

## Unified Protocol for Transdiagnostic Treatment of Emotional Disorders: Therapist Guide (2 edn)

David H. Barlow, Todd J. Farchione, Shannon Sauer-Zavala, Heather Murray Latin, Kristen K. Ellard, Jacqueline R. Bullis, Kate H. Bentley, Hannah T. Boettcher, and Clair Cassiello-Robbins

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## Module 6: Understanding and Confronting Physical Sensations: (Corresponds to Chapter 10 of the UP Workbook) €

### **Chapter:**

(p. 131) Module 6: Understanding and Confronting Physical Sensations: (Corresponds to Chapter 10 of the UP Workbook)

#### Author(s):

David H. Barlow, Todd J. Farchione, Shannon Sauer-Zavala, Heather Murray Latin, Kristen K. Ellard, Jacqueline R. Bullis, Kate H. Bentley, Hannah T. Boettcher, and Clair Cassiello-Robbins

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#### **Overview**



This chapter focuses on *interoceptive exposure*, or exposure to physical sensations that are associated with (and can sometimes trigger) intense emotions. The exercises described in the UP workbook are designed to assist patients in gaining further awareness of physical sensations that are part of an emotional reaction. Further, these exercises, and continued exposures focused on physical sensations, are expected to help patients learn to tolerate and think differently about the sensations and provide an opportunity to break the conditioned association between the sensations and strong emotions such as fear, anxiety, and sadness.



### **Module Goals**

- Increase patients' understanding of the role that physical sensations play in determining their emotional responses
- Help patients identify internal physical sensations associated with their emotions
- Repeatedly engage in exercises designed to help patients become more aware of their physical sensations and increase tolerance of these symptoms

## (p. 132) Materials Needed



- Physical Sensation Test Form located in UP workbook Chapter 11
- Thin straw or coffee stirrer
- Stopwatch, timer, or clock with a second hand
- Any other materials that may be relevant to patient's specific physiological reactivity (e.g., space heater, wrist weights, belt for tightening around waist)
- Physical Sensation Practice Form located at the end of UP workbook Chapter 11

#### **Homework Review**



Before starting this chapter, review the **Countering Emotional Behaviors Form**, as well as any additional forms that may have been assigned for further practice. At this point, patients may have been able to identify *Alternative Actions* to their emotional behaviors but may be having difficulty implementing these new responses. You may wish to work with your patient in examining the specific reasons they were unable to move forward with engaging in the new behaviors. You may find it useful to help patients identify and challenge outcome expectancies regarding what they believe will happen if they do not engage in their current emotional behaviors. For instance, a patient may believe that if they do not engage in a particular emotional behavior that the emotion will increase in intensity or that it will be experienced indefinitely. Addressing these concerns will help your patient to see their emotional behaviors as being nonadaptive and essentially "clear the path" for new *Alternative Actions*.

## **Physical Sensations and the Emotional Response**



In the same way that patients learn to recognize thoughts and behaviors as part of the emotional response, it is important for them to have a good understanding of how physical sensations can also contribute to emotions. Here we emphasize that, depending on how patients think about and experience these physical sensations, they can contribute (p. 133) to the emotional experience: they may be an important part of what makes the emotion hard to tolerate. For instance, take a person—giving a speech in front of a large audience—who begins experiencing an increased heart rate, sweaty palms, lightheadedness, and slight feelings of unreality. If these sensations are viewed as a threat to that person's ability to continue with the speech, they are likely to experience an intensification of the emotional response (including the physical sensations), which, in turn, will cause the person to become even more concerned about the sensations and so on. If, on the other hand, the person giving the speech interprets the sensations as a normal reaction that sometimes occurs in high-pressure situations and does not believe that the sensations significantly interfere with their performance, or was accepting of this possible interference, it is more likely that the person would be able to focus their attention on the speech, and, after a short period of time, the symptoms would diminish on their own.

