

## Positive Health Outcomes for Those Exposed to Animal Assisted Therapy or Other Interventions

### Peer-reviewed journal articles with abstracts; newest articles listed first:

Brazier, A. (2014). "Creature comfort? Animal assistance in therapeutic work with children and young people." *Clinical Child Psychology and Psychiatry* 19(2): 165-168.

This editorial discusses animal assistance in therapeutic work with children and young people. Animals come with life stories of their own; they can be responsive but can also be unpredictable. Rescue animals may have been badly treated and need special care. In different ways animals' stories may resonate with those of the children and young people. In the case examples featured in the present issue of *Clinical Child Psychology and Psychiatry* the reaction of the animal to its past treatment and its current needs provided different opportunities for young people to engage with their own stories at a distance and in new way. This was done through their active interaction and / or care of the animal in the context of a set of reciprocal relationships; the young person with the animal, the therapist with the young person and the animal with the therapist. All together, animals have been used in a range of contexts to help provide consistency, connection, trust and acceptance. The animals' different kind of livingness, together with the therapists' frame, facilitates the possibility of new ways of relating. (PsycINFO Database Record (c) 2014 APA, all rights reserved)

Funahashi, A., et al. (2014). "Brief report: The smiles of a child with autism spectrum disorder during an animal-assisted activity may facilitate social positive behaviors—Quantitative analysis with smile-detecting interface." *Journal of Autism and Developmental Disorders* 44(3): 685-693.

We quantitatively measured the smiles of a child with autism spectrum disorder (ASD-C) using a wearable interface device during animal-assisted activities (AAA) for 7 months, and compared the results with a control of the same age. The participant was a 10-year-old boy with ASD, and a normal healthy boy of the same age was the control. They voluntarily participated in this study. Neither child had difficulty putting on the wearable device. They kept putting on the device comfortably through the entire experiment (duration of a session was about 30–40 min). This study was approved by the Ethical Committee based on the rules established by the Institute for Developmental Research, Aichi Human Service Center. The behavior of the participants during AAA was video-recorded and coded by the medical examiner (ME). In both groups, the smiles recognized by the ME corresponded with the computer-detected smiles. In both groups, positive social behaviors increased when the smiles increased. Also, negative social behaviors decreased when the smiles increased in the (ASD-C). It is suggested that by leading the (ASD-C) into a social environment that may cause smiling, the child's social positive behaviors may be facilitated and his social negative behaviors may be decreased. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Griffioen, R. E. and M. J. Enders-Slegers (2014). "The effect of dolphin-assisted therapy on the cognitive and social development of children with Down syndrome." *Anthrozoos* 27(4): 569-580.

Cognitive and speech development are delayed in children with Down syndrome (DS). We investigated the effect of dolphin-assisted therapy (DAT), a form of animal-assisted intervention, on the development of speech/language and social behavior in children with DS. We hypothesized that DAT would improve the social and cognitive functions with respect to verbalization and thereby promote task performance. A semi-crossover design was used to study 45 children with DS: 18 received a weekly one-hour session of DAT for 6 weeks (group A), 12 children (group B) started with swimming pool sessions (control period of 6 weeks) and thereafter received DAT, and 17 children (group C) were put on a waiting list (control period of 6 weeks) before receiving DAT. The parameters "verbalization", "impulsiveness", "proper understanding of rules", "recognition of persons", and "establishing contacts" were measured using the Matson Evaluation of Social Skills for Individuals with Severe Retardation (MESSIER) before and after DAT, as well as before and after each of the control periods. Repeated measures ANOVA revealed no significant changes for any of the variables during the control periods (swimming pool, waiting list). Following the period of DAT there was a significant improvement in "verbalization" and "recognition of persons", while "impulsiveness" decreased. No significant changes were found for the other parameters. "Verbalization" continued to increase during the follow-up period of 6 months, while "recognition of persons" slightly decreased. The results of this study provide support for our hypothesis. Through improvements in verbalization and the

recognition of persons, the execution of tasks among children with DS receiving DAT improved. Additional studies are needed to determine if these positive effects of DAT are long-term.

Hession, C. E., et al. (2014). "Therapeutic horse riding improves cognition, mood arousal, and ambulation in children with dyspraxia." *Journal of Alternative and Complementary Medicine* 20(1): 19-23.

Objectives: The objectives of this study were to evaluate the effects of the physical motion of a horse (riding therapy) combined with the audiovisual perception of this motion on a group of children with dyspraxia in terms of cognition, mood arousal, and gait variability. Design: The study design was a pretest/post-test. Settings/location: The study was conducted at the Fettercairn Youth Horse Project, Fettercairn, Tallaght, Dublin. Subjects; Forty (40) children ranging from 6 to 15 years of age with a primary diagnosis of dyspraxia were the study subjects. Interventions: Children meeting inclusion criteria participated in six 30-minute horse-riding sessions and two 30-minute audiovisual screening sessions. Outcome measures: A Standard Progressive Matrices test (also known as the Ravens test) was used to measure aspects of general intelligence. A Childhood Depression Inventory (CDI) questionnaire was used to assess cognitive, affective, and behavioral signs of depression. A GAITRite Pressure Mapping System analyzed foot function and gait variability by measuring single and double support, cycle time, cadence, toe in/out, and stride length. Results: Significant improvements were evident on the Ravens test and the CDI by the end of the study period. The amount of both single and double support required while completing the walking task also was significantly reduced. Improvements were visible on toe in/out values, cycle time, and cadence. Changes in stride length did not reach statistical significance. Conclusions: These findings support the theory that riding therapy and/or the perception of beat-based rhythms, as experienced by the rider on the horse, stimulates cognition, mood, and gait parameters. In addition, the data also pointed to the potential value of an audiovisual approach to equine therapy. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Holm, M. B., et al. (2014). "Therapeutic horseback riding outcomes of parent-identified goals for children with autism spectrum disorder: An ABA' multiple case design examining dosing and generalization to the home and community." *Journal of Autism and Developmental Disorders* 44(4): 937-947.

We examined whether different doses of therapeutic riding influenced parent-nominated target behaviors of children with autism spectrum disorder (ASD) (a) during the session (b) at home, and (c) in the community. We used a single subject multiple Baseline, multiple case design, with dosing of 1, 3, and 5 times/week. Three boys with ASD, 6–8 years of age participated, and counts of target behaviors were collected in each setting and phase of the study. Compared to Baseline, 70 % of the target behaviors were better during Intervention and improvement was retained in 63 % of the behaviors during Withdrawal. Increased doses of therapeutic riding were significant for magnitude of change, and the effect of the therapeutic riding sessions generalized to home and community. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Kemp, K., et al. (2014). "Equine facilitated therapy with children and adolescents who have been sexually abused: A program evaluation study." *Journal of Child and Family Studies* 23(3): 558-566.

Child sexual abuse (CSA) is a social problem that often inflicts long lasting psychological trauma and leads to psychopathology, behavioural problems and revictimization. Treating young people who are presenting with the detrimental effects of CSA is often difficult because these effects off-set efforts at establishing a therapeutic bond. Animals have been found to facilitate the development of the therapeutic alliance between client and practitioner and therapies utilizing horses have the added bonus of empowering clients. This study aimed to evaluate an Equine Facilitated Program (EFT) run by Phoenix House, a sexual assault referral centre in Queensland, Australia. Participants were six boys and nine girls (aged 8–11 years) and 15 adolescent girls (aged 12–17 years). All participants provided several measures of data designed to establish levels of psychological distress at three points in time. That is, Time 1—intake into the service; Time 2—following approximately 6 weeks of in-clinic counselling and pre-EFT; and Time 3 post-EFT (9–10 week duration). Significant improvements in functioning were found between Time 2 and Time 3 assessment across all psychometric measures and for both age groups. No, or nonsignificant, improvements were found between Time 1 and Time 2 assessments. Overall the results show that EFT proved an effective therapeutic approach for the children and adolescents referred to the service. Of particular note was the finding that efficacy was similar across gender, age and Indigenous/non-Indigenous status. Implications of this and suggestions for further research are discussed. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Krause-Parello, C. A. and E. Friedmann (2014). "The effects of an animal-assisted intervention on salivary alpha-amylase, salivary immunoglobulin A, and heart rate during forensic interviews in child sexual abuse cases." *Anthrozoos* 27(4): 581-590.

Animal-assisted invention (AAI) is gaining attention as a therapeutic modality; however, the effect of it has not been well studied in the child welfare system. The purpose of this study was to examine the effects of AAI on stress indicators (as measured by salivary alpha-amylase (sAA), immunoglobulin A (IgA), and heart rate) in children undergoing forensic interviews for alleged sexual abuse. A repeated measures design was used in this study. Upon receiving signed, informed consents and assents, children were enrolled in the study. Children (n=42), whose ages ranged from 5 to 14 years (M=8.91, SD=2.33), were assigned to either the intervention condition (n=19; AAI during forensic interview) or the control condition (n=23; standard practice forensic interview). Each child's parent/guardian completed a demographic form, and saliva samples and heart rate measures were obtained from each child before and after the forensic interview. Mixed linear models were tested, with the level of significance set at  $p \leq 0.05$ . There was an interactive effect regarding the duration of the interview and the presence of the dog on sAA after the forensic interview ( $p=0.047$ ). There also was a significant interaction between age and length of interview ( $p=0.01$ ). Salivary immunoglobulin A tended to be lower ( $p=0.055$ ) when the therapy dog was present during the forensic interview. Results further indicated that the drop in heart rate was greater in longer interviews and with older children ( $p=0.02$ ) when the dog was present. Individuals working in child welfare systems can use the results of this study to advocate for the use of therapy dogs as a therapeutic intervention. More research is needed to further examine the relationships among AAI, salivary biomarkers, and stress responses in children to improve child welfare.

Nordgren, L. and G. Engström (2014). "Animal-assisted intervention in dementia: Effects on quality of life." *Clinical Nursing Research* 23(1): 7-19.

