What do we know about the horse-human connection?

Recent studies conducted by the Institute of Heart-Math, USA provide a clue to explain the two-way "healing" that occurs when we're close to horses. According to researchers, the heart has an electromagnetic field larger than the brain: a magnetometer can measure the energy field of the heart that radiates from 2.4 meters to 3 meters around the human body. While this is certainly significant, perhaps more impressive than the electromagnetic field projected by the heart of a horse is five times larger than that of a human being (imagine an electromagnetic sphere around the horse) and it can influence straight into our own heart rate. Horses are also likely to have what science has identified as a "coherent" heart rate (heart rate pattern) that explains why we can feel better when we're close to them. Studies have found a coherent heart pattern to be a solid measure of well-being and consistent with emotional states of calm and joy. We exhibit such patterns when we feel positive emotions. "A coherent heart pattern is indicative of a system that can recover and adapt to stressful situations very efficiently. Many times, we just need to be in the presence of horses to feel a sense of well-being and peace. In fact, research shows that people experience many physiological benefits by interacting with horses, including lower blood pressure and heart rate, higher beta-endorphins (neurotransmitters acting as pain suppressors), decreased stress levels, decreased feelings of anger, hostility, tension and anxiety, better social working; and greater feelings of empowerment, confidence, patience and self-efficacy".

By: Alejandro Pascual Puig E&C CONSULTING.

https://www.heartmath.org

Reflection Summary from anonymous coaches participating within research at the Institute of Heart-Math: -

"They have been guiding forces through the struggles of growing up as a teenager and continue to provide therapy as an adult. As life has thrown me challenges, including unhealthy relationships and going through some traumatic life experiences, a horse has always been the best therapy. We give credit to horses for helping us grow through some of the toughest times and assisting one to become a better person; they have always been a grounding force".

The emergence of learning difficulties and associated disability within the adult and young person population presenting for coaching"

The COVID 19 pandemic has disrupted academic progress and children with learning disabilities in particular have been impacted. The following descriptions identify disabilities and related learning difficulties that are emerging at schools and within the wider community. Such adults and young people will be involved in equestrian activities and will most likely attend riding coaching.

1.Autism:

Autism is a condition that affects how a person thinks, feels, interacts with others, and experiences their environment. It is a lifelong disability that starts when a person is born and stays with them into old age. Every Autistic person is different to every other. Therefore, autism is described as a 'spectrum'. Autism Australia describes autism as **a different brilliant**.

"You need to stretch kids w/<u>#autism</u> slightly outside their comfort zones but never have surprises" – @DrTempleGrandin pic.twitter.com/DuH6mwY9fA

Effective Communication Techniques when working with ASD persons:

- Speak standing to their side. They often shy away from noise directly in front of them, until they let you in to their world.
- Simple explicit language and short sentences, like speaking to children, in a simpler way
- o Communicate to one sense at a time.
 - "Some cannot process visual and auditory input at the same time. They are mono channel. They cannot see and hear at the same time. They should not be asked to look and listen at the same time. They should be given either a visual task or an auditory task. Their immature nervous system is not able to process simultaneous visual and auditory input." (Dr Temple Grandin)
 - If the rider cannot process visual and auditory at the same time, they cannot look at your while you talk. So, talk without demonstrating, or demonstrate with talking.
- Allow processing time.
 - Before repeating an instruction, and for each step of a request.
- Give only a few instructions at a time.
 - Often people with ASD have problems remembering sequences and processing information.

 Either give a few steps at a time or write down all the steps, bringing each out as needed, Visual cues may help.

Case Story: https://www.abc.net.au/news/2016-02-09/horses-enable-full-life-for-woman-living-with-autism/7151664

Diagnosed with autism as an adult, Danyele Foster has turned her life around after reigniting her passion for horses and embarking on a career as a competitive equestrian.

"Horses have been the framework for me to improve in such a wide variety of areas," Ms Foster said.

"They have enabled me to gain fitness and muscle strength, they've also enabled me to become more assertive and set boundaries in my relationships with other people and enabled me to feel fulfilled and like I'm contributing to society."

