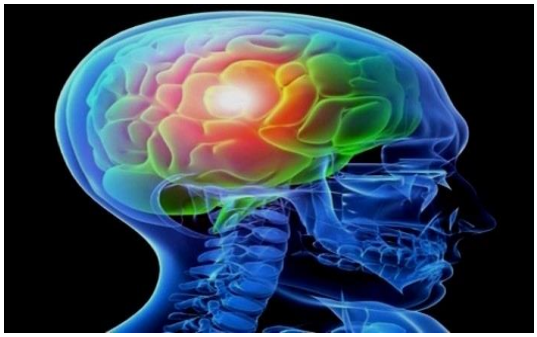
Understanding & Treating Concussion

Visual Perceptual
Therapy That Works!

Let's get one thing very clear, a concussion is a traumatic brain injury. There was a blow to the head and damage was done to the brain, and not everyone simply gets over such an injury



I often wonder where this tendency to minimise traumatic brain injuries began. We have all been exposed to the idea that we will simply get over a concussion, and I continue to come across this idea holding sway in all walks of life. Unfortunately, it doesn't do anyone any good, especially when their symptoms do not resolve.

I have been treating traumatic brain injuries for over 30 years now and I find myself in the unusual position of having had a moment of realisation, which has allowed me to develop a therapy that does fix these injuries and does so very quickly. I say this is unusual because I have yet to come across anyone else who fell down the same rabbit hole and does anything even remotely similar.

If you are someone who has suffered a TBI and has gone through all the contemporary (current) therapies and treatment and still have symptoms, you will know that frustration that comes when

you can't get the answers you seek and no one seems to be able to help you. Well I was trained into pretty much the exact same understanding that most healthcare professionals continue with today. But, instead of continuing to do the same things over and over again and accepting the limited outcomes it achieved, I got frustrated. I knew something was missing and I wanted to know what it was.

Now this was not just an ordinary old frustration; I found myself consumed by the desire to know what was missing. I can look back now and see how life led me through a series of different events and situations, which gave me a very good understanding of how TBI's were seen and understood within healthcare. I could see how none of it was particularly useful and there were a lot of ideas an imaginings many healthcare professionals had, which simply did not stand up to any real scrutiny.

In 1996 I found myself in a small town in the south east of New Mexico, USA. Once again I was experiencing that familiar frustration, because someone was sitting in front of me who needed my help and I was still limited by not knowing what I was missing. However, this time things took a very different turn for me and my demands upon the universe were finally answered and I saw what I was missing.

In hindsight I realised that contemporary therapies and understanding are based upon a great deal of assumption with a good mix of imagination thrown in. I have often likened this understanding to believing in sea monsters because no one has ever looked beneath the surface and discovered fish. What that moment of insight did for me was open a doorway into a level of performance, which exists below neuro-cognitive performance and allows us to treat neuro-cognitive disorders in ways that were not possible previously.

That moment has resulted in a body of work I love and a therapy – the ***Visual Perceptual Therapy.*** These days I can look back and say quite definitively that most of the world is only ever seeing the surface level of our performance; they are seeing the outcome or results of a process, which remains hidden to them. It will take a shift in perspective for them to see beneath the surface, and start to realise the profundity of what is allowing any of us to do the truly amazing things of which we are capable.

Looking beneath the surface

In order to understand what brain injuries do, let's first imagine the brain as a ball of fibre optic cables. All through our lives, our brain has been continually modified on the basis of the sensory information it receives, and the associations formed between the pieces of that information. When the brain is functional, information is received and integrated into patterns. This process is experiential and does not involve mind and its thinking and results in essentially means that we can look out on the world and immediately recognise and know (an experiential state) what something is, and respond to it in an effective, efficient, spontaneous and harmonious way. Conversely, when the brain has been damaged, these processes are fractured, chaotic, and dysfunctional.

The developmental process we all move through as children has us moving through different

priorities in perception. New born babies are in the priority of auditory perception and they will move into physiological perception as a priority at around age 3-3½ months; and into visual perceptual performance at around 3-3½ years of age. Any child who cannot move into visual perceptual performance as a priority at this age will struggle to some degree or other, simply because visual perceptual performance allows us to refine our performance in a truly phenomenal way. Moving through these different priorities allows us to receive sensory information from any of our senses, and form a dynamic experience of anything in our world. It does this because a dynamic function of perception is created as a result of this, where the dynamic is multi-dimensional and multi-facetted and allows us to form crucial inter-relationships between pieces of sensory information received and perceive the worldview that we do. Everything within that worldviews is comprised of patterns and the pathways within the brain – those fibre optic cables – are modified and refined on the basis of the patterns we perceive.[1]

Any damage to the brain destroys or disrupts these pathways and our core perceptual performance collapses to some degree or other as a result, because our ability to recognise patterns has been disrupted

Our tolerance for sensory loading

In every moment of the day we are flooded with phenomenal amounts of sensory information, and when our neurology is working well, there are no problems with this. We exist in this vast sea of information and get to experience life as a result.

