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Working with Pain-Related Thoughts

"Working with Pain-Related Thoughts" is part of a series of six Integrative Health tools designed to assist clinicians who want to enhance patient's chronic pain self-management skills. For additional information, refer to the other materials in the "Self-Management of Chronic Pain" module.

The field of Cognitive Behavior Therapy (CBT) emphasizes that negative thought patterns can have a profound effect on our physical and mental well-being. How we perceive a situation or even our day-to-day life can lead to higher stress levels and ultimately contribute to anxiety and depression. Research suggests that many of the thoughts that we think are repetitive and can be negative. This is often referred to as the negativity bias of our brain. Our brains are primed to pay attention to, focus on, and remember the negative things that occur. Negative experiences are like Velcro, they tend to stick to us causing us to worry or ruminate about them long after they happen.

When we're not paying attention to our thought patterns, it's easy for our minds to fall into a playback loop—thinking repetitive thoughts each and every day. Depression, for example, is linked to negative beliefs related to hopelessness and helplessness. Anxiety disorders are linked to thoughts of future possibility of danger and threat. When we start to pay attention through some simple practices, we can notice the quiet ways we get stuck in negative patterns and then we can begin to reshape our thinking in more constructive ways. Many psychological disorders can be treated and prevented, and stress can be reduced by carefully examining and restructuring our thinking to be more accurate.

The role of cognition is an important area of self-management in chronic pain.¹ CBT is at present the most widely used psychotherapeutic treatment for adults with chronic pain and secondary depression and anxiety. It uses structured techniques involving multiple methods to modify cognition and behavior.

Pain catastrophizing, for example, is a common thinking pattern that occurs with chronic pain, and has been found to be one of the most important psychological factors contributing to perceived pain intensity and emotional distress.^{2,3} People who catastrophize about their pain tend to have exaggerated worry, overestimate the likelihood of unpleasant outcomes, and think more helpless and distress-amplifying thoughts in response to pain.⁴

Several meta-analyses examining the benefits of CBT have shown that it yields moderate to large effects for cognitive coping responses and small to moderate effects for pain outcomes relative to controls.^{5,6} Researchers have asserted that CBT may be efficacious through therapeutic mechanisms that involve fostering a sense of control over pain and encouraging the developing and strengthening of self-management skills.^{7,8}

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People who develop a more positive attitude toward life and a sense of increased coping with pain experience less distress, avoidance, and disability than those who tend to take a more negative view.⁹

It can take some work to retrain our brain, as our thought patterns are often ingrained. Thinking of your mind as its own inner environment, take some time to reflect on the types of thoughts that you want occurring there. You might ask yourself, "What kinds of thoughts do I want guiding my life? What kinds of thoughts would feel supportive and make me more resilient in the face of stress? What kinds of negative thoughts am I willing to let go of?" With a little bit of work, you can choose to think thoughts that reflect the direction you want to be going, and reduce the ones that keep you stuck where you've been. You can develop the capacity through enhanced awareness, and practice to choose thoughts that serve you well or release thoughts that are no longer useful from the past. 10

Listed below are four steps to help you become more aware of your thought patterns and how to work with them.

1. Examine Your Thinking

When you are working with your thinking, you may find it helpful to begin to notice and write down your automatic thoughts. When you pause and begin to actually listen to your internal dialogue, you can step back and not get wrapped up in irrational, self-critical or negative thoughts. Once you recognize that, you can actually choose how to continue. One way to examine your thinking is to identify any typical, unhelpful thinking patterns characterized as cognitive distortions. The following list of cognitive distortions is adapted and taken from David Burns, MD, *The Feeling Good Handbook*, 1989.¹¹

Ten Cognitive Distortions

- 1. **All or nothing thinking.** Sometimes called "black and white thinking." If your performance falls short of perfect, you view yourself as a total failure. E.g., "Either I do it right or not at all."
- 2. **Overgeneralization.** You view a single negative event as a never ending pattern of defeat. You are overly broad in the conclusions you draw. E.g., "Everything is always horrible."
- 3. **Mental filter.** You only pay attention to certain types of evidence. You pick out a single negative detail and dwell on it exclusively. E.g., "If I can't do it the way I did it before, there is no point in doing it."
- 4. **Disqualifying the positive.** You discount the good things that have happened or reject positive experiences by insisting they "don't count" for some reason or another. E.g., "It took me twice as long to finish that project, so I can't do anything anymore."
- 5. **Jumping to conclusions.** You make negative interpretations even though there are no definite facts that support your conclusion.
 - a. Mind reading
 - You imagine you know what others are thinking and arbitrarily conclude that someone is reacting negatively to you, but you do not verify this.
 - b. Fortune telling
 - You predict the future and anticipate things will turn out badly.

