

Chapter 3

In the last chapter, we discussed what happens to children who have been subjected to early childhood abuse or neglect. Now we will describe the burden placed on these children because of the resultant brain damage and behavioural dysfunction. Because their offensive behaviour challenges the sensibilities of the functional community, these children rarely attract the compassion of that broader population. Here lies a cruel incongruity, the adults who find their behaviour offensive ignored their circumstances while other adults perpetrate that abuse on to that individual during their childhood.

Here we will examine how that impairment affects behaviour. To summarize, the cognitive damage comes from:

- Broad scale reduction in the neural density caused by the lack of appropriate stimulation at the pertinent times and the corresponding, excess pruning.
- A deficit when it comes to forming memories because the very part of the brain that creates memories the hippocampus is reduced in size by up to 10%. It is the hippocampus that decides what to remember and distributes this across the cerebrum.
- The lack of neural density in the frontal lobes estimate at being as much a 20%.
- The scarcity of neurons means the material to build memories is less than children who have had secure childhoods.
- The increased sensitivity of the amygdala creates a hypersensitive individual.

This damage, particularly in those areas that impact on the executive functioning of the brain, the prefrontal cortex, reduces your ability to manage your life. It is in the frontal lobes, and that link to the limbic system where working memory, the ability to manage your life is located.

Working memory is our ability to gain and integrate pieces of evidence into an existing scheme of information. Then, through comprehension and reasoning, we can apply that information in response to presenting situations to achieve a conscious or unconscious goal. The very definition of learning is the establishment and modification of working memory.

These children have a real disadvantage both in the deficit in the memories stored across the cerebellum and the lack of neuron material in the frontal lobes to integrate what is available. These students suffer a 'physical' disability that affects their learning but that cognitive incapacity is not obvious.

It is little wonder these children do not succeed, not only at school but also in the community. They have trouble interpreting all exchanges with the outside world. Their apparent naivety or defiance is often a lack of comprehension. Teachers can misinterpret this as insubordination when really it is their disability that determines their behaviour.

A further physical issue involving the frontal lobe is its interaction with the limbic system, particularly the amygdala. Amongst the functions of the amygdala is the regulation of emotions. We have seen in an abusive environment the amygdala becomes more powerful which means it is much more sensitive to stimulus that just may represent a potential threat. Because of this over-active response to stress these kids will over-react when they even think they are being 'attacked'. They have an underdeveloped ability to critically assess the risk of any stressful situation.

To make matters worse, in normal development the frontal lobes reach a stage of development where they assume the role of arbitrating the emotional content of the environment. This means that, with the exception of real and imminent danger children get a bit of time to assess the situation before deciding about their actions. This short period of time is at the heart of most cognitive interventions that deal with behaviour modification. One particular program best illustrates the futility of this 'thinking' approach. Stop – Think – Do is, or was a program popular in schools. It 'teaches' children to stop before they react to a challenging situation and then think about what would be the best response.

Kids with PTSD can't 'stop' they are too finely tuned to react to any perceived threat. It is obvious that the combination of a damaged frontal lobe coupled with a very powerful amygdala means cognition, carefully assessing what to do is a tactic that is just not available. These kids will do what they have always done. The chance of any cognitive intervention being of much use for these children when they are threatened is extremely unlikely.

As a result, in the classroom they are highly reactive and to further complicate matters when they are super aroused they will take a much longer time to recover their self-control. Teachers and school counselors often see this as the student not applying the 'lessons' like Stop – Think – Do that they have so patiently taught them. They see the kids as not bothering to apply the 'perfectly logical practice' that just makes sense. They don't see that these children at the time of arousal do not have access to 'perfectly logical practice'! What we have is a brain that is super alert to danger.

PTSD in these children creates a range of conditions that must be considered when thinking about the behaviour of these children. One of the main defenses they have is to avoid the types of situations that remind them of the initial abuse. Any such situation will trigger a stress response that is strongly linked to that emotional memory. This response may not seem at all fitting for the current circumstance. So, it makes sense for our survival not to return to any situation that is like that which caused the trauma.

This avoidance is hard for children who are abused in their home. Physically leaving is not an option, psychologically leaving, dissociating is a tragedy. They dissociate from their thoughts, feelings and memories. It's as if they are not there. They lose their sense of identity and regard the abuse as having happened to 'someone else'.

