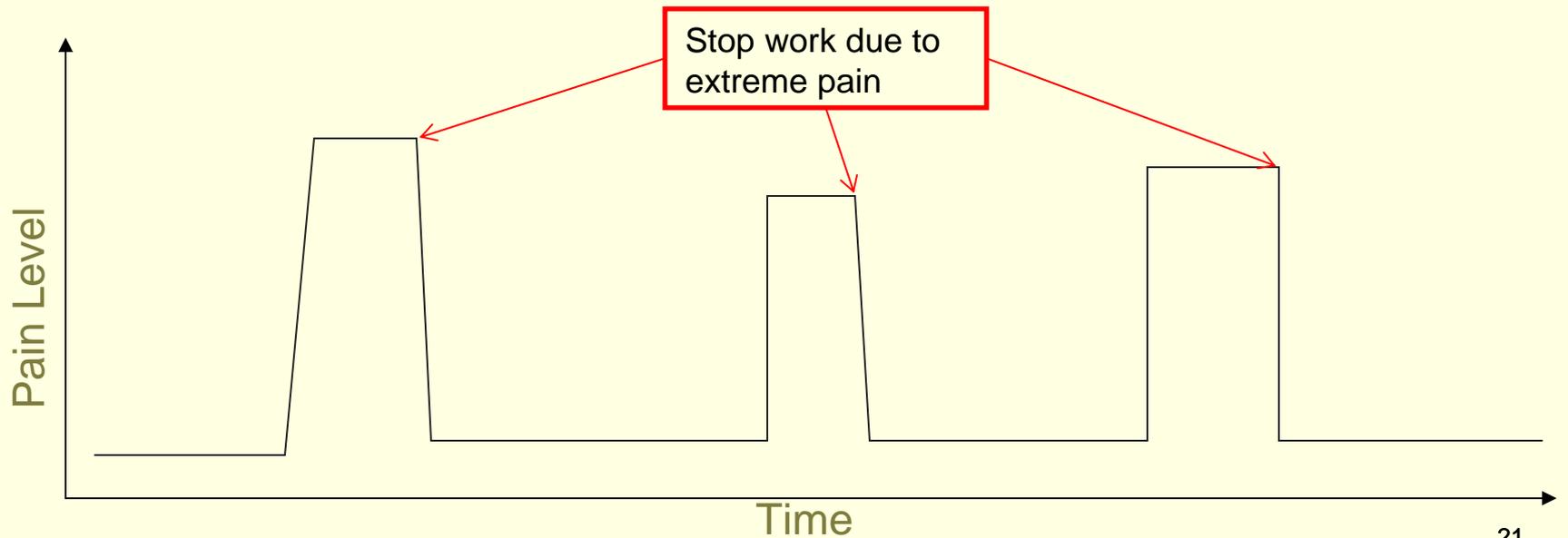
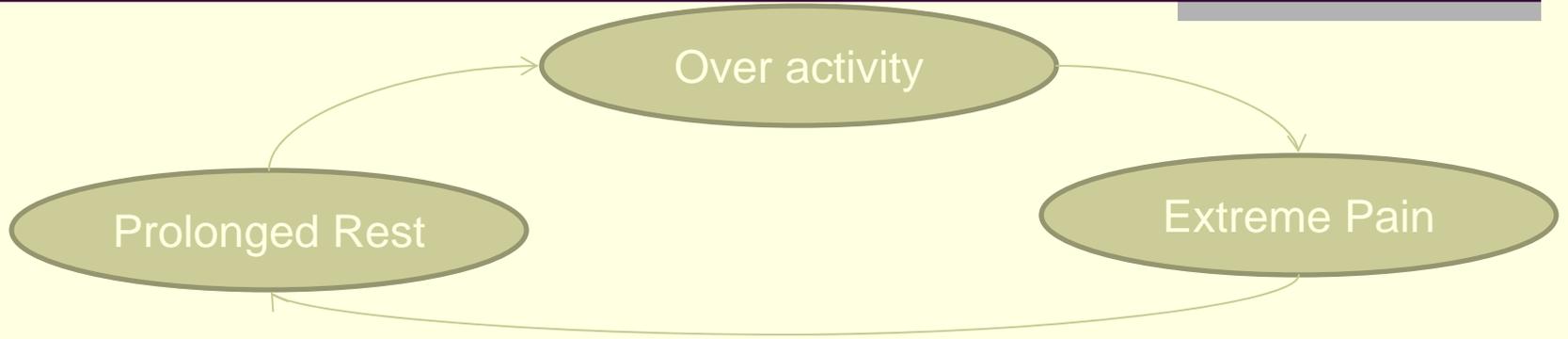
■ Life Skills Content

