

The Role of Therapeutic Riding Teaching Meta Communication In Education, by Anita Shkedi, Med

Therapeutic riding, (TR), has been in existence for almost fifty years and today provides a service to thousands of challenged equestrians in forty five countries. Yet parents, teachers, educators and many medical professionals still find it difficult to understand 'the special characteristics of a horse', and how it is capable of changing many lives.

It was thousands of years ago that the horse bonded with man, an ancient bond that established a level of communication, (behavioral, emotional, cognitive and relational), whereby both the animal and the human could reconstruct the content of the message sent by the other.

The moving horse as we know it today is a real relational highly sensitive animal, having been born with the ability to inspire humans through dreams and fantasies, symbols and archetypes, meta- communication, reaching out to the conscious and unconscious mind. TR uses the horse as a very valuable living apparatus that never fails or disconnects if it is interrupted. It is sensitive and has the ability to constantly "listen" to the rider and react accordingly. With this kind of sensitivity and immediacy of reaction, a non-verbal pressure is put on the special learner to acquire self- control and self-regulation.

The article is written with a view to enlighten others about the role TR has in education teaching meta communication that encourages meta cognition.

What is Meta communication (non-verbal communication)? Knapp, quoted by Tucker (1991) defines nonverbal communication as, "...all human communication events that transcend spoken or written words." (1991: 21) Knapp classified non-verbal communication as kinesics, (body motion), physical characteristics, hap tics (touching behavior), proxemics (personal space), artifacts and environmental factors. According to Tucker non-verbal communication accounts for 65% to 93% of all messages we send and receive, and is often more believable than verbal communication. Katagiri, Shimojima (2000) defined meta-communication as, "...the process of communicating information and knowledge other than content." (Katagiri, Shimojima 2000: 195) It usually involves higher level skills, such as: different ways to organize the material; how people think; how people solve problems; what to study in a textbook; how to read and extract information from textual material, etc.

What is horse communication? Roberts (1999), a famous trainer of difficult and young horses studied the role of the matriarchal horse in the wild herd. He observed that she is the real leader of the heard, not the stallion. She is the one that maintains law and order and decides where the herd must move. She gives orders by non-verbal gestures and communication, and is a real relational animal that has been given this ability through genetics and tribal memory. This behavior can be seen in all domesticated horses worldwide. By observing the wild herd, Roberts noted that if a young offender misbehaves then the matriarch controls the situation by active non-verbal discipline. According to Roberts the dominant mare would drive the young offender out of the heard by kicking and biting, not letting it in again until he or she shows signs of forgiveness. The mare demands forgiveness by standing "four square" in front of the offender staring directly at it. This powerful visual contact and stance, frightens the youngster into submission. It then asks for forgiveness by making licking and chewing movements with its mouth, and dropping its nose close to the ground. The matriarch responds, changes her attitude, drops the eye contact and turns her back on the young offender, all signs of forgiveness. These signals give the offender the chance to reenter the herd again. Roberts went

on to prove that this powerful body language could be imitated and used by humans to train young and difficult horses.

In fact there is far more to horse communication than what is simply described by Roberts. Horse communication is egocentric. According to Barry (1994), the horse communicates with others by using gestures, (putting ears back), or through gestural transmission, (isopraxy, iso-equal and praxis-action). If the horse is in a mood to gallop, it gallops creating a synchronized response amongst the herd, that they all start galloping. Barry explains how horses express sensory affective behavior, isoesthesia, (from iso -equal and esthesis-sensitivity, which is the sensitive spontaneous understanding between animals, which can also be seen between animals and humans).

Horses are sensitive to another sick horse and show sensitivity towards a disabled person. He maintains that horses communicate through social space, (isognosy, iso-equal, gnosis- knowledge), primitive space that is "topological" by nature, i.e. it takes into account most elementary relationships: proximity, separation, continuity and succession.

How does this communication work interspecies? "Riding therapy can bring about patient recovery" (Barry 1994: 148) Barry believes that the success of therapeutic riding that brings about patient recovery is based on the interconnection of nervous networks. Applying the isopraxy (gestural transmission), principal between patient and horse an effective relationship can be recovered and then an isoesthesia period, a verbal relation may be initiated and coherence between archaic, limbic, and upper brain may be restored in a relaxed field leading to patient recovery.

