

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

**Disabled Horse-Rider's Experience of Horse-Riding:
Exploring the Therapeutic Benefits of Contact with Animals.**

Vanessa Favali, Department of Psychology, University of Surrey.

Martin Milton, Department of Psychology, University of Surrey

Abstract

Historically, nature has been seen as beneficial to human wellbeing. Research has shown that there are a number of physical gains from contact with animals and there are a number of organisations that use animals as part of therapy. The present study explored five disabled adult horse-riders' experiences of horse riding using interpretative phenomenological analysis (IPA). Five major themes are reported here (a) physical benefits, (b) psychological benefits, (c) interaction and relationship with horses, (d) drive and motivation and (e) negative aspects to riding. These themes support what the limited literature has found. The present study highlights a number of therapeutic benefits from contact with horses and suggests that psychology would profit from exploring how animals can be utilized in therapeutic settings.

Introduction

Nature has long been seen as conducive to human wellbeing (Kaplan and Kaplan, 1989, Leather et al 1998, Wells and Evans, 2003). The early Greeks used horses to encourage the terminally ill to live and William Turke founded an inpatient retreat in the eighteenth century, using animals as a healing intervention (Schaefer, 2002). More recently, Ulrich (1984) found that patients recovering from a gall bladder operation who had a view of trees from their windows, recovered more quickly than patients recovering from the same operation who had the view of brick wall. Ulrich argued that having the view of the trees reduced stress by restricting negative thoughts and arousal (1984).

There are a number of possible reasons why nature has this effect on people. One explanation is the Biophilia Hypothesis (Schaefer, 2002; Wilson 1984), an evolutionary notion claiming humans have developed strong connections with animals and their environments around them as a method of survival. For example, humans need to be attentive to signals from animals to be able to see if the animal was posing a threat to them (Dunbar, 2004). Therefore, an animal at rest or in a peaceful state signifies to humans that they are safe, which produces a feeling of well being. If the animal is not at rest, it will signify danger and consequently produce feelings of fear (Gilbert and Bailey, 2000). Lasher (1998) proposed that the relationships

[Type text]

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

humans have with animals helps us to develop a greater awareness of our self and also provides the opportunity to trust another being albeit by way of non-verbal behaviour.

DeMares and Krycka (1998) found that participant's encounters with wild animals were meaningful and emotionally positive and argued that the same emotional states could be reproduced in clinical settings to help assist in producing a sense of well being.

One focus of the available research has been an exploration of the impact that pets have on their owners. Friedman, Katcher, Lynch and Thomas (1980) looked at the association between pet companionship and heart disease survival rates. They found that the survival rate by the end of the first year of post diagnosis was 84%. Friedman et al also compared the number of deaths within the first year of patients who owned pets and those who did not. They found that of the 53 patients who owned pets only 3 (6%) died within the first year, compared to 11 out of 39 patients without pets, who died within the first year.

Regardless of this evidence there is not much literature from a psychological point of view on the benefits of animal and human interaction and the potential therapeutic implications this interaction may have. Schaefer points out that psychologists have been "slow to formally and systematically integrate and examine human-animal bond, communication and experience as an intervention with clients" (2002, p. 1).

Despite this, there are a number of organisations and facilities that incorporate animals as part of therapy particularly for those with mental or physical disabilities. For example dolphin assisted therapy programs have been created to help children with cerebral palsy, Down Syndrome and brain damage (Nathanson, deCastro, Friend and McMahon, 1997). Horses have been increasingly utilised as part of Animal Assisted Therapy (AAT). For example HMP Guys Marsh provided the opportunity for inmates to train, nurture, care and be responsible for free-roaming horses. Lindstrand (2005) observed that horses' reactions to humans' feelings encouraged offenders to think about how to handle their emotions. One offender on the programme reported that he learnt to assert himself through communicating with the horses using non-verbal behaviour.

