

Mechanisms of PE in PTSD: Emotional Processing and Cognition Modification

[Click here to watch the video](#)

- PE involves promoting emotional engagement with the trauma memory.
- We want all exposures to be therapeutic. We want something to change.
- We aim to decrease distress associated with trauma reminders and to change the trauma-related cognitions.

Barbara Rothbaum, Ph.D.

How Does PE Work?

Dr. Barbara Rothbaum

Mechanisms of Therapy for PTSD



Promoting emotional engagement



Modifying erroneous cognitions



Modifying associated distress

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences - Therapist guide (2nd ed.). Oxford University Press, USA.



Welcome to video 4, How Does PE Work? Let's talk about emotional processing. What are some of the mechanisms of therapy for PTSD? We think that it works by promoting emotional engagement with the trauma memories. Remember that we said we think that PTSD develops out of avoidance. So we want to promote the emotional engagement and then we want to modify some of the erroneous cognitions underlying PTSD and modify the distress associated with it.

References

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences – Therapist guide (2nd ed.). Oxford University Press, USA.



Cognitive Modifications During Exposure Therapy

Repeated revisiting of the trauma memory promotes:



Organization of the trauma narrative



Discrimination between remembering and re-encountering



Differentiation of the trauma from similar safe events

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences - Therapist guide (2nd ed.). Oxford University Press, USA.



We think that some of the cognitive modifications that occur during exposure therapy are that the repeated revisiting of the trauma memory promotes organization of the trauma narrative; discrimination between remembering and re-encountering the trauma; differentiation of the trauma from similar but safe events, for example, disconfirming the thought that the world is extremely dangerous.

References

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences – Therapist guide (2nd ed.). Oxford University Press, USA.



Cognitive Modifications During Exposure Therapy



Habituation of
fear and anxiety



Associating PTSD
symptoms with mastery

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences - Therapist guide (2nd ed.). Oxford University Press, USA.



Habituation or extinction of fear and anxiety, disconfirming that anxiety stays forever or I'll go crazy.

And we want to associate the PTSD symptoms with mastery rather than incompetence, disconfirming the thought I am incompetent.

References

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences – Therapist guide (2nd ed.). Oxford University Press, USA.



Fear Structure of a Recovered Memory



PTSD

- Tall bald man with a gun
- Home in the suburbs
- Froze and screamed
- Felt incompetent

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences - Therapist guide (2nd ed.). Oxford University Press, USA.



The fear structure of a recovered memory. So in the example of a woman who was raped by a tall bald man with a gun who shot the gun: she was alone in her home in the suburbs. He made her say, "I love you." She froze and screamed and had PTSD symptoms; felt afraid, felt it was uncontrollable. She was confused. Felt incompetent. Obviously felt that it was dangerous. All of this is jumbled together early on.

References

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences – Therapist guide (2nd ed.). Oxford University Press, USA.



Fear Structure of a Recovered Memory



Discrimination

- Every man is not dangerous
- My home is not dangerous
- Does not mean I was incompetent

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences - Therapist guide (2nd ed.). Oxford University Press, USA.



Once she has recovered and no longer has PTSD, there's discrimination. So she can understand that yes, that man was dangerous. That tall bald man with a gun who shot it and raped me in my home was dangerous. But every man is not dangerous. Every bald man is not dangerous. Every tall man is not dangerous. My home in the suburbs is normally not dangerous. It was just that one event that occurred there. The fact that he made me say "I love you" does not mean I was incompetent. The fact that I froze does not mean I was incompetent. The fact that I screamed doesn't mean I was incompetent.

References

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences – Therapist guide (2nd ed.). Oxford University Press, USA.



Fear Structure of a Recovered Memory



The stimuli, the responses, and the meaning changed

Foa, E., Hembree, E. A., Rothbaum, B. O., & Rauch, S. (2019). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences - Therapist guide (2nd ed.). Oxford University Press, USA.



So the stimuli, the responses, and the meaning changed. And they changed in a way that allows this person to go on and live the life that she wants to lead.



Habituation



Within the session



Between sessions

Minnen, A. and Foa, E., 2006. The effect of imaginal exposure length on outcome of treatment for PTSD. *Journal of Traumatic Stress*, 19(4), pp.427-438.



Sometimes, we see habituation within the session and what that means is we see it get easier. We see less distress, less fear, and anxiety within one session. And sometimes, we will see this if there are several repetitions of the trauma memory within a session. We will see a habituation or extinction within the session. But what's really important is to see habituation or extinction between sessions. So sometimes, at the end of the session, the person is still upset and we don't have to worry too much about that. Now, when we end the exposure, we're still going to do processing so there's still time to spend with the patient that hopefully their distress will reduce.

References

Minnen, A. and Foa, E., 2006. The effect of imaginal exposure length on outcome of treatment for PTSD. *Journal of Traumatic Stress*, 19(4), pp.427-438.



Habituation



Habituation between sessions is more important



Always a therapeutic exposure



Long enough for distress to decrease

Minnen, A. and Foa, E., 2006. The effect of imaginal exposure length on outcome of treatment for PTSD. *Journal of Traumatic Stress*, 19(4), pp.427-438.



Research has found that it's more important for the habituation between sessions. So going over their memory from one session to the next, to the next that that's what we want to see. We want to see it getting easier across time.

A reminder that we always want it to be a therapeutic exposure, it has to be long enough for that distress to decrease. When we used the example of the child exposed to a dog who had been bitten by a dog, you put him in a room, he runs out screaming—not a therapeutic exposure. You want to stay with an animal long enough. You want to stay with the stimuli long enough for the responses to decrease.

References

Minnen, A. and Foa, E., 2006. The effect of imaginal exposure length on outcome of treatment for PTSD. *Journal of Traumatic Stress*, 19(4), pp.427-438.



Key Points

- PE involves promoting emotional engagement with the trauma memory.
- We want all exposures to be therapeutic. We want something to change.
- We aim to decrease distress associated with trauma reminders and to change the trauma-related cognitions.



Key points from this video include that PE involves promoting emotional engagement with the trauma memory. We want all exposures to be therapeutic exposures. In other words, we want something to change. We aim to decrease distress associated with trauma reminders and to change the trauma-related cognitions.

