



The Resilient Brain & The Resilient Life

What isn't helpful and what we may be missing?

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"The challenges today's generation of young people face are unprecedented and uniquely hard to navigate. And the effect these challenges have had on their mental health is devastating."

A [2021](#) advisory by the US Surgeon General

"Our data not only shows a continuing decline in the mental health of the current crop of young people but continues to effect older generations today heading into their 40s and 50s. We are not seeing the rebound out of young adulthood that previous generations saw as they aged."

[Dr Richard Morris](#), senior research fellow in the University of Sydney's Faculty of Medicine and Health.

An anatomical model of a human brain in a sagittal section, showing the cerebral cortex, white matter tracts, and cerebellum. The brain is mounted on a pink, rounded base. The white matter is highlighted with a semi-transparent pink overlay.

Brain Structure – the White that Matters



Your brain has two main masses that house various regions of the brain, the Grey Matter, and the lesser known, but very important White Matter.

The central nervous system (CNS) is made up of tissue known as white matter and grey matter. White matter makes up around half of the brain and comprises bundles of millions of axons (or nerve fibres). White matter is located in the deep parts of the brain while grey matter makes up the outer surface of the brain. *White Matter essentially acts as the brain's communication network, connecting different parts of Grey Matter and facilitating coordinated brain function.*



The “white” appearance comes from the myelin sheath, a fatty insulating layer that surrounds the axons. Myelin not only gives white matter its characteristic colour but also increases the speed of neural signal transmission.

The role of White Matter is to allow information to be transmitted between different areas of the grey matter within the Central Nervous System. White Matter in the brain comprises myelinated axons that facilitate rapid transmission of neural signals. Its primary function is to connect different brain regions, enabling communication and coordination between them. Unlike Grey Matter, which peaks during child development, *White Matter keeps developing until the later 20s, (some science suggesting now even early 30's), with some areas in the CNS taking longer to develop than others.*¹

Making Your White Matter Sick.

White Matter disease is an umbrella term for changes and damage to your brain's white matter — again, the nerve fibres in your [brain](#) that connect different areas of your brain to each other and to your spinal cord like highways. It's important to note that one can also get white matter disease (also called cerebral small vessel or microvascular disease) from aging and [blood vessel](#) changes in your brain's white matter. It can be mild, moderate or severe. White matter disease is strongly linked to [cardiovascular](#) disease risk factors, and researchers believe that white matter disease is a biomarker (medical sign) of the lifelong risk of [stroke](#), [dementia](#) and disability.²



Another name for this is leukoaraiosis, and this damage to White Matter in the brain can lead to problems with thinking, memory, problem solving, balance, and other symptoms. Not unlike a dementia-type conditions and some Parkinson Disease symptoms. Degeneration of the white matter — specifically, the myelin sheaths — can affect a person's mood, focus, muscle strength, vision, and balance.

Repeating, White Matter is the tissue that includes nerve fibres (axons), which connect nerve cells. These axons connect the neurons of the brain and spinal cord and signal nerve cells to communicate with one another. Remember it is a fatty tissue called myelin that covers or 'coats' the axons.

One can prematurely age this white matter with other factors, substance use being a key and most significant one – more on that later. These facts are all very important and to keep it in mind as you keep reading.

White matter disease may develop with conditions associated with aging, such as stroke, but it can also affect young people due to conditions such as cerebral adrenoleukodystrophy and multiple sclerosis (MS) and more and more manifesting from **substance use.**³

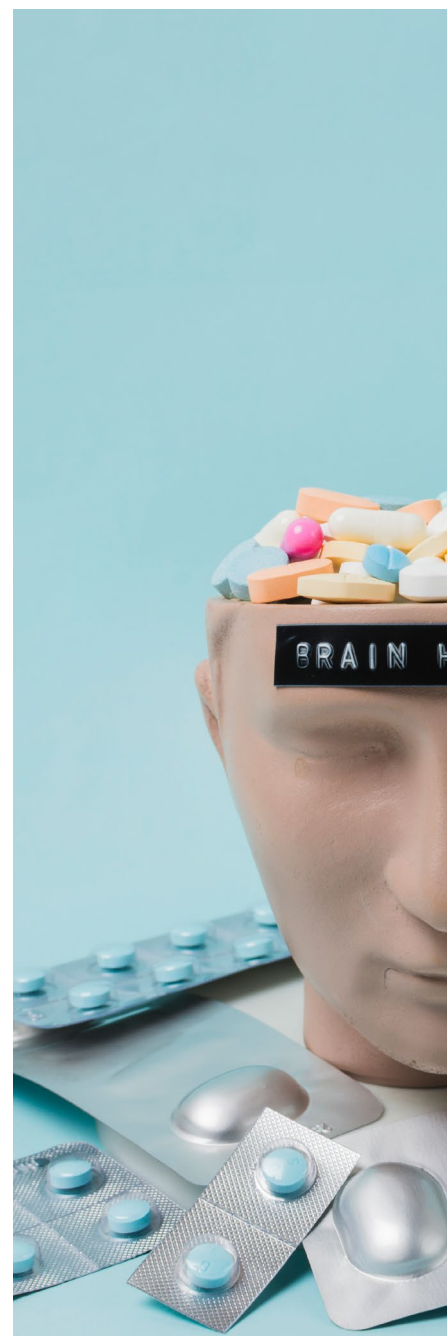
How May Drug Use Effect Your White Brain Matter?

The most common effect of drugs on white brain matter is white matter disease, which is when white matter in brain tissue wears down or deteriorates. As we have noted, this is often caused by aging, but it can, very much, also be caused by drug abuse – a substance use in many instances accelerates aging, not only of the body, but the brain.

A study conducted in 2014 on the effects of drugs like methamphetamine and methadone on the brain reported that lesions in white matter were more apparent in subjects with drug addictions. The decreased oxygen supply to the brain caused by drugs like meth can result in ischemia (lack of blood supply to a part of the body like the heart) and deep lesions in white brain matter.² Another study on how drug abuse affects white matter in the brain reported that there was less frontal white matter in people with substance abuse disorders.³

Marijuana has also been found to decrease white matter efficiency and volume.

There is a long list of drug use effects on the brain. Abusing substances like heroin, cocaine, methamphetamine, and even marijuana can cause deterioration of white matter in brain tissue. When this white matter begins to die, communication between nerve cells becomes non-existent, preventing the individual from functioning. Things like emotions, thoughts, learning, speech, memory, and overall behaviour are all directly affected by any disruption in cell communication.





In recent years, scientists have discovered that the human brain contains its own version of *black holes*. These are areas of the brain where there is a lack of activity or connectivity between neurons. These black holes are known as functional connectivity disruptions (FCDs) and can be seen on fMRI scans.⁴ Whilst these 'holes' can be created by a number of factors including stress, distress, anxiety and aging. A person with drug dependency issues may be more vulnerable to white matter disease and other forms of brain damage.⁵

The published research around substance use impact on White Matter is significant. Substance use disorders (SUDs) represent a significant public health concern with widespread neurological and psychological implications. We gleaned evidence from several studies that employed various neuroimaging techniques, primarily diffusion tensor imaging (DTI), to investigate the white matter microstructural integrity in individuals with SUDs.