Dissociation is particularly common in children who have suffered abuse and for victims of sexual assault. This may be because the victim could not physically escape and so they escape psychologically and this can occur during the abusive event. That isolation is another cruel burden they carry.

Children suffering from PTSD will be plagued by intrusive thoughts, unwanted recall of events or the feelings surrounding those events. These are unwanted and unwelcome but will occur and so the child will feel like for all intents and purposes they are facing their abuse again. The inability to stop these thoughts can leave the child feeling guilty and/or ashamed that they can't even stop the abuse in their mind and if it becomes too obsessive suicide becomes a big risk.

So, they take psychological leave by avoiding thoughts about their abuse. They may try to not think about their situation, refuse to talk about it, push away the emotions that are associated with it. This refusal can be a coping mechanism but this can lead to a situation where they are numb to all emotions and that will deny important feedback from the state of their present circumstances.

Another form of protective behaviour is to become hyper-vigilant around their environment. They want to identify danger before it gets too close. Their brain is highly tuned, functioning for survival. If another person startles them their reaction will be exaggerated and it will take a long time for them to recover their poise.

This extreme, protective arousal, this constantly being on-guard has the individual continually scanning the environment looking for threats. They may take up what they perceive as safe positions in a room, say close to the door so they can 'get away'. The practice of making these children 'sit down the front of the room' may well intensify their feelings of being trapped! Because of this exaggerated focus on protecting themselves they can miss what is really happening.

They are also hyper-vigilant regarding the emotional content of other's communications. They are super sensitive to facial expressions, body language and tone of voice; the non-verbal cues in any conversation. Unfortunately, they read too much into situations and become highly suspicious of others. They believe that the other person knows what they are thinking and so they are vulnerable.

It seems that almost every developmental mental illness and personality disorders suffered by adolescents has identified early childhood PTSD as a significant contributing factor. Anxiety, depression, obsessive compulsive disorders are amongst the range of illnesses. On top of this these children have an increased risk of violent behaviour, drug and alcohol abuse, teenage pregnancy, becoming perpetrators of abuse and at risk of being the victims of future abuse. All this because of the 'nurture' we provided for them.

We have covered the why and the 'what' of abuse but we need to examine how these are expressed as behaviour because it is their conduct that causes the

problems for others and for schools - those others are the students and the teachers.

It is clear that the clash occurs when the behaviours these kids demonstrate conflicts with the expectations of the schools have about that behaviour. The classroom has one set of expectations and the dysfunctional student tries to meet their needs in the opportunities available in that class. The problem is that the behaviours they have developed in their formative years will be activated in times of stress and they will not achieve the desired outcomes in their current situation. That is, the more they fail to get their needs met the more likely their level of arousal will be elevated and the more likely they will act in a manner that offends the class.

There are two particular systems in place that explain these behaviours. The first is the drive to protect you from abuse, that is from any boundary violation. This is the need to feel safe and secure. The second is the seeking of conditions that satisfy needs. Both systems express themselves in the form of stress.

The protective cycle has been the focus of much of the previous work. This is primarily the function of the amygdala which prepares us for the general adaptive response, the fight, flight or freeze reaction when threatened. We understand that when we are calm, in homeostatic equilibrium we have access to all our cognitive functions. When we consider the process of increasing levels of stress that are the result of an attack on our safety we experience the following cognitive conditions:

1. Arousal – This occurs when a child's attention is drawn to a potential threat. Under these conditions the student will become vigilant and will lose access to that curiosity that examines alternative ideas but focuses on conditioned behaviours. If the goal of the lesson is to learn new material or new behaviours, when stress is heightened the opportunity to be taught is gone because the student will only acknowledge established beliefs.
2. Alarm – The emotional level has increased and the cognitive patterns are 'frozen' into a particular response. There is a broad gender difference in that the girls become compliant in an attempt to avoid attention while the boys start to actively resist the threat.
3. Fear – At this stage the student reacts to the threat. The behaviours are out of the control of any cognitive process. The girls will start to dissociate, numb themselves from the situation while the boys will become defiant.
4. Terror – At this level everything becomes reflexive, under the control of our basic survival modes of behaviour. The girls will have experience a mini episode of psychosis while the boys will become actively aggressive.