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In talking about physical sensations you may want to emphasize the role that interpretation can play in changing how the patient experiences those sensations. We present this idea by noting that the context in which the physical sensations occur can influence our interpretation and level of acceptance of those sensations. So, for example, playgrounds are designed specifically to induce strong physical sensations—dizziness, racing heart, shortness of breath, and so on—and in fact, that's what makes them fun for kids! Similarly, amusement park rides are designed to elicit similar physical sensations in adults. Yet when these very same sensations arise in an anxious adult, or in a context where they may not be expected, they are interpreted very differently. Likewise, you might point out how the very same physical sensation may be associated with different emotions depending on the context—such as flushing being associated with pride, embarrassment, or anger, depending on the thoughts it accompanies. This illustrates that physical sensations are not *inherently* threatening; rather, it is our interpretations of these sensations that make them feel that way.

#### Therapist Note

As many practitioners are aware, interoceptive exposure has traditionally been applied in the treatment of panic disorder, in which specific concerns about the consequences of physical experiences are central to (p. 134) the psychopathology. However, having conducted interoceptive exposure with patients with a wide range of diagnoses, we believe strongly that this intervention can benefit any patient who experiences noticeable physical sensations as part of their strong uncomfortable emotions—which is to say almost all patients, even if they do not initially identify fear of physical sensations as a problem. We believe this because, as mentioned, physical sensations are part of what convinces a patient that they cannot handle an unwanted emotion. For example, a depressed patient may feel less willing to engage in behavioral activation when experiencing the physical heaviness that accompanies low mood. A patient with obsessive-compulsive disorder may report that their intrusive thoughts feel more true and threatening when accompanied by physical arousal. Socially anxious patients might find that blushing or sweating increases the likelihood of negative appraisals arising during a social interaction. Patients with generalized anxiety often feel greater urges to engage in avoidant emotional behaviors (e.g., procrastination) when worries are accompanied by unwanted physical sensations such as elevated heart rate or muscle tension. In each of these cases, the process is the same: Concerns about the physical sensations heighten aversion to the emotional experience, which increases the pressure to suppress the physical sensations to cope.

The initial discussion on the role of physical sensations in the emotional response provides patients with justification for conducting exercises designed to increase the flexibility of their interpretations of physical sensations. Then take the opportunity to identify the physical sensations that most frequently arise during emotional experiences, looking back at previous examples of **Three-Component Model of Emotions** or **Following Your ARC Forms** if necessary. Next, proceed to a discussion of avoidance of physical sensations and the value of conducting exposures to these sensations.

## Avoidance of Physical Sensations



Avoidance of physical sensations is common in patients suffering from panic disorder. However, in our experience, patients with other anxious and depressive symptoms also exhibit some level of avoidance of physical sensations. More obvious avoidance includes avoiding

activities, such (p. 135) as physical exercise; arguments with friends; thrilling movies; or sexual relations, which elicit strong physical sensations. Patients may avoid substances that naturally produce physical sensations, such as caffeinated beverages, chocolate, energy drinks, and even over-the-counter medications. Avoidance also includes distracting oneself from thoughts about physical sensations. Of course, avoidance precludes new learning about one's ability to tolerate physical sensations in the context of a strong emotion and instead maintains the vigilance for and acute sensitivity to such sensations. Therefore, the majority of this module is devoted to helping the patient repeatedly confront physical sensations, so the patient can increase their tolerance of these sensations and learn that these are not harmful.