Understanding these structural alterations in the brain is crucial for gaining insights into the aetiology, progression, and potential treatment strategies for SUDs.

These studies have focused on examining the integrity of white matter (WM) in individuals with SUDs related to alcohol, cannabis, stimulants, opiates, and nicotine. These studies collectively reveal a compelling picture of how SUDs impact WM microstructure.

1. **Chronicity and Abstinence:** One recurring theme across studies is the association between reduced WM integrity and the chronicity of substance use. Individuals with longer histories of substance use,

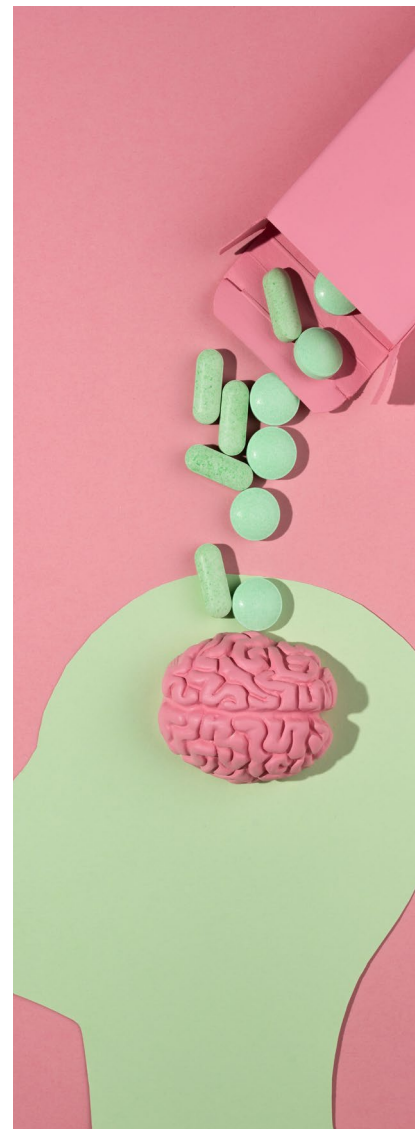
earlier onset, and greater dosages consistently exhibit more pronounced WM alterations. However, there is hope, as improved WM integrity is observed with *extended periods of abstinence*.

2. **Grey Matter and White Matter Pathology:** While grey matter abnormalities have long been associated with SUDs, there is increasing evidence of white matter involvement. Distinct morphological alterations in grey matter regions such as the insula, anterior cingulate cortex, basal ganglia, and thalamus correspond with specific white matter tracts, including the thalamic radiation and internal capsule bundle. These findings suggest a complex interplay between grey and white matter changes in SUDs.
3. **Substance Specificity:** The nature and extent of WM alterations appear to be substance-dependent. Different substances, including alcohol, opiates, cocaine, cannabis, and nicotine, are associated with unique patterns of WM microstructural changes. This suggests that the effects of substances on the brain may vary, potentially due to the specific pharmacological actions of each substance.
4. **Adolescence and Long-term Effects:** Studies emphasize the importance of examining the effects of substance use during adolescence, a critical period of brain development. These investigations show that co-use of nicotine and cannabis during adolescence can influence white matter integrity, highlighting the need for early intervention.

So, what does that all mean?

Although the functional implications of these structural changes remain a subject of ongoing research, these studies have provided crucial insights into White Matter (WM) alterations in SUDs. Reduced fractional anisotropy (FA), which is a common measure of WM integrity, may indicate various white matter alterations, such as axon or myelin damage, reduced axonal coherence, or density. The impact of WM changes on cognition, decision-making, and psychopathological symptoms are evident but do require further investigation.

This synoptic summary of these multiple research papers underscores the significance of studying white matter microstructural integrity in individuals with Substance Use Disorders. While there is evidence of substance-specific alterations and correlations with chronicity and abstinence, much remains to be learned about the functional consequences of these changes and clearly serious caution must be exercised around substance uptake and the developing brain. (summary of [A](#),[B](#),[C](#),[D](#),[E](#),[F](#),[G](#),[H](#).)



*So, using substances for recreational purposes, **is all about trading a potential 'buzz/high' (not always good by a long shot) for the diminishing and deteriorating of the organ that matters most to our humanity.***

However, as we will soon see, there may be other lesser drivers of substance engagement than purely hedonic pursuits, self-medicating psycho-social and/or emotional maladies or trauma the most consistent one. Ironically, the attempt to alleviate perceived or real emotional and, or psycho-social fragility could be only amplifying those fragilities and undermining further the **resilience** you need to endure or 'bounce back', when *stuff happens*.

Fear, Distress, Anxiety, and White Matter Impact?



As a starting point, let's look at one common issue from pretty much every human being – stress. According to the Premier Neurology & Wellness Centre, there are **5 negative ways** that stress effects your brain,

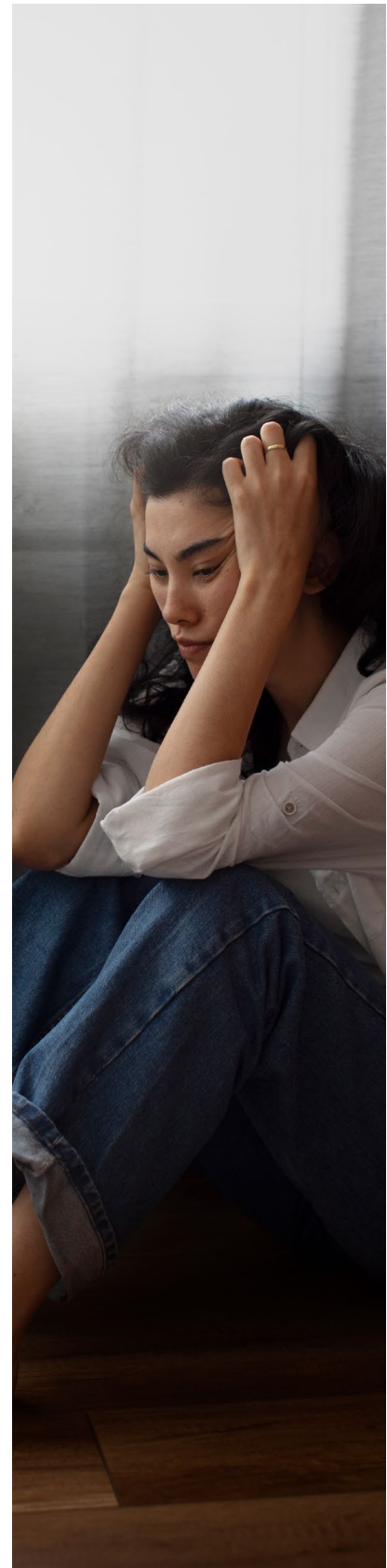
- Impairs Memory
- Changes the Brain's Structure
- More Susceptible to Mental Illness
- Stress Kills Brain Cells
- Stress Shrinks the Brain

Much of it has to do with Myelin or White Matter interference. As we have looked at, and we cannot stress enough of the importance of this; Myelin is a layer of fatty substances and proteins that wraps around the axons of neurons — essentially, the insulation around the brain's wiring — to facilitate long-distance transmission of signals and, thus, communication between distant areas of the brain.⁶

Researchers found that hardening wires may be at the heart of the hyper-connected circuits associated with prolonged stress. This results in an excess of myelin — and too much white matter — in some areas of the brain. Ideally, the brain likes to trim the fat of excess wiring through **neural** pruning in order to maintain efficiency and streamlined communication within the brain.⁷

Some of the other compounding factors for brain health and white matter efficiency are the results of what chronic stress can do.

