

Concussion - Pathway to Recovery Program

Session 10 - Patient guide

Concussion, emotions, and memory

TBI and memory

- Memory involves a number of different skills and stages, and this can be compared to a complicated music system in which CDs are recorded and stored in the treat from storage and he played when needed. The first stage of memory as recording which involves attention to the sound in encoding the information. The second stage involves storage of the information, such as creating a CD that this started safely somewhere. The final stage involves her retrieving the information, such as finding the CD from a file.
- Memory is not one “thing”, but rather a process involving the number of stages:
 - **Attention.** Attention is the mechanism by which information enters the brain. If one does not attend to the information it will not be stored or encoded.
 - **Encoding.** Regarding his registration of information at the moment of learning. The strength of this registration of information depends on the depth processing, and deeper interest or motion associated with the information can be attached to that memory.
 - **Storage.** Once information is encoded, it is stored in long-term memory.
 - **Consolidation.** If the information is not rehearsed or practiced it may be lost. The process of practicing remembering scald consolidation. For example, if one here's a phone number and uses it several times, it will be better remembered.
 - **Retrieval.** This involves accessing information in long-term memory.
- *Perform memory questionnaire*

Emotion work

- Patient Guide: Writing about Strong Emotions

- As you have already learned, thoughts and emotions greatly influence our experience of pain. The brain activity generated by strong emotions and thoughts can have a direct effect on the pain signals getting into the brain. Our feelings and thoughts can open or narrow the pain gateway, letting more or fewer pain signals get to the brain. We have focused on thought processes in the last few treatment modules, but strong emotions are also very important to consider. In some situations, negative emotions may even be easier to recognize than negative thoughts. We may be able to recognize when our mood goes south before we can identify what we are telling ourselves about the situation. But in certain situations or with particular life events, we may try to block out the emotion. This is particularly true of very strong negative emotions produced by traumatic events. Especially in situations over which we have little control (say, a motor vehicle accident or a fall at work), we may try to bury our negative emotions. This is also true of emotions resulting from early childhood trauma—out of a sense of survival, we might bury those emotions in an out-of-the-way “filing cabinet” in our brain.
 - It’s not uncommon for people to feel ashamed about or responsible for negative life events. Take, for example, a former client who had purchased a brand-new sports car, only to roll it down a ravine the next day. The accident left her not only with chronic pain but also intense guilt. The associated thought was that this had been a sign from God that she should not have been so self-indulgent and bought an expensive car. She wanted to smother those guilty emotions! We tend to wall off strong emotions because we might think there is nothing we can do about them anyway, or we might even think that we will be overwhelmed by the negativity of the emotions. Another reason people would rather bottle up strong negative emotions is that they don’t want to overwhelm others or hurt loved ones by sharing their negative feelings and thoughts. In these cases, the emotions may be buried inside us, but they are still having an effect on our well-being, whether we know it or not. And they are likely opening the pain gate, allowing in more pain signals and thus increasing our experience of pain.
- WRITING (OR TALKING) ABOUT STRONG EMOTIONS
- You’ve already seen that people have negative thoughts they might not even be aware of, and once they become aware of them, they can learn to challenge the untrue/unhelpful part and construct alternative thoughts. You’ve also seen that sitting with and observing our thoughts and feelings can sometimes be used to just let them pass on by without getting caught up in them and swept away by them. This writing exercise focuses more on your emotions and asks you to write

down your feelings regarding a stressful situation that has happened or is happening right now in your life. Writing about our strong emotions may help us sort out our feelings about seriously stressful life events. Writing down your feelings helps you to clarify what you are actually feeling and begin dealing with your feelings instead of denying their existence. Scientific research has shown that writing about unresolved emotional situations in our lives can actually help us to function better, both physically and emotionally. This activity has been shown to be particularly useful for patients with a variety of medical problems and with other stressful or even traumatic situations.

- Although many people report that the writing exercise initially makes them feel sad or even distressed, these feelings pass. After doing these exercises, many people report having a better understanding about feelings they have tried to ignore or squash down, which has a positive effect on other parts of their lives.

- Not a communication tool!

- We don't typically use these exercises as a communication tool, like to tell a loved one what's on our mind or in our hearts. When we write to communicate with someone else, we often censor what we write. We want this exercise to be just for you, without any pressure of holding back that might come from sharing it with others. Further, if you are very angry at another person, unleashing your fury by sharing your writings may have consequences you had not thought about, particularly if the other person is not trustworthy or becomes very defensive. We will talk about a different approach to communication in the next session.
- Some people would rather not write about their feelings, instead preferring to verbalize them. This is okay too, and for those who don't want to write, you can practice doing this exercise by talking into an audiorecorder or a voice recorder on your smartphone. Most smartphones have this function, or you can use any other sort of digital recorder. If all else fails, you can do what another client of mine did and talk out loud for 10 minutes while in the shower! The point is to get your feelings expressed in a way that is safe and private for you.

- What should I write (or talk) about?

- We are asking you find a quiet and private place and set aside 10 minutes to write continuously about your feelings regarding an unresolved situation in your life. We are asking you to do this for at least four days in a row, including the in-session writing. We encourage you to really let go and allow yourself to explore all of your

emotions and thoughts about this situation. We want to encourage you to write about emotions that you may not have discussed in great detail with others: maybe about your childhood, or your loved ones, or about your concept of yourself and who you want to be. If your emotions are about a relationship you have had or an ongoing relationship, you might want to write an unsent letter to the other person or persons. We can talk about how to use your new awareness of your feelings as a springboard for healthy communication in the next session. The most important part of this exercise is to explore your deep feelings and thoughts about the topic you choose. It is natural to feel a broad range of emotions, including sadness or grief, when you do this exercise. If you find yourself getting extremely upset about what you are writing, rather than quit, just change topics. The only rule is to write continuously for 10 minutes. If you run out of things to write, go ahead and repeat what you have already written. Don't bother erasing or crossing things out. Just write. Don't worry about grammar, or spelling, or sentences. Just write.

- To summarize, trying to block out or hold in strong negative feelings is generally not a useful strategy for understanding or resolving them. These unacknowledged negative feelings still have an effect on our well-being and likely widen the pain gate. Writing about negative feelings and thoughts is a way to help you understand them better, and perhaps be less of a slave to them. **Writing for as little as 10 minutes for 4 days in a row has been shown to improve mood and overall health. It is another tool in your toolbox to help you narrow the pain and TBI gate.**

Homework

- Memory questionnaire
- Continue daily mindfulness exercises
- Continue progressive relaxation exercises
- **Daily writing exercise**