Scheidhacker (1994) supports this idea when she described the emotional value of the horse to humans. Working with psychotic patients in a dynamic- psychiatric clinic where many patients participated in riding therapy, she discovered horses react to conscious and unconscious human emotions, and thus found out that they could be used as part of the treatment for psychotic illness. She understood the horse to be a real relational tool; describing its special qualities, and expressing how special the horse was, helping the patient to connect and communicate. She said, "In contrast to inter human communication, the man – horse encounter does not contain such illness-disposing factors as speech and therefore rapport remains in non-verbal communicating. Nonverbal communication is of fundamental importance to the psychotic process. The horse is a relational object, which remains entirely true because of its immediate way of reacting". Scheidhacker maintained the value of the horse as a purposeful non-verbal intervener, consciously using physical, facial expression, gestures and emotional intent. According to Schiedhacker (1994), McCormick and McCormick (1997), non-verbal motherly intervention is an important psychological process that starts when a human baby is first born. If the process does not take place then poor mothering occurs which later on has a direct impact on a child's development of psychological processes causing illnesses later on in life. In fact non-verbal communication is so significant and is directly connected to psychological illness, a disturbance of the ability to relate and communicate.

McCormick and McCormick (1997) focused on horse – man communication maintaining their belief in the power of the meta -communication. As we communicate with horses in so many ways especially psychologically, physically and through extrasensory, knowledge control, perception, visualization and telepathy, skills and cognition are improved. In fact the man horse connection goes beyond technique and develops a sense of what to do and how we do it.

I am convinced that not only is the moving horse a highly sensitive animal, but is an animal born with the ability to inspire humans through dreams and fantasies, symbols and archetypes, a level of meta- communication, reaching out to the conscious and unconscious human mind. A unique man-horse experience supports creativity, spirituality, mystical union, improving self-confidence and self-awareness, and higher levels of thinking. Symbols can spur personal growth; McCormick

and McCormick (1997) cited Carl Jung who discovered that people use symbols to communicate with one another in powerful ways.

Jung writes, "What we call a symbol is a term, a name, or even a picture that may be familiar in daily life, yet that it possess specific connotations in addition to its conventional and obvious meaning. It implies something vague, unknown or hidden from us... As the mind explores the symbols, it is led to the ideas that lie beyond the grasp of reason... there are events, which we record unconsciously and may lay dormant for years or forever, but later on may suddenly return."
(McCormick, McCormick 1997: 157-158)

A rider, for example, may see her horse as Pegasus, when sitting on its moving in the pace of canter. The rider is euphoric, picturing that she is flying on the most magnificent horse. Observers would only see it as a grey colored horse. According to Scheidhacker the horse is able to stand for different archetypes depending on the particular point of view. It may be the child's archetype, superman or woman, the anima or animus, the Great mother or the wise woman or man. Scheidhacker (1994) says, "The horses' archetypal symbolism can help us recognize and resolve archetypal fixation and gain insights into the dimensions of the collective unconscious." (Scheidhacker1994: 1)

Feuerstein (1998) adds to Jung's idea of symbols and the importance of non-verbal communication. He discusses his theory of mediated learning experience, (MLE). With the child, he explains, "What of the interaction, where or when it takes place. It is rather how?" (Feuerstein 1998: 43) He explains that we can communicate units of information by, singing to child, reading him a story etc, but in order to turn it into MLE, the interaction has to have a special quality that motivates and arouses the cognitive system. MLE does not depend on language. It uses gesture and symbols. This form of non-verbal communication mediates the reality, organizing the life of the child.

Beveridge (1998) voices concern regarding the importance of meta communication and meta cognition, commenting on the recent neo Vygotskian argument, which interconnects dialogue processes (scaffolding), tools for thought and natural concepts (constructivism). Thinking is seen as developing through internalization of the individual's engagement with these interconnections. Duveen (1998) says the "Vygotskian model established a dynamic which travels from practices established as interpersonal relations through internalization to interpersonal achievement of this practice". (Duveen, 1998:82) Dewey says, We must not overlook learned physical activities, learning physically, is also mental, intellectual, in quality.... the link between practice and intellectuality... it is not simply a case of acquisition of a new physical activity capacity; there is also learning in the mental sense. The infant experiences joy as he learns to control, through self-activity and self-reliance using his senses and movement. Self-activity cannot be secured internally without the cooperation of bodily action through play, construction of objects, and manipulation of materials and tools" (Dewey, 1939: 608-609). According to Dewey, (1939) to increase pupil learning the quality of teaching has to rise. To learn, pupils have to have their senses stimulated.

