

JANE CARLEY reports from Centaur Biomechanics' inspirational rider confidence clinic and discovers how correct mental and physical training is the key to success

entaur Biomechanics' two-day Improve Your Riding and Confidence Conference, held at Moulton College, Northamptonshire, addressed a wide range of topics from rider nutrition and fitness to sports psychology and improving soundness, presenting the latest research and techniques.

MENTAL AND PHYSICAL FITNESS

Eco-coach is a partnership of personal coach Tjalling van den Berg and mental coach John van Apeldoorn, who have set up the Adelinde Training Centre in the Netherlands following their success with the Dutch Olympic silver medallist.

Tialling and John work together to help athletes reach their potential: "Coaching is bringing out what is already there."

In a highly interactive session, delegates were immediately taken out of their comfort zone by being asked to change seats and work in pairs with strangers, as well as considering how they approach new challenges and the first impression that they create.

Tjalling emphasised the importance of posture. "Good posture brings alertness and energy," he explained.

He added that this was just as important when dealing with animals as it is when dealing with humans.

"In terms of communication, 85% is body language and tone of voice, and just 15% is words. Walk positively towards your horse as you go to get on, and your confidence will transfer to him."

Using profiling, the Eco-coaches develop training programmes based on an athlete's strengths and weaknesses.

Tjalling explained the difference between a trainer and a coach: "Trainers tend to give instructions, while a coach asks more questions and delves deeper into the individual - the athlete is central. We also focus on the process more than the results, as an athlete will learn from loss."

He added that, under their programme, Adelinde is set assignments that are almost impossible, and that every day of her training is different.

Video footage showed her juggling balls while jogging through a grid of poles, catching balls while rapid-fire questions were directed at her and testing her balance on a fitness ball.

Delegates were given the opportunity to try out these techniques, working in pairs, as well as perform exercises to improve their mental and physical agility.

"Do one exercise three times and then move on," Tjalling said. "If you are coaching someone, ask them what exercises they think would be helpful and why. What are they going to get out of it?"

GOAL SETTING

In a section on goal setting, delegates were also asked to think about their goals and whether they were too broad.

MINDFULNESS EXERCISE

Dr Amanda Owens, sports psychologist, recommends practising a mindfulness exercise to stay in the present, and avoid worrying about the competition ahead:

- I see: What can you see in your immediate surroundings?
- ◆ I hear: What can you hear in your immediate surroundings?
- ◆ I notice: This could be a feature of the place that you are in.
- I feel: Hot? Cold? A breeze against
- ◆ I imagine: Something just outside of your immediate area, such as birds in the trees outside.
- ◆ I smell: What aroma can you pick up in your surroundings?



"Determine your goal, keep it short and powerful, be positive and visualise your success," advised John.

He added that having too broad a goal can reduce your focus: "Think of a singular goal and simplify it."

The Eco-coaches also touched on the negativity that can creep in after a disappointing competition: "Don't blame someone else or say 'yes, but...' Don't think of problems - have solutions."

John suggested that the athlete should consider if they have done their best. "If not, your coach can help, but, in any case, turn the negative into a positive - 'what could I have done better?' You haven't lost, you just haven't reached your goal yet."

He added that athletes should aim to improve themselves every day, and to have commitment to training, rest and a good diet.

Winning can have its pitfalls, he pointed out: "Winners can get complacent, lazy and arrogant, so when you have reached your goal, set yourself another one."

Working with riders who performed a short test in front of the delegates, the Eco-coaches asked them to assess their initial performance.

Young rider Jade Clark, who rode novice movements sympathetically on five-year-old Fuchur, admitted that she felt under pressure, lost some concentration and focus, and got tense.

"Jade should focus on her feet and then continue to build her focus upwards, through her body, so that she can concentrate and avoid rushing the horse," suggested John.

Tjalling asked her to walk towards him and introduce herself, looking up and smiling to increase her confidence.

"Your head affects your shoulders," he explained. "Now approach your horse in the same way. When on the horse, sit proud, with your shoulders back and chin up. Keep your eyes strong and feel your balance."

This simple assessment and correction had a dramatic effect on both horse and rider, with a much more focused and relaxed performance.

"Always keep your focus. If something goes wrong in the test, don't dwell on it just go on to the next movement," said John.

TACKLING CROOKEDNESS

Chartered and veterinary physiotherapist Helen Mathie discussed assessing and managing asymmetry in the horse, using three of host Moulton College's horses, as well as her own event mare.

She pointed out that horses can display asymmetry due to their conformation, or due to an injury, and that it was worth studying the horse on a regular basis to check whether it was becoming more crooked

"A static assessment looks at the overall impression of their body proportions and conformation," she explained. "Take a systematic approach from the feet up, looking at heel angle, hoof size, pastern angle and knee height. Think of plumb lines running down the legs."

Next is movement analysis: "Walk and trot in a straight line on hard and soft ground, and then lunge on a suitable surface. Look at the limb symmetry during the gaits and the flight arc of the limb. Is he tracking up or overtracking, and what is the alignment of the limbs? Look at the head, spine, pelvis and tail orientation."

