

Information Handout

Professional Version | US English

Exposures For Fear Of Body Sensations



Description

The fears that people struggle with can be organized according to their focus. Tolin (2012) suggests that the most common sources of fear relate to:

- Specific situations or objects (e.g., fear of dogs, fear of crowded places)
- Bodily sensations (e.g., heart palpitations, dizziness)
- Social and performance situations
- Obsessive fears
- Excessive worries
- Post-traumatic fears (e.g., beliefs that one is still in danger even after the threat has passed, or memories of trauma which are accompanied by high levels of fear)

Exposure is one of the most effective interventions for overcoming fear (Hofmann & Smits, 2008). It involves individuals repeatedly facing their fears to reduce their fearful responses and reverse the patterns of avoidance that perpetuate them (Springer & Tolin, 2020). Exposure is a first-line intervention for some conditions (such as phobias), and is an essential treatment component for many others (such as panic, social anxiety, OCD, and PTSD).

"Exposure methods share the common feature of confrontation with frightening, yet realistically safe, stimuli."

Rothbaum & Schwartz, 2002

Exposure-based interventions have been incorporated into several therapies, most notably cognitive behavioral therapy (CBT), and can take various forms:

- **In-vivo exposure.** The client confronts their fear in real life. These fears may include objects, situations, bodily sensations ('interoceptive exposure'), and thoughts.
- **Imaginal exposure.** The client confronts their fear using their imagination or a narrative form (e.g., re-reading a written description of their fear). Imaginal exposure is often used when exposure is impractical or impossible (e.g., the client's fear relates to a traumatic event or potential disaster).
- **Virtual reality exposure.** This client faces their fear using virtual reality (e.g., giving a presentation to a computer-generated crowd of strangers). Like imaginal exposure, virtual reality is often useful when in-vivo exposure is difficult to facilitate.

Theoretical accounts of exposure-based treatments have developed over the past century. Two of the currently most influential accounts are derived from emotional processing theory and inhibitory learning theory:

- **Emotional processing theory** proposes that fear is represented by associative networks that maintain information about the feared stimulus, behavioral fear responses, physiological fear responses, and their meaning (Foa & Kozak, 1986). When an individual encounters a stimulus that resembles the feared stimulus, the fear representation is activated. Kaczirkin and Foa (2022) propose that a fear structure is pathological when "the relationship among stimuli, responses, and their meaning do not match reality, such as when it is activated for safe stimuli" and that the fear structure is maintained by avoidance behaviors, which prevent new learning from occurring. Exposure modifies this pathological fear structure by first activating it, and then providing new information that disconfirms

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inaccurate or pathological associations in the fear structure. Emotional processing theory suggests that habituation within sessions leads to habituation between sessions, and subsequently longer-term change, although more recent research suggests that habituation is not a strong predictor of treatment effectiveness.

- **Inhibitory learning theory (ILT)** proposes that the threat association learned during fear acquisition is not erased, replaced, or modified by new learning during exposure (Craske et al, 2008; Tolin, 2016). Instead, the fear-inducing stimulus becomes ambiguous, with two meanings that both live in memory and compete for retrieval. Craske describes how a client might “enter therapy with a threat expectancy, such as ‘If I panic, I might die’ or ‘If I am socially rejected, it would be unbearable’. As a result of exposure therapy, a competing non-threat expectancy develops, such as ‘If I panic, I am unlikely to die’ or ‘If I am socially rejected, I will survive’. After completion of exposure therapy, the level of fear that is experienced when the stimulus is re-encountered is dependent upon which expectancy is activated. Activation of the original threat expectancy will enhance the expression of fear, whereas activation of the exposure-based non-threat expectancy will lessen fear expression”. Inhibitory learning theory helps to explain why fear can return easily, even in people who have successfully completed treatment, and why habituation does not seem to be important for exposure therapy to be effective.

While the mechanisms of action underlying exposure are debatable, the stages of exposure are relatively consistent:

1. The client identifies a fear stimulus they are willing to confront.
2. The client describes what they expect will happen when they face the stimulus.
3. The client exposes themselves to the stimulus for a prolonged period, without distraction.
4. Changes in the client’s fear levels are monitored.
5. After exposure, the client and therapist reflect on what has been learned (e.g., whether the stimulus is as dangerous as the client initially thought).
6. The client repeats the exposure.

Exposure is usually preceded by the development of a fear ladder (sometimes referred to as an “exposure hierarchy”) (Beck et al., 1985). Fear ladders are an idiographic list of stimuli (such as activities, situations, or sensations) that generate fear for the client and are avoided. Once the list is generated, items are ranked and ordered according to the level of fear they generate.

Description

The *Exposures for Fear of Body Sensations* information handout is designed for clients who fear specific physical sensations. Fearful responses to somatic sensations are apparent in several disorders including panic disorder (with and without agoraphobia; Barlow, 2002), illness anxiety (Walker & Furer, 2008), vomit phobia (Hunter & Antony, 2009), chronic pain (Flink et al., 2009), irritable bowel syndrome (Craske et al., 2011), eating disorders (Boswell et al., 2019), and obsessive compulsive disorder (Blakey & Abramowitz, 2018). Several factors have been implicated in the maintenance of somatic fears including the misinterpretation of normal body sensations (e.g., “My rapid heartbeat means I am going to have a heart attack”), somatic hypersensitivity, attentional biases (e.g., hypervigilance to physical sensations), avoidance, and safety behaviors, such as distractions, relaxation strategies, reassurance seeking, and ensuring support is available during exposure exercises (Clark et al., 1997; Springer & Tolin, 2020).