There are two points to make at this time. The first is obvious; it is clear that the only feeling state where 'new learning' can take place is that of 'calm'. Previously we discussed stress in terms of healthy and unhealthy kinds. We need a certain level

of attention to learn new work but in this instance the arousal is directed at a potential threat.

Challenging students is good teaching practice but the professional consideration is not so simple. What is an engaging, motivating task for one student might well be a threat to the psychological safety of another. The defining element of good teaching is the ability to challenge each individual with the right amount at the right time.

The second point to be made is the difference between the gender responses. The following comments are in the broadest terms. Of course, there are obvious exceptions to these observations some males respond in a way we would expect a female to respond and vice versa.

Initially it could be thought that the difference is cultural, girls and boys have been taught to behave that way. We give boys aggressive toys and girls things like dolls and toy kitchens to prepare them for their future roles. Or maybe we just see what we expect to see, boys being boys and girls being girls.

But when you look at the school level data around abuse and dysfunctional behaviour, despite the incidents for abuse being higher for girls than boys the number of boys being suspended or placed in a specialist setting far outweighs that of girls. The boys act out while the girls internalize. The reality is there is a difference that is impossible to ignore.

The best explanation I have heard about this difference is an evolutionary view that in early times, once humans generally became the dominant species one of the greatest threats for survival was attack from another tribe. When this occurred, the victors would kill the males and take the children as trophies. Sadly, this practice has echoes in modern conflicts where atrocities such as the killings in Bosnia were predominantly of males and the recent incidents of the abduction of school girls in Africa reflect this difference.

When you examine the suspension data in schools, the boys do outnumber the girls across the age ranges but at the onset of puberty, the time we move from childhood the number of boys suspended for aggressive behaviour dramatically increases. This implies that for the best chance of survival the children of both genders; women would become compliant and the men fight or flight. Not always were male children taken in some instances they were also killed. This behaviour is not confined to our species; it is common practice in a lot of herding animals such as the great apes and lions.

One of the tragedies of this 'difference' is that despite suffering more abuse the girls are neglected. Because the boy's behaviour demands attention the bulk of the resources provided for dysfunctional students are focused on dealing with boys. As a teacher a compliant girl, frozen in her mind is so much easier to deal with than a boy who is abusing you. However, both boys and girls are in serious need of attention and support but only boys get it.

In contrast to this protective behaviour, we also get stressed when we need access to resources. This results in seeking behaviour that is common across all organisms. It is behaving in ways to acquire conditions that will sustain our survival and ability to reproduce. The seeking neuro-circuitry is a relatively recent consideration in the examination of dysfunctional behaviour.

There is an important distinction to be made between the 'consumption' of an experience and the drive to get to that experience. The consumption is a return to homeostatic equilibrium and is a feeling of satiation. These are things we 'like', what we seek and the behaviours we have developed to achieve this condition have been acquired just as every other thing is learned.

The issue is when we are not in homeostatic equilibrium the resulting stress will drive us to deal with that deficit. The neuro-circuitry behind the drive is referred to as the dopamine system long associated with the pursuit of reward. We are driven to achieve a goal and the more this is denied to us the more elevated our stress levels become.

With the caveat declared about levels of stress when discussing the protective response to abuse, that is we need a 'healthy' amount of stress to act at all, the impact on our cognitive skills of elevated stress levels while seeking resources is comparative to those of protective behaviour in the production of dysfunctional behaviour.

As stated the research into the seeking characteristic of behaviour is new and there is no distinction between the reactions by gender but it would be fair to speculate that these differences would appear throughout the continuum from calm, curiosity to rage. When the child is calm and satiated, their curiosity can be accessed in their 'cognitive' brain. The following is what happens as the failure to achieve the desired outcome is experienced.

1. Elevated Intensity – this is when a deficit is understood by the child. At this time, a goal is identified and an existing behaviour designed to achieve this goal is commenced. Like the protective cycle, access is limited to known behaviours.
2. Obsession – This level employs extreme behaviours that are associated with previous success. The children will become less inhibited and exhibit extremes in their behaviour.
3. Delusional Thinking – At this level the child becomes confused and will try novel expressions of behaviour that just might work. They are not only irrational with others they delude themselves.