There is a need to develop nonpharmacological treatments and methods which can serve as alternatives or complements to medications in dementia care. Previous research indicates that animal-assisted intervention (AAI) can be beneficial. The purpose of the present pilot project was to evaluate effects of AAI on quality of life (QoL) in people with dementia in four Swedish nursing homes. A pretest/posttest research design was used. Twenty people (12 women, 8 men; aged 58 to 88) were included. Nine people completed the intervention which comprised 10 training sessions with a certified therapy dog team. QoL improved in the expected direction after the intervention ( $p = .035$ ). Even though the effects of AAI may not be discernible over longer periods of time, there are still immediate effects which can promote better QoL for people living with dementia diseases. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Bachi, K. (2013). "Application of attachment theory to equine-facilitated psychotherapy." *Journal of Contemporary Psychotherapy* 43(3): 187-196.

Equine-facilitated psychotherapy (EFP) is a form of animal-assisted therapy used to treat human psychological problems that employs horses in and around the natural surroundings of the stables. Despite the increasing number of professionals and organizations that offer this innovative therapy, EFP lacks a firm theoretical and research base. This paper aims to reveal how attachment theory can inform and enrich theory and practice of EFP. It explores the fit between central features of EFP and several of the primary concepts of attachment-based psychotherapy, such as: secure base and haven of safety through the provision of a holding environment, affect mirroring, mentalizing and reflective functioning, and non-verbal communication and body experience. This work is composed of definitions of these concepts, their application to human-horse context and EFP, and interpretation in light of potential therapeutic (transformative) processes. (PsycINFO Database Record (c) 2013 APA, all rights reserved).

Bachi, K. (2013). "Equine-facilitated prison-based programs within the context of prison-based animal programs: State of the science review." *Journal of Offender Rehabilitation* 52(1): 46-74.

Equine-facilitated prison programs have become more prevalent and operate in correctional facilities in 13 states throughout the United States. However, there is a deficit of empirical knowledge to guide them. This article reviews 19 studies of prison-based animal programs and centers on patterns in the literature. It reveals how previous studies are relevant and how they can be applied to the examination of equine-facilitated prison-based interventions. Research of this field is warranted in order to study issues, such as the effectiveness of these programs, suitable participants for such

programs and contraindications, and the impact of these programs on variables such as recidivism and disciplinary misconduct. (PsycINFO Database Record (c) 2013 APA, all rights reserved).

Bernabei, V., et al. (2013). "Animal-assisted interventions for elderly patients affected by dementia or psychiatric disorders: a review." *Journal of psychiatric research* 47(6): 762-773.

OBJECTIVE: The aim of this literature review was to assess the effects of Animal-Assisted Interventions (AAI) on elderly patients with dementia or various psychiatric disorders. METHODS: We conducted a comprehensive literature search using the online PubMed network of the US National Library of Medicine & National Institutes of Health, Embase, PsycINFO, with the purpose of investigating AAI effects on cognitive functions, mood, and behaviour. RESULTS: A total of 18 articles on dementia and 5 on psychiatric disorders were included in the present review. AAI were found to have positive influences on demented patients by reducing degree of agitation and by improving degree and quality of social interaction. Few studies have assessed the effects of AAI on mood, and even fewer have assessed its consequences on cognitive functions. The results that are available indicate a positive effect on communication and coping ability, but none on cognitive performance. A substitute pet robot yielded encouraging results, but its use requires further investigation. The few studies conducted for elderly patients presenting a variety of psychiatric diagnoses produced controversial findings. CONCLUSIONS: In spite of the encouraging results of AAI, much more research examining the issue of optimal AAI duration, frequency of sessions, and suitable target group is needed.

Berry, A., et al. (2013). "Use of assistance and therapy dogs for children with autism spectrum disorders: a critical review of the current evidence." *Journal of Alternative and Complementary Medicine* 19(2): 73-80.

BACKGROUND: Autism spectrum disorders (ASD) are characterized by deficits in social reciprocity and communication, and by unusually restricted, repetitive behaviors. Intervention strategies based on the exploitation of the emotional aspects of human-dog relationships hold the potential to overcome the difficulty of subjects with ASD to relate and interact effectively with others, targeting core symptoms of this disorder. METHODS: This review summarizes the results of six published studies on the effects of brief interactions with dogs and the effects of introducing dogs in families with a child diagnosed with ASD, with an emphasis on social behaviors and language use. Furthermore, the possible mechanisms responsible for the beneficial effects observed are discussed. CONCLUSIONS: Although the studies described here are encouraging, further research with better designs and using larger samples is needed to strengthen translation of such interventions to the clinic. In addition, potential applications of analyzing child-dog interactions are highlighted to screen for early signs of the disorder.

Bibbo, J. (2013). "Staff members' perceptions of an animal-assisted activity." *Oncology nursing forum* 40(4): E320-326.

PURPOSE/OBJECTIVES: To examine the perceptions of staff members toward the implementation of an animal-assisted activity (AAA) in an outpatient regional cancer center. DESIGN: Quasi-experimental, post-test design. SETTING: An adult outpatient regional cancer center in northern California. SAMPLE: 34 facility staff members. METHODS: Self-report questionnaire following four weeks of AAA visitation. Visits took place three times a week for a total of 12 visits. MAIN RESEARCH VARIABLES: Perceptions of the AAA. FINDINGS: Previous perceptions toward AAA influenced the perceptions of the visitation's efficacy. Direct and indirect interaction with the visiting AAA teams was positively associated with perceptions of the AAA. A disagreement occurred that the AAA had caused extra stress or work for staff. Enjoyment of interacting with the dog handler was not significantly different from interacting with the dog; however, it was more positively correlated to acceptance of the AAA. CONCLUSIONS: The study provided evidence that the AAA was generally accepted by staff members. IMPLICATIONS FOR NURSING: Individual staff members' perceptions of dogs and AAAs can influence their receptivity to AAA interventions. Interaction with AAA teams should be voluntary and available for patients and staff members. KNOWLEDGE TRANSLATION: AAA may be introduced into facilities without creating the perception of extra stress or work for staff members. Providing staff the opportunity to interact with visiting AAA teams may be beneficial for the success of such programs. The human handler in AAA teams may play a vital role in the staff acceptance of such programs.

Burton, A. (2013). "Dolphins, dogs, and robot seals for the treatment of neurological disease." *Lancet neurology* 12(9): 851-852.

A growing body of evidence suggests that animal-assisted therapies and activities involving all kinds of real and even robotic animals can have beneficial effects in people with neurological disease or mental illness. But what is the quality of that evidence and do these interventions really provide any health benefits? Adrian Burton investigates.

Cipriani, J., et al. (2013). "Dog-assisted therapy for residents of long-term care facilities: An evidence-based review with implications for occupational therapy." *Physical & Occupational Therapy in Geriatrics* 31(3): 214-240.

Objective: We conducted an evidence-based practice review of the literature to determine whether residents of long-term care facilities who received dog-assisted therapy achieved outcomes that can positively influence quality of life, as compared to individuals who did not receive dog-assisted therapy. Methods: A comprehensive computer-aided search of the literature was conducted. A total of 61 studies were retrieved; 19 studies met the inclusion criteria. These studies were reviewed using the McMaster's Critical Review Form—Quantitative Studies. In addition, each study was assigned a numerical score based on the number of criteria met (0–100%). Results: Outcomes examined included emotional regulation, activities of daily living, communication/ social, cognitive, sensory-perceptual, and motor/praxis skills. Levels of evidence found included three randomized control trials, 11 cohort studies, four before and after studies, and one single case design. Twelve of the 19 studies reported statistically significant findings of improved outcomes for residents who participated in dog-assisted therapy. Percentage of McMaster's criteria met in each study ranged from 31 to 92%. Conclusions: Though a majority of the studies found statistical significance to support the impact of dog-assisted therapy on outcomes related to quality of life, there remains a significant lack of published research within the occupational therapy literature. Occupational therapy professionals can contribute to the evolving knowledge base of this promising intervention via the use of more rigorous designs, such as randomized control trials with large sample sizes. (PsycINFO Database Record (c) 2013 APA, all rights reserved).

Corring, D., et al. (2013). "Therapeutic horseback riding for ACT patients with schizophrenia." *Community Mental Health Journal* 49(1): 121-126.

One form of psychiatric leisure rehabilitation which has only recently been explored for individuals with schizophrenia is Therapeutic Horseback Riding (THBR). This study is the first to examine THBR for Assertive Community Treatment (ACT) patients with schizophrenia. A sample of 6 ACT patients with schizophrenia or schizoaffective disorder who reside in the community and 6 mental health care staff participated in 10 weeks of weekly horseback riding sessions with an experienced THBR instructor. Participating patients, staff and the THBR instructor were qualitatively interviewed at the start, during and at the end of the THBR program and these semistructured interviews were analyzed for recurrent themes. We found that THBR benefitted this group of patients. In spite of our study's limitations, such as its exploratory nature and the small sample size, it demonstrates that THBR has promise and should be further developed and studied for individuals with schizophrenia. (PsycINFO Database Record (c) 2013 APA, all rights reserved).

Dookie, A. L. (2013). "Perspectives of animal assisted activities on empowerment, self-esteem and communication with caregivers on elders in retirement homes." *Activities, Adaptation & Aging* 37(3): 189-212.

This qualitative study explores the potential benefits of animal assisted activities (AAA) on elders' empowerment, self-esteem, and quality of communication with caregivers in retirement homes. Although the link between self-esteem and AAA has been explored, this is not the case for empowerment and communication with caregivers. A total of 10 semistructured interviews were conducted in retirement homes in Ottawa. Results of the content analysis suggest that overall AAA has a positive influence on elder's empowerment and self-esteem but a relatively low impact on communication with caregivers. Theoretical and practical implications are discussed. (PsycINFO Database Record (c) 2013 APA, all rights reserved).

Engelman, S. R. (2013). "Palliative care and use of animal-assisted therapy." *Omega: Journal of Death & Dying* 67(1-2): 63-67.

A growing body of research and clinical reports support the benefits of utilizing animal-assisted therapy (AAT) as a complementary, transdisciplinary treatment intervention in medical settings. However, fewer articles are found demonstrating AAT's use in palliative care settings. This article is a study of the effects of AAT in palliative care situations,

presenting one anecdotal clinical vignette. In this way, the efficacy of this technique in decreasing patient pain, thereby increasing patient quality of life, and lowering staff stress levels may be illustrated.