Over the course of a number of such practices, anxiety over the symptoms eventually declines. Having patients systematically face their feared sensations is very different from how they may have experienced these sensations in the past, as those experiences were most likely accompanied by significant fear and avoidance. In this case, patients will work toward embracing, rather than avoiding, the physical sensations that typify their uncomfortable emotional experiences. Here is an example of how you might describe interoceptive exposure to a patient, drawing on conversations from the previous module on emotional behaviors:

As we've been talking about throughout this treatment, we're working on building a more accepting, willing attitude toward emotions and their parts. We just spoke about how interpretations of physical sensations really color how they feel to us, and that shows up when we think about some of the three-component models and ARCs of emotion that you made before. Remember how you pointed out that you feel muscle tension all over when you're worrying about your family, and this makes you feel like you should just call them so you can relax? But we figured out in the last session that calling your family is an emotional behavior that can contribute to you staying anxious over the long term. So ideally, the feelings of muscle tension wouldn't be adding to that urge to call your family as soon as you have a worry thought. Keeping that in mind, we're going to work on building up a more tolerant attitude toward your physical feelings of tension and other sensations that come up when you're emotional. Just as we've been working on practicing Alternative Actions to counter (p. 136) emotional behaviors, we're going to practice an Alternative Action to how you typically respond to feeling muscle tension. Instead of immediately doing something to make yourself feel more comfortable, we'll actually practice bringing on muscle tension on purpose, then not doing anything at all—just tolerating the sensation and the distress it brings up, and watching it change on its own. We will do this over and over again until you feel more used to the sensations, until you are no longer worried that they will lead to negative consequences or be intolerable.

## **Symptom-Induction Exercises**



Prior to engaging in interoceptive exposure, it is essential to identify those exercises that are likely to elicit the physical sensations most resembling those that arise in the context of strong emotion and that are at least moderately distressing for each individual patient. Instructions for administration of these exercises are found in the UP workbook but generally involve performing the exercise at full force for 60 seconds. A number of specific exercises are described in the UP workbook, but you should be creative in trying to develop exercises that will be most relevant, given the patient's presenting symptoms. The **Physical Sensation Test Form** can be used to assess the patient's response to these exercises in session. After each exercise,

patients are asked to rate the distress associated with the symptoms and the similarity of those symptoms to those that typically occur as part of an emotional response. Each of these items is rated on a 0 to 10-point scale, with 0 = none, 5 = moderate, and 10 = extreme. Based on the results of this assessment, several exercises can be selected for additional practice in-session or given to the patient as homework.

The symptom-induction exercises are to be performed in a way that elicits sensations as strongly as possible. Although patients may only be able to engage in the exercises for a short period of time initially, the length of exposure gradually can be extended. However, it is important that the sensations are fully induced and that the patient continues with exposure beyond the point that the sensations are initially experienced, as terminating the exercises on first noticing the sensations will reinforce fear of the symptoms. The present-focused awareness skills (p. 137) developed earlier in treatment should also be brought to bear during the exercises. You should instruct your patient to focus on their sensations while conducting the exercises, not to distract from them. If your patient notices certain thoughts occurring during the exercises, they should not engage in cognitive reappraisal at this point but rather should simply notice them as part of the experience. All forms of avoidance (e.g., distraction, minimal symptom induction, the presence of safety signals) should be prevented in order for patients to obtain the most benefits from the exposures.

### Therapist Note

Before conducting the symptom-induction exercises, it is important to fully assess for any medical conditions that would render these exercises harmful for the patient and to consult, as appropriate, with the patient's medical professional. It is also important to differentiate psychological distress from true potential for harm. For example, a patient diagnosed with panic disorder who fears having a heart attack while running in place (in the absence of any physical heart condition) is different from a patient who could be put at risk for cardiac arrest due to a documented medical condition.

## **Repeated Exposures**



After identifying exercises that elicit physical sensations most similar to your patient's naturally occurring symptoms, it is important to identify the feared consequences associated with the sensations. Examples of feared consequences might include passing out, throwing up, dying, having a heart attack, having a full-blown panic attack, losing control, feeling distressed for a very long time, or being unable to do other things following the exercises. These consequences are important to identify because the object of interoceptive exposure (and emotion exposure generally) is to violate expectations about the meaning or consequences of the experience. After identifying feared consequences, you should ask your patient to engage in the exercises repeatedly, in session and as homework. Ideally, your patient will practice first in your office so that you can assist with troubleshooting, particularly keeping an eye out for subtle avoidance (e.g., stopping prematurely, not engaging (p. 138) fully, distracting). The duration of interoceptive exposure trials can be lengthened gradually in order to teach your patient about their ability to cope with progressively more "difficult" exercises, particularly if distress decreases rapidly with initial practice.