4. Rage – This is an ‘out of control’ child who is not only unmanageable but has no self-restraint. There is a ‘reflexivity’ about their thinking that is not unlike the terror experienced at times of extreme abuse but is driven by a separate neural system.

What is known is that the levels of increasing dopamine that are associated with the intensity of the stress have a sinister side. The use of dopamine creates feelings of intensity and purpose in the individual. This feeling is not a form of satisfaction or pleasure but it can become an obsessive drive to act and keep on acting, a desperate longing for something. This ‘longing for something’ is particularly relevant for children with a history of neglect as well as abuse. The levels peak when the goal is ‘just out of reach’. This longing is at the heart of the addictive behaviour associated with the seeking system.

When we are faced with high levels of stress we all face the task of protecting ourselves or seeking ways to alleviate that stress. Children from dysfunctional families suffer when they are stressed but as repeatedly pointed out when they are in an unfamiliar environment; the behaviours previously learned do not work.

Another subtlety that must be considered is that abuse can come in two ways. It can be consistent always in the same pattern and so they can develop some protective behaviours. Or it can be random with the child having no chance in predicting what will happen and so no defensive tactics can be learned.

It is not appropriate to say one form of abuse is worse than another but I would contend that abuse that is perpetrated in a random fashion with no predictable antecedent indicator, leaves the child much less able to at least minimize the severity of the abuse at the time it occurs.

Even this statement falls short of explaining what I think about the impact of abuse. In fact, any statement that minimizes the damage done to these children is in a sense another form of abuse. So, I am left to just describe what I mean.

In the previous chapter we discussed the instances of toxic shame. In this section we discuss how those children a try behaviours that might get their needs met.

For children mentioned immediately above, the children raised in unpredictable environments struggle to learn any effective behaviour. If they stumble onto a successful tactic to avoid the abuse on one occasion, the next time the situation occurs and they use that ‘learned behaviour’ they find it ineffective and maybe this time another action might work. Because there is no predictive pattern the child never develops a successful repertoire of action. These are the children of addicts or the mentally ill who have no predictability in their own lives.

Other children are abused in a consistent manner and because the abuse is predictable they are able to learn how to deal with these moments. They have a chance of protecting themselves, albeit just for the time they are being subjected to

that abuse. This results in them building selective 'walls of behaviour' around themselves. These walls could be displays of anger, being funny, crying, any behaviour that minimizes the abuse. Unfortunately, their actions hide the reality of how they feel.

This doesn't mean the walls stop the abuse, they just help them survive each event. An extreme example could be the behaviour of a girl who is sexually abused. Previously I have pointed out one of the primary behaviours of those suffering PTSD is avoidance and so it should be that the victim of sexual abuse should avoid situations where such abuse is likely to occur. Contrary to this expectation, it is not uncommon for victims of sexual assault to become promiscuous. It is thought that by being an active participant they can at least minimize the violence of rape, it is going to happen anyway. This behaviour is their type of protective wall.

Lesser examples are where children risk rejection from their parent if they do not act in certain ways. As a coach, I have seen children expose themselves to physical risk, say tackle a much larger and stronger opponent just because their father wants them too. The injury from the tackle is less damaging than the rejection of the father and so a pattern of behaviour is formed that serves the father's needs but not the sons. The behaviour is effective because the pay-off is predictable.

They may appear to be independent and 'in control' but all their actions are to satisfy their abuser. There is one way to act and they will do this to perfection. This leaves the child with no idea that they have rights.

Children do not lose the desire to get their needs met, the drive for homeostatic equilibrium is fundamental. When we find ourselves in disequilibrium the search to initiate behaviours to return us to a state of calm fire-up those protective or seeking behaviours previously found to be successful.

Unfortunately, those behaviours learned in their maladaptive childhood will not work in a functional world. They may provide relief in the short term but their actions will fail in the long-term. Repeated use of these behaviours become entrenched because the frequency they are called on provides ample opportunity for neural pathways to develop and the drive reappears emboldened. This continued response becomes a form of addictive behaviour. You get stressed, you call on a behaviour and the stress is mitigated. The cycle is repeated every time the stress appears!

