

# Raising the "Reaction Threshold"

by Sophia Tutorial



#### WHAT'S COVERED

In this lesson, we'll discuss how to prepare for situations that we know will be stressful. In the particular, we'll focus on:

- 1. The Reaction Threshold
- 2. Response Strategies for Raising the Reaction Threshold
  - a. Confidence
  - b. Rational Assessment

# 1. The Reaction Threshold

You learned in an earlier lesson that we have intense reactions, both physical and emotional, when we find ourselves in a stressful situation. These reactions start with the **amygdala**—a structure in the brain which interprets stimuli as either a threat or non-threat and then initiates a fight or flight reaction.

This **fight or flight reaction** is a condition in the body caused by the release of adrenaline to prepare the body to flee from or combat a stimulus perceived as a **threat**, or a stimulus interpreted by the amygdala as harmful to an organism.

The amygdala can interpret something as harmful when it really isn't; the amygdala doesn't make distinctions, and it doesn't look at the intensity of what it is we're facing.

EXAMPLE Whether we're sitting in a board room waiting to give a speech or being chased by a bear in the wilderness, the response in the body can feel the same.

When the amygdala sees a threat, we want to respond consciously; aresponse is a behavior toward a given stimulus or in a given context that is consciously chosen.

Unfortunately, we often have a **reaction** when we find ourselves in a stressful situation; this is a behavior which is not consciously chosen, but is automatic or reflexive in a given context or in relation to a given stimulus.

In order to teach the amygdala not to react in this way if the threat doesn't warrant it, we need to consider the **reaction threshold**—the level of potential threat necessary to trigger a fight or flight reaction for a given person or organism in a given situation.

What we want to do is raise the reaction threshold so that it takes a higher level of threat for us to react



#### **Amygdala**

A structure in the brain which interprets stimuli as threat or non-threat and initiates fight or flight reaction.

#### Fight or Flight Reaction

A condition in the body caused by the release of adrenaline, preparing the body to flee from or combat a stimulus perceived as a threat by the amygdala.

#### **Threat**

A stimulus interpreted by the amygdala as harmful to an organism.

#### Response

Behavior towards a given stimulus or in a given context that is consciously chosen.

#### Reaction

Behavior which is not consciously chosen but is automatic/reflexive in a given context or in relation to a given stimulus.

#### **Reaction Threshold**

For a given person/organism in a given situation, the level of potential threat necessary to trigger a fight/flight reaction.

# 2. Response Strategies for Raising the Reaction Threshold

#### 2a. Confidence

One way to raise the reaction threshold is to increase **confidence**, or the belief that one can engage in a given situation successfully by meeting needs or preventing loss and harm.

EXAMPLE Many people have a fight or flight reaction when it comes to public speaking. This can cause physiological reactions, such as:

- Sweating
- · Loss of voice
- Loss of memory
- Rapid heartbeat

A method for raising the threshold here is to actually do more public speaking. A lot of people join Toastmasters, which is a public speaking practice group that's been very successful in raising the reaction threshold for people who find public speaking stressful.

EXAMPLE There's a lot of changing technology in the world that people are required to learn and understand for their jobs. If you have a fear of new technology, you might find yourself freezing, or having the fight or flight reaction.

Taking classes, or getting a tutor or mentor to help you actually practice using the technology, will make it feel more familiar to you. This will increase your confidence, raising the threshold level so you don't feel the reactions that typically occur when you are stressed, nervous, or afraid.

EXAMPLE The method of increasing confidence can also work with a sport, such as skiing or swimming. By facing your fear, you desensitize yourself to it so that the amygdala learns that it doesn't need to react quite so defensively.



#### Confidence

A belief that one can engage in a given situation successfully (e.g. by meeting needs or preventing loss/harm).

#### 2b. Rational Assessment

It also helps to prepare rationally because when we behave in a certain way, the behavior comes from our emotions, and the emotions come from our thoughts.

EXAMPLE Before you give a presentation, you might think things like, "I'm really going to be awful when I get up there to give that speech. I think I'll forget what I'm going to say. I know my heart's going to beat really quickly; I'll look foolish."

Those thoughts spiral into negative emotions, and you begin to feel nervous; when you stand up to give the presentation, you might begin to sweat and forget what you were going to say. This is a downward spiral that starts with thoughts, which lead to emotions, which then lead to behavior.

Instead, you can step back and rationally assess the situation, perhaps by substituting some of your negative thoughts with positive ones or visualizing yourself doing a good job. Doing this will desensitize you to the situation that you're finding stressful, and thus raise the reaction threshold.



#### **SUMMARY**

In this lesson, you learned about the **reaction threshold**, and how it determines the way we immediately react to a perceived threat. You now understand that there are **response strategies for raising the reaction threshold** in order to handle stressful situations more easily. These strategies include increasing confidence and assessing the situation rationally. Good luck!

Source: Adapted from Sophia tutorial by Marlene Johnson.



# **TERMS TO KNOW**

#### Amygdala

A structure in the brain which interprets stimuli as threat or non-threat and initiates fight or flight reaction.

#### Confidence

A belief that one can engage in a given situation successfully (e.g. by meeting needs or preventing loss/harm).

## Fight or Flight Reaction

A condition in the body caused by the release of adrenaline, preparing the body to flee from or combat a stimulus perceived as a threat by the amygdala.

#### Reaction

Behavior which is not consciously chosen but is automatic/reflexive in a given context or in relation to a given stimulus.

## **Reaction Threshold**

For a given person/organism in a given situation, the level of potential threat necessary to trigger a fight/flight reaction.

# Response

Behavior towards a given stimulus or in a given context that is consciously chosen.

#### **Threat**

A stimulus interpreted by the amygdala as harmful to an organism.