

# Mindsight Summary

By Daniel Siegel

We all know about the five senses, we've all heard of a sixth sense, but have you ever heard of a seventh sense?

*Mindsight* explores a seventh sense called mindsight, using cutting-edge neuroscience. Mindsight focuses on the complex interplay between the brain, mind, and social relationships. This helps to understand emotions, experiences and relationships, and to build new neural pathways at any stage of life.

Let's imagine our minds as an internal ocean that's teeming with life, and continuously changing. However, as with all oceans, it's also unbelievably turbulent at times. Historically, the brain has been a mysterious inner world, but neuroscientific research has changed this. Now we can learn to focus our attention on our minds' inner workings, and so begin to understand why we think, behave, and feel the way we do. This can free us from the same old reactive emotional loops that trap us, helping us transform our emotional and social lives. This transformation happens because our brains build new neural pathways that improve our mental and physical health.

Dr. Dan Siegel is a world-renowned psychiatrist and psychotherapist. He first published *Mindsight* in 2009, which broke new ground by applying cutting edge neurological research in therapeutic interventions. It gives practical insights into how we can make more sense of our complex, confusing, and often cluttered minds. He bases his book on what he terms "interpersonal neurobiology," emphasizing that our brains are social organs. There's a constant energy and information flow between

our brains, minds, and relationships. Dr. Siegel found his early experiences at Harvard medical school difficult, because he was discouraged from exploring patients' feelings, and persuaded to make facts his focus. Changes in the world of medicine, and his determination to explore the mysteries of the mind, led him to develop his theory of interpersonal neurobiology.

Before we unpack the key concepts, here's a brief story Dr. Siegel shares. He recounts the tragic case of a client, Barbara, whose prefrontal cortex was damaged in a car accident. She described the changes to her personality as feeling as if she had 'lost her soul.' Her devastated family now had to cope with a very different person from the one they knew and loved. Barbara had lost her mindsight, and her family had to develop their own mindsight to understand and care for the new Barbara. This story highlights a few key ideas that will be explored further.

We'll briefly look at mindsight as a way to approach how we relate to our bodies, minds and relationships. Each of us has our own unique mind, and we're often living in our own worlds, which causes us to behave in a range of different ways. Understanding the concept of mindsight allows us to understand our own messy and turbulent internal worlds, while also providing insight into other people.

## **The Interconnected Triangle of Well-Being**

Dr. Siegel views the mind, brain, and relationships, as three different dimensions of one reality, and they form an interconnected triangle of well-being.

With more than a hundred billion interconnected neurons packed into a

small space, our brains are infinitely complex. The brain can be explained as follows; hold up your hand with your palm facing you. Picture the hand model as having the face of a person in front of your knuckles. Your wrist is the spinal cord. Now lift your fingers and thumb, and your palm will represent your inner brain stem. If you put your thumb down, you'll have the limbic area's location. If you now fold your fingers over your thumb, they will represent your cortex. The brainstem, limbic system, and cortex make up the triune brain. Mindsight aims to link activity in these three regions, which is known as vertical integration. The brain is also represented as having two halves, and linkage between the left and right sides is known as horizontal or bilateral integration.

As we learn from the story of Barbara's tragic injury, the prefrontal cortex is in charge of nine essential skills. These include, regulating the body, being able to tune into others, balancing emotions, responding flexibly, and soothing fear. The other abilities are creating empathy, insight, morality, and intuition. The prefrontal cortex's nine functions help us hold our stuff together, making it essential for well-being and meaningful social interactions. However, when we talk about the brain, we're actually talking about the whole body. We have neural networks throughout our bodies that continuously send sensory messages to our skull-encased brain, influencing how we tell our lives' stories.

Dr. Siegel extends our understanding by exploring the concept of the mind. His definition is that, 'the human mind is a relational and embodied process that regulates the flow of energy and information.'

How do we understand energy and information? Energy is when we act, and information is data that our minds collect. Our minds create information from the flow of energy, which leads to the exertion of energy in new ways. The mind is regulatory, so it monitors and modifies

this flow of energy and information all the time. If we can see our unique minds more clearly, we can start to shape these patterns. This information, and energy flow, also happens in the body—through our nervous system, heart, and intestines.

Not only are the mind and brain embodied, but they're also relational, meaning we share energy and information in our relationships. Think of the last time you noticed how infectious laughter is, or how a sad friend can bring tears to your own eyes. Or the impact Barbara's brain injury had on the family relationships. This "resonance" is a result of our mirror neuron system.

In the late 1990s, a group of neuroscientists studied the premotor area of a monkey's cortex. When the monkey ate a peanut, a particular electrode fired. No surprise there. They then realized that when this monkey watched one of the researchers eat a peanut, his same circuitry fired. This is now known as the mirror neuron system, and is believed to be the root of empathy. Our mirror neurons help us to resonate with other people. The insula is the part of the brain that seems to form the superhighway of the resonating circuit. We resonate physically as well, as our respiration, blood pressure, and heart rate can change in line with somebody else's physical state.

Interestingly, research shows that people who are more aware of their bodies, tend to be more empathic. And this highlights how crucial early caregiving is. Hence, if we had parents who were confusing and hard to read, our mindsight would be built on shaky ground. Whereas if our caregivers were firm and clear in their body and verbal language, our mindsight's circuitry would rest on a solid foundation.

