CHAPTER 4

False Safety Behaviors: Their Role in Pathological Fear

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What are safety behaviors?

Human beings are hardwired to engage in protective actions when faced with perceived threats. Examples of such actions include wearing seat belts to increase one's chance of surviving a car accident, wearing warm clothing when venturing outside on a winter's day in Minnesota to avoid hyperthermia, and using condoms with a new sexual partner to prevent HIV infection. However, engaging in such protective actions when no real threats exist has been shown to actually fuel anxiety disorders and may even play a role in the maintenance of other problems such as insomnia and chronic pain.

A clever experiment conducted by Dr. Olatunji and colleagues at Vanderbilt University provides a nice illustration of how safety behaviors can actually fuel anxiety. They randomly assigned normal college students to an experimental or control group. After a 1-week baseline period in which both groups monitored their safety behaviors, participants in the experimental group were instructed to perform a list of 34 different health-related safety behaviors every day for a week. These included behaviors such as carrying anti-bacterial hand sanitizer with them at all times, avoiding touching door handles, checking their throat for inflammation, checking pulse, etc.). Those in the control group were instructed to just be themselves and continue to monitor their health-related safety behaviors. At the

end of this week, both groups were instructed to just monitor their heath-related safety behaviors for an additional week. Results of the experiment convincingly showed significant increases in health anxiety among those who had engaged in safety behaviors for just a week compared to the those who did not! Human beings are hardwired to engage in protective actions when faced with perceived threats. Examples of such actions include wearing seat belts in the event of a car accident, wearing warm clothing when venturing outside on a winter's day in Minnesota to prevent hyperthermia, and using condoms with a new sexual partner to prevent STD's. However, engaging in such protective actions when no real threats exist has been shown to actually fuel anxiety disorders and may even play a role in the maintenance of other problems such as insomnia and chronic pain.

What are false safety behaviors?

We define false safety behaviors (FSBs) as *unnecessary actions taken to prevent, escape from, or reduce the severity of a perceived threat.* There is one specific word in this definition that distinguishes legitimate adaptive safety behaviors - those that keep us safe - from false safety behaviors - those that fuel anxiety problems? If you picked the word *unnecessary* you're right! But when are they unnecessary? Safety behaviors are unnecessary when the perceived threat for which the safety behavior is presumably protecting the person from is bogus.

Common types of false safety behaviors

Most FSBs fall into one of the following types: (1) *avoidance*; (2) *checking*; (3) *mental maneuver*s; (4) *use of safety aids*. Examples of these four types appear below.

1. *Avoidance*
    a. *Avoidance of external activities, situations, or objects:* e.g., heights, enclosed spaces, needles, parties, certain foods or beverages, restaurants, planes, being alone, TV shows or news stories
    b. *Avoidance of certain bodily reactions:* e.g., exercise, caffeine, amusement park rides, saunas or steam rooms)
    c. *Avoidance of negative thoughts, memories, or emotions:* e.g., avoiding stress, sadness, anxiety, certain memories, or specific thoughts.

2. *Checking*: e.g., stoves, locks, location of exits, location of bathrooms, one's pulse or blood pressure, excessive checking of written work or emails, safety of significant others;

3. *Mental Maneuvers*: Repeated attempts at mental distraction, mental self-reassurance, mental reviewing or analysis of events, thoughts, bodily reactions, repeated mental analysis, mental distraction;

4. *Use of Safety Aids:* Carrying rescue medication, water, food, inhalers, anti-bacterial lotion, phone numbers in your car or person, having to have another person accompany you to certain places.

5. *Reassurance Seeking from others:* Repeatedly asking for reassurance from friends, partner, other family members, boss, or others.

Table 1. Examples of commonly reported perceived threats and the corresponding false safety behaviors (FSBs) commonly observed across a wide range of anxiety-related disorders.

Anxiety complaint	Perceived threat	Safety behavior(s)
Fear of public speaking	Trembling in front of audience	– Gripping both sides of the podium – Ingest beta blocker before talk
Panic disorder	Losing control of one's vehicle while driving	– Avoid driving – Carrying rescue medication in one's pocket or purse
Post-traumatic stress disorder	Being attacked while walking down the street	– Avoid going out at night – Carrying a weapon in one's pocket or purse
Agoraphobia	Having a panic attack while in the grocery store	– Avoid grocery stores – Have a companion accompany one to the store
Obsessive–compulsive disorder	Slitting husband's throat while he is sleeping	– Locking up all knives and scissors before bed – Avoid arguments with husband
Relationship worry	Rejection from partner	– Reassurance seeking – Checking whereabouts of partner
Acrophobia	Plummet to one's death	– Avoid high places – Tightly grip railing while standing on balcony
Sitophobia	Choke while eating	– Avoid swallowing pills – Pureeing food before eating it

Case of Bill

Bill is a 32-year-old executive working for a major software company in Central Texas. Anticipating having to stay up all night to complete a final report for an important client, Bill consumed three energy drinks over a span of three hours. All of a sudden, Bill noticed his heart pounding and racing and felt like he couldn't catch his breath. He called 911 in a state of panic believing that he might be having a heart attack.

How do false safety behaviors fuel anxiety?

Although there is overwhelming evidence that false safety behaviors present a major obstacle for overcoming anxiety related problems. Scientists are still trying to figure out how FSB's exert such a powerful maintaining effect. There seems to be a growing consensus that FSB's fuel pathological anxiety in several different ways. One way in which FSBs might do their mischief is by keeping the patient's bogus perception of threat alive through a mental process called misattribution. Misattribution theory asserts that when people perform unnecessary safety actions to protect themselves from a perceived threat, they falsely conclude (misattribute) their safety to the use of the FSB, thus leaving their perception of threat intact. Take for instance, the flying phobic who copes with their concern that the plane will crash by repeatedly checking the weather prior to the flight's departure and then misattributes her safe flight to her diligent weather scanning rather than the inherent safety of air travel.