However not all educators agree with the idea that non verbal communication, and especially meta communication with animals is an important and powerful form of communication. In fact there are those who would say it is of little relevance to improving cognition. There are some who would argue that in evolutionary terms much of the information passed among animals has little educational significance; communication was not education. Hamilton insists that animals only use communication for biological reasons; in fact he is convinced that they communicate for instinct rather than by social learning. Hamilton argues that teaching and learning are special forms of communication, which begins non-verbally, and is developed through play but then reach another level and move on to the cognitive plane, whereby the scope for telling how becomes much greater than showing how. Experiences could be brought to mind more easily than brought to hand". (Hamilton, 1991:19)

Methodology

To confirm the positive theoretical findings I investigated three special learners; gathering data from case studies, personal interviews, and questionnaires. I analyzed the data and reviewed the actual TR praxis

considering three main issues; supporting inclusion, teaching Meta communication and teaching self regulation and management (Shkedi, 2003: 8-15)

I chose a qualitative and naturalistic method of research capturing observed differences and trends towards improvement that did not reach statistical significance.

The three special learners chosen had been working in the INTRA program at Hadassah Neurim for some time. They were all candidates from High School in different areas of Israel. Their commonalities were that they were top students, in regular high school and had the ability to confirm or deny their therapeutic riding experience.

The studies were conducted over different periods of time; which was relevant in the final analysis of both the case studies and the interviews. The format of the studies was a précis of reports including aims and goals, methodology observations and spontaneous remarks and comments from the instructor, special learner, parent and teachers.

The advantage of this type of reporting was that it gave a far longer and wider picture of events taking place both in the TR environment and out side the TR environment.

One candidate was male, (S1), with ADHD. The other Candidate was male, (S3), with a chronic intestinal disability. The third candidate was female, (S2), with Cerebral palsy.

The teachers of these students were included in the interviews as well as were each of their parents.

Research Data- Case study observations- Evidence of Meta Communication

Case study S1

S1 was born with ADHD, which means that he was unable to inhibit his behavior due to a core deficit found in the pre frontal cortex of the brain. This results in the inability to inhibit response.

S1 was unable to prolong memory of an event. He was unable to rely on past events to help him know how to act. He had a poor sense of time. He was unable to split up information separating fact from feeling. He needed an environment or something external to stimulate his arousal or drive. He was unable to internalize language; nor reflect; problem- solves; or subjects himself to analysis.

Aims and goals S1

The aims and goals of therapeutic riding program were to improve his primary, biological/neurological challenges, ineffective sensory systems, weak or missing links between emotions, intentions and sequencing abilities, and his secondary deficits - communication problems, behavior problems, learning problems, loneliness, to give S1 enough tools to help him "think on his feet" create innovative logical solutions to problems, connecting his emotions to his behavior and thoughts. Developing a little more understanding of which he is what he wants, and what he is capable of doing.

S1 began his riding therapy by being extremely afraid of the horse. He found that working beside an older and more sensitive horse helped him. In his first months of riding he established a two way intentional communication between himself and the horse, taking care of her needs and respecting her sensitivity, at the same time learning to inhibit his behavior. After four months of riding therapy he was able to relate and communicate with the horse and others expressing his feelings, ideas developing friendships.

By nine months he had built sufficient Meta -communication to be capable of building a relationship with another living being, and emotionally flexible enough to continue serious dressage training. By one year he had become a dressage rider at national level. He devoted his time and money on the horse, fulfilling his dreams and fantasies. He became reliable and punctual and a caring participator in all aspects of the centers life. Away from the TR environment he continued to improve his performance in mathematics, physics and computers. His teacher reported that he was a top student coping very well with many new friends.

Case study S2

S2 had been born with cerebral palsy, spastic diplegia, severely affecting both her lower limbs which meant that it was difficult for her to walk easily and certainly would never be able to run. She did have good use of her upper body including her arms and hands.

