

This summary is from the book “The Body Keeps The Score” by Bessel Van Der Kolk M.D. ISBN 978-0-14-3127674-1. The book is around 360 pages. Even though it is a bit of a more challenging read, the author does a good job. The latter half of the book didn’t seem as organized but was still good. He, in essence, writes the book as he learns through his education and work – layering information and knowledge and then adding new knowledge. He does not integrate it all, but exposes the steps. There is a lot of good information. The author does talk about and use brain physiology and anatomy. Because of the nature of the topic, it makes sense.

Part 1: Rediscovery of Trauma

Dr. Van Der Kolk opens the book talking about his first job as a psychiatrist in Boston dealing with PTSD Vietnam veterans. PTSD was not a ‘valid’ diagnosis at the time and the VA pushed against the concept/diagnosis. Because of a shortage of doctors, he started a group therapy session as a stop gap. He got very connected to the group and a key thing for them to accept him was to be made part of team – they got him a Marine captain’s uniform. He had to be one of them. A similar thing happened with WW2 vets – they got him a period military watch.

The PTSD symptoms were labeled as other issues: alcoholism, substance abuse, depression, mood disorder, schizophrenia, and so on. PTSD was identified in 1980 as a cluster of symptoms. Note that there had been previous terms, but all minimized: shell shock, combat fatigue, and so on. After he quit the VA (who declined to view PTSD as a mission they cared about), he went to work for Harvard Mental Health Center. The cases were not veterans, but a lot of adults dealing with rape and molestation. It became very clear that PTSD was a broad mental health issue and it wasn’t just soldiers. These other patients had very similar issues and responses. It’s all about severe trauma and how we deal with it.

During his training, he began to notice that the exact things that the medical staff would do with a patient was similar or was replicating the original trauma. As he closes this section, he talks about the benefit and optimism around pharmacological treatments. Thorazine and then later Prozac. These do help in many situations, but it turned out that for severe PTSD, it had little or no effect.

One of the big things is that we have a lot of mental processes and mechanisms that help us in the world to deal with issues. However, in severe trauma, this effectively re-wires our brain to be pulled back or trapped in the event that caused the trauma. With PTSD the person can’t get past the ‘then’ and move forward in the ‘now’.

Part 2: This is Your Brain on Trauma

Dr. Van Der Kolk describes the layers of the brain, when they developed, and what they are intended to do. The bottom line is that our brain is driven to help us survive – even in miserable conditions. The human brain can be viewed as three layers:

1. The reptilian brain (the oldest portion and basic functions: eat, sleep, defecate, urinate, etc.)
2. The limbic system (newer portion that involves emotions and group interactions, relationship with the surrounding world, perception, categorization)
3. The neocortex (newest portion that involves thinking and conscious/rational thought, planning, time, empathy, inhibition)

The key survival drives include:

1. Our needs (food, rest, protection, sex, shelter)
2. An understanding of the world (and where to get our needs met)
3. Plan the actions to get there
4. Keep us aware of barriers and dangers
5. Adjust our actions based on the needs of the moment

The author describes a model for dealing with danger: The limbic system is ‘the cook’ – it gathers all the information and determines what is happening. The lower reptilian brain uses the amygdala as our ‘smoke detector’.

It takes in input from the limbic system quickly and does a rough guess on the danger. Sometimes, it gets it wrong or at least incomplete. The watchtower that determines that are our frontal lobes but it gets the information well after the amygdala. PTSD modifies the balance between amygdala and frontal cortex. This makes it harder to control impulses and emotions. Severe trauma will also affect our perception of time and make the events seem like they are lasting forever.

People have different reactions to trauma and severe trauma. Some people have a huge reaction to the event and things that feel like the event. In PTSD, this heightens the sensitivity of the amygdala and a person can't escape the trauma. For others, their brain disassociates – it basically shuts down.