There are three ways these addictions are manifested; through the use of substances that alter the impact of the emotion, the use of activities to distract thoughts from the problem and the third is focused on stress that has its source in personal interaction; this I call 'people addiction'.

The use of substances is long been used to alter emotions. When anyone mentions addiction the first thing most people think of is the classic drug addict and I would argue that at the heart of the reason these chronic addicts are around is their early

childhood abuse. I have worked with children who are suffering from such addiction and they will invariably tell you that the first time they got high/drunk/bombed-out was the first time they felt good about themselves. Never be under the illusion drugs don't work, the problem is that like all addictions the more you use them more you need for the effect and eventually the need for the drug becomes the primary problem for the user.

Substance addiction is not limited to illegal substances, all sorts of prescription drugs and for that matter household products can be used. I taught a child who inhaled furniture polish spray, apparently the propellant reduced his oxygen supply and had a similar effect as those who engaged in petrol sniffing. Eating disorders also fall under this category.

The second type is activities addiction. This is where the person becomes so focused on a task or hobby they can't think about anything else. You can see this with over-the-top sports fans who live every moment for the team. Or with kids, when a new craze sweeps the country you see those who become obsessed with it. While ever I am fully engaged I will not have to feel the emotions from my 'shame'.

You see activities addiction in the work place. Years ago, when I was formulating these ideas I discussed them with a colleague. He stopped me and said – you are describing me. I had suspected he was somewhat engaged in such addictive behaviours as he was having difficulties in his life but was enjoying success at work. When I started to expand my thoughts he cheerfully told me it was alright, he had just enrolled to study for his doctorate. He achieved his doctorate but lost his family.

The problem with activities addiction is summed up by those who become workaholics. The extra output they achieve because of the hours and the intensity they put in to their work results in their promotion. Soon they are in positions where the workload becomes the problem, like the substance they need more and eventually they break down.

The last type of addiction is what I refer to as people addiction. In reality, this is most likely the reflection of how the children learned to survive in the abusive relationships in which they were raised. As with other addictions these behaviours are the result of previous experiences of success in alleviating unhealthy levels of stress. This 'people addiction' is the result of behaviours that worked directly on the stressor.

The first type of people addiction is that of overt control. The tactic is to stress the other person much more than they stress you. In a sense, you abuse them straight back and in such a way they will their behaviour. This can be done through all types of aggression ranging from physical attack, making fun of the other person, discounting their worth, any form of attack on their physical or psychological safety.

Individuals will take this form of defense when they hold a position they perceive as being superior to the other person. This could result in overt behaviour against a younger sibling, a different gender, usually female or someone you perceive to be in a 'lower' social 'class'.

Overt action can make the original aggressor stop but this does not provide protection from future attacks and as with all addictive strategies, there is a long-term cost. The aggressive behaviour pushes others away and so the danger is you become distant from others. Those who use overt control limit their opportunity to have productive relationships; they become isolated, frustrated and bitter.

The reverse approach is that of covert control. This strategy consists of being so nice and cooperative towards others they will have no reason to attack you. A common phrase used by those who adopt the covert position is 'I don't care' – 'whatever you want to do'. These children are nice to be around because they are sensitive to your needs and do whatever they can to make sure you get them met. They avoid unpleasant situations at all costs.

They take up this position for the same reasons as those who take up the overt position, they want the other to stop stressing them but because they consider themselves less than the offending other they 'give-in'. The problem is their own needs are never met and resentment and anger will build-up but remain internalized. This adds to their feelings of worthlessness.

The final position is that of resistance, the students choose to ignore the source of the attack by not getting involved with any of the other students or activities. They rebel against any organised activities and are absent a lot. They will avoid anything that has the potential to cause stress.

The cost of opting out of interactions with others is the loss of opportunity to get any needs met. These students become isolated and marginalized.

In this chapter I have tried to point out to teachers and school administrators the complexity and depth of the challenge in dealing with children with severe behaviours. The behaviours they have learned in early childhood do not work in our schools and so they either continue to fail to get needs met because of their dysfunctional attempts or learn to find new functional ways to behave.

Providing the environment to allow them to develop new behaviours is extremely difficult not to mention the ethical considerations about what we think they should learn. And finally, we have to consider the danger to which we may expose these children if we take away their existing behaviours. After all these have let them survive in an environment that may still exist at home.