Whenever she is anywhere near a horse, Ms Foster said she felt incredibly centred.

"I suppose it would be a form of meditation for me — a form of moving meditation such as what another person might experience performing yoga or tai chi," she said.

"I would not be the person I am without horses in my life."

In 2015 Ms Foster was able to compete in mainstream equestrian competitions on the Atherton Tablelands, and her journey as an equestrian athlete is far from over.

"I would absolutely love to further my equestrian career and I'm going to take it further this year and next year," she said.

"Eventually I do want to become a para-equestrian and hopefully one day represent Australia."



Danyele Foster now regularly competes in equestrian events on the Atherton Tablelands in far north Queensland. (Supplied: Danyele Foster, courtesy of Matthew Fry

2.CAPD - Central Auditory Processing Disorder:

CAPD often co-exists with ASD.

Types of CAPD:

- 1. Auditory hypersensitivity poor tolerance for background sounds.
- 2. Phonetic decoding an inability to process language at natural language speed.
- 3. Auditory integration slowness integrating things heard with things seen.
- **4.** Prosodic processing inefficiency that makes it hard to think while listening.

3.PTSD - Post Traumatic Stress Disorder:

This syndrome causes something called hypervigilance, a tendency to feel amped up all the time, as if danger were to strike at any moment. The disorder also makes people emotionally numb and socially withdrawn, unable to feel anything but anger and sadness.

Related articles about PTSD and interacting with horses:

https://www.foxnews.com/health/horse-therapy-ptsd-help-veterans-experts

https://www.youtube.com/watch?v=JIso3QFV82E

Effects of therapeutic horse riding on post-traumatic stress disorder in military veterans

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5774121/

Research Centre for Human Animal Interaction, College of Veterinary Medicine, University of Missouri, Columbia, MO 65211 USA

"Our findings have honed the existing knowledge base on Therapeutic Horseback Riding (THR), a beneficial intervention for veterans with PTSD, by identifying a clinically meaningful dosage of THR. A 3-week THR program was effective, and a 6-week program produced clinically significant outcomes in PTSD levels. Older veterans, such as the majority in our sample, may have been diagnosed with PTSD decades ago; THR may be particularly promising for them.

Communication Recommendations when working with those with PTSD:

- 1. Be Patient (Don't Pressure Them) ...
- 2. Listen. ...
- 3. Don't Judge. ...
- 4. Show Respect. ...
- 5. Learn About Their Triggers.

Exercises whilst riding to release tension.

https://www.youtube.com/watch?v=shwBx7WOvi4

4.ADHD:

The 3 categories of symptoms of ADHD include the following:

- Inattention: Short attention span for age (difficulty sustaining attention)
 Difficulty listening to others. ...
- Impulsivity: Often interrupts others. ...
- Hyperactivity: Seems to be in constant motion; runs or climbs, at times with no apparent goal except motion.

Related articles and videos:

https://www.youtube.com/watch?v=FE0pYsmmego https://www.youtube.com/watch?v=ZJDWFVeY5QY

"I'm here almost every day," said rider Emma Stanford. Stanford has attention deficit hyperactivity disorder (ADHD) that she says makes it difficult for her to focus. "Whenever I do focus sometimes I hyperfocus and I lose track of what's going on around me," said Stanford. She says often times it's hard for her to sit still but she's found with riding she can better control the disorder. "After I ride, it's easier for me to do homework; it's easier for me to think," she said.

https://www.kbtx.com/content/news/Student-with-ADHD-says-horseback-riding-helps-control-the-disorder-485467261.html

5.ADD:

How do you recognize ADD?

The symptoms include:

- 1. Trouble paying attention (easily side-tracked)
- 2. Doesn't like or avoids long mental tasks (such as homework)
- 3. Trouble staying on task during school, at home, or even at play.
- 4. Disorganized and seems forgetful.
- 5. Doesn't appear to listen when directly spoken to.
- 6. Doesn't pay close attention to details.