Ford, C. (2013). "Dancing with horses: Combining dance/movement therapy and equine facilitated psychotherapy." *American Journal of Dance Therapy* 35(2): 93-117.

This qualitative research study explores the ways in which dance/movement therapy (DMT) and equine facilitated psychotherapy (EFP) can be combined to produce an integrated, creative, and effective psychotherapeutic approach. Interview methodology was used to collect qualitative data from current psychotherapeutic practitioners with experience in both disciplines. Interviews were transcribed, coded, and organized into 16 themes nested within 5 categories. The results showed a natural therapeutic fit between DMT and EFP, including the innate ability of horses to co-facilitate body-centered, movement-oriented, therapeutic processes. The results also suggested that combining DMT and EFP can increase therapeutic possibilities, including levels of client and therapist embodiment and creative expression, opportunities for contact and touch, and the depth and breadth of the therapeutic relationship. Finally, the results described some of the tools and techniques currently being used in DMT–EFP sessions and highlighted factors necessary to be successful in this endeavor. This study is intended to provide a foundation for further research and writing about combining DMT and EFP. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Jenkins, S. R. and F. D. DiGennaro Reed (2013). "An experimental analysis of the effects of therapeutic horseback riding on the behavior of children with autism." *Research in Autism Spectrum Disorders* 7(6): 721-740.

The current study experimentally evaluated the effects of therapeutic horseback riding on the behavior of children with autism using a multiple baseline across participants design and a waitlist control group for comparison purposes. Participants were observed weekly in an after-school program during four center-based activities and during therapeutic horseback riding lessons. We also conducted intermittent probes of behavior at home. Therapeutic horseback riding did not produce systematic changes in affect, responding to others' initiations, spontaneous initiations, off-task behavior, compliance, problem behavior, or performance on two standardized measures. Three of four participants' posture improved during therapeutic horseback riding. (PsycINFO Database Record (c) 2013 APA, all rights reserved).

Kaldy, J. (2013). "Alternative therapies for a new era of health care." *Consultant pharmacist* 28(2): 84-90.

More than 20 years ago, an article about the use of music, art, and pet therapy in nursing facilities appeared in this journal. At the time, these fields were still evolving, and there was limited clinical evidence regarding their value. While there were a few champions of these therapies among practitioners, many more were skeptical about their benefit to long-term care facility residents. This article presents an update on these alternative therapies in light of recent developments in health care, changes in the culture of long-term care, and federal efforts to reduce the use of antipsychotics.

Lubbe, C. and S. Scholtz (2013). "The application of animal-assisted therapy in the South African context: A case study." *South African Journal of Psychology* 43(1): 116-129.

The purpose of this article is to explore the use, value, and applicability of animal-assisted therapy in psychology. The case study method was applied to a therapeutic case, using the interpretivist paradigm. Data were analyzed by means of document analysis. The findings are discussed according to five themes derived from the study, namely, "facilitating relationship building," "enabling communication by working indirectly," "experiencing physical affection through the therapy dog," "socialization skills," and "enhanced self-esteem." We report that the deliberate inclusion of an animal in therapy facilitates relationship building and therefore aids the therapeutic alliance, as well as enhances an individual's socialization skills and self-esteem. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Majić, T., et al. (2013). "Animal-assisted therapy and agitation and depression in nursing home residents with dementia: A matched case–control trial." *American Journal of Geriatric Psychiatry* 21(11): 1052-1059.

Objectives: To investigate the efficacy of animal-assisted therapy (AAT) on symptoms of agitation/aggression and depression in nursing home residents with dementia in a randomized controlled trial. Previous studies have indicated that AAT has beneficial effects on neuropsychiatric symptoms in various psychiatric disorders but few studies have investigated the efficacy of AAT in patients suffering from dementia. Methods: Of 65 nursing home residents with dementia (mean [standard deviation] age: 81.8 [9.2] years; mean Mini-Mental State Examination score: 7.1 [0.7]), 27 matched pairs (N = 54)

were randomly assigned to either treatment as usual or treatment as usual combined with AAT, administered over 10 weekly sessions. Blinded raters assessed cognitive impairment with the Mini-Mental State Examination, presence of agitation/aggression with the Cohen-Mansfield Agitation Inventory, and depression with the Dementia Mood Assessment Scale at baseline and during a period of 4 weeks after AAT intervention. Results: In the control group, symptoms of agitation/aggression and depression significantly increased over 10 weeks; in the intervention group, patients receiving combined treatment displayed constant frequency and severity of symptoms of agitation/aggression ( $F_{1,48} = 6.43$ ;  $p < 0.05$ ) and depression ( $F_{1,48} = 26.54$ ;  $p < 0.001$ ). Symptom amelioration did not occur in either group. Conclusions: AAT is a promising option for the treatment of agitation/aggression and depression in patients with dementia. Our results suggest that AAT may delay progression of neuropsychiatric symptoms in demented nursing home residents. Further research is needed to determine its long-time effects. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Marcus, D. A., et al. (2013). "Impact of animal-assisted therapy for outpatients with fibromyalgia." *Pain medicine* (Malden, Mass.) 14(1): 43-51.

**OBJECTIVES:** Animal-assisted therapy using dogs trained to be calm and provide comfort to strangers has been used as a complementary therapy for a range of medical conditions. This study was designed to evaluate the effects of brief therapy dog visits for fibromyalgia patients attending a tertiary outpatient pain management facility compared with time spent in a waiting room. **DESIGN:** Open label with waiting room control. **SETTING:** Tertiary care, university-based, outpatient pain management clinic. **SUBJECTS:** A convenience sample of fibromyalgia patients was obtained through advertisements posted in the clinic. **INTERVENTIONS:** Participants were able to spend clinic waiting time with a certified therapy dog instead of waiting in the outpatient waiting area. When the therapy dog was not available, individuals remained in the waiting area. **OUTCOME MEASURES:** Self-reported pain, fatigue, and emotional distress were recorded using 11-point numeric rating scales before and after the therapy dog visit or waiting room time. **RESULTS:** Data were evaluated from 106 therapy dog visits and 49 waiting room controls, with no significant between-group demographic differences in participants. Average intervention duration was 12 minutes for the therapy dog visit and 17 minutes for the waiting room control. Significant improvements were reported for pain, mood, and other measures of distress among patients after the therapy dog visit, but not the waiting room control. Clinically meaningful pain relief ( $\geq 2$  points pain severity reduction) occurred in 34% after the therapy dog visit and 4% in the waiting room control. Outcome was not affected by the presence of comorbid anxiety or depression. **CONCLUSIONS:** Brief therapy dog visits may provide a valuable complementary therapy for fibromyalgia outpatients.

Maujean, A., et al. (2013). "Connecting for health: Playing with horses as a therapeutic tool." *Journal of Community Psychology* 41(4): 515-522.

This pilot study examined a brief psychological intervention using horses as a therapeutic tool to improve levels of self-esteem, self-efficacy, and facilitate the development of life skills in a group of disengaged youths ( $n = 16$ ). Participants and their case managers were interviewed after completion of the program to explore their responses to the intervention. Interview transcripts were coded to identify participants' experiences and outcomes. Five themes emerged from these interviews, namely, (a) enjoyment, (b) psychological and social benefits, (c) engagement, (d) transferrable skills, and (e) mechanisms of change. The findings of this study indicate that this type of intervention may provide a viable option for youths who are disengaged from school and/or the community and who have not responded to traditional interventions. (PsycINFO Database Record (c) 2013 APA, all rights reserved).

Mulcahy, C. and D. McLaughlin (2013). "Is the tail wagging the dog? A review of the evidence for prison animal programs." *Australian Psychologist* 48(5): 370-378.

In the last 10 years, Prison Animal Programs (PAPs) have been implemented in many Australian correctional centres. Like our international counterparts, these programs receive glowing endorsements from key stakeholders and accolades in the media. The evidence supporting these programs however has not kept pace with public opinion. This article provides a review of the literature surrounding PAPs. Findings highlight that PAPs vary markedly in design, and few have been subjected to research or evaluation. Of these few, only one study was conducted in Australia. Additionally, the research strategies used within international studies are varied; providing little foundation from which to identify consistent outcomes or develop evidence-based practices. It is concluded that more extensive research is needed to identify the program features that most commonly benefit prisoners, particularly prisoners with mental health needs. A greater

evidence base is also needed to guide the introduction of new programs, according to the program objectives at each site. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

O'Haire, M. E. (2013). "Animal-assisted intervention for autism spectrum disorder: a systematic literature review." *Journal of Autism and Developmental Disorders* 43(7): 1606-1622.

The inclusion of animals in therapeutic activities, known as animal-assisted intervention (AAI), has been suggested as a treatment practice for autism spectrum disorder (ASD). This paper presents a systematic review of the empirical research on AAI for ASD. Fourteen studies published in peer-reviewed journals qualified for inclusion. The presentation of AAI was highly variable across the studies. Reported outcomes included improvements for multiple areas of functioning known to be impaired in ASD, namely increased social interaction and communication as well as decreased problem behaviors, autistic severity, and stress. Yet despite unanimously positive outcomes, most studies were limited by many methodological weaknesses. This review demonstrates that there is preliminary "proof of concept" of AAI for ASD and highlights the need for further, more rigorous research.

Pugliese, A., et al. (2013). "[Useful of animals as integrated rehabilitation in patients with psychological and physical discomfort]." *Giornale italiano di medicina del lavoro ed ergonomia* 35(4): 354-356.

In the context of social farming, understood as traditional agricultural production, there is a peculiarity appointed to generate innovative services of extreme importance from the health and social: the use of assisted therapy with animals for promoting the employment of disadvantaged people (handicapped). The proximity of the animal is to humans, and especially for young people, a great educational event, an important reference point for growth, a strong incentive to open up to the world, to communicate better, to gain a sense of responsibilities and to correct some default behavioral and cognitive. This work attests to the validity of the animals as an aid in the treatment methodological neurorehabilitation of some diseases, emphasizing the importance of combining this new intervention strategy to conventional rehabilitation therapy.

Pullen, R., et al. (2013). "Tiergestutzte Therapie im Demenzbereich eines Akutkrankenhauses." *Zeitschrift für Gerontologie und Geriatrie* 46(3): 233-236.