Helen explained that, while asymmetry can cause strain and lead to pathologies (injuries or lameness), training can help, especially in overcoming oneside dominance that leads to natural crookedness.

"The horse will always favour one diagonal pair. However much we ask them to halt square, they will always prefer to advance one foreleg. The dominant diagonal can influence foot balance and joint wear."

At the walk, the horse's belly will always swing out more to one side - its convex (stiffer) side.

"Horses also have a dominant eye, with which they prefer to look at unfamiliar objects, so will also tend to angle their head and tilt their shoulder to that side."

Conformation will make some horses preferentially load the forehand, while others may have limb length discrepancies - this can also be as a result of injury.

"Have a look at the rider's posture during a ridden assessment, as this can also affect the horse's crookedness. It's important to get yourself checked out as well!"

Soft tissue or skeletal manipulation helps horses with straightness issues, but Helen emphasised the importance of correct saddle fitting, regular dental and

66 Winners can get complacent, lazy and arrogant, so when you have reached your goal, set yourself another one" JOHN VAN APELDOORN

bitting checks and, where necessary, remedial farriery.

"A saddler can also help identify a problem - if different limb lengths affect the position of the scapula, the saddle won't fit well. The farrier can often help in this situation by rebalancing the feet."

Referring to the college horses as examples, Helen suggested that appropriate training can help overcome asymmetry.

"The dapple grey has a dominant right foreleg, so gentle counter-flexions and testing the horse's ability to stay on the centre line when flexed to the left or right with the body straight would be useful.

"Gymnasticise the horse - the dressage horse in particular needs a strong core, so

66 Don't expect a bad experience simply because that was what happened last time, as it will define vour behaviour"

DR AMANDA OWENS

THINKING POSITIVE

- Recall training and competition successes and visualise them. Don't dwell on failures.
- ◆ If you have problems, accept that they are horrible, but temporary.
- Know your pressure and stress triggers so that you can manage them.
- Get feedback from others rather than just listening to your internal monologue, and find something positive from your performance.
- Review why you are competing.
- Remember mind over matter believe that you can be successful.

riding plenty of transitions is important. Lateral work is very useful as it improves the horse's ability to lift his back. Using Thera-Bands on the lunge can also build core strength, but needs to be done correctly. Above all, ride forward and straight."

IMPACT OF RIDER IMBALANCE

Centaur Biomechanics' Russell Guire and master saddler Mark Fisher showcased a new application for the Pliance saddle pressure system, studying how the rider sits by demonstrating how the pressure exerted by the rider's seat bones can vary dramatically.

The Pliance pad is placed on top of the saddle rather than underneath in this instance, and measures the pressure from the seat bones, displaying it in graphical form on a PC. Russell also uses high-speed video footage with Quintic software analysis to track the changes and relate them to the pace or direction of the horse.

"Some asymmetry is natural - righthanded people tend to have shorter right leg and tighter right hip flexors," Russell explained. "Rider biomechanics can help to make the pelvis more neutral and the 'blocks' on top in balance – this is important, as asymmetry affects saddle balance. Getting a friend to video your »



riding on a regular basis can help you track your asymmetry."

Demo rider Jade's saddle had been padded up on the left-hand side to exaggerate asymmetry for the purposes of demonstration, and the graphs showed the effect of this.

"The right seat bone is reaching peaks of 15psi or more, when the average is 6-7psi," explained Mark, while Russell pointed out that the imbalance was causing Jade to slip over to the right and tilt her body to the left.

"If the saddle is not correctly balanced, the rider cannot sit straight," added Mark. "In many cases, the solution is to balance the saddle and then correct the rider."

COMPETITION PRESSURE

Sports psychologist Dr Amanda Owens has worked with athletes at five Olympic Games, and knows a thing or two about pressure, having been a top junior tennis player. She outlined the psychology and physiology of pressure on athletes, and added that coaches and managers can sometimes exacerbate its effects.

"Self-awareness can be helpful as it builds self-control," Amanda explained. "The emotional effect of pressure is also important - how you respond can impact on your horse."

Amanda also recommended building intensity in training to help riders cope with pressure. "You need to understand your physiological responses, such as an increased heart rate or 'jelly legs' or shaking.

"Consider how you react before, during and after a competition, and think about external factors that might affect you, such as a particular venue or weather conditions, or the horse that you are riding."

Resilience is something that coaches can help with - improving recovery from a poor performance or bad experience, she pointed out. "Athletes need to be adaptive and to 'bounce back'. Where learned helplessness takes over, you can feel powerless to change, but talking can help, whether to friends or your coach. It's important not to go into denial.

"The best outcome is to change your expectations - don't expect a bad experience simply because that was what happened last time, as it will define your behaviour."

The next Improve Your Riding and Confidence Conference will take place in June 2016. For more info. visit www.centaurbiomechanics.co.uk



