



## A Psychologically-Informed Guide to Promoting Physical Activity in Routine Physical Therapy Practice

Kelsi Kazmierczak



## Purpose

The primary focus of this manual is the promotion of physical activity and exercise in our PT patient populations using psychologically-informed models of health behavior change.

#### Learning Objectives

After reviewing these materials, learners will be able to:

- Describe what psychologically informed PT practice is and how it can improve the quality & Ι. deliverance of physical activity health promotion. Describe strategies that can be utilized to better tailor PA-promoting interventions based
- 11. on screening results.
- III. List barriers to increasing physical activity levels and describe potential ways to overcome these barriers.
- IV. Perform a self-reflection on current practices and name 1 or more strategies they are able and willing to implement in their own practice to better promote physical activity in their patients.
- V. Identify resources for learning more about psychologically informed strategies and physical activity promoting approaches.

## Terms to Know

Holistic PT Practice

Psychologically Informed PT Practice (PIPT)

Health Promotion & Wellness

The Biopsychosocial Model

# 5 Domains of Health Promotion<sup>1</sup>

- 1. Physical Activity
- 2. Stress Management
- 3. Sleep & Sleep Hygiene
- 4. Nutrition, Dietary Habits, and Weight Management
- 5. Cessation of Smoking and Substance Use & Abuse

# PIPT<sup>2</sup>

Major Types of Interventions Used in Psychologically Informed Practice Approaches

Intervention	Brief Description
Educational	Threat reduction and activation <sup>46</sup>
Behavioral change	Explicit focus on incorporating adaptive behaviors in response to pain <sup>47</sup>
Cognitive-behavioral	Principal focus on cognition and coping strategies <sup>48</sup>
Psychophysiological focus	Variants of stress reduction and mindfulness <sup>48,49</sup>
Contextual cognitive-behavioral therapy	Acceptance and commitment therapy <sup>10,50,51</sup>

# Background

Social Ecological Model

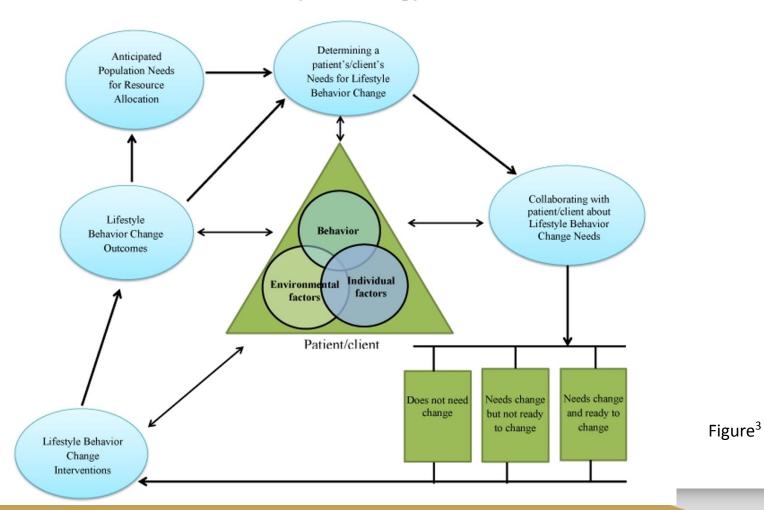
Transtheoretical Model & Stages of Change

Theory of Self-Determination

Social Cognitive Theory

#### =A Health Focused PT Practice Model

#### Health - Focused Physical Therapy Practice Model



## User's Guide

- Subjective
- Objective
- Assessment
- Interventions
- Plan
- After the Initial Evaluation





## Subjective

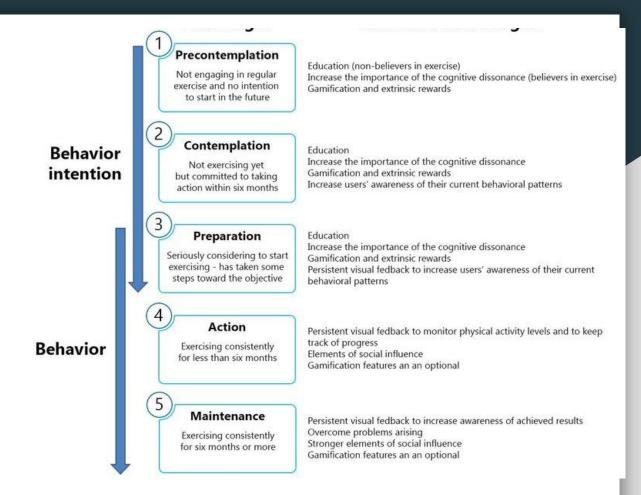


Establishing a Strong Therapeutic Alliance

#### Common Features:

- Trust
- Open-ended questions
- Empathetic & reflective listening
- Non-judgement
- Shared decision making
- Consideration of goals & values
- Patient-centered care