In the next chapter, the author talks about brain/body connections. After the Origin of Species, Darwin did a study on the Expression of the Emotions. Darwin observed that humans and high animals have instincts and behaviors in common (intuition, sensation, passions, jealousy, suspicion, etc.). Darwin even observed what we would call PTSD:

Behaviors to avoid or escape from danger have clearly evolved to render each organism competitive in terms of survival. But in-appropriately prolonged escape or avoidance behavior would put the animal at a disadvantage in that successful species preservation demands reproduction which in turn depends upon feeding, shelter, and mating activities which are reciprocals of avoidance and escape.

Our nervous system has a balanced set of systems within the body's Autonomic Nervous System (automatic): the Sympathetic Nervous System (acting as the body's accelerator) and the Parasympathetic Nervous System (acting as the body's brakes). There are a lot of common examples – medication, yoga, response to loud sounds, and so on trigger one or the other. If we look beyond the symptoms of psychiatric diagnoses, you will find that almost all mental suffering revolves around ability/trouble in building satisfying relationships or managing our arousal/interest.

We need to operate effectively in groups/tribes. The author points out that this is not just being in the presence of others who are supportive or calming. It really depends on reciprocity: being really heard and seen by the people around us. People with severe trauma often find themselves out of sync with the people around them. However, if you connect with people with similar trauma (gangs, cults, political parties, etc.), you may find solace but it does not provide mental flexibility in the broader society and can be very destructive. (I immediately thought of January 6th.)

Dr. Van Der Kolk points out that if you experience a traumatic event, a lot of us think of the classical 'fight' or 'flight' reactions. But there is a third option depending on the person and their makeup – collapse. This is a very reptilian brain reaction. If we are trapped, or can't move, we don't care about ourselves or anything and pass out.

Related to the 'collapse', severe trauma can people to losing connection between their brain and their body. Many PTSD patients are functional, but they feel very disconnected and unemotional. In some cases, people will cut themselves or cause themselves pain. They may understand the trauma that triggered the behavior, but that doesn't enable them to control the impulse. For people who have these behaviors or characteristics, brain scans have shown that portions of the brain that are responsible for self-awareness (anterior cingulate, medial prefrontal cortex, insula, and orbital prefrontal cortex) have very little activity. The other part of the brain that does have some activity is the posterior cingulate – which provides for basic orientation in space. The patients had learned to shut down those parts of the brain.

So, how can people reconnect? One of the author's patients was sent to a massage therapist. Although she was panicked because the masseuse touched her feet and the patient didn't know where the masseuse was, the therapy did reconnect her senses. My sense of this is that the patient/person needs to take an active role in trying to sense the world and their emotions.

This leads to the concept of owning your own life, and not being disconnected from it. Dr. Van Der Kolk talks about this as 'agency'. Agency is the feeling of being in charge of your life and knowing where you stand (physically and emotional). Agency starts with interoception – awareness of the subtle sensory inputs we get from our body. The three steps to get this is all working are:

1. Help the patient draw out the sensory information that has been blocked by trauma
2. Help the patient stop suppressing these inner experiences
3. Follow through on the physical actions that had been thwarted by the trauma

When the brain and body are not in sync, the reptilian brain still responds to perceived threats – even if the person is not aware. This can lead to physical symptoms: fibromyalgia, digestive issues, irritable bowel, asthma, fatigue, and

migraines. Sometimes the lack of syncing can lead to alexithymia – not having words or being able to explain emotions.

Part 3: The Minds of Children

Dr. Bessel in this section talks about the importance between mother/care giver and the child. The better and stronger the bond, the better. Mothers unable to connect with their kids is the basis for all sorts of problems and sets the children up to respond very badly to trauma all through their life. He talks about research with very troubled children who were in a residential clinic and a similar control group (from similar backgrounds). For the children they used TAT (Thematic Apperception Test). These were cards that showed an ambiguous scene (like a dad working on a car with kids watching, a pregnant woman looking out the window, etc.). The children were asked to tell stories of what was going on. The differences between the troubled kids and the control group were dramatic and scary. The control group generally told positive and hopeful stories. The troubled kids told very negative stories and pointed out dangers and also got very dysregulated. One girl started talking about sexual organs and how often the interviewer had ‘humped’. The troubled children had very disconnected childrearing by their parents.

