

What's Going On In My Brain?

Just as your personality has different, interdependent parts, your brain has different, interdependent networks that serve different functions.

Your brain's networks affect your everyday thoughts, feelings, and behavior. Imagine that your brain is made up of three major networks; each communicates with the other two for your brain to function well. The various brain networks work together to help you stay alive, survive when threatened, solve problems, feel and process emotions, make intelligent decisions, and manage many other types of cognitive skills.

1) The Thinking Brain Network- This mental processing network enables you to gain and comprehend knowledge. These cognitive processes include thinking, knowing, remembering, judging, and problem-solving. The higher-level functions of the thinking brain network process information using language, imagination, perception, and planning. Your ability to regulate and adapt your emotions, body sensations, and behaviors to fit the environment you're in depends on the use of this cognitive network. People function more successfully when they use the brain's thinking network to process and regulate emotions, thoughts, body sensations, and behaviors. The expression of our personality can be influenced by learning to develop and use this network. Most neurologists agree that this network is not fully developed until age 25. This network is meant to lead the emotional and survival brain networks.

2) The emotional brain network- This network acts like the brain's panic alarm by sending a signal that alerts the survival network when you are super-stressed and feel threatened with danger/harm. The emotional network regulates how you react to emotions based on what you feel in your body. Whether there is a real or perceived threat, this network communicates to the survival brain network that it's time to send your body into the fight or flight mode.

3) The survival brain network- When this network receives the danger message, it sends a signal to the autonomic nervous system (ANS). The ANS consists of the sympathetic (gas pedal) and the parasympathetic (brake pedal) nervous systems. Once activated, the sympathetic nervous system (SNS) triggers the release of stress hormones into the bloodstream. This dysregulates your nervous system by activating the SNS. This stress response results in increased heart rate, blood pressure, breathing, and other survival-mode bodily changes, including suppressing your immune system. It is important to have ways to calm and relax your body by activating your parasympathetic nervous system when this happens. You can "train your brain" not to react with fight or flight actions when you feel stressed. Your brain can create new neural pathways and modify existing ones, by learning coping skills and forming new memories through a process known as neuroplasticity.