INTRODUCTION: In nursing homes animal-assisted therapy has been applied in demented elderly patients for several years. There are no studies on this treatment in hospitals, especially in geriatric departments. METHODS: From September 2010 to November 2011 105 in-patients, among them 77 female, participated in a 30 min dog-assisted group therapy (mean age 84,4 +/- 6,56 years). The patients had cognitive and functional impairments (mean MMSE 18 points, mean Barthel Index 34,6 points). RESULTS: Adverse events were not observed. Thirteen patients discontinued the treatment early, due to different reasons. The psychologist, who attended the treatment, observed an improvement of mood in 58 % and an improvement in activity in 54 %. DISCUSSION AND CONCLUSION: Animal assisted therapy can be safely established in a hospital among patients with cognitive impairment. The data support the hypothesis that animal assisted therapy improves mood, communication and activity in patients with cognitive impairment.

Selby, A. and A. Smith-Osborne (2013). "A systematic review of effectiveness of complementary and adjunct therapies and interventions involving equines." *Health psychology : official journal of the Division of Health Psychology, American Psychological Association* 32(4): 418-432.

OBJECTIVE: This systematic review examines the empirical literature in an emerging body of evidence for the effectiveness of biopsychosocial interventions involving equines across populations with chronic illness or health challenges. METHOD: Selected quantitative studies published in peer-reviewed journals were reviewed for inclusion; the gray literature and white papers were also explored. Population, Intervention, Comparison, and Outcome (PICO) criteria and Grades of Recommendation, Assessment, Development, and Evaluation (GRADE) were applied to all studies. Fourteen full reports meeting a priori inclusion criteria were extracted from 103 studies accessed through 16 electronic databases and a hand search. Data were synthesized in relation to three research questions informing evidence-based practice. RESULTS: No randomized clinical trials were located. Two studies provided a moderate level of evidence for effectiveness. Nine studies demonstrated statistically significant positive effects. Three studies did not find significant psychosocial effects for the target group, although one found significant positive effects for the comparison group. CONCLUSION: In the aggregate, the evidence is promising in support of the effectiveness of complementary and adjunct interventions employing



equines in the treatment of health challenges. Future studies are needed that utilize rigorous and creative designs, especially longitudinal studies and comparisons with established effective treatments.

Vrbanac, Z., et al. (2013). "Animal assisted therapy and perception of loneliness in geriatric nursing home residents." *Collegium antropologicum* 37(3): 973-976.

Use of animals for therapeutic purposes, animal assisted therapy or AAT is a method for improving quality of life for long-term inpatients. The object of this paper was to evaluate dog companionship as a form of AAT and its effects on perception of loneliness in geriatric nursing home residents. The participants were involved in a six-month program of dog companionship three times weekly for 90 minutes. There were 21 residents included in the program, with a mean age of 80 years. Loneliness was measured by the short version of the UCLA Scale of Loneliness. Comparison of test results before and after participation in the program showed that dog companionship reduces the perception of loneliness.

Wehofer, L., et al. (2013). "Equine assisted activities and therapies: A case study of an older adult." *Physical & Occupational Therapy in Geriatrics* 31(1): 71-87.

Falls are the leading cause of injuries and deaths in adults over the age of 65. The purpose of this case study is to explore the use of Equine Assisted Activities and Therapies (EAAT) to improve the mechanisms of balance, postural sway, fear of falling (FOF), and participation in older adults (OA). The participant (a 76-year-old woman), completed 10 Adaptive riding (AR) sessions over a six-week period, led by a Level II therapist (COTA/L and PATH certified riding instructor). Changes in function were assessed using the Berg Balance Scale (BBS), Activities-Specific Balance Confidence Scale (ABC), Activity Card Sort (ACS), and Video Motion Capture (VMC) system. Results indicated improved static standing balance, postural stability, and greater dynamic head and trunk control. Additionally, the participant expressed decreased FOF, decreased back pain, the ability to recover self after a fall, and an increase in activity participation as indicated in the ACS. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Yorke, J., et al. (2013). "Equine-assisted therapy and its impact on cortisol levels of children and horses: A pilot study and meta-analysis." *Early Child Development and Care* 183(7): 874-894.

Childhood trauma, abuse or neglect impacts the function and structure of the brain of affected children. Attunement with other beings as well as an enriched environment can contribute to normal brain development. The enriched environment of a barn and attunement with an animal may contribute to reductions in stress for traumatised children. A pilot study, using a multiple base line, single case design included four children with post-traumatic stress syndrome (aged eight to ten years) and four therapy riding horses. This study hypothesised that cortisol would correlate between each child-horse pair, using a 12-day intervention that included six consecutive days of riding and grooming. A meta-analysis was completed of correlation levels of four child-horse pairs. The weighted mean cross-correlation, controlling for autocorrelation, was 0.23,  $Z = 3.03$ , approximate 95% confidence interval  $0.23 \pm (1.96 \times 0.076)$  or 0.08 to 0.38. The data suggest a need for further research. (PsycINFO Database Record (c) 2013 APA, all rights reserved).

Ansorge, J. and J. L. Sudres (2012). "La médiation équine en psychiatrie infanto-juvénile. D'un état des lieux à une étude d'évaluation clinique. = Equine-assisted therapy in child psychiatry." *A.N.A.E. Approche Neuropsychologique des Apprentissages chez l'Enfant* 24(2[117]): 147-154.

Although equitherapy seems to arouse the interest of the media and the professionals, few rigorous researches are led on their efficiency. By an investigation sent to 600 French children's mental healthcare institutions, and the observation of 23 children with multiple mental disorders in sessions of equine mediation over a period of one to three years, we can draw-up the first overview of the indications and practices of the equitherapy. (PsycINFO Database Record (c) 2012 APA, all rights reserved).

Aoki, J., et al. (2012). "Evaluation of cerebral activity in the prefrontal cortex in mood [affective] disorders during animal-assisted therapy (AAT) by near-infrared spectroscopy (NIRS): a pilot study." *International Journal of Psychiatry in Clinical Practice* 16(3): 205-213.

OBJECTIVE: Previous studies have shown the possibility that animal-assisted therapy (AAT) is useful for promoting the recovery of a patient's psychological, social, and physiological aspect. As a pilot study, we measured the effect that AAT had on cerebral activity using near-infrared spectroscopy (NIRS), and examined whether or not NIRS be used to evaluate

the effect of AAT biologically and objectively. METHODS: Two patients with mood [affective] disorders and a healthy subject participated in this study. We performed two AAT and the verbal fluency task (VFT). RESULTS: The NIRS signal during AAT showed great [oxy-Hb] increases in most of the prefrontal cortex (PFC) in the two patients. When the NIRS pattern during AAT was compared with that during VFT, greater or lesser differences were observed between them in all subjects. CONCLUSION: The present study suggested that AAT possibly causes biological and physiological changes in the PFC, and that AAT is useful for inducing the activity of the PFC in patients with depression who have generally been said to exhibit low cerebral activity in the PFC. In addition, the possibility was also suggested that the effect of AAT can be evaluated using NIRS physiologically and objectively.

Berry, A., et al. (2012). "Developing effective animal-assisted intervention programs involving visiting dogs for institutionalized geriatric patients: a pilot study." *Psychogeriatrics* 12(3): 143-150.

AIM: An ever increasing interest in the therapeutic aspects of the human-animal bond has led to a proliferation of animal-assisted interventions (AAI) involving dogs. However, most of these programs lack a solid methodological structure, and basic evaluative research is needed. The purpose of this study was to test the value of dog-assisted interventions as an innovative tool to increase quality of life in the geriatric population. METHODS: Nineteen patients (men and women) with a mean age of 85 years participated in the study. Interactions between patients and visiting dogs occurred either in a social situation (socialization sessions) or in a therapeutic context (physical therapy sessions). We derived and characterized a specific ethogram of elderly-dog interactions aimed at evaluating the effectiveness of visiting dogs in improving mood, catalyzing social interactions and reducing their everyday apathetic state. Cortisol levels were also measured in the saliva, and depressive state was evaluated. RESULTS: Overall, results show a time-dependent increase in social behaviour and spontaneous interactions with the dogs. Dog-mediated interactions affected the daily increase in cortisol levels, thus having an 'activational effect', in contrast to the apathetic state of institutionalized elderly. CONCLUSIONS: Dog-mediated intervention programs appear to be promising tools to improve the social skills and enrich the daily activities of the institutionalized elderly.

Dietz, T. J., et al. (2012). "Evaluating animal-assisted therapy in group treatment for child sexual abuse." *Journal of child sexual abuse* 21(6): 665-683.

This study evaluates and compares the effectiveness of three group interventions on trauma symptoms for children who have been sexually abused. All of the groups followed the same treatment protocol, with two of them incorporating variations of animal-assisted therapy. A total of 153 children ages 7 to 17 who were in group therapy at a Child Advocacy Center participated in the study. Results indicate that children in the groups that included therapy dogs showed significant decreases in trauma symptoms including anxiety, depression, anger, post-traumatic stress disorder, dissociation, and sexual concerns. In addition, results show that children who participated in the group with therapeutic stories showed significantly more change than the other groups. Implications and suggestions for further research are discussed.

Dorfman, J., et al. (2012). "The role of complementary and alternative medicine in end-of-life care." *Psychiatric Annals* 42(4): 150-155.

This article focuses on three domains of complementary and alternative medicine (CAM) applicable to palliative and end of life care which includes herbal medicines, massage therapy and animal assisted therapy. For centuries, herbal medicines were the primary source of medical treatment for the world's population. Many herbal medications contain bioactive compounds that can be helpful in the treatment of multiple medical conditions. However, the increasing popularity of over the counter (OTC) herbal preparations presents a unique set of problems, such as toxicities due to contamination, and interactions with mainstream medications. Massage therapy includes many different modalities such as Swedish massage, reiki and several other modalities and the physiological basis for the benefits of massage is currently under active investigation. It appears that moderate pressure massage activates the parasympathetic nervous system as measured by heart rate variability changes which reflect increased vagal efferent activity after massage. Animal-assisted therapy (AAT) is defined as a goal directed intervention between a human and a trained therapy animal that draws from this human animal bond and promotes improvement in human physical, social, emotional and cognitive functions.  
(PsycINFO Database Record (c) 2012 APA, all rights reserved)

Marcus, D. A., et al. (2012). "Animal-assisted therapy at an outpatient pain management clinic." *Pain Medicine* 13(1): 45-57.

