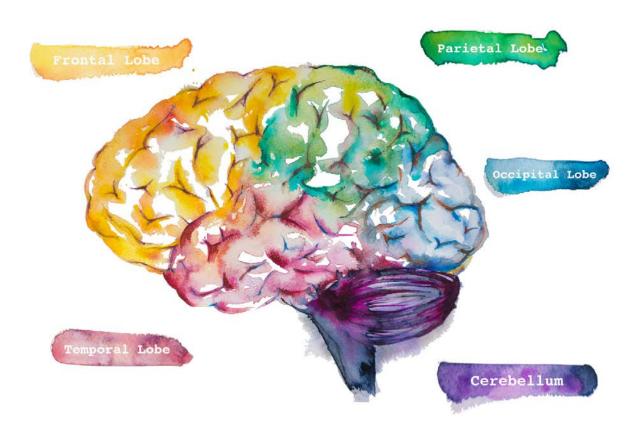
## **Neurobiology of Trauma:**

## Dismantling Common Misconceptions and Victim-Blaming Statements about Sexual Violence



The myths listed below are examples of common misconceptions and victim-blaming comments survivors hear when they share their stories. While there are many explanations which serve to dispel these misconceptions, this document is focused on how the neurobiology of trauma dispels these victim-blaming misconceptions.

Myth: If it was really an assault, they could have just fought back.

Neurobiology Fact: During an assault, the brain's defense/fear circuitry can take over. It can quickly impair the thinking part of the brain (prefrontal cortex), responsible for rational and flexible responses, and instead trigger habit behaviors and survival reflexes that don't involve fighting or even struggling. These responses are automatic and normal in such situations. There are a few common reflexes that the brain falls back on during an assault situation. For example, a person may "freeze" when the attack is first detected. Some people space out and disconnect from their body, while others actually pass out from fear, or become paralyzed and unable to move or speak. These are all common brain responses to any type of life-threatening, fearful situation, not just a sexual assault. They are not a matter of choice for the person experiencing them.

Myth: If it was really an assault, they would've called out for help or called the police.

Neurobiology Fact: When a person experiences extreme fear, their prefrontal cortex (decision-making part of the brain) becomes impaired. Logically thinking through the situation and deciding to call out for help, remembering that neighbors are nearby and could help, or remembering where your phone is to call the police (or even remembering what the emergency number for the police is!) can become impossible tasks without a fully functioning prefrontal cortex. It is not as simple as *choosing* to call the police or *choosing* to fight back or call for help. What others may call "doing nothing" during an assault is NOT a sign of consent. It is, in fact, a defense mechanism the brain utilizes to keep a person alive during a life-threatening or terrifying situation.

Myth: If it was really an assault, you could've just run away. You didn't even move.

Neurobiology Fact: Decades of research into the neurobiology of trauma tells us that there are three responses humans (and many mammals) have to terrifying situations: fight, flight, AND freeze. While most people have heard of fight or flight, freeze is discussed less often in our society. Yet it is by far the most likely first response people have to life-threatening and traumatic situations. Most people will freeze when they are scared—this is a part of their fear circuitry in the brain which bypasses the prefrontal cortex, meaning it is not a choice the person is making but is an automatic response. There are several levels of the freeze response: one is called 'tonic immobility'. This is when a person's body goes rigid and they can't move – that is, they were paralyzed with fear. Another is 'collapsed immobility'. In this case, one feels faint and the body goes limp (like a possum), and one may even pass out. These reflexive responses can happen when someone is unable to escape an assault, they believe

they are unable to escape, or that trying to escape could be very dangerous. It's a response that appeared millions of years ago in evolution, and all mammals can have that type of response."

Myth: If it was really an assault, then why did you agree/offer to give him a blow job first?

Neurobiology Fact: When people are attacked, their brain may automatically activate old habits of responding to aggressive and dominant people, for example from experiences of childhood abuse or bullying. Or habits that girls learn for politely responding to unwanted sexual advances without causing a scene or upsetting the other person. Women, in particular, are raised to be nice and to be pleasers or placaters. Sometimes that might mean offering or initiating sexual behaviors because the brain is using that as a coping strategy—it's thinking "maybe if I just give him a blow job, he'll leave" or "If I just do this one thing then he won't kill me." These responses are NOT consensual because there is no safe space for a "no" in these situations (see ASAP's Consent definition for more information). These habitual responses are not choices a person makes—they are part of the fear circuitry of the brain, which bypasses the prefrontal cortex or decision-making part of the brain. Even though such habitual modes of operation don't stop someone committing an assault, the brain may persist in them anyway because it doesn't have any effective habitual responses to draw on.

Myth: Your story has changed over time—you must be lying. Why did you wait so long to tell anyone?

Neurobiology Fact: During a traumatic situation, when the brain's fear circuitry kicks in, memories are encoded differently. Sometimes the brain may encode seemingly unimportant details—the smell of the room, the color of the bed covers, or the sounds outside of the window—rather than seemingly important details such as what the perpetrator looked like or what the perpetrator did. Memories are not encoded in chronological order—a survivor may or may not remember in what order events occurred and there may be gaps in memory. This is all due to a normative brain response to extreme fear. The way in which the memories are encoded may cause confusion for survivors and may make it difficult for them to share their stories in ways that "make sense" to others, but it is NOT a sign that the experience itself did not occur. Rather, it is a sign that the person has experienced trauma.

It is not uncommon for people who have experienced trauma to go through a time with little memory of what happened and then recall more later. A lot of research has found that the human brain is capable of preventing unwanted memories or parts of unwanted memories from coming into awareness — sometimes for long periods of time, not only months or years, but even decades in some cases. In the aftermath of a sexual assault or other trauma, it's totally normal to try not to remember or think about it. If and when the memories eventually come back into awareness, it's usually because something happens that — for that person, at that time —triggers recall or 'recovery' of those memories. Thus, a person is not "changing their story" or "making it up." Rather, their brain is simply taking the necessary time to process the experience and sort out their potentially disjointed memories.