Identifying Stage of Change<sup>4</sup>



# Motivational Interviewing

O.A.R.S. Model originally introduced by Miller & Rollinick<sup>5</sup>

0	<b>O</b> pen-ended questions	"What would it look like for you to be more physically active?" "Tell me about a time in your past when you were physically active."	
A	Affirmations	"I appreciate your honesty and effort with self-reflection." "I understand that starting a new routine can be daunting and I want to recognize the hard work you have been putting in."	
R	<b>R</b> eflections	"I am hearing that you are concerned about getting injured during exercising." "It sounds like you are feeling a bit overwhelmed about how to increase your activity levels."	
s	<b>S</b> ummarization	"Here is what I understand so far. Let me know what I have missed, if anything" "So I am hearing that you have been wanting to do X, but that you are having a hard time finding time to fit that into your schedule. Is that right?"	

## Locus of Control

Internal Locus of Control	External Locus of Control
"I am going to focus on what I can control." "I know that I can learn how to be more physically active." "I make things happen." "My passion & hard work can help me reach my goals." "I take responsibility for my failures and will try better next time."	"I don't have any control, why did this have to happen to me? I'm just unlucky." "This is just how I was born. No one in my family exercises." "Things happen to me." "There is nothing I can do about this." "It's not my fault!"

Screening: Physical Activity & Health Behaviors

#### "Are you physically active?"

Other questions to follow up with include:

"What does a normal day look like for you?" "What does your exercise routine look like?" "What do you normally enjoy doing? What do you want to get back to doing?" "What would being more active look like for you?"





## Objective



# OSPRO Yellow Flag Questionnaire<sup>6</sup>

#### 3 domains:

- 1. Negative Mood (psychological distress, cognitive distortions)
- 2. Fear Avoidance (maladaptive beliefs)
- 3. Positive Affect/Coping (self-efficacy, locus of control, acceptance)

#### Patient-specific activity scoring scheme (Point to one number):

0 1 2 3 8 9 10 4 5 6 7 Unable to Able to perform perform activity at the same level as before activity injury or problem

#### (Date and Score)

Activity	Initial			
1.				
2.		°		
3.				
4.				
5.		 £.		
Additional	5 V	 	 	
Additional		5		

Patient Specific Functional Scale (PSFS)<sup>7</sup>

## **Other Considerations**

- Baselines are important. Consider utilizing some performance measures or aerobic capacity testing to get a baseline of physical fitness.
- Performance-based measures that align with patient-reported goals may be useful for tracking meaningful change and can be used as encouragement for the patient to "beat their scores"





### Assessment



Presence of Fear-Avoidance or other Maladaptive Beliefs	Education & Graded Exposure	<ul> <li>Educate on hurt vs harm &amp; debunk maladaptive beliefs (pain neuroscience)</li> <li>Build activity tolerance over time through interval training</li> <li>De-emphasize pain with use of relaxation techniques</li> </ul>	
Low Self-Efficacy +/or external locus of control	Motivational Interviewing & Graded Activity	<ul> <li>Use motivational interviewing to emphasize self-efficacy</li> <li>Start with goals and activities which guarantee early success</li> <li>Validate &amp; celebrate incremental progress</li> <li>Teach self-management strategies to self-manage activity &amp; pain</li> <li>Relate past successes &amp; patient values to future goals "You've done this before"</li> </ul>	
Low Levels of Motivation	Motivational Interviewing & Value Based Goal Setting	<ul> <li>Use motivational interviewing to emphasize how current behaviors align with patient values and encourage change behaviors</li> <li>Educate on ways physical activity can improve wellbeing &amp; introduce simple strategies that guarantee early successes</li> <li>Relate patient values to goals through use of PSFS</li> </ul>	





# Interventions



# Educational Strategies

Simpe, brief statements can often be the most impactful. For example:

- "Stand Up, Sit Less, Move More, More Often."
- "Motion is lotion."
- "The best posture is your next posture."

Be sure you have a base of patient education materials available in multiple formats & languages.