- problem-solving, sleep and exercise management, and communication skills
 - Integrated both cognitive and behavioral components in life skills sessions

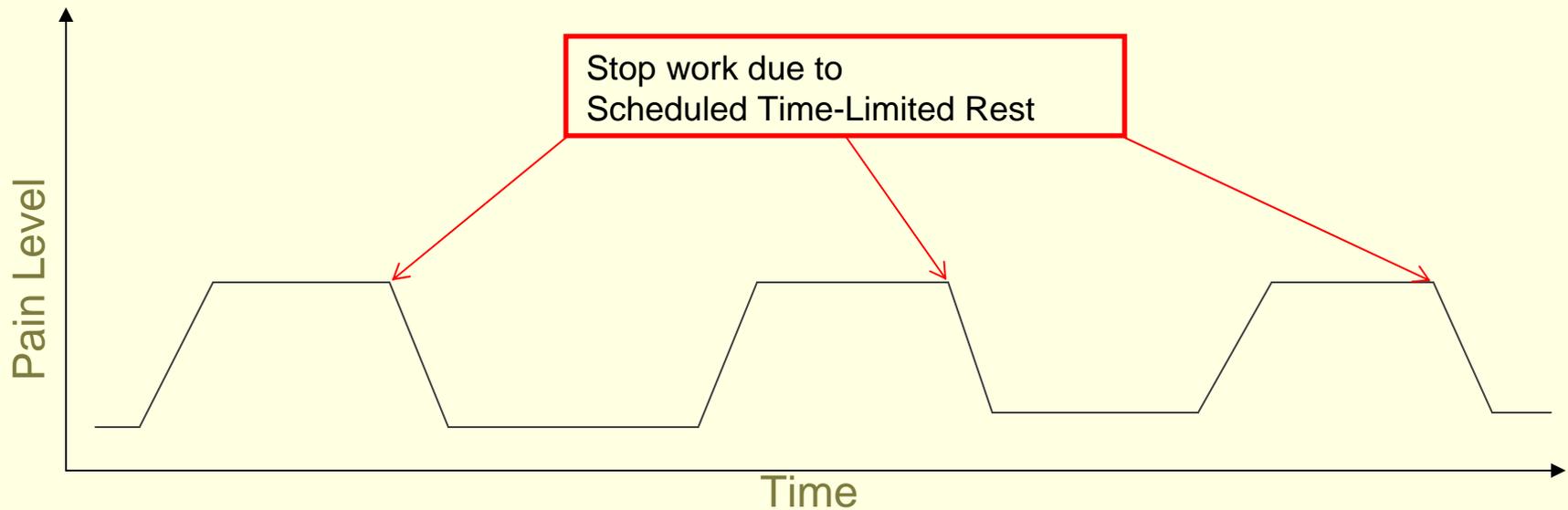
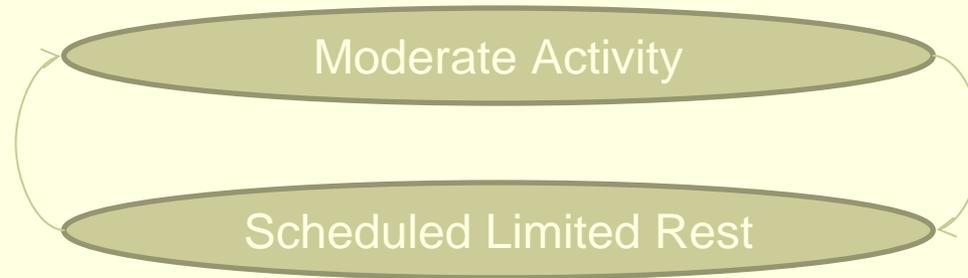
■ Acceptance