Objective: The objective of this study was to evaluate the effects of brief therapy dog visits to an outpatient pain management facility compared with time spent in a waiting room. Design: The design of this study is open-label. Setting: This study was conducted in a university tertiary care adult chronic pain outpatient clinic. Subjects: The subjects of this study include outpatients, adults accompanying outpatients to their appointments, and clinic staff. Intervention: Participants were able to spend clinic waiting time with a certified therapy dog instead of waiting in the outpatient waiting area. When the therapy dog was not available, individuals remained in the waiting area. Outcome Measures: Self-reported pain, fatigue, and emotional distress were recorded using 11-point numeric rating scales before and after the therapy dog visit or waiting room time. Results: Two hundred ninety-five therapy dog visits (235 with patients, 34 family/friends, and 26 staff) and 96 waiting room surveys (83 from patients, 6 family/friends, and 7 staff) were completed over a 2-month study period. Significant improvements were reported for pain, mood, and other measures of distress among patients after the therapy dog visit but not the waiting room control, with clinically meaningful pain relief (decrease  $\geq 2$  points) in 23% after the therapy dog visit and 4% in the waiting room control. Significant improvements were likewise seen after therapy dog visits for family/friends and staff. Conclusions: Therapy dog visits in an outpatient setting can provide significant reduction in pain and emotional distress for chronic pain patients. Therapy dog visits can also significantly improve emotional distress and feelings of well-being in family and friends accompanying patients to appointments and clinic staff. (PsycINFO Database Record (c) 2012 APA, all rights reserved).

Maurer, M. (2012). "Quelles méthodologies pour analyser les programmes d'interventions assistées par l'animal? = What are the methods used to analyze animal-assisted intervention program?" *A.N.A.E. Approche Neuropsychologique des Apprentissages chez l'Enfant* 24(2[117]): 168-174.

Scientists, who are interested in the therapeutic effects of animal-assisted interventions on the health of human being, have to deal with numerous methodological issues. First, a panorama of various theoretical models is established, leading to the conclusion that none of them is able to take in to account all the observed effects. Then two ways of reflexion, regarding some new methodologies in animal-assisted interventions, are presented. (PsycINFO Database Record (c) 2012 APA, all rights reserved).

Merle, M. and M. Saillant (2012). "[Dog-assisted intervention with elderly people]." *Revue de l'infirmiere*(185): 41-43.

An experiment to study the benefits of dog-assisted intervention in a long-term nursing home was carried out in two care homes in Lyon. It brought together trained visiting dogs with their handlers and elderly people. More than a simple activity, the experience proved to be therapeutic, soothing and stimulating for people who are often withdrawn.

Nordgren, L. and G. Engstrom (2012). "Effects of animal-assisted therapy on behavioral and/or psychological symptoms in dementia: a case report." *American journal of Alzheimer's disease and other dementias* 27(8): 625-632.

Background: Recently, interest in nonpharmaceutical interventions in dementia care has increased. Animal-assisted therapy has been shown to be one promising intervention but more knowledge is needed. The present article reports on a pilot study involving an 84-year-old woman with vascular dementia who was systematically trained with a therapy dog team for 8 weeks. Methods: A quasi-experimental longitudinal interventional design with pre-post measures was used. Data were collected on 3 occasions. Descriptive statistics were used for data analysis. Results: Some effects on the woman's ability to walk and move were identified. In addition, some effects in the woman's cognitive state were observed. Conclusions: Physical, psychological, and/or social training with certified therapy dog teams can have effects on behavioral and psychological symptoms in people living with dementia. Further research is needed.

Pedersen, I., et al. (2012). "Important elements in farm animal-assisted interventions for persons with clinical depression: A qualitative interview study." *Disability and Rehabilitation: An International, Multidisciplinary Journal* 34(18): 1526-1534.

Purpose: The main aim of this study was to obtain participants' own experience of a farm animal-assisted intervention, and what they perceived as important elements in relation to their mental health. Method: A qualitative

study, inspired by a phenomenological-hermeneutical perspective was conducted. Eight persons with clinical depression who had completed a 12-week farm animal-assisted intervention at a dairy farm participated in thematic interviews between May and June 2009. Results: The intervention was regarded as a positive experience for the participants. The analyses revealed that central elements in the intervention were the possibility to experience an ordinary work life, but also the importance of a distraction to their illness. Furthermore, the flexibility of the intervention made it possible to adjust the intervention to the participants' shifting reality and was thereby a key element in farm animal-assisted intervention. The flexibility and adapted work tasks were important elements that the participants associated with their experience of coping. A model showing the interaction between the different elements reported as important by the participants was constructed. Conclusions: This study shows that a farm animal-assisted intervention could be a supplement in mental health rehabilitation. All the elements in our model could possibly influence positively on mental health. (PsycINFO Database Record (c) 2013 APA, all rights reserved).

Reed, R., et al. (2012). "Natural healers: a review of animal assisted therapy and activities as complementary treatment for chronic conditions." *Revista latino-americana de enfermagem* 20(3): 612-618.

The primary objective of this review is to synthesize the existing literature on the use of animal-assisted therapy and activity (AAT/A) as complementary treatment among people living with chronic disease and to discuss the possible application of this practice among children living with HIV. Relevant databases were searched between March 10 and April 11, 2011, using the words: animal assisted therapy or treatment and chronic conditions or diseases. Thirty-one articles were found and 18 followed the inclusion and exclusion criteria. Research suggests that AAT/A is effective for different patient profiles, particularly children. Interaction with dogs has been found to increase positive behaviors, such as sensitivity and focus, in children with social disabilities. Decreased levels of pain have also been reported among child patients as a result of AAT/A. More research should be done in the area of children living with chronic diseases that require strict adherence to treatment, such as HIV, and on AAT/A's prospective use as an educational tool to teach children about the importance of self-care for their medical conditions.

Siporin, S. (2012). "Talking horses: Equine psychotherapy and intersubjectivity." *Psychodynamic Practice: Individuals, Groups and Organisations* 18(4): 457-464.

Drawing on the play *Equus*, this article discusses equine psychotherapy and intersubjectivity. In the play a teenage boy displays a pathological fascination with horses. A psychiatrist is consulted, and discovers that the horse embodies powerful religious and sexual signification for the boy, along with possible therapeutic effect. Even the psychiatrist has strong emotional responses towards the animal. While the treatment outcome in *Equus* is unclear, what is clear is that horses are potent psychological symbols. Gestural and body language, implicit in therapist-client relations, is explicit in human-horse communication. This urges the expansion of client awareness and may evoke early parent-infant interaction patterns. Thus, with the human therapist's careful guidance and interpretation, equine-assisted psychotherapy (EAP) may promote emotional healing and empathic growth. (PsycINFO Database Record (c) 2012 APA, all rights reserved)

Sudres, J. L. and A. Tafforin (2012). "Quand la relation au chien devient thérapeutique auprès de la personne âgée démente. = When the relationship with the dog becomes animal-assisted therapy for elderly with dementia." *A.N.A.E. Approche Neuropsychologique des Apprentissages chez l'Enfant* 24(2[117]): 155-167.

The objective of this research is to evaluate the effect of Animal Assisted Therapy (dog) on behavioral disorders as well as psychomotor, cognitive, language and socio-emotional skills in persons with dementia (N = 9). The application of Neuro-Psychiatric Inventory and an Observation Grid have helped to record an overall decrease in behavioral disorders (agitation/aggressiveness). Performances in four assessed spheres have increased. (PsycINFO Database Record (c) 2012 APA, all rights reserved).

Symington, A. (2012). "Grief and horses: Putting the pieces together." *Journal of Creativity in Mental Health* 7(2): 165-174.

The effectiveness of grief counseling may be enhanced through the utilization of equine-assisted psychotherapy (EAP). An experiential, solution-focused, and natural approach, EAP provides clients with the opportunity to discover solutions to challenges that exist within themselves. Counselors and equine specialists team with horses to provide a unique approach based on metaphor and interaction. Horses' natural abilities allow them to be extremely beneficial

components of a counseling team. When incorporated into grief counseling, horses provide many unique therapeutic options. This article discusses the integrative potential of grief counseling through EAP while incorporating humanistic and cognitive theoretical counseling concepts, as well as providing case examples to illustrate these concepts. Client names and identifying information have been changed to protect confidentiality. (PsycINFO Database Record (c) 2013 APA, all rights reserved)

Takeda, M. (2012). "Integration of drugs and non-pharmacological intervention to Alzheimer patients." *Psychogeriatrics* 12(1): 1-2.

This issue of *Psychogeriatrics* focuses on the Integration of drugs and non-pharmacological intervention for Alzheimer's disease patients, There are many complementary and alternative medicines (CAM) for dementia. CAM for dementia include off-label use of drugs, Chinese herbal medicine, natural supplements, food, exercise, leisure activities, life styles and non-pharmacological interventions. Patients, caregivers and medical professionals have been searching for effective interventions for Alzheimer's disease, and there are a variety of non-pharmacological interventions. The limited efficacy of drug therapy and the plasticity of the human brain are the two main reasons that explain this growing interest in non-pharmacological intervention for dementia patients. The non-pharmacological interventions include, cognitive training, cognitive rehabilitation, cognitive stimulation therapy, reality orientation, reminiscence therapy, validation therapy, physical activity, light therapy, music therapy, aromatherapy and animal assisted therapy. (PsycINFO Database Record (c) 2012 APA, all rights reserved)

Thompson, J. R., et al. (2012). "Giddyup! Or whoa Nelly! Making sense of benefit claims on websites of equine programs for children with disabilities." *Journal of Developmental and Physical Disabilities* 24(4): 373-390.