However, when the brain is damaged those fibre optic cables lose are no longer working as they should and they are no longer carrying the same volume of sensory information. As a consequence of this there are two issues, which arise:

1. What is the consequence of that sensory information no longer being included in our perception and, consequently, being integrated into patterns.
2. What happens to our performance when we are not receiving all information available to us

If we use the analogy of a funnel when considering perception. All of this information is pouring into our central nervous system. When things are working well, the aperture of the funnel is wide open and the sensory information flows unimpeded. When things are not working well, the aperture of the funnel is narrow and constricted and the funnel overflows, and the consequence is that our nervous system is flooded with undifferentiated sensory information (noise), or information we are unable to make sense of. This is sensory overload and most of the symptoms people have following a traumatic brain injury are the direct consequence of this.

[1] Our performance is also based upon patterns. Performance is inherently based on pattern recognition ie: what is being perceived, with it (performance) occurring reciprocally to perception ie: the construction of patterns of performance. Therefore pattern recognition and construction becomes the central core function within all human performance; **BUT** we cannot stop there, because we need to know how it is we recognise those patterns and then turn around and are able to construct patterns of performance as a consequence.

Because there is such an intimate relationship between perception and performance, performance naturally suffers when perception is dysfunctional. Underneath that capacity to recognise and construct patterns is our capacity to connect the dots (form inter-relationships) between pieces of sensory information and, consequently, perceive patterns. The same formation of inter-relationships is required in order to generate patterns of performance, and the breakdown of this ability shows up as a fractured or chaotic mode of task performance. However, there is an even more fundamental issue going on here, which also has a tremendous negative impact on performance: information that is missing from perception will also be missing from performance.

This issue only shows up when we put performance under a figurative microscope. It cannot be seen in observing someone performing everyday tasks, simply because there is too much information contained within most of those tasks and it obscures the ***how the task is being observed.*** [2] Underneath our capacity to recognise and construct patterns are a raft of skills that are required to form inter-relationships between pieces of sensory information – thereby allowing patterns of information to coalesce – and between patterns of sensory information that have already been formed. The term 'connecting the dots' is such an excellent one to use here, because that is exactly what is going on. The reality is that, if we cannot connect the dots, we cannot make sense of the world, and our performance will clearly demonstrate that something has gone wrong.

Interestingly, in a world that is often enamoured with 'the research, etc' we have to rely on functional indicators (or pointers) of performance in order to know what someone's performance is telling us about where the breakdown in their performance is occurring. I've been doing this work for so long now, that someone can tell me how a person is performing and I will immediately know what has gone wrong for them. However, it is not until we start working through the Visual Perceptual Therapy sessions that I can determine where about within their core level skills, abilities and processes the actual breakdown has occurred. For example, I recently worked with a young man whose core issue was his inability to utilise visual cues relative to one another. [3]

Summary

Visual perceptual performance has the priority for functional human beings. Traumatic brain injuries essentially knock people out of this priority and leave them trying to make sense of the world from a far lesser perspective. When I tell my clients that they have been knocked off centre, this typically makes perfect sense to them.

TBI's are very significant injuries, regardless of what anyone might think; and they most certainly need to be treated. However, we live in a world where most people never receive appropriate therapy and, for most, this means that life is going to be confusing and difficult from that point

[2] This is probably the number one reason why we have ended up with such a complex morass of ideas surrounding neuro-cognitive performance – that only the end result or consequence of performance can be observed in the performance of everyday tasks. Unfortunately, maintaining such a view of our task performance is incredibly self-limiting, because it never answers the ***how*** of our performance.

[3] It's important to realise that relative inter-relationships can show up in many different ways. Dyslexia in kids who struggle in school is entirely about this issue, but it has a far wider context for these children than it did for this young man.

onwards. I find this truly tragic, along with the refusal of those people providing such therapy to acknowledge the downsides and limitations of what they are doing. As in so many areas of healthcare, it is always the client or patient who suffers the consequences of such limitations, and that will never seem right to me, no matter how it is spun.

As I edit this article and rework it, I realise how far the Visual Perceptual Therapy has come over the years. Of late I have been working primarily with people with TBI's and find it to be a world full of interesting challenges and amazing successes. With the options available now, it is really a matter of making sure that people with TBI's start to understand that their issues can be treated and that it is possible to move beyond the limitations of living with a TBI.

With that, I would like to welcome you to my world,
the world of visual perceptual performance

Natoya Rose
Occupational Therapist

Email: info@visualperceptual.com **Website:** www. visualperceptual.com