*When chronic stress is experienced, the body makes more cortisol than it has a chance to release. This is when cortisol and stress can lead to trouble. High levels of cortisol can wear down the brain's ability to function properly. According to several studies, chronic stress impairs brain function in multiple ways. It can **disrupt synapse regulation**, resulting in the loss of sociability and the avoidance of interactions with others. Stress can **kill brain cells** and even **reduce the size of the brain**. Chronic stress has a shrinking effect on the prefrontal cortex, the area of the brain responsible for memory and learning.*



*While stress can shrink the prefrontal cortex, it can increase the size of the amygdala, which can make the brain more receptive to stress. "Cortisol is believed to create a domino effect that hard-wires pathways between the hippocampus and amygdala in a way that might create a vicious cycle by creating a brain that becomes predisposed to be in a constant state of fight-or-flight," Christopher Bergland writes in Psychology Today.*⁸

Arguably the most severe manifestations of these distressing issues in a child's experience can be labelled trauma. In early 2024 the [University of Essex released the largest childhood trauma study to date.](#) What the research confirmed was much of what we have been referencing in this work, that trauma rewires the maturing brain.



In a landmark study hailed as the largest of its kind, a team of researchers has identified a disruption in brain neural networks, shedding light on how trauma affects child brain development.

The world's largest brain study of childhood trauma has revealed how it affects development and rewires vital pathways. The University of Essex study – led by the Department of Psychology's Dr Megan Klabunde – uncovered a disruption in neural networks involved in self-focus and problem-solving.

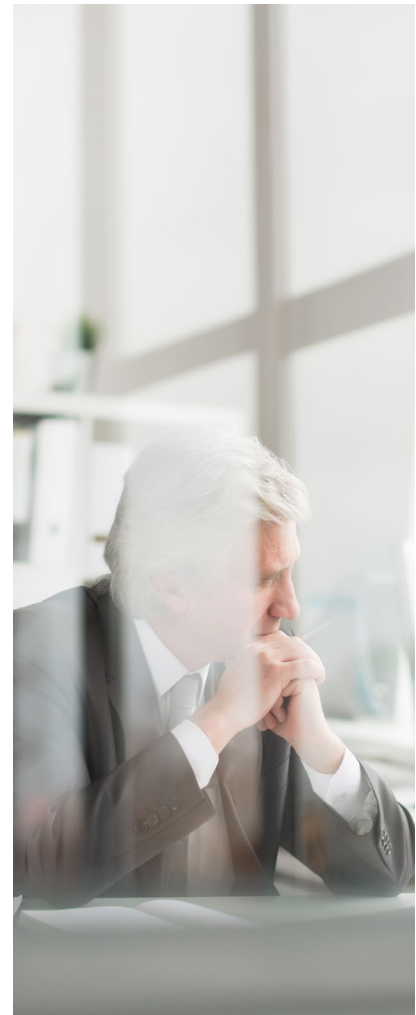
This means under-18s who experienced abuse will likely struggle with emotions, empathy and understanding their bodies.

"Currently, science-based treatments for childhood trauma primarily focus on addressing the fearful thoughts and avoidance of trauma triggers.

"This is a very important part of trauma treatment. However, our study has revealed that we are only treating one part of the problem.

"Even when a child who has experienced trauma is not thinking about their traumatic experiences, their brains are struggling to process their sensations within their bodies.

"This influences how one thinks and feels about one's 'internal world' and this also influences one's ability to empathise and form relationships." Dr Klabunde (Research Lead)



Intervening in this clearly unhelpful amygdala-hippocampus loop in the child's developing brain, requires more than 'burying' or 'avoidance' tactics. However, far more importantly the need to help the child, if not work toward a more proactive outcome from it, then at the very least help them make some self-preserving sense of it. This is a resilience building journey opportunity for the child and their developing brain. Not a, 'harden up, lift yourself up from your bootstraps' approach, but a robust process that does go some way to empowering the traumatized child to grow beyond, not just with the impact.

Adverse Childhood Experiences (including trauma) all too tragically, may be a given for many children, but what it is greeted by and/or mixed with will significantly determine brain, character and personality development – good or poor.



In this space rather than simply 'trauma informing' behaviour, we can assist the children to begin to 'inform' the trauma. Consider the following simple equations and begin to contemplate what each outcome may look like and what vehicles used to build or diminish resiliency in these contexts.

- **Trauma + casualty =**
- **Trauma + suppression =**
- **Trauma + victimhood =**
- **Trauma + equipping =**
- **Trauma + empowerment =**
- **Trauma +**
- **Trauma +**

Concerningly, some of these circumstances become all too often the major drivers of self-medicating substance use. Whilst seeking alleviation of distress is understandable, it is reparation and recalibration that is needed. Substance use only interferes with and undermines that important restorative process.



What happens when you use a substance to reduce your stress or anxiety?

Let us take note again of the synopsis of the five stress and angst can do to your brain; *Impairs Memory. Changes the Brain's Structure. More Susceptible to Mental Illness. Stress Kills Brain Cells. Stress Shrinks the Brain.*

Not unsurprisingly, alcohol and other drug use can do very similar things to the brain as stress can, and even worse.



*You can see where this is going, can't you?
How the loop of repeating harms can be created?*

One could argue cogently here that Harm Reduction strategies best practice is abstinence in the denying of uptake, or work toward abstinence in the exiting of substance use. The repeating of harms has no place in this context, so the notion of 'safer' substance use has no track in this context, with perhaps only one exception – The long-term alcoholic may be at risk of death if sudden alcohol cessation occurred. Stopping any other 'recreational drug' (not including misuse of some pharmaceuticals) cold turkey so to speak, will not kill you.

However, when stressors of all kinds hit, some people often turn to substance use, legal or illegal, for a 'quick fix' for their psycho-social or emotional distress (perceived or real) and

whilst they may 'feel better' in the interim, they are only compounding the problem moving forward. Doubling down, as it were, on *harm*.

Sadly, once an individual locks into this faux psycho-analgesic mode, the process becomes harder to shift. If healthier solutions to these issues are not engaged, then invariably the harms start to bite, and bite hard on many areas of life, brain health not the least.

It is perhaps important to note here too, that published research is telling us that the use of pharmaceutical prescribed mood-altering drugs such as anti-depressants are not only losing efficiency but potentially creating another set of issues. See [Medicating Irrresilience – is There a Better Way?](#)



**Millennial kids and
adolescent mental
health are in decline
and they're not
bouncing back –
But why? Eroding
Resilience?**



So, for a quick evaluation of the current first world west culture, what resiliency components are missing?