Following research recommendations for administering interoceptive exposure (e.g., Deacon et al., 2013), we recommend conducting the same exercise repeatedly with no breaks between trials—the patient only waits long enough to provide ratings of distress and similarity. The exercises should continue until your patient no longer expects their feared consequences to occur. To assess this, you may choose to ask your patient to make ratings of expectancy (e.g., "I think there is a 40% chance straw breathing will cause me to lose control"), although this is not a formal part of the recordkeeping. It is likely, though not guaranteed or required, that distress will decrease across trials. If a patient is experiencing decreasing distress, a good rule of thumb is to continue until distress does not get above 3 out of 10. However, the most important thing is to change expectations and interpretations about experiencing physical sensations and to create a willingness to experience these sensations, whether or not they are distressing.

#### Homework



- Ask your patient to repeatedly engage in physical sensation exposures following the instructions on the **Physical Sensation Practice Form**. This form can be used to help conduct symptom induction exercises at home. Assign three brief physical sensation exposure exercises, to be agreed upon between you and your patient in-session.
- Instruct your patient to continue monitoring progress by completing the **Anxiety** and **Depression Scales** (as well as **Other Emotion** and **Positive Emotions Scales**, if they are using them) and charting their scores on the **Progress Record**.

## (p. 139) Case Vignettes



### Case Vignette #1

In the following two vignettes, the therapist provides an explanation for why hyperventilation can contribute to the physical sensations that the patient feels and explains that the exercise is unlikely to result in fainting (which this patient is particularly concerned about).

- P: Why does hyperventilating cause all those physical sensations I feel?
- T: That's a good question. Without going into too much detail, hyperventilation essentially leads to low levels of carbon dioxide in the blood. This causes many of the symptoms you may feel if you hyperventilate. For instance, low carbon dioxide levels cause the brain's blood vessels to constrict, resulting in a slight reduction of blood flow to the brain, which results in feelings of lightheadedness. Breathing slowly, or just allowing your body to regulate itself, will bring the balance of oxygen and carbon dioxide back to normal, and the physical symptoms will naturally diminish.

#### Case Vignette #2

- P: Won't I faint if I do the hyperventilation exercise?
- T: The short answer is no. At least, it would be highly unlikely, unless you're especially prone to fainting. When people faint, it's usually due to a sudden drop in blood pressure and/ or heart rate. This is not what happens during hyperventilation. It's possible to pass out from hyperventilating, but that typically occurs when people hyperventilate for long periods of time and/or you hold your breath immediately afterwards. Our exercise is not really long enough to cause this to happen. It is, however, likely to produce some physical sensations that may be slightly uncomfortable, including lightheadedness, increased heart

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rate, and tingling in your hands and face. Those are normal sensations and do not necessarily mean that you're going to faint.

### (p. 140) Case Vignette #3

In the following case vignette, the therapist provides a rationale for why the patient should practice interoceptive exercises even if they do not feel particularly afraid of any physical sensations.

P: I don't think I'm really afraid of any physical sensations. Do you think we should still go through the exercises?

T: Yes, I do. Even if you're not afraid of physical sensations, the exercises will give you a chance to really focus on the sensations and build your awareness of this component of the emotional response. Then, when you experience a strong emotional reaction, you'll be better able to notice the physical reaction that occurs as part of the emotional response. We have also learned that these exercises can be helpful even if physical sensations are not what you're afraid of, because even in these cases, physical sensations are part of what makes emotions feel hard to tolerate.