Programs offering horseback riding or other equine related experiences for children with disabilities are commonplace throughout the United States as well as other parts of the world. However, there is a dearth of research findings demonstrating the benefits of these programs. Four Internet search engines were used to identify 115 websites associated with equine programs that people with disabilities and their family members in the United States would likely encounter if searching the Web for information. Content analysis methodology was used to review websites for information related to program characteristics and benefit claims. Findings are summarized and the importance of establishing the validity of benefit claims through means other than anecdotal and testimonial evidence is discussed. (PsycINFO Database Record (c) 2012 APA, all rights reserved).

Urbanski, B. L. and M. Lazenby (2012). "Distress among hospitalized pediatric cancer patients modified by pet-therapy intervention to improve quality of life." *Journal of pediatric oncology nursing* 29(5): 272-282.

This state of the science, integrative literature review focuses on animal-facilitated therapy (AFT) and the benefits provided to quality of life in hospitalized pediatric oncology patients. Results showed physiological and psychological benefits in pediatric inpatients settings. AFT has been shown to decrease pain, change vital signs, provide distraction, decrease fear, increase socialization, increase pleasure and decrease emotional distress in hospitalized pediatric patients. AFT needs to be implemented with appropriate medical discretion, but for the appropriate high-risk patients, AFT can improve quality of life. Pain, adjustment difficulties, mood changes and symptom management can be improved in inpatient pediatric cancer patients receiving AFT, thus improving overall quality of life.

Young, J. S. (2012). "Pet therapy: dogs de-stress students." *Journal of Christian nursing* 29(4): 217-221.

Research supports the efficacy of the human-animal bond and pet therapy in a variety of settings. At nursing students' request at one school, the author began offering pet therapy prior to examinations. Anecdotal evidence of a study with the author's Golden Retriever, Goldilocks, demonstrates that pet therapy can reduce test anxiety and improve nursing student performance.

Baars, S. and F. Wolf (2011). "Tiergestützte Therapie bei Kognitions- und Sprachstörungen." *Nervenheilkunde* 30(12): 961-966.

The animal assisted therapy is a new method of treatment, which recently gained interest and currency into the neurological rehabilitation as an assistant addition to the conventional methods of therapy. It is aimed at the multimodal and emotional interaction with the concerned patient. The first scientifically proven findings about the therapeutically

assignment of animals are written by the child psychologist Boris M. Levison 1961 and describe the positive influence on a boy's behavior. The scientific evaluation of the animal assisted therapy in neurology are still at the beginning state. Admittedly there are some, mostly Anglo-American publications, that describe the evidence of this treatment in psychiatry and geriatrics. The assignment of animal assisted therapy in neuropsychology therapy settings enables the improvement of multiple cognitive domains, respectively the mental state. The empiricism, as well as published case reports and smaller studies, show, that it is mostly the patient's impulse and alertness, that can be often measurable and appreciable enhanced already at the first therapy session. Within the animal assisted speech therapy increased nonverbal and verbal communication can be asserted. All linguistic modalities can be exercised within the animal assisted therapy. Therefore this therapy is an considerable treatment option ranging from severe aphasia to remaining symptomatology of aphasia or speech apraxia. It is important to declaim, that the assignment of therapy animals takes place corresponding to the guidelines of the Robert Koch Institute and does not compromise the hospital hygiene. For quality management the course of treatment is documented with a standardized protocol.

Burgon, H. L. (2011). "'Queen of the world': Experiences of 'at-risk' young people participating in equine-assisted learning/therapy." *Journal of Social Work Practice* 25(2): 165-183.

There is a significant body of research into the benefits of animal-assisted therapy (AAT) but less into the fields known as equine-assisted learning and therapy (EAL/EAT) where horses are incorporated in therapeutic and learning interventions. This paper explores the experiences of seven 'at-risk' young people who participated in a therapeutic horsemanship (TH) programme. The study followed a practice-near approach seeking to capture the young people's experiences within a participative ethnography. Themes related to the risk and resilience literature such as self-confidence, self-esteem, self-efficacy and a sense of mastery, empathy and the opening of positive opportunities are explored in this paper. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Geist, T. S. (2011). "Conceptual framework for animal assisted therapy." *Child & Adolescent Social Work Journal* 28(3): 243-256.

Animal-assisted Therapy (A-AT) is becoming a popular therapeutic treatment for both children and adults. The author has used A-AT in a school setting with students with emotional disturbances. A review of the literature regarding A-AT reveals a lack of a unified theoretical framework. This paper proposes a conceptual framework that incorporates a physiological, psychological, and cognitive model to depict the functional deficits that challenge students with emotional disturbances. Attachment Theory is then used to describe why A-AT may be effective in improving the socio-emotional and behavioral functioning of students with emotional disturbances. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Granados, A. C. and I. F. Agís (2011). "Why children with special needs feel better with hippotherapy sessions: A conceptual review." *The Journal of Alternative and Complementary Medicine* 17(3): 191-197.

Background: Hippotherapy literally means "therapy with the help of a horse" and is derived from the Greek word *hippos*, meaning "horse." Hippocrates was the first to describe the benefits of hippotherapy for rehabilitation purposes. Although this therapy has many years of history, few scholars have defined the theoretical bases of hippotherapy and less about how psychologic, physical, social, and educational benefits can be achieved through hippotherapy in children with special needs. Objective: This article is designed from a chronological perspective to provide mental health professionals, educators, and others with current information on how horses can be used as a main tool in an effective and holistic therapy for children with special needs. This is supported by current literature review through a conceptual framework of hippotherapy explained by dynamic system theory along with the theory of neuronal group selection and sensory integration theory. Conclusions: Hippotherapy, by affecting multiple systems such as the sensory, muscular, skeletal, limbic, vestibular, and ocular systems simultaneously, leads to psychologic, social, and educational benefits that will be evidenced in behavioral patterns used in other environments. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Mallow, A., et al. (2011). "'For the love of horses': Establishing a protocol for women in a therapeutic community to work with rescued horses." *Journal of Social Work Practice in the Addictions* 11(2): 205-208.

Basics and Promesa, Inc., two of the largest and oldest Latino community-based nonprofit organizations in the Bronx, New York, entered into a strategic alliance in 2009, combining their services to care for more than 3,000 people

every day. Together these organizations offer a wide range of services in chemical dependency, health care, and housing. Services delivered are expected to be evidence- or consensus based. Pet-assisted therapy has been utilized in one of our residential health care facilities with good results; therefore, we began to explore the possibility of animal-assisted therapy for the women in treatment at one of our residential chemical dependency programs. The horses chosen for this project reside at Equine Rescue in Walden, New York, and mirror the life experiences of the women in the residential program: They also have suffered tremendous emotional and physical pain at the hands of others. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Maurer, M., et al. (2011). "L'enfant avec un autisme et l'animal dans un lien signifiant: Des possibilités d'interventions thérapeutiques." *La Psychiatrie de l'Enfant* 54(2): 575-609.

Bonds with animal are constructed early on in the course of a child's development. They present certain characteristics which differentiate them from relations with another human being. Thus, although the animal also shows himself to be contingent, his behavior is more predictable and less complex than that of a human. The child gives the animal significance, gives him meaning. Moreover, communication with the animal most commonly takes place on a non-verbal level and often involves tactile exchanges. These specificities make him a more accessible partner for the child without developmental problems and constitute some real assets in therapeutic work with children suffering from autism. Indeed, autism is characterized by interactional and communicative difficulties which can be improved following structured contact with animal. The aim of this article is thus to recapitulate the principal theoretical arguments which show the animal to be a singular partner for children in general and for autistic children in particular. (PsycINFO Database Record (c) 2012 APA, all rights reserved).

Mende, E.-M. and M. Mende (2011). "Integrating animals in psychotherapy: The dog as co-therapist in the hypnotherapeutic treatment of trauma—A case report." *Contemporary Hypnosis & Integrative Therapy* 28(1): 8-16.

The article outlines the present status of animal-assisted therapy research and describes the special communication and contact skills that qualify dogs among all animals to serve as co-therapists. A distinction is drawn between the general benefits dogs may have in therapy and the special psychotherapeutic assignments dogs can assume in a hypnotherapeutic setting. Describing the case of a traumatically bereaved patient, it is shown how the therapy dog is used to create a stable therapeutic alliance. The dog becomes a positive transference object facilitating ego-strengthening and re-accessing lost resources. It is described how the dog assists in hypnotherapeutic interventions to lower chronically raised psycho-physiological arousal, dissolve dissociative symptoms of derealization, and provide enough stability to confront and integrate the traumatic experience. As a consequence, a good balance between the basic emotional needs to feel autonomous, related, competent, and oriented can be reached. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Moretti, F., et al. (2011). "Pet therapy in elderly patients with mental illness." *Psychogeriatrics* 11(2): 125-129.

Background: To evaluate the effects of pet therapy on cognitive function, mood and perceived quality of life on elderly inpatients (mean age 84.7 years; 95.2% women) affected by dementia, depression and psychosis. Methods: Mini-Mental State Examination (MMSE) and 15-items Geriatric Depression Scale (GDS) were administered to 10 patients (pet group) and 11 controls (control group) together with a self-perceived quality-of-life questionnaire, before and after a pet therapy intervention that lasted 6 weeks. MMSE and GDS mean scores were compared between and within groups by Student's t-test. Results: Both the pet group and control group improved on GDS and MMSE. Within the pet group, GDS symptoms decreased by 50% (from 5.9 to 2.7,  $P = 0.013$ ), whereas mean MMSE score increased by 4.5 ( $P = 0.060$ ). The between group comparison showed a positive effect of pet therapy intervention on GDS ( $P = 0.070$ ). Most of the participants reported an improvement of their perceived quality of life. Conclusions: Pet therapy is efficient in improving depressive symptoms and cognitive function in residents of long-term care facilities with mental illness. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Mossello, E., et al. (2011). "Animal-assisted activity and emotional status of patients with Alzheimer's disease in day care." *International psychogeriatrics / IPA* 23(6): 899-905.