The critical need for a connected caregiver seems to last until the child is around 7. Dr. Van Der Beek connected with a perfect group for further research – British psychologists. As one researcher commented: “most research is me-search”. British men upper class men were usually sent to boarding schools around the age of 6. So, there is a lot of attachment research in Britain. There were further aspects uncovered: during WW2, children were often separated from parents and sent to remote locations. This is all about our attachment. It is so baked in, we hardly notice it.

Children are similarly baked in to attach to the caregiver – they have no choice. If the child has adequate or good parents, things are good and they have a secure relationship with their caregiver. But with distant or disconnected parents, the child will develop the appropriate coping skills to be ‘effective’ getting what they need. In a study of 2,000 middle class infants, 62% were secure, 15% were avoidant, 9% anxious/ambivalent, and 15% disorganized. (I was surprised by the rather high numbers of infants that weren’t well connected.). The disorganized children had a high correlation to economic and family instability.

Childhood trauma and abuse is too-often overlooked by society. Roland Summit made this statement:

Initiation, intimidation, stigmatization, isolation, helplessness and self-blame depend on a terrifying reality of child abuse.... “Don’t worry about things like that; that could never happen in our family.” “How could you ever think of such a terrible thing.” “Don’t let me ever hear you say anything like that again!” The average child never asks and never tells.

This portion hit me very hard. I had great parents and my cousins told me that I had won the parent lottery.... Yeah, sure. ☺ I had an aunt and uncle who were very formal and in the medical field. Another uncle and aunt were pretty normal people and fun to be around. They were my favorite. I found out at the funeral for my favorite uncle that he had abused his 3 girls. I couldn’t wrap my head around this. And at the event, I found out my other uncle had abused his daughter. And several of the women in my life have had prior sexual abuse. This sort of stuff, from my limited experience, leaves a serious mark and is still there decades later.

In this section Dr. Van Der Beek talks about his efforts to get a new diagnosis in the main manual of psychiatry the Diagnostic and Statistical Manual of Mental Disorders (DSM). This was to improve the borderline personality disorder (BPD). From his and other’s work, he wanted to put in a new/better diagnosis for PTSD and its cluster of behaviors. They did the research and used Traumatic Antecedents Questionnaire. 81% of patients with BPD had child abuse of neglect. And the data was pretty clear but again it was turned down. Dr. Bessel is clearly severely bothered by this, and makes a very strong case in the book. I think he is right.

Later in this chapter he talks about something I hadn’t realized: some damaging behaviors are a person’s way to protect themselves from real or perceived threats. One patient, after losing a lot of weight started getting interest from a co-worker. She immediately gained even more weight. The weight was a protection mechanism – over weight was ‘out of sight’. But the core was childhood trauma. For others hurting yourself is one of the ways that the person can feel something or punish themselves for their perceived failure.

The author closes this section talking about Developmental Trauma Disorder. This is an integrative view of childhood trauma and attachment issues. Again Dr. Van Der Beek and others did research about this and again tried to get this included in a new DSM. (Note: The American Psychology Association publishes the DSM. And each new version generates about \$100M in revenue.) The request was rejected. The version from 2010 had several organizations complain about issues: National Institute of Mental Health (NIMH), the American Journal of Psychiatry, and the British Psychological Society.

Part 4: The Imprint of Trauma

In this section, Dr. Bessel talks about traumatic memory. It is very different from normal memory. In normal memory, we tell stories. They have a beginning, a middle, and an end. Traumatic memory of the kind we've been talking about is not like that. In cases of abuse, often times, the traumatized person doesn't remember much of anything. They may get flashes of locations, objects, faces. And often times no specific memory of the traumatic event. With some of the Catholic priest abuse, the defense attorneys worked hard to discredit recovered memories – unsuccessfully. The traumatized people have consciously forgotten the event, but it is still present lower in their mind and when triggered, they have panic and reaction.

Veterans with PTSD have a different sort of traumatic memory. They can remember in deep detail and it doesn't change over time. This is because they are constantly reliving the event. Which prevents them from moving on.