# Neuroplasticity Brings us Hope

In cases like that of Barbara, brain damage is so severe that improvement is marginal. However, neuroscience shows, that the brain's neuroplasticity means that we can literally build new or strengthen existing neural pathways. Our neural inclinations are established before birth, and shape how we approach the world. Yet, our continually growing brains are also shaped by how the world treats us, meaning that genetics, chance, and experience all combine to shape our personalities.

Throughout our lives, our brains continue to be a work in progress. In other words, 'what fires together, also wires together.' As with physical exercise, where we focus on building different muscle groups, directing our attention can shape neural firing and strengthen synaptic connections in other parts of the brain. As Dr. Siegel says, 'synaptic linkages are strengthened, the brain becomes more interconnected, and the mind becomes more adaptive. This is neuroplasticity in action.'

# Mindsight Helps us to Move Towards Integration

Integration is core to well-being, because we want to avoid a controlled life that's too rigid, but we also don't want to live in continuous mental chaos. Dr. Siegel realized that cognitive difficulty comes with either chaos, rigidity, or both. He started to wonder if this meant that mental health is a function of integration. He describes integration as resembling a river, with the central part of the river being the ever-changing flow of integration. This river has two banks though, one is the bank of chaos, and the other is the bank of rigidity. Sometimes we get stuck on the side of rigidity, and on other days, when our lives feel out of control, we drift

towards chaos. But when we're integrated, we can move along the central winding flow of harmony and balance, and we dare to move towards uncharted waters. Mindsight is designed to lead us back to integration. We all have a strong drive to be healthy, but we can have impediments to this.

## **Eight Domains of Integration**

Siegel outlines eight domains of integration that, if blocked, can hinder our growth. He unpacks these domains in his work with clients, in order to assess where a client may be stuck. His book provides case studies of how he has built various clients' skills in each of these domains. Let's have a brief look at each of the eight.

The integration of consciousness is the foundation for the other domains, because it creates a "hub of awareness." A hub of awareness is where we can regulate our emotions, calm ourselves, and develop a more flexible mind.

Horizontal integration helps us to unblock the linkage between the logical, linear, literal, and language-based left-brain, and the creative, intuitive, holistic, and nonverbal right brain. This integration creates a more coherent life story.

Vertical integration refers to our nervous system, which extends from the body, through the brainstem, the limbic system, and the cortex. In a cut-off state, such as a response to trauma, we can disconnect from our body's signals.

Memory integration can help us integrate early implicit memories, and

mental models that we created in the past to explain how the world works. We need to allow implicit memories to become explicit so we can live more fully in the present.

Narrative integration helps us integrate the story-telling part of the left brain, with our autobiographical memory storage in the right brain. Once we've done this, we can weave them into coherent narratives.

State integration helps us integrate our fundamental needs and drives, such as closeness and solitude, by releasing old patterns, like shame, to meet our needs in healthier ways.

Interpersonal integration helps us to connect meaningfully in relationships without losing our own identity. Put simply, this is the "we" in well-being.

Finally temporal integration, takes us to more existential concerns around uncertainty and impermanence that our prefrontal cortex so often reminds us of. This type of integration helps us live more efficiently.

## **Working Towards Vertical Integration**

Dr. Siegel describes a therapeutic intervention with Anne. Anne was a patient who seemed disconnected from her body. After a childhood of loss and emotional neglect, she had cut off from the subcortical input to survive, but this meant that she had little awareness of body sensations and primary emotions. Anne had also buried herself in work, isolating herself from meaningful relationships. She told Dr. Siegel how she decided at 11 years of age that she would never feel anything again. Dr. Siegel realized that this decision had eventually blocked her vertical integration. She had coped with her psychological pain by shutting off

from her feelings. But inevitably, shutting off from the bad feelings means cutting off from the good ones as well. She had shut down the activation of the anterior cingulate cortex (ACC), which forms the boundary between the thinking cortex and our feelings, generated by the limbic regions. The ACC, is crucial because it links us to our bodies, emotions, attention, and social interaction. It's vital for us to connect to ourselves and others.

Dr. Siegel worked with several appropriate techniques over time. These include basic mindfulness, breath exercises, and walking meditations. His patient Anne, found the body scan particularly difficult, but by using techniques such as creating a safe mental place, Anne could retreat to this when she felt overwhelmed, and she started to tune into what her body was feeling. Dr. Siegel also used an exercise with color that evokes different feeling states. As Anne managed to broaden her tolerance window, and use her "hub of awareness," she linked her emotions and physical experiences and could address some painful emotions from her past. She could start to access her feelings of grief and loss, and also forgiveness. What's more, she began to show more vitality, finding time and energy to connect more with others in her life.

## **In Conclusion**

Dr. Siegel's innovative insights that merge the latest brain science, with the pragmatics of psychotherapy, help pave the way for a new way of thinking in the realm of personal transformation. He teaches us about our brains' architecture, and shows us how to observe our minds' workings. With his advice, we not only learn to understand why we think, feel and act the way we do, but how we can literally change the wiring of our brains. And, it's not only about changing the wiring of our brains, we should also think of it as a way to improve our health and well-being. Here's a concluding thought from the book: 'The mind uses the brain to

create itself. As patterns of energy, and information flow are passed among people within a culture and across generations, it is the mind that is shaping brain growth within our evolving human societies.'