**BACKGROUND:** Preliminary studies suggest beneficial effects of animal-assisted activities (AAA) on behavioral and psychological symptoms of dementia (BPSD), but data are inconsistent. This study aimed to assess the effect of AAA with dogs on cognition, BPSD, emotional status and motor activity in severe Alzheimer's disease (AD). **METHODS:** Ten patients attending an Alzheimer Day Care Center (ADCC) participated in a repeated measures study, which included: two weeks' pre-intervention, three weeks' control activity with plush dogs (CA), and three weeks' AAA. Cognitive function (Severe Impairment Battery), mood (Cornell Scale for Depression in Dementia; CSDD), BPSD (Neuropsychiatric Inventory; NPI) and agitation (Cohen-Mansfield Agitation Inventory; CMAI) were assessed at baseline and after each period. Observed Emotion Rating Scale (OERS) for emotional status, Agitated Behavior Mapping Instrument (ABMI) and a checklist for motor activity were completed across the study periods, both during intervention sessions and after three hours. **RESULTS:** Cognition and NPI were unchanged across the study. Declines in the CMAI and CSDD scores after AAA were not significant, while the NPI anxiety item score decreased in comparison with CA (CA 3.1+/-2.3, AAA 1.5+/-2.7,  $p = 0.04$ ). OERS "sadness" decreased ( $p = 0.002$ ), while "pleasure" ( $p = 0.016$ ) and "general alertness" ( $p = 0.003$ ) increased during AAA compared with CA sessions, and observed sadness remained lower after three hours ( $p = 0.002$ ). Motor activity increased significantly during AAA. **CONCLUSION:** In this sample of severe AD patients in ADCC, AAA was associated with a decrease in anxiety and sadness and an increase in positive emotions and motor activity in comparison with a control activity.

Munoz Lasa, S., et al. (2011). "Animal-assisted interventions in internal and rehabilitation medicine: a review of the recent literature." *Panminerva Medica* 53(2): 129-136.

While conventional wisdom has always affirmed the value of animals in promoting human well-being, only recently has their therapeutic role in medicine become the focus of dedicated research. Therapeutic modalities that use animals as a tool for improving the physical, emotional, cognitive and/or social functioning of humans are called animal-assisted interventions (AAI), and are classified into: animal-assisted activities (AAA); animal-assisted therapy (AAT); and service animal programs (SAP). The aim of this review is to analyze the papers published between 2001 and 2010 in the most influential medical journals dealing with AAI, and discuss their findings in the light of what may be of interest for internal medicine and rehabilitation. A total of 35 articles met the strict inclusion criteria for this review: 18 papers dealing with AAA, 8 with AAT, and 9 with SAP. The therapeutic outcomes associated with AAA are: enhancement of socialization; reduction of stress, anxiety and loneliness; improvement in mood and general well-being; and development of leisure/recreation skills. Regarding AAT, horses are often used as a complementary strategy to facilitate the normalization of muscle tone and improve motor skills in children with cerebral palsy and persons with lower limb spasticity. Finally, most SAP utilize dogs, that assist people with various disabilities in performing everyday activities, thus reducing their dependence on other persons. Further studies are needed to better define the fields and programs for the therapeutic use of animals and to increase their utilization in medicine, as a promising, complementary and natural means to improve both functional autonomy and quality of life.

Prosinečki, N. (2011). "Animal-assisted therapy—Novi trend u liječenju osoba s psihičkim i intelektualnim smetnjama." *Socijalna Psihijatrija* 39(1): 25-33.

The aim of this paper is to define animal-assisted therapy, to describe its historical development, and to present relevant authors having advocated the involvement of animals in therapeutic process (even before the existence of theoretic foundation), its current role and place in therapeutic approaches to people with various mental and physical disorders. We illustrate which animals and under what specific criteria can be considered therapy animals and participate in sessions along with therapist. We also demonstrate the benefits of animal-assisted therapy in the work with elderly residents in long-term care facilities, chronic schizophrenia inpatients, illegal substance abusers, children with intellectual difficulties and autism, and in the context of family therapy. We emphasize the role of animal-assisted therapy within the frame of social work and give an overview of the Krila (Wings) Society and Silver Center, the Croatian model of including animals for therapeutic purposes. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Reyes, P. (2011). "Pooch in the practice: Mona Lisa makes patients smile." *Journal of the California Dental Association* 39(3): 137-139.

On Mona, a rescued Chihuahua/Dachshund mix dog, and her impact on patients in a family dental practice in La Jolla (D. Anderson).



Beckmann, A. (2010). "Die Untersuchung psychosozialer Wirkungen tiergestützter Intervention bei dementen Menschen in stationären Einrichtungen." *Verhaltenstherapie & Psychosoziale Praxis* 42(1): 69-85.

It has already been established that animals can positively influence human quality of life and well-being in various ways (see Nestmann, 2005). This longitudinal field study, 'Animals at the Johanniter-Stift Nursing Home', is the first to investigate the effects of animal-assisted activities on the quality of life and well-being of elderly nursing home patients with dementia. In order to systematically establish the extent to which various forms of regular contact with animals can benefit such patients, psychological and social changes in patients with and without contact to animals were examined at three intervals over a three-year period, using research instruments such as non-participant observation (MTU) and questionnaires completed by nursing staff (FSAK; NPI). These questionnaires asked staff to evaluate patients' levels of independence in performing everyday tasks and ability to communicate, as well as any unusual behaviour they displayed as a result of dementia. The study demonstrates that elderly dementia sufferers with regular contact to animals tend to show greater agility, independence, strength of social network and communication abilities compared to those without contact to animals. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Beckmann, A. and S. Wesenberg (2010). "Pet Encounters—Tiergestützte Intervention für hilfebedürftige ältere Menschen." *Verhaltenstherapie & Psychosoziale Praxis* 42(1): 87-95.

It has long been known that animals can be beneficial to human health in many ways, and they have been used in professional and therapeutic settings since the 1960s. The diverse psychosocial benefits of animal-assisted activities may also be seen in retirement and nursing home programmes, where animals can be successfully integrated into residents' daily routines. This article presents an animal-assisted therapy programme developed especially for elderly and frail adults—"Pet Encounters"—and considers the effects and options associated with introducing animal-assisted activities into care for the elderly, as an alternative to pharmacological treatment. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Cangelosi, P. R. and J. M. Sorrell (2010). "Walking for therapy with man's best friend." *Journal of Psychosocial Nursing and Mental Health Services* 48(3): 19-22.

Recent research has shown that older people who walk dogs are more likely than those who walk with a human companion to engage in regular exercise and show more improvement in fitness. Studies with dogs and other animals have suggested new approaches for using animals to enhance both mental and physical health in older adults. With the current intense focus on health care reform, increased use of animals as therapy may serve as a cost-effective strategy for improving and maintaining health in older adults.

Chandler, C. K., et al. (2010). "Matching animal-assisted therapy techniques and intentions with counseling guiding theories." *Journal of Mental Health Counseling* 32(4): 354-374.

Animal-assisted therapy (AAT) interventions are often used in mental health practice, yet there are few studies to assist mental health counselors in integrating AAT practice with theoretical foundations. The authors draw upon the literature on AAT intentions and techniques to illustrate how these practices are consistent with a variety of theoretical orientations. Case illustrations are provided. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Friesen, L. (2010). "Exploring animal-assisted programs with children in school and therapeutic contexts." *Early Childhood Education Journal* 37(4): 261-267.

Animal-Assisted programs with children are becoming increasingly popular in school and therapeutic settings. This article provides an overview of the benefits accrued by children as well as the concerns with programs which involve animals, and therapy dogs in particular, in these environments. Research over the past 30 years indicates that therapy dogs may offer physiological, emotional, social, and physical support for children. The distinguishing features of Animal-Assisted Therapy (AAT) are characterized by the supplemental inclusion of a trained therapy dog in reaching an intervention goal in therapeutic environments, and as a supplement to an educational objective in school contexts. The general assumptions underlying AAT with children are that although therapy dogs are interactive, children seem to perceive them as non-judgemental participants who are outside of the complications and expectations of human relationships. This unique interaction may offer children a valuable form of social and emotional support in educational and therapeutic settings. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Garcia, D. M. (2010). "Of equines and humans: Toward a new ecology." *Ecopsychology* 2(2): 85-89.

Since the domestication of the horse ~6000 years ago, the equine-human relationship has played a crucial role in the evolution of humankind. Horses enabled the conquering of new worlds and civilizations, forging an intimate interspecies relationship that is complex and difficult to articulate. No longer used primarily as companions in battle and beasts of burden, horses are today predominantly visible in the Western world of competitive sports and pleasure riding. New fields have also opened up in the past two decades, where horses are being utilized as friends, teachers, and therapists—namely, therapeutic riding and equine-facilitated psychotherapy/learning. This article explores two dimensions of equine-facilitated learning: (1) ways in which horses communicate, and how the human perceives this phenomenon, and (2) ways in which horses help humans construct systems of shared meanings (i.e., community). Both of these dimensions may have important implications for understanding how horse-human encounters can promote emotional well-being and ecological awareness. Further, the study contextualizes this exploration by drawing connections to Gregory Bateson's thought on esthetics, grace, and ecosystemic health. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Hameury, L., et al. (2010). "Équithérapie et autisme." *Annales Médico-Psychologiques* 168(9): 655-659.

Equine-assisted therapy is used beside therapies realised at the Child Psychiatry Center and included into individualised therapeutic program. The goals are to adapt therapeutic principles outside hospital and with pony as mediator in order to exercise adjustment and control systems: Communication and relationships with others, cognitive regulation (attention, mental representation, understanding causality, anticipation), motor regulation (tonus, body consciousness, postural adjustment, balance, coordination), emotional regulation (self-esteem, relaxation, pleasure, coping emotionally with problems, expressing and sharing emotions), adjusting to change. Varied activities with tranquil and easy-going ponies were realised in a calm secure environment by three therapists with experience in horseback riding for a group of four children. An individual plan targeting specific goals was worked out for each child. Results were evaluated with standardized tools (Behavior Function Inventory and Behavior Summarized Evaluation Scale) for six children with autistic spectrum treated at the day-care hospital, which participated to equine-assisted therapy. Improvements are obtained since the first session and concerns all developmental functions, especially communication, imitation, perceptual, emotional and motor adjustment. With his/her pony the child is stable, calms down, adjusts his/her interactions, is more aware of the effects of his/her actions, and optimal sensory integration can take place. So, equine-assisted therapy is an efficient remediation of the neurophysiologic functions involved in developing communication and social skills, and cognitivo-emotional regulation. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Lee, D. and P. A. Higgins (2010). "Adjunctive therapies for the chronically critically ill." *AACN Advanced Critical Care* 21(1): 92-106.