There are loads of what we refer to as *scaffolding* – tactics, tricks and talking processes – all important – but for the most part remains only a temporary 'hold up' *while you stabilize the fragile psyche at its foundation*. It is the foundations of resilience, as with all sound structures, which is key to ultimate stability, and must be a revisited priority for our struggling millennials.

Meaning and purpose are now coming back on the radar as anthropologically important factors in healthy psycho-social and wellbeing development. But these too require anchor points. Meta-narratives and or at the very least narratives that frame our humanity in a larger more connected context are a growing inclusion in the therapy space.

Yet still, in the public discourse on these vital issues, most research and academic commentary largely ignores these factors. This same cohort seem to have no problem identifying an issue, inventorying the harms, quantifying the data sets of negative outcomes, but so few, if any, in the last 20 years have bothered to posit holistic strategies as to remedies for this decline in, arguably, the most advanced, potentiated and longevity enabled generation that has ever lived on the planet.

Perhaps it is important to share the following: everybody, and we do mean every single person on the planet, starts out life as a kind of *wheelbarrow*. The human animal is very unique in this context.



Now **wheelbarrows are empty and powerless vessels that are filled by someone else and pushed by someone or something else.** This is not a bad thing, it's a design factor. Humans, like no other creature, are created with very little 'pre-loaded' programming – What we do have is an incredible faculty and capacity to learn and learn large!

However, as this is done over a long period of time and only done in connection – in relationship – to other human-beings (or lack of), how you develop and grow depends heavily on *who or what* is *filling* you and *pushing* you.

Up until you hit puberty, you are set up to learn by that input and instruction from others and your environment. However, once you hit puberty, your learning, your input and what you let direct you begins to be determined more by you. Ah, but how you were prepared (or not) for this next stage of development is a huge factor in you making smarter, wiser, safer, and sound developmental choices.



So, the question is, who or what is influencing you?

One of the very few social scientists commenting on these issues early in this millennium was academic Richard Eckersley. In a number of papers, he began to bring attention to these diminishing factors in our cultural resilience. Such works as **Values and Visions Youth and the failure of Modern Western culture** opened up this subject matter, but was not followed up or promoted by many or published in the public square.

If you recall our opening quote by the US Surgeon General that young people face uniquely difficult hurdles and humps that their surrounding materialistic and individualistic culture in the West did not prepare them for and their mental and emotional health is suffering as a consequence.

However, there is more to these challenges than the often-superficial triage will diagnose.



It is not merely a matter of labelling younger generations as more vain, selfish, or even shallow. Though superficial may be a kinder word to describe this emerging generation, it is a label with some identifiable origins.

Superficiality is more *caught than taught* – by that we mean, it is lessons in ‘omission’, both inadvertent and deliberate, that relentlessly facilitate focus on veneer and facade over *structure and strength*– fashion and form over substance and depth. The substantive and robust building blocks of resiliency have been either omitted, lost or worse ignored. This too, is **cultural abuse**.

This has resulted in a significant shift in the way people perceive life and their place in the world, which, in turn, directly impacts their well-being.

Much of this shift can be attributed to cultural changes we have alluded to, specifically the rise of three key culprits of history ignoring superficiality, materialism, and individualism in modern Western culture.

Cultural Abuse – What Might That Look Like?

A standard overview of *cultural abuse* is seen as a form of domestic and family violence that involves the use of aspects of a victim's culture, identity, or spirituality to inflict suffering or as a means of control. It is recognized as a form of domestic and family violence that may be part of a broader and complex pattern of behaviours experienced by a victim. Spiritual and cultural abuse have unique dimensions where spirituality or cultural identity is central to the victim's way of life, or their personal sense of meaning, purpose, and well-being and is used nefariously to harm, not help them.



The National Domestic and Family Violence Bench Book outlines some of the nuances of this genre of abuse

Behaviours may include any form of domestic and family violence and may involve the perpetrator: belittling the victim's spiritual or cultural worth, beliefs or practices; violating or preventing the victim's spiritual or cultural practices; denying the victim access to their spiritual or cultural community; causing the victim to transgress spiritual or cultural obligations or prohibitions; forcing on the victim spiritual or cultural beliefs and practices that are in conflict with their own; manipulating spiritual readings and practices to justify abuse; misusing the traditions, practices, and expectations of the spiritual or cultural community to which the victim belongs as a means of normalizing or suppressing the abusive behaviours, silencing the victim, or preventing the victim from seeking support and help.⁹

Whilst these behaviours are clearly abusive and are actively perpetrated upon a person to undermine, control, dominate or otherwise diminish an individual, it is the often overlooked but *no less harmful form* of abuse that is not on the radar. A harm that is no less undermining in its abuse.

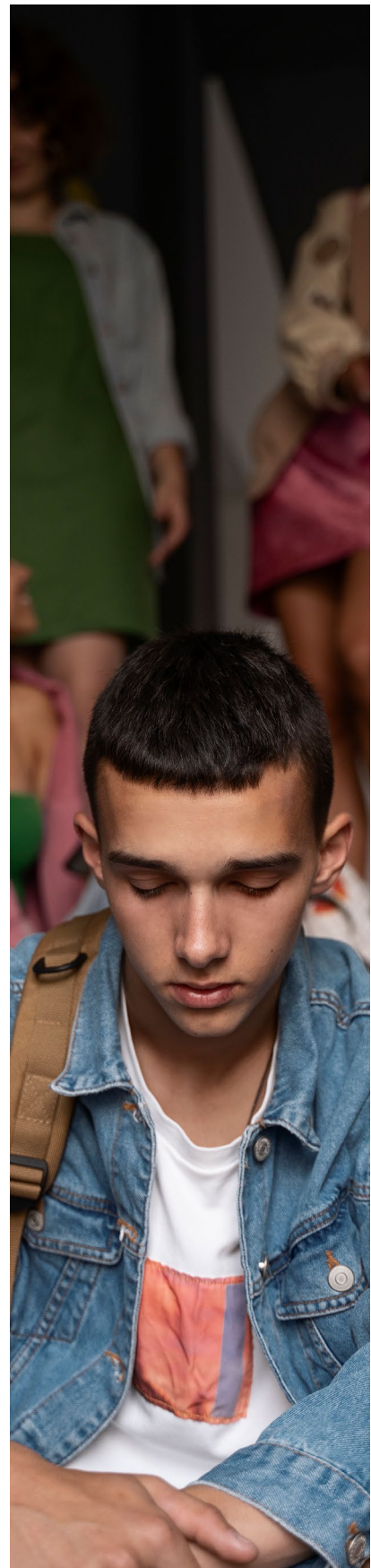
The *removal, omission, erasing, or ignoring* of spirituality and meaning in worldview framing presents another genre of abuse. It is these anthropological underpinnings of culture that help an individual psyche frame themselves adequately in a complex world, which has and can be a psycho-social foundational strength. Consequently, the undermining, erasing or neglecting of this psycho-social imperative can become what we refer to as a *resiliency killer* – An ultimate form of abuse.

This absent or severely underdeveloped capacity has huge ramifications on psycho-social health.