6.Intellectual Disability:

The term 'intellectual disability' refers to a group of conditions caused by various genetic disorders and infections. Intellectual disability is usually identified during childhood and has an ongoing impact on an individual's development. Intellectual disability can be defined as a significantly reduced ability to understand new or complex information, learn new skills and to cope independently including social functioning. As with all disability groups, there are many types of intellectual disability with varying degrees of severity. These include considerable differences in the nature and extent of the intellectual impairments and functional limitations, the causes of the disability, the personal background and social environment of the individual. Some people have genetic disorders that impact severely on their intellectual, social, and other functional abilities. Others with mild intellectual impairment may develop adequate living skills and are able to lead relatively independent adult lives. Approximately 75 per cent of people with intellectual disability are only mildly affected, with 25 per cent moderately, severely, or profoundly affected

The characteristics and impact of a person's intellectual disability will vary depending on the cause. There are several common characteristics that may have a significant impact on an individual's learning, including:

- difficulty understanding new information
- difficulties with communication and social skills
- slow cognitive processing time
- difficulty in the sequential processing of information
- difficulties comprehending abstract concepts.

7. Dyspraxia:

A term that refers to lifelong trouble with movement and coordination. It's not a formal diagnosis. But you may still hear people use this term. The formal diagnosis is Developmental Co-ordination Disorder (DCD).

People with these challenges can struggle with balance, coordination, and motor skills. These include:

• Fine motor skills (for making small movements like using a pencil)

7

- Gross motor skills (for making large movements like kicking a ball)
- Motor planning (for doing multi-step tasks like tying a shoe)

The difficulties usually don't exist on their own. People often have other challenges, too, including:

- ADHD
- Transcription and handwriting difficulties, like dysgraphia
- Sensory processing issues
- Mental health issues, like anxiety
- Slow processing speed
- Autism

Struggles with motor skills can impact learning, working, and daily living. But people with dyspraxia are just as smart as other people. And there are many ways to help at home, at school, and on the job.

8. Brain damage - neurological damage

Stroke Victim. Video depicting a rider's perspective. https://www.youtube.com/watch?v=Jf7FA1n2r50

9. Dyslexia

Dyslexia is a learning disorder that affects the ability to read, spell, write and speak. Children who have it are often smart and hardworking but have trouble connecting letters they see to the sounds those letters make. Adults can have this learning disorder as well. Some people are diagnosed early in life whereas others don't realise they have an issue until much later.

Children with this disorder often have normal vision and are just as smart as their peers, however they struggle more in school because it takes them longer to read. Sometimes they may have visual tracking complications. Trouble with processing words makes it harder to write, spell and speak clearly.

Dyslexia can be described as a neurobiological disorder which affects a person's ability to read and write, it affects their memory, organisation, concentration, ability to multitask and communication. Interestingly when you now take the description of any of the equestrian Olympic disciplines the challenges become clearer.

Fifteen to twenty percent of the population are believed to be dyslexic, but it is still poorly understood and especially when it comes to the equestrian world. A dyslexic person looks normal, appears to do all the normal things,

and usually have become expert at putting up a facade to hide their difficulties. They often must work harder than others and put in extra hours to overcome daily challenges. Such a facade requires additional energy and can become tiresome.

Reading and writing is the most common difficulty, and some dyslexic people experience a visual stress when reading that makes words unclear, distorted or even appear to move.

Another issue faced is too much information, such as a list of instructions or directions which makes it harder for the dyslexic brain to process. In addition to all the above, poor short-term memory and concentration mean that learning a dressage test for instance is phenomenally difficult; it becomes even more complicated when they don't know their right from their left. Often dyslexia is accompanied with dyscalculia (problems with mathematics) Speech and language disorders and Dyspraxia (effecting fine and gross motor coordination).