- Learning to adapt to pain

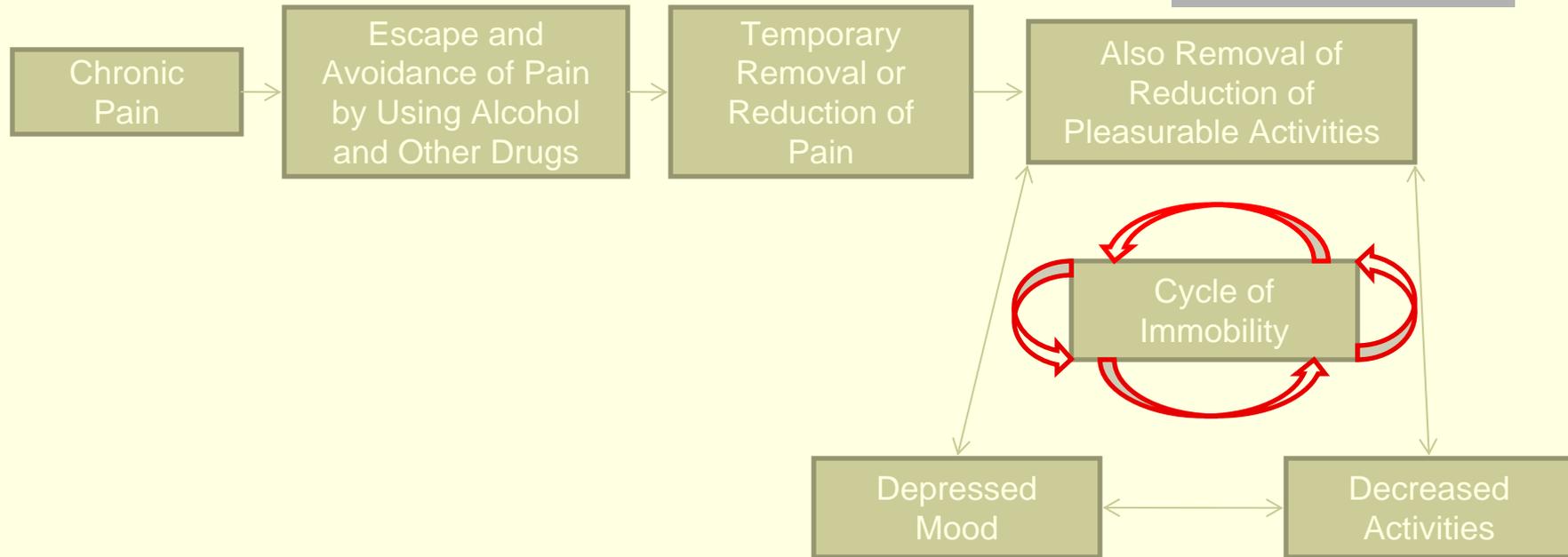
Behavioral: Over Activity Cycle



Behavioral Modification: Pacing



Cycle of Immobility and Behavioral Activation

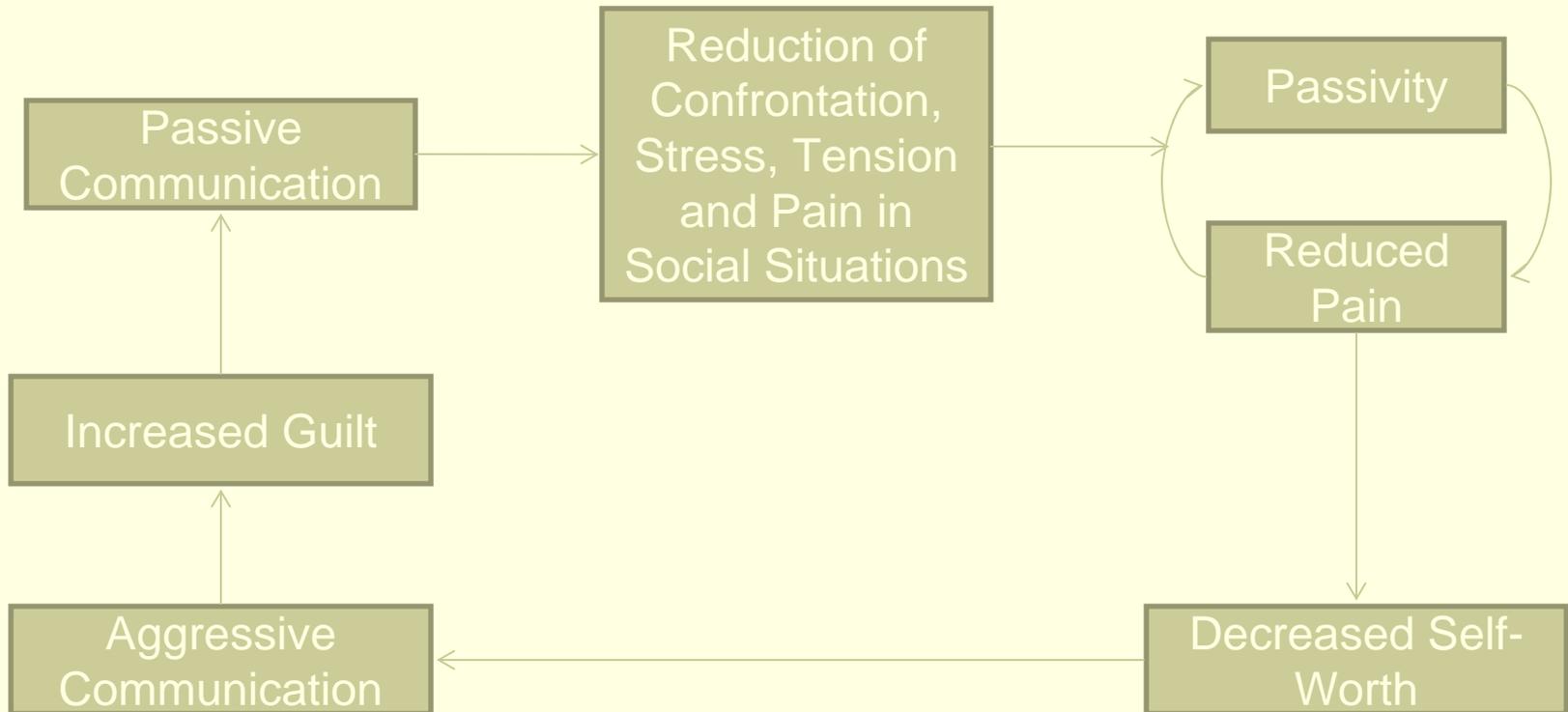


■ Behavioral Activation

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Communication Cycle



SAS Technique

- **State** the problem and its consequences.
 - “I’m glad to help you with any task, however I am unable to help because I have increased pain today”
- **Ask** for what you need.
 - “Due to my back pain I need you to ask ahead of time.”
- **Spell** out the advantages of cooperation.
 - “This way I can plan to be well rested or let you know to reschedule if I’m having a difficult day.”

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Acceptance in IPM

- Covered throughout all sessions.
 - E.g. Cognitive restructuring discussion of changeable versus unchangeable situations.
- Two specific sessions were focused on acceptance:
 - 1) Willingness to acknowledge using harmful coping vs. healthy coping
 - 2) Nonjudgmental description of emotions, thoughts, and situation that influence ability to implement healthy coping skills.