Materialism and individualism have undoubtedly brought benefits, including improved health and well-being, to individuals on at least one level - physical. However, there is growing evidence that the benefits are diminishing while the costs are mounting. These costs manifest in heightened feelings of pressure, avarice, 'missing out'; followed by, insecurity, drivenness and growing uncertainty can take a toll on the un-anchored psyche. When this mode is also **harnessed by the omnipresent social media contagions**; adrift in a lack of clear sound frames of reference and non-materialist context, we see distress grow.

Expectations have skyrocketed, creating a perception that success rests solely on the individual, disregarding the persistent role of social privilege and disadvantage. Excessive freedom and choice, paradoxically, are seen as oppressive, and autonomy has been confused with independence. Most significantly, there has been a shift from more intrinsic to extrinsic values and goals.

Intrinsic goals are those pursued for their inherent value, satisfying basic human needs for competence, affiliation, and autonomy. They promote well-being, as they are "self-transcending."



On the contrary, extrinsic goals are pursued in the hopes of external rewards, like status, money, or recognition, making them "self-enhancing" but often detrimental to well-being. The relentless pursuit of external markers of success raises the stakes, increasing the risk of failure and goal conflicts.

It is in the Affective Domain of education – the meaning, values, and ethics – that underpin cognition that well-being and resilience find their anchor points and resources.

These are not found merely in the fleeting moments of happiness that Consumption, Acquisition, and Recreation (C.A.R) may bring. These pursuits are not 'bad' at best they are a very temporary scaffolding for the psyche. However, unanchored to Meaning, Achievement and Purpose (M.A.P) they can ultimately end up on [the dissatisfying treadmill of a hedonic adaptation](#) - consumption/value, thus 'driving' the C.A.R model even harder and the perception that anything that interferes with the sought-after 'Happy' feelings that the egocentric consumption model drives, must be dealt with in whatever expeditious manner one can access – substance use being one of the quickest.



Often, and predictably in a fun entitled culture that uses substances 'recreationally,' this leads to a harmful and escalating engagement with drug use for 'fun' or faux happiness. This, concerningly, is now becoming the benchmark for 'okay-ness' in the First World West.

This transformation in youth health challenges the orthodox view of human development, which has placed Western nations at its forefront. It highlights those conventional measures of development, such as income, life expectancy, or happiness, along with education, governance, freedom, and human rights, often falls short in capturing the more intangible cultural, moral, and spiritual aspects crucial to well-being. In these aspects, Western societies lag.



A comprehensive view of health is imperative if we are to grasp human development fully, recognizing health as a social dynamic influencing social changes and developments, as informed, and in turn, informing development. Motivators for best health and wellbeing practices go beyond simple *welfare* and *medical* offerings.

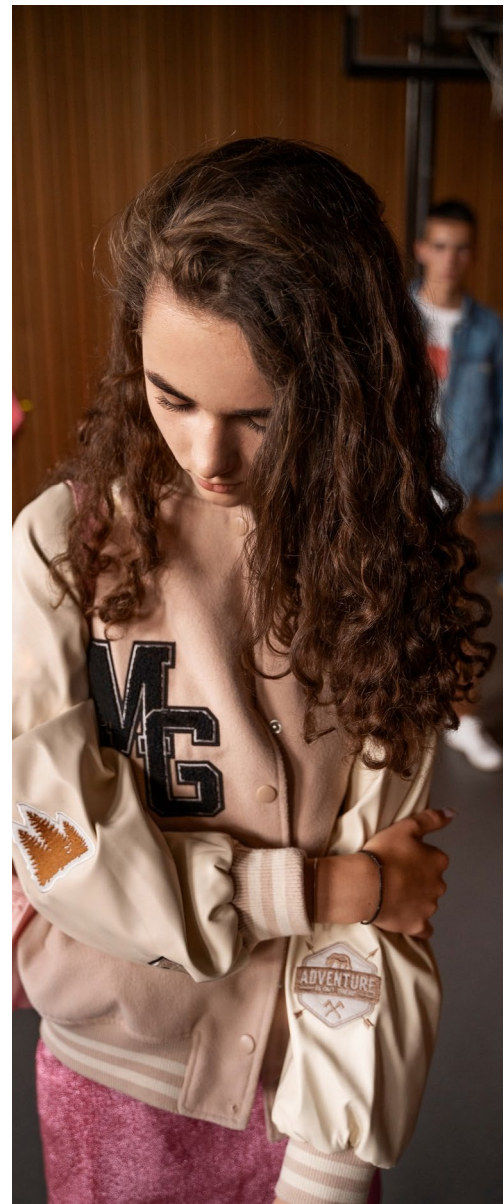
What we can say in finalising this line is that the struggles faced by young people today are undeniably real and deeply rooted in a complex interplay of cultural and societal factors. To address this crisis effectively, society must recognize the shifting landscape of beliefs, values and goals, prioritize intrinsic well-being over extrinsic markers of success, and embark on a broader mission to improve social conditions.

Again, this is not merely the tactical apparatus of 'more welfare and more education', as we have seen those two powerful vehicles *fail*, as they've been untethered from tried and tested affective domain principles that give them the capacity to improve culture.



Early 20th century Russian community change agent Ivan Prokhanov put it succinctly when he said, "*No social or political reforms could prove successful unless a moral and spiritual reform in the people themselves was first realized.*" Only by adopting a more holistic approach can we hope to provide young people with the support and resources they need to navigate the vicissitudes and maelstroms of the modern world.¹⁰

At the risk of seeming repetitious, we are not (to labour this imperative), simply inventorying problems and identifying specific harms is part of the issue. Though



this may be a little helpful if it can point towards, at least a triage intervention, more is needed. What we are emphasising is a greater focus on long-term restorative and protective solutions for stronger psycho-social as well as emotional health and wellbeing which requires investments beyond triage and damage management.

An *irresilient* culture is one of the clearest manifestations of a society that is unravelling, and we must look holistically at what is needed to work toward more robust psycho-social foundations (not simple *scaffolding*) to build robust communities that foster, not sabotage, best health, and wellbeing practices.

A photograph of two people bungee jumping from a high point. They are suspended in mid-air, upside down, against a clear blue sky. The person in the foreground is wearing a red and white outfit with a colorful shawl. The person behind them is also in similar attire. Two ropes are visible, extending from the top left towards the jumpers.

The Bungee Rope of Resilience

The Dalgarno Institute has a working definition of resiliency. What we want to do now is drill down more into the key 'strands', as it were, of this *rope of resilience*.

“Resiliency is like a Bungee Rope. It doesn’t stop you from falling from time to time, but it does stop you from going ‘splat’ and enables you to spring back more readily. Resilience is 1) managing complex issues of difficulty, duress, disappointment and/or trauma with – 2) well-developed problem-solving skills 3) persistence of will 4) all founded on hope. Hope is not only the positive expectation of good, but the reasonable grounds for it. It all starts with the 5) ‘reasonable grounds’ and knowing what yours are.

Before we unpack these components, these strands, can we encourage you to take the brief [‘Weaving Your Bungee Rope’ Questionnaire](#) to get a modest baseline of where you or your charges might be at.