Horses are used for both disabled riding and as part of psychological therapy programmes addressing a variety of mental health, human development and behavioural issues, such as ADHD, depression, substance abuse, eating disorders and abuse (Hart, 1992; Schultz, Remick-Barlow, and Robbins, 2006). These programmes vary, with some offering the experience of riding and others offering the chance to look after and work with the horse without doing any actual riding. These programmes are used to help therapists and patients assess and process their feelings and behaviours. Patients use the simple task of

[Type text]

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

grooming a horse to work through various issues such as nurturing, asking for help, isolation, dependence and intimacy. Patients then apply the strategies learnt from working with the horses to cope and work through their problems, as a metaphor, allowing them to transfer their human- horse relationship to human-human relationships (Brener, 2007).

The present study aimed to explore the benefits of animal contact and focussed on exploring the experiences of physically disabled adult horse-riders. As there is very little evidence of what people are actually experiencing when they are with animals, a qualitative methodology was thought most useful.

Method

For this pilot study, participants were recruited from Riding for the Disabled Association (RDA) groups in Surrey and Wiltshire, UK. Three participants were interviewed from a Surrey RDA group and two participants were from two different RDA groups in Wiltshire.

Ethical approval was obtained from the University of Surrey, Department of Psychology before the study commenced. The nature of the study was discussed with the participants who were given the opportunity to ask questions. A consent form was signed once participants agreed to take part in the study. The study involved an audio-taped semi-structured interview. Participants were informed of steps taken to offer anonymity and their right to withdraw at any time. Demographic forms were completed by participants before the interviews began.

Twelve questions were used as a flexible guide in the interview, to explore each participant's experience of horse riding. The interviews lasted between forty minutes to an hour. All interviews were recorded and were transcribed verbatim and Interpretive Phenomenological Analysis (IPA) was used to analyse the data (Smith and Eatough, 2007). IPA allows the material from the interview to be explored in relation to the individual experience of the participant. Each transcript was read several times and initially passages, phrases and words were identified that were meaningful, followed by the identification of emerging themes (Smith and Eatough, 2007).

Findings

Demographic Information

The study consisted of five disabled horse-riders, four females and one male and the ages ranged between thirty six years to fifty six plus years old. All participants were horse riders before becoming disabled. The level of riding experience ranged from novice to advance. Rider disabilities included Multiple Sclerosis, stroke and paraplegia. The participants' education level ranged from GCSE's, post graduate degree, diploma and teacher training

[Type text]

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

college. The majority of the participants were retired, one was unemployed and one was a Para-Olympic Dressage rider. Income ranged from £0-35000. Although the small sample size was not ideal, it does offer initial insight into the experience of the animal-human relationship.

The findings demonstrate disabled horse-riders' experiences of horse riding and its therapeutic value. The researcher's interpretation is presented with examples from the interviews to support these interpretations. In the quotations the use of ellipsis indicates a pause. The data within the square brackets is used to clarify sentences. Pseudonyms have been used to maintain anonymity.

Physical Benefits of Riding

Riding provides a variety of physical benefits specific to the type of disability people have. The movement of the horse is extremely beneficial as it helps with problems such as spasticity in a way that nothing else can. Sue said "being on a horse is the only time that my pain basically disappears and my spasm relaxes. I can't exercise any other way, it's the passive movement of the horse that does it..." Zoe noted how the movement of the horse "...stretches your legs the vibration of the walk or the trot, um, is enough to break down spasticity..."

Zoe's observation of other riders reinforced this view. She said

"I knew somebody in Kent who rode...and his legs were so spastic they were practically up under his chin, but after riding round, gentle riding the knees would gradually come down, well there's not much that can do that because you would break a spastic limb if you tried to straighten it..."

The movement of the horse also helps with balance. John describes riding as, "a bit of a physio session" and explained how "[riding] is very good for your balance because it forces you to use both sides, because of the horse's movement it is changing your balance all the time..."

Physical well-being is clearly helped through riding. Sue said "...I am certainly fitter and not as disabled as I would have been if I hadn't been riding, it definitely keeps me looser, fitter and stronger and more able than I would be without it..." And Kate described how when she doesn't ride her disability is worse, "...I don't find it easy to move around um but it's worse if I haven't been riding..."

As well as providing physical benefits, horses and horse riding helps people psychologically.