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- 6. **Magnification or minimization.** You blow things out of proportion (catastrophizing) or inappropriately shrink something to make it seem less important. E.g., "Since I am sick and can't make it to work, I am going to be fired." Or, "They were just being nice to me, they don't really care."
- 7. **Emotional reasoning.** You assume that your negative emotions reflect the truth about how things are. E.g., "I feel like a failure, therefore it must be true."
- 8. **Should statements.** You criticize yourself (or other people) with critical words like "should," "must," or "ought." The emotional consequence of these words is guilt.
- 9. **Labeling.** You assign labels to yourself or other people, e.g., "I am a loser," "He is such an idiot."
- 10. **Personalization.** You blame yourself or take responsibility for something you weren't entirely responsible for, or you blame other people and deny your role in the problem.

Exercise: Examining Your Thinking

You might choose to spend time observing in a non-judgmental way some of your automatic thoughts that occur and how often you think them. Of course, you will not be able to catch all of them, but this exercise will assist you in becoming more aware of the thoughts influencing you.

To practice this skill, visit this exercise.

2. Restructure Your Thoughts

The first thought that you think may be automatic, but the more you practice noticing your thinking you can consciously choose how to continue. By slowing down and examining your thinking, you can choose to edit your thinking to pick thoughts that are more supportive and help you feel good about what you are doing and going through. A great way to do this is with the thought restructuring exercise using the ABCD model developed by Albert Ellis.¹²

The ABCD model is an opportunity to practice restructuring your thoughts to ones that are more balanced, realistic and helpful with coping. You can also begin to notice the impact that automatic thoughts have on your mood, your body and your behavior. Use the ABCD cognitive restructuring exercise below to practice this skill.

Exercise: ABCD Cognitive Restructuring

It is often not events themselves that cause stress and upset; rather, it is our interpretations of and beliefs about the event that create the most distress. It takes some practice to identify negative ways of thinking and cognitive distortions to work on changing your thought patterns (which can be very powerful and habitual). This cognitive restructuring exercise can assist you in becoming aware of and editing your thinking to have more helpful thoughts. *Never underestimate the power of your own thoughts to help or hurt you.*

To practice this skill, visit this exercise.

3. Practice Cognitive Defusion

Sometimes when we directly try and challenge the content and accuracy of our automatic, negative thoughts and our negative interpretation of events, it can lead to increased levels of distress. When this happens, it may be more appropriate and useful to try another approach

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such as "cognitive defusion." The cognitive defusion strategy comes out of acceptance and commitment therapy (ACT), which is considered a "third wave" or third generation of cognitive behavioral therapies. In contrast to the focus in CBT on challenging and changing distorted thoughts around controlling pain, the focus of acceptance based treatments is on increasing individuals' capacity to be both aware and nonjudgmental of present moment experiences, including pain and their reaction to pain.¹³

A meta-analysis of randomized clinical trials of acceptance-based treatment for chronic pain indicated small improvements in pain and depression and small to moderate improvements in physical well-being relative to education controls or treatment as usual. ¹⁴ Additionally, several randomized controlled trials provided support for the use of ACT for chronic pain. ¹⁵⁻²⁰ Findings suggest that ACT yields positive effects such as increased physical and social functioning and decreased pain-related medical visits, even three years following treatment. ²¹

Cognitive defusion involves shifting from trying to change certain thoughts that are considered "bad" to learning to recognize thoughts as just a thought, no more and no less.²²

Defusion techniques are methods for learning how to be present with our patterns of thinking in a broader and more flexible way. For example, suppose you put your hands over your face and someone asked you, "What do hands look like?" You might answer, "They are all dark." If you moved your hands away a few inches you might add, "They have fingers and lines in them." In the same way, cognitive defusion techniques allow you to get some distance from your thoughts to enable you to recognize them for what they are.

You begin to notice the process of thinking as it happens rather than only noticing the products of that process—your thoughts. When you observe a thought, you can recognize how it structures your world, but you can also understand that you are the one doing the structuring. For example, this awareness gives you a little more room for flexibility in that you might notice the thought, "I am having the feeling that I am anxious" which is quite different from the thought, "Wow, I am so anxious."