FSBs may fuel anxiety problems by also interfering with the basic process through which people come to learn that some of their perceived threats are actually not threats at all. We call this corrective process *threat disconfirmation*. As discussed in our earlier section on the "alarm off switch" entering situations often provides new sensory information that corrects our faulty views about whether a situation is actually threatening. Take for instance the young toddler who shows significant fear while waiting their turn to sit on Santa's lap for the first time. The often observed fear and the accompanying tears typically turn into smiles after a few seconds of disconfirming sensory information that Santa poses no threat! This normal process of fear reduction through threat disconfirmation is disrupted when one uses the most common FSB of all - avoidance. The reason is simple! When

one avoids, one loses out on the opportunity to receive corrective information that might disconfirm the false sense of threat. If you avoid all dogs you never get exposed to new sensory data to disconfirm the belief that most dogs are dangerous.

Other FSBs such as checking, or using external safety aids also disrupts the process of threat disconfirmation but in a slightly different way. For this important perceived threat reduction process to occur, not only must new information be *available* but it also must be *processed*. Performing certain FSBs redirects the person's attention to the execution of the FSB, thus limiting the person's attentional capacity to process the new threat disconfirming information.

A third way in which FSBs fuel anxiety problems is through their direct effects on the fear center of the brain. During the course of evolution, engaging in protective actions became associated with dangerous situations. Consequently, the brain's fear circuitry evolved to automatically activate the threat readiness alarm (anxiety) in response to feedback from our actions. When we act like there's a danger (even when there is not), the brain responds as though the danger is real.

Case of Sue

Sue was a 28-year-old professional photographer who presented for treatment with a severe driving phobia. Her anxiety disorder began at age 20 in response to a panic attack that she experienced while driving on a major highway in Texas. Following that initial panic experience, Sue developed the concern that she might have another panic attack while driving, which she worried, would lead her to lose control of her vehicle causing injury or death to herself or others. At first, Sue's FSBs were limited to avoiding the one highway in which her panic occurred. But gradually, Sue adopted increasingly restrictive FSBs consisting of additional avoidance rules (no night driving, no driving on unfamiliar roads, no driving in the passing lane) and other types of FSBs including carrying klonopin in her purse, checking to make sure her cell phone was sufficiently charged, driving significantly below the speed limit, and gripping the steering wheel so tightly that her hands would hurt. As Sue's FSBs increased so did her anticipatory anxiety about driving. At the time of her first appointment with us, Sue could only drive on local roads and only then if her husband was next to her in the passenger seat. Her anxiety and driving restrictions played havoc with her job and signifi-

cantly strained her relationship with her husband. Not surprisingly, Sue became hopeless and depressed about ever being able to live a normal life.

Unfortunately, Sue's story is not uncommon. Isolated panic reactions often lead to a marked fear of having additional panic attacks (panic disorder), and a marked fear of panic attacks often leads to panic disorder and agoraphobia. Her case nicely illustrates the simultaneous operation of the *three* major maintaining causes of anxiety disorders: (1) faulty threat perceptions (having a panic will lead me to lose control and crash); (2) fear of anxiety (high anxiety sensitivity); and (3) adoption of false safety behaviors to cope with the misperceived threat.

Tips for Eliminating False Safety Behaviors

There is now overwhelming evidence that encouraging individuals with anxiety problems to eliminate their use of false safety behaviors (FSBs) significantly improves the effectiveness of treatment. Here are some brief tips that might help you successfully eliminate your FSBs:

1. Review the definition and examples of FSBs in this chapter to make sure you understand the difference between a false safety behavior and an an adaptive (helpful) safety behavior.
2. Observe the kinds of ways you cope with anxiety-provoking situations and ask yourself, "Do most other people perform this action to cope with the situation?" If the answer is no, chances are the action is a false safety behavior and should be eliminated.
3. Since some FSBs are more challenging to eliminate than others, list all your FSBs first and then arrange them in an ascending list from *easiest to eliminate* to *most difficult to eliminate*. Begin by eliminating the first few easier FSBs before tackling the more difficult ones.
4. Expect that your anxiety will likely increase *temporarily* when you first eliminate using the FSB and don't let the temporary increase in your anxiety prevent you from staying the course. Most notice that their anxiety reduces fairly soon after all or most FSBs have been eliminated.

5. If you have encountered an obstacle in your efforts to fade a particular FSB and are working with a therapist, ask him or her to brainstorm with you on how you might successfully overcome the obstacle.
6. If your FSBs involve others (which they sometimes do), ask their assistance in helping you fade the FSB. For example, if you use checking or reassurance-seeking with a partner or family member, educate them about FSBs. Many family members or friends operate with the mistaken belief that they are helping you by providing you repeated reassurance. You might even consider having them read this chapter as a way of better understanding how they might help you.
7. Don't forget the mental FSBs as well. Some people remain stuck because they continue to engage in mental FSBs such as mental self-reassurance, mental reviewing, or mental analysis. One useful technique for fading these mental FSBs is to redirect your attention to activities that you would likely be doing if you were not having anxiety. Engaging in meaningful actions unrelated to your anxiety sends a powerful message to your brain that things must be ok and helps turn off the bogus threat transmission.