Key elements to weaving your resiliency bungee rope are important. Let’s unpack the key strands...

- 1. Managing complex issues** of difficulty, disappointment, duress and/or trauma. That word ‘manage’ is the starting point. When these inevitable ‘nasties’ of life hit, pretty much all of us are rattled and our emotions can spiral. That moment is in and of itself, distressing.

It is the immediate taking charge of that emotional chaos that is a starting point of your management. It is not the fix, but it’s like a *corralling* of this *wild thing* before it starts tearing into other parts of your world.

It is in this phase of tough events or circumstances, that we will reach for the ‘coping mechanism’ we have in our tool kit. If that is alcohol or other drugs (not clinically prescribed by your doctor), then the unravelling is ensured, though temporarily slowed. However, it is good and healthy coping mechanisms that we are wanting to weave in our *Resiliency Script*.

2. Well-developed problem-solving skills:

No one is born with this capacity; this is very much a learned thing. It is mainly in the cognitive domain, you know learning stuff and remembering how things work. What is good practice, and what also doesn't work so well and the why that may be. However, it is important to remember that there is an *affective domain* component too and this is the domain that really adds 'education' to information.

For example, working out what is best practice in good behaviours is also modelled by others. You not only watch how to work through an issue, but the attitude being manifest behind that activity, i.e. patience, attention, humility – not arrogance, getting help and relating with respect, etc. All these helps develop well your ability to work through a problem. Of course, negative responses, behaviours and manifestations can also instruct, but hopefully it can lead to an avoidance of, and not engagement in that conduct.

Some key steps in problem solving are,

- *What is the problem?*
- *What are the causes of the problems?*
- *What are possible alternatives to this problem?*
- *Which alternative should be applied? and*
- *Evaluation of the problem-solving methods.¹¹*

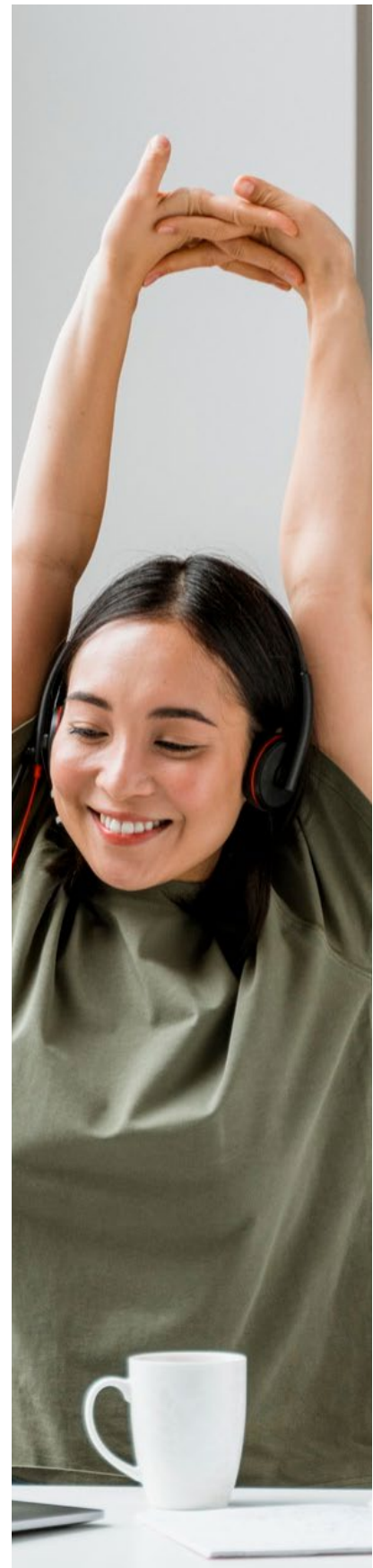


- 3.** When it comes to ***persistence of will***, “Various studies have shown that perseverance is an essential quality for success in life. It often tops aptitude and raw talent and is a more accurate predictor of achievement.”¹² I love what even people like me, with truly little talent and limited aptitude, are still able to achieve with this quality. Some of the above factors are vital, patience and attention not the least. However, what is also important in this space the ‘help factor’ of others.

Encouragement and feedback from trusted older and wiser people who have a clue – lived experience – is a vital factor in your ‘keeping going’ tool kit when an issue is tough and seemingly stuck. Having, or finding those people is a key bungee rope weaving partner. *“That which we persist in doing becomes easier to do, not that the nature of the thing has changed but that our power to do has increased.”* [Ralph Waldo Emerson](#)

As vital as the need is to continually develop these strong strands to strengthen your ‘bounce-back’ factor, it is also what that rope of resilience is anchored too that matters most.

- 4. Hope:** This is both part of your *bungee weave*, but also a key platform to anchor your bungee rope of resilience to. That *positive expectation of good* is not just optimism or a positive predisposition, they can be, but these factors can be very fragile and transient. For many people, when these evaporate, so does their hope. When this eventuates then often distress, angst and even despair can set in, often making your rope of resilience fragile, and you can in fact go ‘splat’ when you fall. Nurturing this vital state can include all of the above, but too, something ‘bigger’. That leads us to the...





5. Reasonable Grounds: This is the arena in which the ‘waters have been muddied’, and, as we are finding, a key risk factor for failing psyches if it is not cultivated.

We will commence here with one of the staples of *hope-linked* resilience – finding purpose. This can be one such reasonable grounds in hope.

In an anthropological context, the term “purpose” is often used to describe the reason or motivation behind human behaviour and cultural practices. Anthropology is a unique discipline that studies all aspects of what it means to be human across time with a focus on how changes – to the strengthening or detriment – occur in our cultures. However, it also examines the ways in which we adapt to different social and physical environments.

The anthropological approach views humans as part of a wider system of meaning, as actors and **change-makers** within a dynamic environment populated by others and how that collective works in a harmonious order, that promotes and enables healthy, safe, and productive functioning.

Each culture and each community must be aware of its power and potential to enact positive change, as well as awareness to ‘regress’ culture. Awareness of both can generate a potential for hope in this space. But what practices and purpose are helpful, sustainable, and good for the culture needs to be agreed upon by that group.

Over the centuries, belief systems and values that did not afford best practice for health, safety, harmony, well-being and development, became extinct, and it was the sound systems that not only remained, but brought forward the beneficial cultural assets that have seen these societies flourish.



The exception to these best practices is cultures that by ‘bullying and breeding’ continue to suppress any proven healthy, safe and humanity developing practice that does not comply with its narrow ideology.



Again, it is not just the materialistic benefits that make life comfortable and easier, it is the philosophy and values underpinning those that determine that positive outcome. Eroding or removing those sound, trialled and tested anthropological underpinnings – salutary, beliefs, rules, boundaries, laws, behaviours – may not change the ‘structure’ built, but without these important foundations, the structure is prone to crumble and fall – herein lies yet another problem with materialist and individualist paradigms.

However, purpose can be taken away, it can be hindered in several ways, and if hope remains in your capacity to fulfill a purpose alone, then this can be devastating to one’s resilience.

The key word in the anthropological framework above is **meaning**.