Progressive Muscle Relaxation in IPM

- Practiced at the end of each 90 min session
 - 5 – 20 min.
 - Exercises included:
 - Progressive Muscle Relaxation (PMR)
 - Guided Imagery
 - Diaphragmatic Breathing
 - Thought Monitoring
 - Thought Management.
 - Participants were provided with a 20 min PMR.
 - Encouraged to practice 20 min/day 3x/week.

Case Example Outcome

- Attended 7 of 12 sessions
- Despite high pain and stress ratings the patient reported:
 - Increase in acceptance of not being able to be an active grandfather
 - Decreased avoidance of grandchildren attributed to decreased feelings of inadequacy.
 - Attributed better mood management to increased activity
 - Increase in acceptance of pain during walking and the benefits of walking outweighing the pain
 - Increased compliance of medication management attributed to increase in acceptance of chronic pain
 - Increased confidence in ability to cope with stressors without substance misuse

Pilot Study Methods

- 28 participants from either the Ann Arbor VA outpatient addictions treatment clinic or CPI provided informed consent and completed the baseline assessment – approximately 80% completed the post-treatment follow-up.
- The majority of participants reported experiencing at least six months of chronic pain and eight (62%) endorsed five or more years of chronic pain.
- In the VA, patient medical records indicated that 54% were diagnosed with an alcohol use disorder, 31% with a marijuana use disorder, 15% with an opiate use disorder, 8% with a cocaine use disorder, and 8% with polysubstance abuse or dependence.
- 69% had a clinical diagnosis of depression, 39% PTSD, 15% Bipolar disorder; 23% were diagnosed with at least one personality disorder in their medical record.

Pilot Study Results

- Over 80% of individuals who initially consented to this project completed at least four sessions of the pain management group.
- The average number of sessions attended was 7.17 (SD = 3.24) out of 10-12 sessions total.

Pilot Study Results

- Overall, pain reduced significantly from an average of 6.4 (\pm 2.1) to 5.3 (\pm 2.2), $p < .05$ from pre- to post-treatment
- Participants reported a significant increase in their self-efficacy to manage their pain with misusing drugs or alcohol [mean CPSS at baseline 146.2 (+ 49.9); mean CPSS at post-treatment 188.3 (+ 50.8), $p < .01$].

Pilot Study Results

Measure	Pre Group Mean (SD)	Post Group Mean (SD)	Change	T-test	P-value	Effect Size
ASI (alcohol composite)	0.27	0.21	-0.06	1.96	0.04	0.23
ASI (drug composite)	0.12	0.11	0.02	0.86	0.20	0.08
TLFB Alcohol Frequency	3.07	2.29	-0.79	0.76	0.23	0.06
TLFB Drugs Frequency	2.79	0.579	-2.21	0.99	0.17	0.18

Conclusions

- Concepts of pain management, acceptance and relapse prevention/harm reduction can be combined into a cohesive group.
- Delivery of a pain management group is feasible in addictions treatment settings.
- Patients are willing to attend this group and reconsider their approach to pain and their substance use.
- Preliminary evidence indicates that participation in the group is associated with reductions in pain level, alcohol-related consequences, and increases in pain-related self-efficacy.

Next Steps in Research

- Improved measures of pain medication misuse are needed.
- Conduct a larger trial of the intervention in a VA addictions treatment program.
- Understand ways to better integrate pain behavioral treatment into addictions treatment programs.

Steps to improving pain management in addictions treatment

- Ask about pain – ask about prescription pain medications.
- Try to understand patients' motivation for using pain medication – what are their beliefs about pain medications?
- Reinforce the message that managing pain does not always have to involve using a substance.
- Consider referrals to outside behavioral health providers.
- For clinics that already use CBT, consider adding a pain management group.

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