

Concussion - Pathway to Recovery Program

Session 7 - Patient guide

Mindfulness, Concussion and Executive Functioning

Session goal

- Understanding of the connection between the concussion and cognitive functioning
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Mindfulness and TBI

- A different way to relate to our own thoughts and feelings
 - The earlier treatment modules have emphasized the importance of thoughts as they relate to your pain self-management. We started with the gate control model of pain, noting that our thoughts and feelings can affect our pain experience. Thoughts tend to drive emotions and actions, and when our thoughts are negatively slanted, our emotions and actions take on a similar characteristic.
 - Research clearly shows that brain activity (including the brain activity generating thoughts and emotions) has a direct effect on the pain signals getting to the brain. In other words, our thoughts and emotions can open the pain gateway, making our pain worse, or can narrow the gate, resulting in less experienced pain. Since thoughts are so important, we want to approach them in a number of different ways and use a variety of tools to help us create the optimal brain environment to make the pain gateway as small as possible. In earlier treatment modules, you learned to notice what thoughts you were having, (especially negatively slanted, unhelpful thoughts), examine them for their truthfulness, and come up with new, more realistic thoughts.
 - The current treatment module approaches thoughts in a different way: instead of examining the content of thoughts (i.e., what we tell ourselves), this approach teaches you to explore the process of thoughts (i.e., the way they arise in our brain and the way they pass by). This approach is called **mindfulness meditation**.
 - You may have heard something about mindfulness, and/or you may have some ideas about what meditation is. Some people associate the word “meditation”

with Eastern religions, although many Western religions use meditation as part of their spiritual tradition. Mindfulness meditation is not a religious practice, although some people find the practice spiritually fulfilling. Mindfulness practice doesn't require any special clothing, equipment, or body positions. It can be practiced sitting in a chair, lying down, or even standing. Mindfulness as used in the current treatment approach is not employed to fulfill a spiritual goal. In this treatment program, mindfulness is used to give you another way to approach troubling thoughts, emotions, and even body sensations. Most people also find the practice relaxing and calming.

- What is mindfulness?
 - In essence, mindfulness practice teaches your brain to pay attention to what is happening in the present moment without judging it or clinging to it or running away from it.
 - There are at least two things happening in the present moment: what is going on in the external environment around us and what is going on inside our skin (brain activity certainly included). Often, we are “in our head” and only partly aware of our external surroundings, particularly when performing an activity that has become auto- matic through repetition (for example, driving our same route to work every day). It is quite typical for our minds to engage in thought processes in any number of ways, such as revisiting previous conversations (especially if they were problematic in some way), planning our next activities, engaging in internal commentary about a previous event, and talking to ourselves about how we might handle an upcoming challenge. It is also very common to get caught up in our mental activity and find ourselves “down the road” without any real awareness of how we got there, perhaps even angry all over again about a past disagreement or fearful of what may be coming.
 - When we get carried along down the road of our mental superhighway, our bodies (and brains) respond as if the mental event is current rather than past or future. And it is common for the stress response to occur as a result. Mindfulness is a skill that allows us to slow down and consider the present moment rather than dwell on the past or future. Mindfulness helps us realize the complex and ever-changing process of what is happening internally and externally, without getting swept along by any one thing. Once they start paying careful attention using mindfulness, most people are surprised to see how much is happening in the present moment!
- Why do we focus on our breathe with mindfulness?