In an anthropological context, the term “meaning” is often used to describe the significance or interpretation of human behaviour and cultural practices. What is behind and underpinning the ‘why’ of culture, not just the actions and behaviours in it.

Anthropological frameworks always insist on discovering what is ultimately true, good and right. These ultimate realities are not so much ‘created’ as discovered, and in that sense, it is an holistic process. By that we mean it looks at all of culture, not just components of it, such as purpose, which is more an action and an outcome than a *source*.

A Fact/Truth-based pursuit of what is best-practice and why, using at the very least a basic epistemological equation of *coherence, cohesion and pragmatism* to start with, will help guide the pursuit of what confirms most completely to objective reality as it should be. Does this make sense? Does it hold together consistently in different contexts, and does it work consistently well?

This helps a tribe, if you like, more objectively consider all aspects of the interconnections between many parts of our lives and weaving together our biology, belief systems, traditions, values, and behaviour systems, along with the diverse social and physical environments in which we live.





Conclusions

Whilst there is a lot to developing a resilient brain, much of it starts with minimising the damage to the *white that matters* on the way through.

Sadly, for many of us our *environments* frame us up in insecurity, anxiety, fear, and distress, that we have no or little control over – that’s a tough start. However, it is not the end of your potential to become resilient despite those liabilities.



What we can control is the decisions we make now about practices, behaviours and actions that can strengthen both the brain and resilience and avoid damaging both further. ***Denying substance use is one clear and easily step in avoiding damage. Denying uptake is the smartest choice on every metric when it comes to brain and personal resilience.*** However, if you or those in your community networks have started in that space, walking back out is part of weaving your bungee rope with those who have a clue and care about you.

Engaging healthy coping mechanisms, whilst looking to build a strong personal foundation as you engage your growing problem-solving skills and perseverance, with your caring mentor are key factors.

Yet, even if mentors are missing, and the coaching, teaching and help to learn you need may be limited, there are still key elements that you can pick up. *Finding that sustainable meaning is an absolute care foundation for any psyche.*

Shane Varcoe – Exective Director, Dalgarno Institute

Endnotes

1. [What Is White Matter In The Brain \(simplypsychology.org\)](https://www.simplypsychology.org/white-matter-brain/)
2. <https://my.clevelandclinic.org/health/diseases/23018-white-matter-disease>
3. <https://www.medicalnewstoday.com/articles/white-matter-disease>
4. <https://cristivlad.com/this-is-your-brain-if-you-smoke-drink-or-do-drugs/>
5. <https://www.banyantreatmentcenter.com/2021/02/04/how-drug-abuse-affects-white-matter-in-the-brain-pompano/>
6. <https://news.berkeley.edu/2022/01/07/anxiety-and-ptsd-linked-to-increased-myelin-in-brain/>
7. <https://www.psychologytoday.com/us/blog/the-athletes-way/201402/chronic-stress-can-damage-brain-structure-and-connectivity>
8. <https://www.tuw.edu/health/how-stress-affects-the-brain/>
9. <https://dfvbenchbook.aija.org.au/understanding-domestic-and-family-violence/cultural-and-spiritual-abuse/>
10. <https://www.salon.com/2023/09/16/more-young-people-are-struggling-and-there-is-no-quick-fix-why-being-young-is-getting-worse/>
11. (PDF) [Problem Solving Skills: Essential Skills in Providing Solutions to Personal and Professional Problems \(researchgate.net\)](https://www.researchgate.net/publication/312111111)
12. (Duckworth) [Perseverance in Psychology: Meaning, Importance & Books \(positivepsychology.com\)](https://www.positivepsychology.com/perseverance-in-psychology/)

For further reading



- [Young People's Health and Wellbeing - Richard Eckersley](#)
- [Alcohol-and-the-brain_Alcohol-and-society-2024_summary_en.pdf \(alcoholandsociety.report\)](#)

For further insights

- [My Brain on Drugs, Booze, EMF, & Trauma with Dr. Daniel Amen](#)
- [Mans Search for Meaning](#)
- [The 'God' Shaped Brain](#)



**Appendix:
Generational
Decline in
Australia's Mental
Health: Insights
from a University
of Sydney Study**

Introduction

It's not just the kids. The mental health of Australians has been on a downward trajectory since around 2010, affecting not only the younger generations but also earlier cohorts. A recent study conducted by researchers at the University of Sydney sheds light on this concerning trend.



Key Findings

Generational Trends: Contrary to the common perception that mental health challenges primarily impact younger individuals, this study reveals that mental health decline spans across different age groups. It's not limited to Gen Z; it affects Australians of all ages.



Long-Term Perspective: By analyzing data over several decades, the researchers discovered that mental health issues have become more prevalent over time. This suggests that societal changes, lifestyle factors, and other influences are contributing to this generational decline.

Factors at Play: While the study doesn't pinpoint specific causes, it highlights the need for further research into the factors driving this decline. Possible contributors include increased stress, social isolation, changes in work environments, and the impact of technology.

Implications

Public Health Concern: The findings underscore the urgency of addressing mental health as a public health priority. Policymakers, healthcare professionals, and communities must collaborate to develop effective strategies for prevention, early intervention, and support.

Holistic Approach: Mental health interventions should consider the unique needs of different age groups, in the context of best-practice broader culture staples. Tailored programs and resources can help individuals cope with stressors and build resilience.

Destigmatization: Reducing stigma around mental health is crucial. Open conversations, awareness campaigns, and education can foster understanding and empathy.



Conclusion

Australia's mental health landscape is evolving, affecting people of all ages. By acknowledging this generational decline and taking proactive steps – beyond tactics, 'hacks' and one-dimensional gimmicks – we can work toward a healthier and more resilient society.

Source: Study shows generational decline in Australia's mental health - The University of Sydney

Additional reference: Generational differences in mental health trends in the twenty-first century | PNAS

**What are
some potential
solutions to
address this
decline?**





Addressing the decline in mental health requires a multifaceted approach. Here are some potential solutions:

1. **Access to Collaborative Care:** Implement team-based, collaborative care models that cater to the increasing complexity of mental health issues. [By involving various professionals \(psychologists, psychiatrists, social workers, etc.\), we can provide comprehensive support to individuals¹.](#)
2. **Social and Emotional Learning Programs in Schools:** Introduce social and emotional learning programs in every school for all students. [These programs can equip young people with essential coping skills, emotional intelligence, and resilience².](#)
3. **Equality of Access to Services:** Ensure equal access to publicly subsidized Medicare services. [Bridging gaps in access can lead to early intervention and better outcomes for those struggling with mental health issues².](#)
4. **Prevention and Risk Factor Clarity:** Focus on prevention by identifying modifiable risk factors driving the decline in mental health, especially among young people. [Understanding these factors can guide targeted interventions³.](#)
5. **Integrated Primary Youth Mental Health Care:** Establish integrated primary care services specifically for youth. [Early intervention is crucial, and multidisciplinary team-based care can address severe and persistent illnesses³.](#)
6. **Workforce Development and Digital Models:** Invest in building the mental health workforce and explore new digital and direct service delivery models. [Expanding psychological services and innovative approaches can enhance equity and accessibility⁴.](#)

It's important to note again that in addressing mental health issues, a more holistic anthropological approach is vital. The collective effort that involves families, policymakers, healthcare providers, educators, and communities looking to discover best practice not in siloed contents, but all of culture...