The military branches and leadership have not been very supportive of PTSD related problems. During WW1, the British very explicitly prevented the use or research around shell-shock. It was viewed as a character defect in the soldier. The US was not as bad and attempted treatment and benefits (but not always). The Germans were even more punitive and blamed these soldiers in part for Germany's losing WW1.

The trauma of child sexual abuse and incest has a poor history as well. I was surprised that Sigmund Freud identified and pursued abuse in his work. He found it was rampant in Vienna and involved his own father. He, unfortunately, shifted his directions and work. As recently as 1974, Freedman and Kaplan *Comprehensive Textbook of Psychiatry* stated that incest was extremely rare – and does not occur in more than 1 out of 1.1 million people. This is patently not true. The authors then went on to extol the 'virtues' of abuse.

Part 5: Paths to Recovery

You can't treat war, abuse, rape, etc. They can't be undone, what can be done is the imprints of trauma. This recovery is all about regaining control of yourself. For many this involves:

- Finding ways to become calm and focused
- Learning to maintain that calm in response to the triggers of trauma
- Finding ways to be fully alive in the present
- Not having to keep secrets from yourself.

These goals are not necessarily sequential or distinct. The rest of this section tries to provide an overview of the principles and methods. One of the challenges is that getting through this is not in our rational mind (the frontal lobes). It is in our emotions – the limbic system. We have to get more in touch with our bodies and sensations and emotions. This requires mindfulness.

Recovery also needs the person to recover in a support network – a place where you can feel safety and trust. Various organizations provide this: AA, veterans' organizations, religious communities, and professionals. Dr. Van Der Beek describes some criteria for picking a professional:

1. It is NOT okay to ask what personal issues they have dealt with, it IS appropriate, however, to ask what forms of therapy they are trained in.
2. Are you comfortable with the therapist?
3. Are they comfortable in their own skin?
4. Do you think the therapist is curious/wants to find about you and not some 'generic' patient?

Dr. Bessel talks about sensation and touch. This can trigger trauma. Some of the time, massage and yoga can help. Other times, therapy animals (including horses and dogs and cats) can enable progress. In a following chapter, he focuses on Yoga and how it helps with interoception (the perception of sensations from inside the body). A lot of the chapter is about research and results in why it works.

Cognitive Behavioral Therapy is a common therapy and is useful for de-sensitizing people to some of things that trigger them. However, CBT and a related ‘flooding’ (extended continual exposure) therapy don’t seem to work for military vet PTSD sufferers. The author also talks about medications of various kinds – they seem to have mixed results. He mentions (beyond talk therapy) writing to yourself. This could be directed or ‘free writing’. It will often unlock things the patient wasn’t aware of.

Dr. Van Der Beek spends a chapter in this section talking about EMDR (eye movement desensitization and reprocessing). It was developed by chance: a doctor was walking through a park preoccupied by painful memories. She noticed that rapid eye movements produced a dramatic relief from distress. The author noted that:

- EMDR loosens up something in the mind that gives people rapid access to loosely associated memories and images. This helps them put the trauma into a larger context.
- People may be able to heal without talking about the trauma. EMDR enable them to observe their experience visually not requiring verbal give and take with another.
- EMDR can help even when the patient and therapist don’t have a trusting relationship.

The next portion talks about multiple personalities. I guess it isn’t surprising that PTSD and abuse would trigger this state. From my view it seems that rather than pushing down the trauma, the mind splinters to different personalities to deal with the different trauma and events. One of the other ways to deal with trauma is to ‘rescript’ your life. Basically, it is about sort-of ‘theater’ where you re-live some events and create new scenarios intense and real enough to defuse and counter the trauma. At this point Dr. Bessel talks about neurofeedback as a treatment area.

This final section was interesting, but felt very different to me as the reader. It felt rather scatter-shot (not very structured or organized). It did expose a lot of possible approaches to treatment. But they were either very technical or very high level/abstract. I know that trauma is a big, difficult problem with few, if any, easy answers. But I was hoping for more here.