Dyslexic children or adults competing in dressage face huge handicaps, especially when they are not allowed a caller

Many riders with dyslexia have struggled internally with other people's misconceptions. They have all experienced feeling of being stupid and embarrassment. Many suffer with poor self-esteem. For some children and adults riding may be the one thing they excel at, it gives them happiness and confidence that they don't get in the classroom. They often have a skill and feel on a horse that brings out the best in them and the horse. Our current system discourages dyslexic riders from achieving their full potential at championships as the fear of forgetting the test is front and foremost in their minds and their energy and focus is absorbed by remembering the test rather than the way of going and their riding.

https://www.eurodressage.com/2021/10/10/marguerite-kavanagh-dyslexia-and-dressage

Charlotte Durajan grew up battling dyslexia, which led to anxiety at school. But as much as she feared a spelling test, as a child she was never nervous at a horse show. The bigger the crowd, the better. (That changed when she had to memorize dressage tests!)



https://www.google.com/search?q=charlotte+durajan+and+her+dyslexia&rlz =1C1GCEB_enAU991AU991&oq=charlotte&aqs=chrome.2.69i59j46i131i433i51 2j69i59

10.Anxiety:

Common anxiety signs and symptoms include:

- Feeling nervous, restless or tense.
- Having a sense of impending danger, panic or doom.
- Having an increased heart rate.
- Breathing rapidly (hyperventilation)
- Sweating.
- Trembling.
- Feeling weak or tired.
- Trouble concentrating or thinking about anything other than the present worry.

From the Everyday Equestrian:

There is a wide range of situations whilst horse riding where anxiety may appear. Some of the most common examples include:

Hacking out, cantering, jumping, competing, riding a different horse, getting back on after a fall.

As individuals, we all have our own unique way of feeling when we are nervous. Some of us may show our nerves more than others do. Just because you can't always visibly see the symptoms of nerves does not by any means they are not there.

Some common examples of how you may be feeling when you are anxious could be:

- Shallow breathing
- Heart racing
- Sweating
- Shaky legs
- Light-headed
- Forgetfulness
- Butterflies in your stomach
- Needing to go to the bathroom

When you're feeling anxious, the key thing to remember is that your mind is responding to a **perceived threat**, whether that threat is real or imagined.

Changes in our riding position are one of the most common effects of feeling nervous and anxious whilst riding. We often hold our breath, tip forward in our upper body, grip up with our legs, shorten and pull on the reins. This is sometimes referred to as moving into the foetal position. This position is an instinctive response to fear and has the purpose of protecting our major internal organs.

Unfortunately, the foetal position is one of the worst things we can do as riders! At best it makes us insecure and unstable, and at worst quickly tells our horse that there is a Big Thing to worry about and he/she should get ready to run away! This can essentially turn a not-great situation into a very bad one for both you and your horse.

The good news is that there are many things you can do to overcome your nerves when riding! Here are some of tips:

1. Recognise your nerves

Practice becoming more self-aware and noticing when you're feeling nervous. If you don't realise that you're experiencing symptoms of nerves and anxiety, you can act to manage and overcome them.

"The first part of finding a solution is recognising that there is a problem"

The quicker you identify your nerves kicking in, the sooner you can act and change how you think, feel, and act. Conversely, the longer you allow yourself to feel nervous, the more difficult it becomes to let go of them.

The key to being self-aware is to gather information about what is going on in your mind without judgment or filtering. Simply notice what is happening as if you are an impartial observer, then you become empowered to act.

2. Slow down

When we're anxious and nervous, time speeds up in our minds. It can feel like everything is happening on fast-forward! One of the first things you need to do is to slow down. Remind yourself that you always have a choice in what you are thinking, feeling, and doing.

You are in control of you.

Stop, take a minute or two to check in with yourself, notice your thoughts and emotions. Take the time to explore what is happening in your mind and see

how you could change just one thing to help you feel more positive. At this time even focusing on slowing down the horses trot and counting the two beats out loud may be enough to change focus and create calm.

3. Change the filter

The film that is playing in your mind is *not real*. It is simply your mind telling you a fictitious story it has created based on your fear, previous experiences, and imagined threats.

Just because your horse spooked when a bird flew out of a particular tree whilst out hacking, does not mean that it will always happen. I'm sure that you have ridden your horse past many trees, even that particular one, without any reaction at all! It's simply that your mind is doing a brilliant job of filtering information from your world, but has a tendency to filter out all the positive experiences you have had where your horse has not spooked at all.