This handout provides examples of interoceptive exposure exercises for addressing these fears. Interoceptive exposure involves strategically inducing threatening somatic symptoms, while encouraging the client to maintain contact with these sensations to reduce fear and promote acceptance (Stewart & Watt, 2008). Therapists can use this tool to:

- Identify feared stimuli that are relevant to the client.
- Inform case conceptualizations and formulations.
- Normalize fear-related triggers.
- Discuss what exposure is likely to entail.
- Develop idiographic items for fear or exposure hierarchies.
- Inform exposure exercises and behavioral experiments.

Identify safety behaviors the client should refrain from using during exposure.

Instructions

Suggested Question



We've talked about how exposure can help people overcome fear. I'd like to show you some examples of how other people have used it to address difficulties like yours. We can use these examples to think about which exposure exercises you might find helpful. Can we look at it together?

Useful questions to support this tool include:

Suggested Questions



- *Which items on this list would make you feel afraid or anxious?*
- *Which items would you usually avoid because of your fear?*
- *Which items would you endure with distress or discomfort?*
- *Can you think of any other scenarios that would make you feel afraid?*
- *Which safety behaviors do you use to cope with your fear?*
- *Can you think of any other safety behaviors or coping strategies you sometimes use?*
- *Does the process of facing your fears make sense? How might you start exposure?*
- *How could you enhance the exposure(s) you are planning to do?*

Other resources that supplement this handout include:

- **Facing Your Fears and Phobias** (Guide)
- **Fear Ladder** (Worksheet)
- **Exposure Session Record** (Worksheet)
- **Maximizing the Effectiveness of Exposure Therapy** (Information handout)

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Exposures For Fear Of Body Sensations

Do certain physical sensations make you feel anxious? Are you afraid of feeling dizzy, breathless, sweating, or your heart racing? Perhaps you worry what these sensations mean, endure these sensations with great difficulty, or do everything you can to stop them from happening.

Fear gets stuck in place when you avoid the thing that scares you rather than approaching it. **Exposure** is an effective treatment that involves facing your fears in a controlled and prolonged way. It helps you learn that the situation isn't dangerous, so your fear declines.

There are many ways you can face your fear. Exposure could include:



Reading stories



Writing about your fear



Looking at pictures or photos



Searching the internet



Using virtual reality



Watching video clips



Imagining your fear (imaginal exposure)



Interacting with your fear in-person (in-vivo exposure)



Ways to face your fear

- Alter your sense of vision by wearing someone else's prescription glasses.
- Make yourself dizzy by spinning in an office chair for one minute, or standing in the middle of the room and spinning in circles.
- Hyperventilate by taking forceful, fast, deep breaths in and out through your mouth for at least one minute.
- Limit how much air you breathe by breathing through a narrow straw for one minute (hold your nose while you do this).
- Experience a sense of disorientation by exposing yourself to a strobe light in a dark room, or by listening to white noise through a pair of headphones.
- Experience a sense of depersonalization or derealization by staring at a blank wall without blinking, or staring at your reflection in a mirror for one minute.
- Increase your heart rate by running on the spot or climbing the stairs briskly for one minute.
- Make yourself feel overheated by sitting near a heater in a small room, visiting a sauna or steam room, or wearing several layers of clothes.
- Drink a caffeinated drink in a short period of time and notice the effects.
- Try any of these exercises in the real world (e.g. in a shopping centre, in a crowded place, at work).
- Combine these exercises to bring on multiple sensations at the same time (e.g., hyperventilating in a hot room).

Safety behaviors

Sometimes people do things to help them 'cope' with their fear during exposures (and at other times). If you are afraid of certain physical sensations, you might:

- Avoid anything which triggers your unwanted body sensations.
- Take or carry medication which suppresses unwanted body sensations.
- Use relaxation strategies before, during, or after exposure.
- Take long breaks between exposure exercises.
- Keep a telephone nearby in case there is an emergency.

Psychologists call these coping strategies 'safety behaviors'. If you use them, you might conclude that they were the reason you stayed safe, but the truth is you don't need them. For exposure to be most effective, you will need to practice 'letting go' of these behaviors.

Some exposure exercises are not appropriate for everyone. If you suffer from a medical condition, it's best to discuss the exposure exercises you plan to do with your physician first.



Exposure exercises are challenging: you're being asked to face your fears on purpose. Remember that the exposures presented here are just suggestions: you can adapt them, or think of new ones, with the support of your therapist.



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Resource details

Title: Exposures For Fear Of Body Sensations

Type: Information Handout

Language: English (US)

Translated title: Exposures For Fear Of Body Sensations

URL: <https://www.psychologytools.com/resource/exposures-for-fear-of-body-sensations>

Resource format: Professional

Version: 20230918

Last updated by: JP

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