Appendix Two: Neuroplasticity and Drug Addiction +

1. Initial Drug Exposure:

- When an individual first uses a drug, their brain experiences an increase in dopamine release. Dopamine is a neurotransmitter associated with feelings of reward and pleasure.
- This initial exposure sets the stage for further neuroplasticity changes in response to repeated drug use.



2. Neuroplasticity in the Brain's Reward System:

- Repeated exposure to drugs of abuse leads to changes in the brain's reward system. These changes make drug use more habitual and, in vulnerable individuals, more compulsive.
- The brain learns to respond to drugs, reinforcing the behavior and creating maladaptive patterns of drug use.

3. Learning Models and Perspectives on Addiction:

- **Learning Model:** Some researchers propose that addiction is a form of habitual learning without necessarily referring to it as a disease. According to this view, addiction is a natural response to challenging environmental circumstances.
- **Brain Disease Model:** Others, including Dr. Nora Volkow (director of the National Institute on Drug Abuse), view addiction as a brain disease triggered by genetic, environmental, and social factors. In this model, addiction is characterized by changes in the brain's reward, stress, and self-control systems.
- **Bio-Behavioural Disorder** – Is a more nuanced explanation of addictive states that combines some of each of the above-mentioned models.

All models acknowledge that addiction is treatable because our brain remains plastic and adaptable – Behaviour can change the brain, as the brain can change behaviour. Building healthy capacity in both arenas is a key to 're-learning' healthy behaviours. (see [Drug Use, Stigma & Proactive Contagions to Reduce Both](#))

4. Whole Brain Neuroplasticity in Addiction:

- Clinical and preclinical studies reveal that repeated drug exposure affects neuroplasticity throughout the brain.
- Key brain regions impacted include:
 - **Mesolimbic System:** Associated with reward processing.
 - **Dorsal Striatum:** Involved in action control.
 - **Prefrontal Cortex:** Responsible for behavioral control.
 - **Hippocampus and Amygdala:** [Associated with memory and mood.](#)

Conclusion

Understanding the interplay between neuroplasticity and drug addiction is crucial for developing effective treatments and interventions. By harnessing the brain's plasticity, we can work toward overcoming addiction and promoting healthier behaviors. **Remember that addiction is not a fixed state; it is a dynamic process that can be influenced positively through targeted interventions and support.**



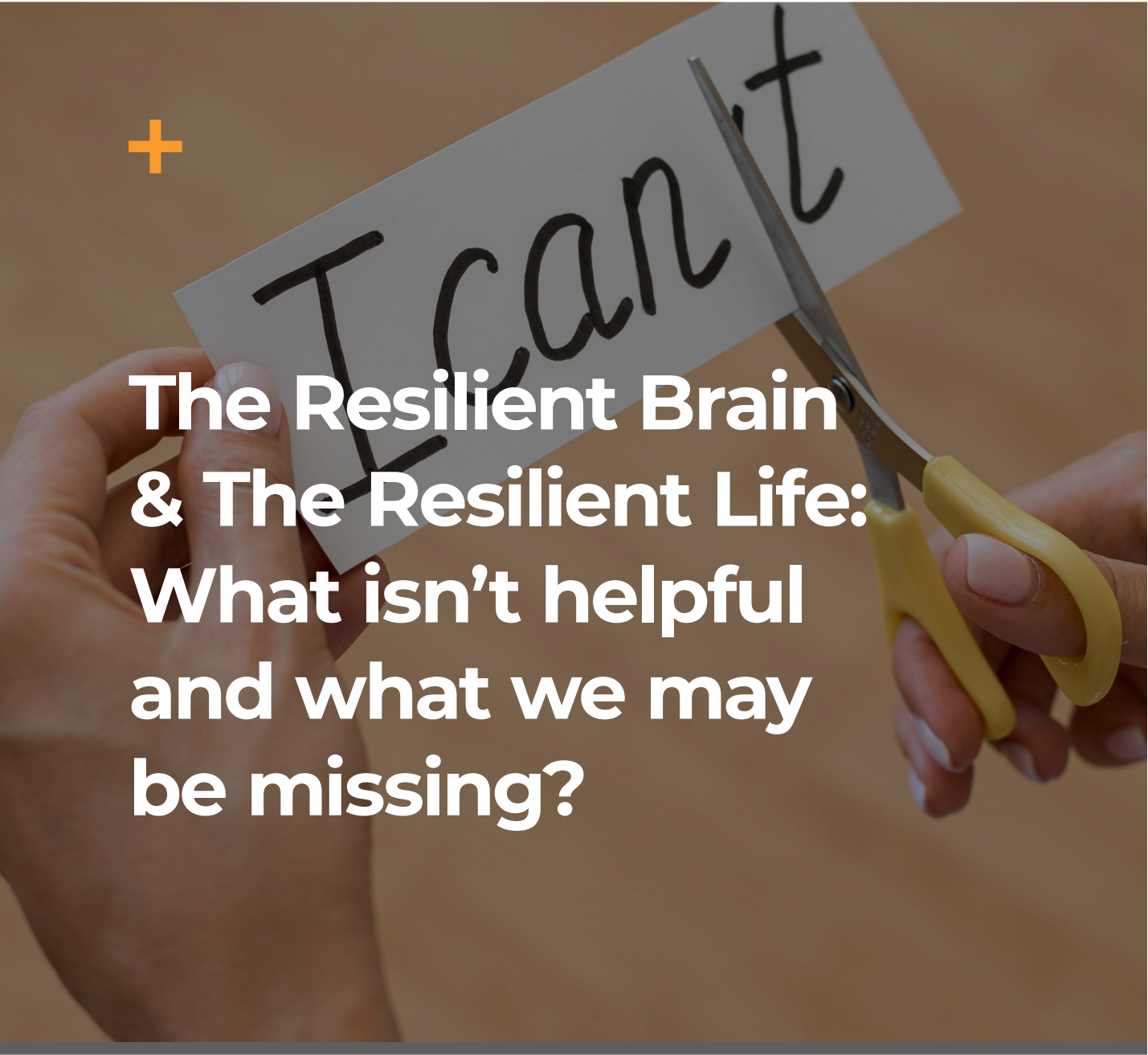
For more in-depth information, you can explore the articles mentioned:

[Brain plasticity in drug addiction: Burden and benefit - Harvard Health](#)

[Aberrant Brain Neuroplasticity and Function in Drug Addiction: A Focus ...](#)

[Adapting to Sobriety: The Role of Neuroplasticity in Addiction Recovery | FHE Health \(fhrehab.com\)](#)

[Drug Use, Stigma & Proactive Contagions to Reduce Both](#)

A hand holds a piece of white paper with the words "I can't" written in black cursive. A pair of scissors with yellow handles is cutting the paper. The background is a solid brown color.

The Resilient Brain & The Resilient Life: What isn't helpful and what we may be missing?



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