Graded	Self-management strategies for grading activity	"I want RPE around 6-7 (or 'medium') while you are doing this. But, if your pain/symptoms increase more than 2 points from where you started (10 pt scale), then ease off of the intensity!"
Exposure / Graded Activity	Find ways to integrate PA into daily routines	<ul> <li>Go for a 10-30 minute walk before or after meals. This can help improve sugar &amp; insulin metabolism.</li> <li>Any time you stand up from sitting, do it 2 more times.</li> <li>Get off the bus a few stops early.</li> <li>Take the stairs instead of elevators.</li> <li>Park farther away in parking lots.</li> <li>Set timers for every 30 min while working. When it goes off, move for 1 min (dance, walk, move!). This improves blood flow &amp; metabolism.</li> </ul>
ACTIVITY	Emphasize social support for accountability & improved self-efficacy	<ul> <li>Recommend community resources</li> <li>Schedule daily walks with friends or group dog walks</li> <li>During the kid's sports practice, recruit other parents to go walk around</li> </ul>
	Track & Encourage Progress	<ul> <li>Use tracking sheets</li> <li>Recommend activity trackers</li> <li>Have pedometers to loan or give out</li> </ul>





# Plan



# Value Based Goal Setting

- 1. Help the patient identify values and meaning:
  - a. What are you doing when you feel most powerfully that "this is what I am meant to be doing"?
  - b. What brings you joy? What are you passionate about?
- 2. Connect these values to participation-level goals in conjunction with findings from the objective exam.
  - a. Patient Specific Functional Scale (PSFS) including findings from PT exam.
- 3. Share a copy of their plan of care & goals.
  - a. You can include tracking sheets with this, as adjunct materials enhance patient adherence long-term.





# After the Initial Evaluation



# Follow Up

- Phone calls, emails, texts
- Maintenance visits
- Annual exams
- Next session

# Monitor Adherence & Progress

- Validate their struggles
  - "It sounds like you really have a lot on your plate! That must be hard. It makes sense with all that going on that you would have some trouble trying to fit in something new."
- Ask open ended questions to help them problem solve & overcome barriers
  - "What would it look like for you to overcome these barriers?"
  - "What is a reasonable amount of X activity you could do?"
  - "What can you do today, tomorrow, this week?"
  - "What do you feel like is keeping you from doing x?"
- Don't tell them what to do right out, help them come up with the right answer for them

#### Health Care Multidisciplinary Team Member

Medical Team: Medical Doctor (MD) Doctor of Osteopathy (DO) Nurse Practitioner (NP) Physician's Assistant (PA) Certified Nursing Assistant (CNA) Registered Nurse (RN) Orthopedic Surgeon Neurologist Cardiologist Dermatologist Dermatologist Podiatrist Gastroenterologist Physiatrist/ Physical Medicine & Rehabilitation Physician Psychiatrist Optometrist	Allied Health: Physical Therapist PT Assistant Occupational Therapist OT Assistant Speech Language Pathologist	Mental Health & Social Services: Psychiatrist Clinical psychologist Clinical counselor Social Workers	Other Providers: Registered Dietitian, Nutritionist Chiropractor (DC) Athletic Trainer Personal Trainer, Strength Coach, Performance Specialist Prosthetist Pharmacists
--	--	--	--

# Referral

## Referral

- Local parks
- Community & Recreation Centers
- Traditional & low-cost gyms
- Alternative style gyms (dance, martial arts, pilates, yoga)
- Pro-bono clinics
- Free educational classes & clinics
- Adaptive sport opportunities
- Evidence Based Programs

## Acknowledgements

Michael McMorris

Morven Malay

Jennifer Cooke

Zachary Stearns

Conor McClure

UNC DPT Class of 2021

# Bibliography

- 1. Bezner JR. Promoting health and wellness: implications for physical therapist practice. *Phys Ther*. 2015;95(10):1433-1444. doi:10.2522/ptj.20140271
- 2. Coronado RA, Brintz CE, McKernan LC, et al. Psychologically informed physical therapy for musculoskeletal pain: current approaches, implications, and future directions from recent randomized trials. *Pain Rep.* 2020;5(5):e847. doi:10.1097/PR9.00000000000847
- 3. Lein DH, Clark D, Graham C, Perez P, Morris D. A model to integrate health promotion and wellness in physical therapist practice: development and validation. *Phys Ther.* 2017;97(12):1169-1181. doi:10.1093/ptj/pzx090
- 4. Ferron M, Massa P. Transtheoretical model for designing technologies supporting an active lifestyle. In: *Proceedings of the Biannual Conference of the Italian Chapter of SIGCHI on CHItaly' ' '13*. New York, New York, USA: ACM Press; 2013:1-8. doi:10.1145/2499149.2499158
- 5. Miller WR, Rollnick S. *Motivational Interviewing: Helping People Change, 3rd Edition (Applications of Motivational Interviewing).* 3rd ed. New York, NY: The Guilford Press; 2012:482.
- 6. Lentz TA, Beneciuk JM, Bialosky JE, et al. Development of a yellow flag assessment tool for orthopaedic physical therapists: results from the optimal screening for prediction of referral and outcome (OSPRO) cohort. *J Orthop Sports Phys Ther*. 2016;46(5):327-343. doi:10.2519/jospt.2016.6487
- 7. Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. *J Orthop Sports Phys Ther*. 2012;42(1):30-42. doi:10.2519/jospt.2012.3727