Aims and goals S2

S2 had started TR at a very young age and therefore her first aims and goals were made to stimulate her through developmental riding therapy. Later on the goals changed as her riding became more challenging. Her most recent goals have been to learn skill of dressage riding so that she can take part in competition.

S2 started TR from 3 _ years, by the time she reached 8 years she discovered that meta- communication with an animal was a real relational experience. She started to consider the horse as a real friend. Changes were noted away from the horse, which included her improved conversational ability, her level of communication. She learned from that time sequencing, number patterning, receptive and expressive language conversation and reversibility. By the time she was twelve years she entered the world of dressage riding, she needed to take emotional risks, new physical challenges, get in charge of her feelings to learn to ride difficult tests. The external control provided by the horse developed her internal control. She says needs a horse in her life for ever and would like to own a farm. Away from the TR environment changes were taking place at school, S2 School marks were rising. By seventeen S2 was not only a regular dressage riding competitor, but had developed sufficient skills and confidence to pass her driving test first time and enjoys the experience of her new found freedom.

Case study S3

S3 was born with an extremely debilitating disease. He has known about this for as long as he can remember making frequent visits to hospital, and requiring treatment on a daily basis. This has left him with a severe anxiety problem, which affects his behavioral and social performance. Not only does he need life saving daily infusions, but also he needs weekly psychological counseling. He came to riding as a child who had an extremely poor opinion of himself, and especially his body. He was suffering from fear, and was unsure of his affective ability. He appeared to have no capacity to use his power, or his talents. He was resentful of his poor body ability, was tactile defensive, and appeared to be driven by negativity, rather than positive thought.

Aims and goals S3

The aims and goals of TR were to break through these emotional barriers of uselessness trying to give S3 the confidence; power and control that would make him feel affective, and less fearful. TR was to encourage S3 not to focus inwardly, dwelling on the things he could not do but on what he could do, by teaching him new skills, through the art of classical riding and mediated by TR instruction.

After two months S3 reported that he was beginning to learn body awareness by communicating with the horse's body. He began to understand the horse's gestures and communication clues, responding appropriately. By six months he was positively changing his opinion of his body, which he had always regarded as useless. By one year he felt a sense of power and control, he was communicating with the horse. Away from the TR environment he began to build real friendships at school. S3 remarked that the horse had taught him how to behave, how to be responsible to himself and others, how to monitor his own behavior, actively listen and report back to him. His teacher reported that he was more relaxed less anxious and fearful, demonstrating that he had achieved management control self regulation, and responsibility. As of today S3 is competing in national dressage championships, has a girl friend, and still remains at the top of his class.

The Interviews

The aim of the interviews was to probe responses, investigate motives and progress. The raw data was then taken from interviews; similarities, differences, patterns and items of significance were extracted. The findings were presented in tables and charts, and then analyzed and interpreted. The results showed items that were most significant, and illustrated the points being made.

Meta communication results

Generally all three teachers, (T) reported that there was a supportive role for TR in education. T1and T2 reported that the horse had taught their special learners meta- communication awareness of another animal, which had taught them to get in touch with their bodies, where as T3 was not quite so aware of this fact. All parents reported that at the outset TR has a real impact on their children's lives. P3 reported that S3 had got in touch with his body. P1 reported that TR had changed S1 opinions of his body awareness, in addition it had changed how he dressed, his appearance.

P2 reported that because S2 had ridden horses from so very young it was a fact that she had walked early, and had a good opinion of her body awareness and control.

P1 and P2 were particularly enthusiastic because they had seen how TR had influenced their children in school. P1 said that there was a constant steady improvement in all classroom activities, his ability to study and be in control of his behavior.

P2 was convinced that it had been the riding that had given S2 her self-confidence, power and control, the ability to stick at learning, take risks.

P3 felt that TR had stopped S3 focusing so much on his problems and self, making it easier for him to try to make relationships in class.

Structured interviews: Scoring

When recording the results a middle value was chosen to take into account any extremes at either end of the range of scores, which would affect the mean to a significant extent. When looking at the range the highest and lowest scores were noted and their values measured.

The range of scores went from (1) "not at all" (2) "barely", (3) "to a certain extent", (4) "quite well", (5) "completely".