Psychological Benefits

[Type text]

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

Riding can positively affect one's sense of identity, it becomes a very important part of who people are. Sue said "[I] just feel complete...it's being around the horses, makes everything complete". It is as if horses are a part of her and therefore when absent would leave her with a sense of being incomplete. This seems to provide great psychological strength in itself, but horses also act as a source of support. Sue said "I have been known, when upset, to be found sitting in the corner of a stable with a horse because they make me feel better". Kate talked about how riding serves as a distraction from the upset she experiences when she thinks about her situation.

"it takes your mind off you and I think about me all the time, all the time and its really boring and it is, it's boring and tedious and very negative and anybody who is in this sort of a position for whatever reason, maybe not MS but for any other reason it is not good for you"

Whether it's the 'personality' of the horse or the distraction, Kate focuses on the horses and not herself. She also described the way riding provides her with the opportunity to do things that are otherwise restricted by her condition. She said "...when you can't do what you usually do and when you can't actually drive, go away...not to do anything they have no idea, how, how suicidal it is and so just to get onto the horse ...it's amazing". In this way horse riding is also helping Kate's sense of wellbeing because it is giving her the chance to feel less restricted by her disability.

Interestingly, there are psychological benefits related to the size of the horse and the height at which one sits in the saddle. In particular, there are benefits of being looked up at for those who are usually wheelchair bound. Mary describes the elevation when out of the wheelchair and up on the horse. She comments "I sit in this chair all day long and I'm at the same height for every single thing I see, when I'm on a horse, I'm, I'm high, I'm up there" By being on the horse, people are given the chance to see things from a different perspective to the one she is used to, giving the rider the opportunity to look down at people rather than having people look down at them.

Riding also offers a sense of 'normality', allowing the rider to do something that they used to do. John said "horse-riding, which you did before and therefore by doing [it] now you're getting nearer to what I would say normality is" The return to riding is a return to a sense of normality which may have been lost as a result of the accident, illness or injury. Regaining a sense of normality creates a more positive attitude, "when you get back to that sort of activity you think oh life is not so bad after all" (John).

[Type text]

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

Mary also experienced a sense of normality through riding and said "I'm no different than anyone else, you know which is really nice, it's, it's something normal". Mary is talking about not being different from others, as she feels when she is in the wheelchair. When she is on the horse she is no different to the other riders.

Another important aspect of riding is the relationship with the horses. Participants talked about their past and present relationships with horses, which varied depending on involvement and riding experience.

Interaction and Relationship with Horses

The interaction and relationship with the horses are a very important part of the riding experience, sometimes described as an "emotional partnership" (Sue). The bond is strong, like "having something amputated really when they go" (Sue). The relationship between people and horses needs developing as well as having trust between the horse and rider. John said, "the trust the horse [has] in you is quite a big thing to have". Horses are described as being active in the way they give within the relationship: "they give so much and ask for so little don't they, and they're this great big beast that could kill you, quite easily, but they happily and willing submit to you doing all these sorts of things" (Mary)

The relationship is experienced as reciprocal and based on giving and taking from both horse and rider. Horses provide people with elements that they don't get from humans. Sue says that 'you can sit and cry with a horse and they don't get embarrassed about it and you don't get embarrassed about sitting and crying with a horse and some how I find horses a bit more responsive'. The horse has the ability to recognise and respond to upset, without having the words or the understanding of human language. Sue describes her relationship with horses as "real friendship" and "[a] sense of unconditional love which you don't get from anywhere else" What Sue gets from horses seems to be distinct from what she gets from people and highlights how real and important the relationship between horse and rider is.

There are other forms of interaction with horses related to the disability of the rider. Mary talks about stimulation through the senses that she wouldn't otherwise get from being in the wheelchair or from her interactions with people:

"well when your sat in a wheelchair, you're sat with a metal and plastic object that gets you from a to b. There is no, you get no sense or feeling from it you get, it's just an object, a horse you get a lot back you can feel that movement because having lost one side when I touch that side I only get feedback from the one hand so it's like touching someone else leg or arm or what ever it's certainly not mine but when you're on the

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

horse, I'm getting feedback from him on the good side so it's quite, it's really nice to have something coming back again, some, some sort of feedback"

Embodied physical contact is an important aspect of the relationship between horse and rider. Kate said "he loves to be hugged and I thought horses just liked to be stroked". She also talked about how horses want to communicate and have contact with people "they want to look at you, they will turn round to look at you". Both horse and rider desire contact with each other.