- The suggestion to focus your attention on the inbreath and the outbreath is a way of providing an anchor to the present moment, since we are breathing every moment of our lives. The technique of bringing our attention to the breath also helps us to come back to the present moment when our mind has wandered away (which it does frequently). A key element of mindfulness (and many other meditation techniques) is the recognition that our minds naturally wander here and there as we are going about the present moment. As we pay attention and observe what is happening in the present moment, we begin to notice when our mind has wandered, and we bring it back to the here and now. Another part of mindfulness is how we bring our mind back to the present moment. Many of us are rather impatient with ourselves and have a tendency to scold ourselves when we think we're "not doing it right." In mindfulness, when you notice your mind has wandered, I encourage you to congratulate yourself! In noticing the mind wandering, you are "doing" mindfulness. And then you gently bring your attention back to the breath, over and over and over again. As you continue to practice, there is a gradual shift in your ability to pay attention to the present moment, and just as important, your ability to let it go.
- Why do we learn to stay neutral with our thoughts and feelings?
 - The nonjudging part of mindfulness also helps you to stay neutral rather than engage in the typical running toward the "good" and away from the "bad." For example, typically we might become aware of a sound outside the window, and we may pay attention to it briefly, but we also label it (good, bad), appreciate it or dislike it, and maybe even associate the sound with a memory (positive or negative). Soon, our mind has taken off, and we are knee-deep in the last time we heard a revving engine (let's say), and how that signified the end of our relationship (perhaps), which then results in a host of negative thought and feelings. Mindfulness encourages us to stay neutral as we observe what is happening, which then goes a long way to help us avoid our typical reflexive actions (e.g., angry outbursts, withdrawal from others, using pain medication to "feel something" or, conversely, to "feel nothing," and avoiding any number of self-care activities because we are convinced they will hurt us).
 - Mindfulness helps us create a different relationship to our thoughts and feelings. As we get practice with observing our thoughts instead of judging them, we realize that thoughts and emotions are pretty short-lived. They come and they go, unless we get swept away by them and are carried down the rushing "thought stream." Some mindfulness teachers have talked about thoughts as

just being electrical-chemical discharges that the brain makes. When we view our thoughts this way, it takes the emotional punch out of some of the things we get hung up on.

- Mindfulness is not specifically aimed at creating the relaxation response, but many people report feeling calmer and less stressed when they practice on a regular basis. And, as we've already learned, the relaxation response counteracts the stress response and helps us to reset our stress thermostats.
 - To summarize, mindfulness meditation is another approach to creating a different relationship with our thoughts, emotions, and even physical sensations, and it is another potential relaxation tool.
- *Perform daily mindfulness exercises*

Cognitive therapy for executive function

- What are our executive skills?
 - **Take the skills of a typical good management executive.** He needs to plan, organize, direct, control, set realistic goals, organize the steps to achieve those goals, initiate action plans, monitor progress, and adjust those plans. He needs to be aware of what is happening throughout the organization, such as sales, marketing, and operations.
 - These skills are necessary not only for executives but also for all of us in our everyday lives. These skills are vital for the ability to function independently at work, at home, and when socializing.
- Managing director or conductor.
 - Executive skills to be thought of as the manager or director of cognitive functions. The majority of cognitive functions are concerned with what we do, and executive skills related to how we do it. Think of the executive skills as a conductor when orchestra, and the cognitive skills as the various sections of the orchestra. If the conductors not working properly than each part of the orchestra medically out of order, at the wrong volume, but the wrong speed.
 - If the executive skills are not working well, then all of the brain functions may be coordinated correctly on tasks.
- Located in the frontal lobes.

- These types of skills located in the frontal lobes, just behind the eyes. Started the brain is connected to all of the brain areas and communicates with them with the wrist in her change of information.
- Having problems more noticeable in unstructured situations.
 - Problems with executive skills tend to show themselves in unstructured situations. Therefore the problems are not easily observed and formal test which provided structure. These problems may appear to be variable since the complexity normal taken amount structure provided any given task varies with the situation. Many people are not aware of difficulties in this area function. Often people describes things as feeling "not being quite right."
- Components of executive skills. Executive functions are divided into these skills:
 - **Stepping back.** The ability to step back and this situation objectively, from a distance.
 - **Starting and initiation** or new activities.
 - **Sequencing and planning.** The ability to breakdown overall: 2 number of discrete achievable steps or sequences. Summarizing. The ability to see what his importance, the main points, and one is a minor detail.
 - **Staying on line or sustained attention.** Important skill of sustained attention, not being distracted by a relevant information.
 - **Self-monitoring.** Inability to access the appropriateness and effectiveness of what is done.
 - **Shifting, switching, consulting problems.** The ability to recognize a problem, find an alternative solution, and shift the pattern of responding.
 - **Stopping.** Inhibiting thoughts or behaviors that are inappropriate.
 - **Self-Awareness.** The ability to have an accurate idea of our own strengths and weaknesses, and to anticipate future difficulties.
- *Executive function questionnaire*

Treatment step 5: Homework

- Homework

- Daily mindfulness practice
- Executive function questionnaire
- Practice 1-2 self statements 2-3 times daily
- Continue progressive relaxation exercises