Results of Structured Interviews

Separating the questions

The average score of the thirty questions used during the interview and asked of each individual. The questions were separated into several topics: Topic (1 question); Meta communications (3 questions); Relational/Behavioral /Social (6 questions); Inclusions (4 questions); Self regulation (6 questions); Self management (10 questions)

The Parents gave a score of 4= 'quite well', for the meta communication questions

The special learners gave their scores in the order: 5 = "completely" for Meta communication questions

The teachers' also gave a score of 4 = 'quite well' for "Meta communication",

Overall the highest average scores coming from all the three groups of interviewees was meta communication.

Meta Communication questions and results

The three questions about Meta communication

The questions were the following:

1. "Since TR can you understand and respect the non verbal communication from another animal"
2. "Since TR has the horse taught you to get in touch with your body"
3. "Since TR are you communicating gestures/ clues within communication".

Generally all three questions got a high score. Only the parent and special learner of S3 gave a lower result, but even so, in the interview felt there were many changes in her son since he started communicating with a horse.

- All three special learners were aware that they had built up a greater understanding of Meta acts by being in close contact with the horse, an animal that almost entirely communicates through Meta acts.
- All the interviewees understood how Meta communication controlled conversation, especially with the horse.
- All the interviewees felt that the special learners had learnt a lot about how to communicate communication; they had learned to relate and communicate.

Regardless of the disability, the case reports and interviews support that there is a place of TR teaching special learners within the school system. All three participants found TR to be a special experience, which had changed their lives. This began with their new knowledge of meta- communication with a horse, which had a direct impact upon their lives. The interview results confirmed that meta communication received the highest score, after the topic question, "Is there a Role for TR in Education" in the enquiry.

The results were comparable to those of Scheidhacker (1994) and Barry (1994) who through their research and practice found that their psychotic patients learned through non- verbal communication to relate and communicate with the horse, making significant recoveries in their psychotic illnesses, especially those related to childhood deficiencies like poor bonding.

Moreover the research data established that all three special learners developed a loving, responsible, reciprocal relationship with the horse, which appeared to have a substantial spin off into their everyday lives. S3 had normalized his tactile defensiveness, S1 learned to inhibit his instantaneous responses, lost his rudeness and anti social behavior. S2 had become confident about herself and her friendships. All three special learners had discovered much more about their bodies, improving their posture, balance coordination, body awareness and spatial awareness. Gaining control of the horse and getting it to do what they wanted it to do make them feel more assertive, powerful and in control. This added to their self-confidence and motivation, making it possible to have greater control over their existence; fears and anxieties were lost, and "risk" taking was increased. In the case of S3, TR had also helped him achieve tactile normality, changing from a person who was tactile defensive to an individual who was capable of reciprocal tactile love, especially, at last with his parents. Furthermore all three special learners have used TR to help them with school inclusion. They used the fact that they 'go riding' as a subject to discuss in the classroom with their classmates. They used their horse back riding prowess as a means to expressing their normality. They were using the symbols of horse back riding to sway the collective unconscious and gain popularity especially in the regular classroom. Jung (1964) regarded symbols as a powerful way to communicate. Feuerstein (1998) says that this kind of communication mediates reality and organizes the life of the child. Feuerstein, in Israel (1998) saw an immense value to meta communication. In discussing his view of Mediated Learning Experiences (MLE), he said, "It's not what of the interaction, where or when it takes place, it is rather how."

Nevertheless today there are still educators who believe that the regular classroom teacher must provide the links between thoughts and actions and that it is not necessary to go 'outside' to find solutions..

Therapeutic riding a program based on linking thoughts to actions, and therefore there is a convincing argument to support in favor of TR, an 'outside activity supporting education. It is clear that TR teaches learners to build solid scaffolding that moves from practices established as interpersonal relations to internalization to interpersonal achievement of the practice, a theory cited by Vygotsky (1978) cited by Duveen, (1978).