Horses are experienced as having their own personalities. Mary noted that her horse "was very temperamental, [...] she only liked it if it was sunny, if it was cold or anything else she was really very miserable". Horses are experienced as different from one another, as are people, and this can affect the relationship. Sue said that "some are much harder than others, horses are individuals, some are never as close, some have to be the boss all the time rather than a partnership".

An important process that facilitates a relationship with the horse is the provision of care they require, an element that is highlighted by its absence. Mary said:

"obviously I don't have the looking after side so that's completely done which in a kind of way I miss, you know because you get quite a bond with your horse, you don't have that personal bond where you, you can tell by just the look in the horse's eye what it's thinking, feeling, how it is that day'.

Frequent contact, whether through ownership or through responsibility for looking after horses, allows for a strong bond to be established between horse and rider. John said "it's easier to build up a rapport when you're looking after them, you know grooming and mucking out". He then went on to describe a previous relationship with a horse: "I knew his habits and would arrive at the stable door to groom him and he would whinny having recognised me so that was nice, sort of feeling a rapport"

Being with a horse also provides a sense of being connected with nature. Mary said:

'there is nothing greater than being on horse and being out, it doesn't matter whether it's cold or warm on a day and the sun is on your back and there's just the two of you, just that whole feeling of nature"

John agreed describing how hack riding provided him with the opportunity to see wildlife, "I enjoyed hacking out and being with nature and seeing wildlife, you know to be able to go places where I probably wouldn't go if I was on foot".

[Type text]

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

There are also experiences that are noticed by virtue of their absence. Not seeing the same horse every time they ride means it takes longer to build up an intimate relationship with them. Kate said "I don't always see the same horse every time but if I had a horse that I saw everyday, twice a day if possible then yes I think I would have more of a relationship with them"

John recognised that it is difficult for the horses to build up relationships as they are ridden daily by many different riders. He said, "they are ridden by, [...] up to five different people a day so that's twenty five per week so there's no chance of establishing a rapport".

Drive and Motivation

Motivation and drive varies depending on individual situations. For some participants the fact that they used to ride gave them incentive to ride again. Mary said:

"I'd always had the want to go, still ride and I looked into it and I was told that the only way I could ride was I had to be able to sit independently, by which I arranged lots of physio until I got to that point"

The love of horses and riding can motivate people to get to a position where they are physically strong enough to ride again, and thereby allowing a return to something that was a big part of life before. Zoe highlights how important returning to riding was for her after she had her accident, "I never doubted that I'd be able to do it, it was going back into the world that I had just left, which was extremely important for me". John echoed this, saying "there is a reason in the first place why you're a horse rider, so that driving reason should be there, it shouldn't be distinguished by the so called handicap".

Disabled horse-riding provides opportunities to compete that otherwise would not have been possible, "it opened a door into international competition that I would never have had, if I hadn't had disability" (Sue). Sue feels that competing is a central part of her life that she finds very appealing, particularly because of the "physical, emotional and mental" challenges it generates. She said it's about "challenging myself against [others] of similar abilities as me coming out on top, competition is exhilarating, fun and the reason to get out bed in the mornings".

Competition is an interesting aspect of the experience as it affects the rider's relationship with themselves as well as the relationship with those they compete against. Zoe said 'I loved competing and and you're competing against yourself in dressage'. Another part of competing is winning and with that a sense of achievement. Sue said, "it's given me a sense of achievement that I would not have been able to do in any other direction". Achieving and

[Type text]

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

setting goals, is not just limited to those participants who compete. John said, "I would say the biggest plus is the fact that you, leave with a sense of well being having done what you wanted to achieve"

The types of goals and targets set are specific to each participant and change over time. Mary said "in the beginning, not having to hold on to the saddle to actually be given the reins and even a couple of paces of trotting, it's all you know every little step is quite a big achievement" John spoke about using riding as a "stepping stone" to being able to do things on a horse that he was able to do before his stroke:

"the big target is to hack ride out, another target that I can do here is to also canter but at the moment the opportunity hasn't presented as such but certainly the ambition is to canter, to hack ride out and that will be nearer again to normality, so it call it so this is a means to an ends".

For John being able to achieve these goals brings him closer to normality and to what he used to be able to do.