### Case Vignette #4

In the following case vignette, the therapist provides the patient with guidelines for deciding when to stop practicing the hyperventilation exercises.

- P: Hyperventilating makes me feel lightheaded and tingly no matter how many times I do it. When should I stop doing it?
- T: Do you feel distressed when you become lightheaded or tingly?
- P: Not anymore, I was originally . . . it really bothered me . . . but now it's just uncomfortable. I don't like it too much, but it doesn't make me anxious or anything.
- T: If you are no longer distressed by the sensations, there is no need to continue with the exercise. Remember, the exercises are not designed to eliminate the sensations but to lessen your distress about the sensations. You might want to come back to it from time to time, just to practice, but otherwise I think you can move on to another exercise.

### (p. 141) Troubleshooting



## The Exercises Are Not Distressing

Some patients do not report much distress during the symptom-induction exercises. There are a number of reasons why this might be. Some patients may need to engage in exercises that are different from those listed in the UP workbook. You should work collaboratively with your patient to identify any avoidance of physical sensations and then use that information to construct an exercise that is more likely to elicit strong physical sensations (and distress). The following are examples of physical exercises to try, which can also be found in the UP workbook:

- *To raise your heart rate:* Squats, push-ups, walking up and down stairs
- *To feel hot and sweaty:* Burpees or squat thrusts, sitting in front of a space heater, putting on a heavy coat indoors

- *To feel dizzy:* Roll your head from side to side, or sit with your head between your legs and then raise your head rapidly
- *To feel disoriented:* Look into a mirror with your face just a few inches away, stare at a bright lamp or pattern (e.g., window blinds) and then look away suddenly
- *To feel shaky:* Hold books or weights straight out to the sides of your body until your arms start to shake, or hold a plank position until your body starts to shake
- To feel heavy or tired: Wear wrist weights, ankle weights, or a heavy backpack while going about daily activities for five minutes
- To feel nauseous or full: Drink a large quantity of water and wear a tight belt.

### The Patient Engages in Subtle Avoidance or Escape

You should also be aware that some patients discontinue the exercises before they fully experience physical sensations. They may terminate the exercises as soon as the sensations are felt or may not perform the exercise with the intensity needed to fully produce physical sensations. You should address such avoidance and help patients modify their (p. 142) anxious beliefs regarding this situation. Even when patients do not report much distress when completing the exercises, they should still be asked to conduct them repeatedly to help facilitate greater awareness of the physical sensations when they occur in other contexts.

## **Problems Implementing Exercises at Home**

Occasionally, patients report difficulty completing the symptom exercises at home. Often, this is because the perceived safety of the therapist, or the therapeutic environment, is no longer present. Patients become concerned that if they experience strong physical sensations, that they will not recover as easily from the experience, or that it may lead to more intense emotions. You should help your patient identify the perceived consequences and work with them to put things back into perspective (e.g., "What's the worst that can happen?" "What has happened when you have had these sensations while alone in the past?"). A graduated approach can also be used. Patients could begin the exercises in the presence of a friend or family member, or even in your office with you out of the room. Next, the patient would practice alone.

#### **Conditional Aversion to Physical Sensations**

Sometimes patients only experience distress about the sensations when they are in certain situations but not others. Usually this is due to how the patient is thinking about the sensations within that particular context. For instance, having feelings of lightheadedness may be perceived as being much more dangerous if experienced while driving than in some other situation. You should examine the kind of thoughts that make the symptoms appear more dangerous in those situations. Remind your patient that, in reality, the symptoms are no more harmful in that situation than they are in other situations, including your office. Moreover, in some cases, concerns about physical sensations may not be intrinsic to physical arousal but rather related to another aspect of the experience (e.g., fear of judgment when visible physical symptoms arise in social situations). In these cases, it will also be important to combine interoceptive exposure with situational exposure in later sessions.