Through practicing this technique, the function of our thoughts is changed by adopting a different awareness of and relationship to our thoughts.²³ Cognitive defusion, more specifically, involves distancing, disconnecting or noticing thoughts and feelings for what they are (streams of words, passing sensations) not what they *say they are* (dangers or facts). The process of stopping, stepping back, observing the thoughts and feelings, and noting what is happening without judging what is happening. It is a process of defusing from thoughts and learning to accept them without struggle, so that a person can engage with life more consciously and intentionally.

One of the many cognitive defusion techniques to try is the "milk exercise" developed by Masuda and colleagues.²⁴ This exercise consists of first saying the word "milk" once and to notice all of the images and thoughts that are associated with it (e.g., creamy, white, cold). The second step is to repeat the word "milk" out loud for 60 seconds. Typically, what occurs is that there is a decrease in the literal meaning of the word and what is left is just a sound.

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The next step is to apply this same practice on a negative thought that causes distress. First, identify a thought that you are struggling with or that occurs frequently. Then try and simplify this thought by reducing it down to a single word. Say this word out loud for 60 seconds without stopping. Take note of the distress, accuracy, and importance of the word and the thought that it represents after practicing the technique. Practice this daily for one week twice a day, until the meaning of the word and the negative thought disappears and all that is left is just a sound. Numerous studies demonstrate that continuous, fast verbal repetition of a word produce a temporary decrease or loss in the word's meaning.²⁵

For more practice in on this skill, visit this exercise.

4. Bring Yourself into the Present Moment

Despite your best efforts to try and ignore certain thoughts or even change them, they can be sticky and persist. Furthermore, the more you try and change them, the more you can inadvertently make them stronger. It's like putting wood on a fire; the more you pay attention to the thought or feed it, the stronger it becomes. When thoughts like those arise, try and bring your mind into the present moment by focusing on something occurring in the environment. Our mind can really only handle one thought at a time, so even just taking a deep breath can interrupt and shift the focus away from the negative thoughts. Eventually, like the fire, the thought will fade out if it does not have anything to keep it going. This contact with the present moment—awareness of the here and now, experienced with openness, interest, and receptiveness—is a core practice of acceptance and commitment therapy.

One technique used to practice coming into contact with the present moment is "SABER" developed by Zgierska and colleagues. Often when something stressful happens, we tend to respond automatically and go into "autopilot." Often this is not a helpful way to respond and can include automatic, negative thought patterns that cause distress and negative behavior. SABER can be used to step out of the cycle of engaging in autopilot, or automatic thoughts, and become more aware and mindful. SABER is meant to be a brief practice and can be done anywhere, in a standing, sitting, or lying-down position. It can help us refocus on the present moment quickly and get out of our automatic thinking patterns.

Exercise: SABER

STOP... Focus on the present moment.

The first thing to do is to STOP, right here and right now, wherever you are, and whatever you are doing, and start by paying attention to yourself. In your mind, stop here, and focus on this very moment. By doing it, you're breaking a cycle of the autopilot.

ACKNOWLEDGE... what is going on right now, in this very moment, in your body, heart, and mind. This pausing and observing means that you have stepped out of autopilot.

Start by ACKNOWLEDGING the thoughts, feelings, and the sensations in your body. Observe what is going on with you right now. What thoughts are going through your mind? Try to name and label your thoughts. Here again, as best as you can, just notice all these sensations, thoughts, and emotions. Observe them without judging. Notice especially all unpleasant

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experiences, any sense of discomfort, or unpleasant feelings. Rather than trying to push them away or shut them out, just acknowledge them, perhaps by saying, "Yes, there you are. This is just how it is right now. It's okay..." Just observe.

BREATHE... Focus on your breath—your anchor to the present moment.

Focus your attention on your BREATH and the movements of the belly, so that you are aware when the breath is moving in, and you know when the breath is moving out and leaving your body.

EXPAND... your awareness to your body and mind, and to your surroundings.

Now, allow your attention to EXPAND. Continue being aware of the breath, but also include a sense of the body and mind as a whole. Notice whether there is any tightness or tension in the shoulders, neck, back, or face, or anywhere in the body. If there is, just notice it, observe it, and don't try to fix it. Follow the breath as if your whole body were breathing. When you're ready, expand your awareness to what's happening around you. Just watch it, observe.

RESPOND... After this pause and curious, friendly observation, when you know what's happening in you and around you, now you are ready to respond mindfully.

Keep breathing and think what would be the best RESPONSE, best thing to say or do. Maybe you shouldn't do anything, after all.

Author(s)

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