As with most experiences some negative aspects were identified. However these did not deter any of the participants from interacting with or riding horses. For all the participants these were simply part of the experience and whilst they are tolerated they in no way outweigh the benefits of riding.

Negative Aspects to Riding

Riding can create physical problems, such as "aches and pains" (Mary) but it seems these are tolerated so as to get the benefits experienced. Kate identifies the fact that riding can be physically quite difficult. She said "when I get off the horse [...] my limbs can be twisted round at the most awkward angle and but if I give it time they will sort themselves out and I feel, I feel good". Kate felt that with more riding this will improve, "the more I do it the more quickly I recover in other words I do think that if I could ride lets say twice a day I would recover even quicker".

The difficulties are not limited to the actual riding. Sue notices that preparing to ride can be physically challenging. She said:

'what I find difficult is the effort of getting ready. The actual preparing myself, physically dress wise that is hard, it makes me tired...and I'm always very physically, very, very tired from training when I get off, it takes a lot out of me".

Despite all the precautions that can be taken, horse-riding can be a very dangerous sport. Zoe spoke about a number of falls and injuries since her initial accident that left her disabled. She

[Type text]

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

said, "I actually got hurled off about six years ago and broke my back twice down here [...] I had those crashing falls [...], that major fall that really hurt you know that hurt me" Kate also identified an injury, "I got off awkwardly, consequently my ribs hurt like hell and they still hurt and this was some weeks ago". Despite their severity, these injuries appear to be accepted as an occupational hazard.

There are other difficulties too. It's not just physical. Mary identified concerns she had before she started riding that were not related to falling off but failing. She said:

"I wasn't scared of falling off, I was just scared I wouldn't be able to do it and I think that was it, I was more scared that I'd come, I'd done all this to get here and now I'm not going to be able to do it and think that's more what I was worried of".

Discussion

This study has offered insight into disabled horse-riders' experience of horse riding. As was expected, the experience of riding varies based on their conditions and previous involvement with horses.

The relationship between horse and rider was a large part of the reported riding experience. These relationships were very personal and intimate, emotional bonds. An important part of establishing these was looking after or owning their own horses and therefore interacting with horses on a daily basis, whether it be riding or simply grooming. All participants had the desire to build a personal relationship with the horses. This included getting to know the horses well and showing them physical affection, such as hugging. For some riders the relationship with the horse is very important because it involves interaction that they do not have with people. This is interesting as the horse's ability to respond to human emotions is a feature highlighted by Equine Assisted Programmes, such as the one used at The Priory (Brener, 2007) and at HMP Guy's Marsh (Lindstrand, 2005).

Communication between horse and rider was another important element in the interaction. Participants had an understanding of the non-verbal language used to communicate with the horses. Non-verbal communication is perhaps significant with horses because they are such large, powerful animals who could quite easily overpower people. Some participants appeared almost humbled by the fact that horses are so willing to submit to them. Others reflected on how they felt there was a strong partnership with the horse.

This interaction and desire for a relationship doesn't appear to be one way but is a two way process between horse and rider. Horses are herd animals and are like people, very sociable by nature. They therefore enjoy being around other horses and people and like other animals

[Type text]

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

horses enjoy being stroked and groomed. Levinson (2007) suggests that the connection between horses and people is a result of both having the desire for a sense of community with others, whether it be other people or other horses. These activities can bring horse and rider closer together as it involves getting close to the horse and not being afraid of them. It helps both the horse and rider get used to and trust each other. It also supports Lasher (1998), who proposed that the human-animal relationship allows for trust in another species using non-verbal behaviour. This research highlights that riders can benefit greatly from interacting in this way with the horses, particularly if they have had little experience with horses and lack confidence.