To conclude TR is able to support many different types of special learners through their school education despite the diversity of disabilities. Therapeutic riding supports and sustains the issue of meta communication/ meta cognition; all interviewees clearly understood that the horse had taught them meta communication. The results of the questionnaire produced the highest score for meta communication, with the remarks made by the interviewees additionally substantiated these positive results. One of the students in the Case study (S3) said, "...yes my body spoke a special language, talking but not speaking--- The horse has taught me that I can use my body" The significance of meta communication- meta cognition or what some educators' regard as a process towards thinking learning has been explained throughout the researched empirical literature, and was proven in the case study and interviews of the special learners. There is clear evidence that TR had a role to play in helping special learners find out about their bodies and how they worked, changing them into thinking learners.

What's more researchers observed psychotherapeutic benefits from TR, which included improved relationships, self-confidence, responsibility and increased tolerance. They saw TR as a relaxed, none threatening, way to initiating a "coherent relationship between the archaic, limbic, and upper brain". (Barry, 1994: 148)

I highly recommend that TR becomes part of the daily program for all special learners; in fact I highly recommend that the horse plays a significant role in the life of all learners.

Bibliography

- Barry, J.** (1994) "Ethological Basis of Communication Between Man and Horse. Application to therapeutic riding and analysis of the Mechanisms Utilized" Ninth International Therapeutic Riding Congress Ch. 28, North American Riding for the Handicapped Association Denver Colorado 1994, p. 148.
- Beveridge, M.** (1998), "Education Implementation and Teaching" in: Smith, L. Dockell, J. Tomlinson, P. (Eds.) Piaget Vygotsky and Beyond, Future Issues for Development Psychology and Education, ch. 1, Routledge London and New York p.1.
- Dewey, J.** (1939) John Dewey's Philosophy: Intelligence in the Modern World, Ratner, J. (Ed.) New York, NY: Modern Library/ Random House, Inc, pp. 6-15, 665-667
- Duveen, G.** (1998) "Psychological Development as Social Progress" In: Smith, L. Dockell, J. Tomlinson, P. (Eds), Piaget, Vygotsky and Beyond Future Issues for Development Psychology and Education, ch. 8 Routledge London and New York, p. 88.
- Fueerstein, R.** (1998) 3rd edition, Don't Accept Me as I Am Ch. 5, Hawker Brown Low Education Pearson Education, Australia, p.43.
- Hamilton, D.** (1991) "Teaching curriculum and learning", Ch. 5 Learning About Education Unfinished Curriculum, Buckingham Open University Press, pp. 19, 42.
- Hamilton, D.** (1992), Comenius and the New World Order University of Liverpool, Department of
- Katagiri, Y. Shimojima, A.** (2000) Available: P=+Katagiri, ++Shimojima+&spd=%09Katagiri%2C++Shimojima+ pp. 195-198
- McCormick, A. McCormick, M.** (1997) Horse Sense and the Human Heart, Health Communications Inc Deerfield Beach Florida, pp. 157-158.
- Piaget, J.** (1948), "The Origins of Intelligence in Children", available: <http://www.gseis.ucla.edu/courses/ed191/assignme.../piaget.htm>
- Resnick, L. Nelson- Lee Gall, S.** (1998) "Socializing Intelligence", In: Smith, L. Dockell, J. Tomlinson, P. (Eds), Piaget, Vygotsky and Beyond Future Issues for Development Psychology and Education, ch. 8, Routledge, London and New York, p. 145.
- Roberts, M.** (1999) Shy Boy Harper Collins Publishers, Hammersmith London, p. 37
- Scheidhacker, M.** (1994) The Horse –Real Relational Object and Archetypal Symbol, Manuscript Available: Berzirkskrankenhaus, Haar, Munchen, Germany pp. 1-4.
- Shkedi, A.** (1998) "The Special Role of Therapeutic Riding Teaching Children with Attention Deficit Hyperactive disorder", Kidum, Cohort, 5 University of Liverpool, Department of Education p. 18.
- Shkedi, A.** (1997), "Sensory Input Through Riding" Therapeutic Riding Strategies Ch.24 Published by Barbara Engel therapy services, Durango, Colorado USA, p. 463.
- Shkedi, A.** (2003), "The Role of Therapeutic Riding in Education, A Case Study" Kidum, University of Liverpool, Department of Education p. 1, 8-15, 70-98
- Tucker, S.** (1991) "Effect of non verbal communication on the communication process between handicapped and non handicapped individuals", The 7th International Therapeutic Riding Congress Aarhus Denmark p. 21.