So, try changing your mind's filter by asking yourself better questions, and looking for the positive evidence (and I promise you there will be plenty, you just have to find it) to discredit that negative story that your mind is giving you.

4. Sit better

When we're nervous, we ride defensively and our body wants to protect itself from accidents, which unhelpfully means that we're actually more likely to fall! One of the simplest and most effective ways to feel more confident is to sit back on your seat, bring your shoulders back, look up ahead, and relax and lengthen your legs. By riding in a more positive, effective position, we are better able to convince our mind (and our horse!) that everything is absolutely fine.

5. Take smaller steps

When you learn to drive, you don't go straight out onto a motorway during your first 3 sessions, do you? So why would you think that you should be able to go cantering around an open field straight away, without building your confidence and technique in the arena first?

Whatever it is that you are nervous about, break it down into the *smallest* possible steps. For example, if you're nervous about getting on the horse and the thought of mounting fills you with anxiety, then your tiny steps might look like this:

A) Practice bringing your horse to the mounting block calmly and in a relaxed manner

- B) Standing on top of the mounting block while your horse stands patiently alongside you
- C) Place your foot in the stirrup and feel calm and comfortable
- D) With your foot in the stirrup, lean over the saddle a little, feeling confident and relaxed
- E) Place a little more pressure on your foot in the stirrup, and notice how the horse stays still and relaxed
- F) Visualise swinging your leg over the horse's hindquarters and sitting down gently into the saddle

The key here is to just practice **ONE** of these steps each day until it becomes boring and non-eventful, then and only then move onto the next step.

6. Simple reframe

This is one of the most simple and effective ways to reframe your nerves so that you can ride more confidently, positively, and effectively.

Instead of saying to yourself "I'm so nervous, I can't do this", change it to "I'm so excited, I can do this". Your physical symptoms of nerves and anxiety are the same as your physical symptoms of excitement and anticipation!

Try making this your new mantra, so that you can let go of your old nerves.

7. Remember that it's supposed to be fun

If you have lost your love of riding, think about why you ride and what you want to get from it. Working on your values and discovering what is important to you (not anyone else), can help you feel more in control and positive about what you do with your horse and your riding.

For example, if you experience extreme negative emotions around doing a certain thing, then ask yourself why you really want to do the thing. What is driving you? Why specifically do you want to do XYZ? This can be challenging, but you will find answers to help you decide whether it is important to you or not, and therefore whether you work to find a solution and overcome how you're feeling, or simply stop doing it!

8. Get help

We are never taught at school how our minds work. When you can get your mind working for you instead of getting in your way, you can do anything you

want to. It's important to recognise that if you are struggling with fear, anxiety, nerves or feeling overwhelmed around your riding, that you will need help and support from a professional to become a confident, positive rider.

Working with a Rider Mindset and Confidence Coach will help you get rid of those old limiting beliefs, and help you learn tools and techniques to help you build a positive mindset so that you can get back to doing what you love.

Skills to overcome anxiety while riding- article below:

https://www.youtube.com/watch?v=CYmctMDQfwY

11. OCD:

Compulsive behaviour includes:

- cleaning and hand washing
- checking such as checking doors are locked or that the gas is off
- counting
- ordering and arranging
- hoarding
- asking for reassurance
- repeating words in their head
- thinking "neutralising" thoughts to counter the obsessive thoughts.

"The COVID-19 pandemic was a difficult time for many people, especially those prone to anxiety and obsessive behaviour", according to Professor Bill Brakoulias, acting executive director of mental health services for Western Sydney Local Health District.

Prof Brakoulias explained that about one in five people have a tendency toward compulsive behaviour, but only 1-2 per cent develop the debilitating pathological condition obsessive compulsive disorder (OCD).

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@DrTempleGrandin pic.twitter.com/DuH6mwY9fA

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- Exercises whilst riding to release tension.
 https://www.youtube.com/watch?v=shwBx7WOvi4
- 5. ADHD articles and videos:

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https://www.youtube.com/watch?v=CYmctMDQfwY