In terms of therapeutic implications of contact with animals, horses can provide people with a number of physical and psychological benefits. Simply looking after a horse and making that unique connection with another being, particularly one that is as strong and potentially dangerous as a horse, can be very powerful. There are many organisations and facilities that are using horses as a therapy, such as the RDA, The Priory Group (Priory Group, 2007) and Great Strides Centre in America (Great Strides, 2007). The programmes have different things to offer clients with some focusing on providing therapy through riding, using the movement of the horse, particularly for those with psychical disabilities, as a form of occupational therapy. Riders are given the opportunity to learn and improve their riding skills as well as compete and go on horse holidays. On the other hand others focus on human skills such as assertiveness, confidence, problem solving and using the horse as the tool for learning about themselves. Clients work with a therapist and horse professional in programmes tailored to their needs. Anxiety issues can be dealt with by teaching the client relaxation techniques through grooming horses. Working with large animals, like horses, provides clients with the opportunity to work through issues of trust, assertiveness and self esteem.

The therapeutic potential of contact with animals is clear and this study has highlighted some of these benefits through contact with horses. The present study only looked at five disabled horse-riders' experience of horse riding, all of whom were riders before. Therefore, future areas of research would benefit from looking at disabled horse riders' experience of horse riding on a larger scale and in other contexts. It may also be beneficial to look at those riders who have no previous riding experience to get a fuller picture of what people experience when they ride and how they benefit from it.

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

References

- Demares, R. and Krycka, K.C. (1998). Wild animal triggered peak experiences: Transpersonal aspects. *Journal of Transpersonal Psychology*. 30(2), 161-177.
- Dunbar, R. (2004) *The human story: A new history of man's evolution*, London: Faber and Faber.
- Friedman, E., Katcher, A.H., Lynch, J.J. and Thomas, S.A. (1980). Animal companions and one year survival from coronary care unit. *Public Health Reports*. 95(4), 307-312.
- Gilbert, P. and Bailey, K. (2000) *Genes on the couch: Explorations in evolutionary psychotherapy*, Brunner-Routledge: Hove.
- Great Strides (2007). Great Strides. [Online] Available: <http://www.greatstrides.org> [03/08/07]
- Hart, L.A. (1992). Therapeutic Riding: Assessing human vs horse effects. *Anthrozoos*. 5(3) 138-139.
- Kaplan, R. and Kaplan, S. (1989) *The experience of nature*, Cambridge University Press.
- Lasher, M. (1998). A relational approach to the human-animal bond. *Anthrozoos*. 11(3), 130-133.
- Leather, P., Pyrgas, M., Beale, D. and Lawrence, C. (1998) Windows in the workplace: Sunlight, view and occupational stress, *Environment and Behaviour*, 30, 739-762
- Levinson, F. (2007). Working with Children and Horses. [Online] Available: <http://www.wayofthehorse.org/Articles/children-and-horses.html> [08/08/07].
- Lindstrand, J. (2005). Horses for Courses. [Online] Available: <http://www.hmprisonservice.gov.uk/prisoninformation/prisonservicemagazine/index> [04/08/07].
- Nathanson, D. E., deCastro, D., Friend, H. and McMahon, M. (1997). Effectiveness of short-term dolphin assisted therapy for children with severe disabilities. *Anthrozoos*, 10(213), 90-100.
- Schaefer, K. (2002). Human-animal interactions as a therapeutic intervention. [Online] Available: http://findarticles.com/p/articles/mi_qa3934/is_200201/ai_n9047636 [01/08/07].

Favali, V. and Milton, M. (2010) 'Disabled Horse-Rider's Experience of Horse-Riding: Exploring the Therapeutic Benefits of Contact with Animals' *Existential Analysis*, 21.2: pp 251-262.

Schultz, P, Remick-Barlow, G, and Robbins, L. (2007). Equine-assisted psychotherapy: a mental health promotion/intervention modality for children who have experienced intra-family violence, *Health and Social Care in the Community*, 15 (3): 265-271

Smith, J. And Eatough, V. (2007) Interpretative Phenomenological Analysis, in E. Lyons and A.Coyle (eds) *Analysing qualitative data in psychology*, Sage: London

Brener, N. (2007). The Priory Group. [Online] Available:

<http://www.priorygroup.com/pg.asp?p=equineassistedpsychotherapy> [08/08/07].

Ulrich, R. (1984). View through a window may influence recovery from surgery. *Science*. 224, 420-421.

Wells, N. M. and Evans, G. W. (2003) Nearby nature: A buffer of life stress among rural children, *Environment and Behaviours*, 35 (3), 311 – 330

Wilson, E. O. (1984) *Biophilia*, Cambridge: Harvard University Press.