Along with the well-known pharmacological and technological advances in the treatment of the critically ill, nurses have made significant contributions in the realm of more holistic approaches to care, advancing well-known nursing therapies such as physical activity, music, and relationship-based care. The purpose of this article is to review current literature regarding adjunctive therapies used for the care for the critically ill, and, by extension, the chronically critically ill. The review describes the application of interventions using physical activity, spirituality, music, complementary and alternate therapies, relationship-focused care, and pet visitation. The authors conducted a multidisciplinary review of literature published between 1990 and 2009, using the Cochrane Database system and PubMed. The main focus was intervention studies; articles in which authors reviewed evidence and made suggestions for practice or further research were also examined.

Marx, M. S., et al. (2010). "The impact of different dog-related stimuli on engagement of persons with dementia." *American journal of Alzheimer's disease and other dementias* 25(1): 37-45.

OBJECTIVE: To provide further empirical evaluation of the effectiveness of animal-assisted therapy in nursing home residents with dementia. METHODS: Participants were 56 residents of 2 suburban Maryland nursing homes and had a diagnosis. Activities of daily living performance was assessed via the minimum data set and cognitive functioning assessed using the Mini-Mental State Examination. Engagement with dog-related stimuli was systematically assessed via the observational measurement of engagement. RESULTS: Mean engagement duration was significantly lower for the small dog. Highest mean engagement duration was found for the puppy video, followed by the real dog and lowest was for the dog-coloring activity. Positive attitudes were found toward the real dogs, robotic dog, the puppy video, and the plush dog.

No significant differences were found in engagement duration among our dog-related stimuli. CONCLUSIONS: Nursing homes should consider animal-assisted therapy and dog-related stimuli, as they successfully engage residents with dementia.

Matuszek, S. (2010). "Animal-facilitated therapy in various patient populations: systematic literature review." *Holistic Nursing Practice* 24(4): 187-203.

With a soaring trend of the incorporation of complementary therapies into the mainstream of health care, animal-facilitated therapy has become a popular interest for the health care team to integrate into a patient's plan of care. This systematic literature summarizes the current research on the use of animal therapy in several patient populations and provides nursing implications for practice.

Niewiadomska, M., et al. (2010). "[Agility in treatment of children with type 1 diabetes--pilot study]." *Pediatric Endocrinology, Diabetes, and Metabolism* 16(2): 89-93.

INTRODUCTION: Physical activity is a very important element in treatment of children with type 1 diabetes. However, it is difficult to find suitable exercises for the children due to their specific needs and psychophysiological condition. The aim of this study was to examine the effects of agility as a physical activity used to improve parameters of metabolic control in children with type 1 diabetes. Additionally, we hope that this form of recreation could induce a more health-oriented behavior in children. MATERIAL AND METHODS: The experimental group consisted of seven girls aged 8-10 years, the patients of the Clinic of Pediatrics, Endocrinology, Diabetology, Metabolic Disorders and Cardiology of the Developmental Age in Szczecin. The children were qualified for the study after the prior assessment of their metabolic control under the conditions of the one-day hospital stay program. The physical condition of the patients was controlled with a 6-minute walk test and the test of perceived exertion (Borg scale). All the patients were treated using a personal insulin pump and the basal-bolus therapy. The applied research method used the scheme of physical exercise performed 3 times a week, 45 min each, reaching the intensity of 75% of the maximum heart rate under effort performed by a given patient. Before the exercises and directly after their completion, sugar level was measured in the blood of the patients (Accu-chek Active). During the exercises, the heart rate was measured with a pulsometer Bauer PM 80. The exercises included outdoor games and agility sessions. Especially the latter received a positive response and high involvement. This form includes a dog going through an obstacle course, with a child as a guide. RESULTS AND CONCLUSIONS: After three months of the exercise scheme, the analysis of the collected results showed a statistically significant ( $p < 0.05$ ) decrease in the insulin doses (bolus) during morning hours (7-8 am), and in the evening at 9 pm and 10.30 pm, with an unchanged basal. No such decrease was observed in the control group. This study showed that an interesting physical activity resulted in a more eager and systematic effort among examined diabetic children. Its proper organization in time may help in the metabolic control in children with type 1 diabetes.

Pawlik-Popielarska, B. M. (2010). "The impact of kynotherapy in handicapped children." *Acta Neuropsychologica* 8(1): 26-37.

Background: Therapy using a dog and a specially trained guide (kynotherapy) makes use of a new form of interaction, intended to improve functionality in disabled patients. This form of work is especially useful in children with intellectual and motor disabilities, and complements traditional methods of rehabilitation. Material/Methods: The research group consisted of 8 handicapped children, who were taking part in sessions throughout the school year. During this time, the person conducting the sessions kept a daily record book, noting all changes in the participant's behavior as a result of the sessions. Additionally, a numerical measurement of the children's behavior was taken before and after therapy by means of the Scale of Observation of the Behavior of Children and Parents. Results: The results showed a considerable improvement in the children's behavior in all aspects studied: emotional, motor, cognitive, and social. Conclusions: This research documented the utility of kynotherapy as a method to support the development of children with intellectual and motor disabilities. It also showed prospects for further study. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Prothmann, A. (2010). "Hund, Katze und Co—Tiere als Prävention und Therapie in der Humanmedizin." *Verhaltenstherapie & Psychosoziale Praxis* 42(1): 31-44.

Over the course of the last three decades, numerous studies have shown that having contact to animals, owning a pet of one's own and animal-assisted intervention can have a multitude of effects on various groups of subjects, in a range

of settings. This article describes the preventative, therapeutic and rehabilitative effects of using animals in human medicine. After providing a comprehensive summary of the effects that have already been empirically identified in various fields of medicine (paediatrics, oncology, surgery, intensive care) and amongst selected subject groups (children and adults, patients with low immunity, chronically ill patients), the article goes on describe various ways of implementing pet-visiting schemes in hospitals. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Risley-Curtiss, C., et al. (2010). "Animal-human relationships in child protective services: getting a baseline." *Child Welfare* 89(4): 67-82.

Inclusion of certain aspects of animal-human relationships (AHR), such as animal abuse and animal-assisted interventions, can enhance child welfare practice and there are resources available to promote such inclusion. However, there is little knowledge of whether this is being accomplished. This study sought to fill this gap by conducting a national survey of state public child welfare agencies to examine AHR in child protective services practice, their assessment tools, and cross-reporting policies.

Rossetti, J. and C. King (2010). "Use of animal-assisted therapy with psychiatric patients." *Journal of Psychosocial Nursing and Mental Health Services* 48(11): 44-48.

The use of animal-assisted therapy (AAT) as an adjunct treatment approach in psychiatric settings has received much attention in the literature. This article explores the use of AAT with psychiatric patients. The authors performed a literature review and found that AAT can have a significant effect on the improvement of psychiatric patients' socialization and provides a variety of psychological benefits. Nurses can benefit from learning about the potential benefits of AAT for psychiatric patients.

Chalquist, C. (2009). "A look at the ecotherapy research evidence." *Ecopsychology* 1(2): 64-74.

Ecotherapy is an umbrella term for a gathering of techniques and practices that lead to circles of mutual healing between the human mind and the natural world from which it evolved. It includes horticultural therapy, wilderness excursion work, time stress management, and certain kinds of animal-assisted therapy. This article provides an overview of research into ecotherapy's treatment efficacy and argues for a psychology of place designed to reconnect people psychologically with the world a place at a time. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Chardonens, E. (2009). "The use of animals as co-therapists on a farm: The child-horse bond in person-centered equine-assisted psychotherapy." *Person-Centered and Experiential Psychotherapies* 8(4): 319-332.

Animals, particularly horses, assist in therapy with children and adults with severe psychological and behavioral problems. Through the case study of M., a teenager with the diagnosis of severe mental illness, the author argues that therapy involving animals as co-therapists leads the client to a clear reduction in symptoms, through a process of validation, sense of responsibility, increase in self-esteem, and development of core competencies that enhance relational competences. A link is shown between equine-assisted psychotherapy and Carl Rogers' basic concepts. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Chu, C. I., et al. (2009). "The effect of animal-assisted activity on inpatients with schizophrenia." *Journal of Psychosocial Nursing and Mental Health Services* 47(12): 42-48.

The aim of this study was to evaluate the effects of animal-assisted activity on self-esteem, control over activities of daily living, and other psycho-physiological aspects among Taiwanese inpatients with schizophrenia. Thirty participants were randomly assigned to either the treatment or control group. A weekly animal-assisted activity program was arranged for patients in the treatment group for 2 months. A questionnaire assessing self-esteem, self-determination, social support, and psychiatric symptoms was completed the week before and the week after the animal-assisted activity. Compared with the control group, the treatment group showed significant improvement on all measures except for social support and negative psychiatric symptoms. The results of this study showed that animal-assisted activity can promote significant improvements in many clinical aspects among inpatients with schizophrenia. Therefore, animal-assisted activity should be integrated into the treatment of institutionalized patients with schizophrenia.

de Reure, A. L. (2009). "Enfants autistes en thérapie avec le poney: Échelles d'évaluation et approches clinique et éthologique concernant les domaines relationnels, émotionnels et la communication." *Neuropsychiatrie de l'Enfance et de l'Adolescence* 57(4): 275-286.

The author presents clinical research data, concerning bodily and psychological infraverbal interactions involved in the contact between autistic children and ponies. The aim is to collect descriptive and clinical data about what is happening between child and animal, in order to analyze precisely psychological processes at work, with a special focus on three key fields in autism: relation, emotion and communication. Our thought stems from a group experience of six autistic children aged between six and eight having undergone equine-aided therapy involving ponies over a period of 18 months. Through a clinical case, we will show how a behaviour scale (CARS) put in counterpoint with a clinical scale (grille de Haag), could be an interesting complement to an approach essentially based on clinical observation and video support. Theoretical and clinical discussion will follow those data. Limits of clinical approach drive us to improve our thought with ethological hypotheses in order to comprehend interactions between autistic child and pony, but this time, from the "point of view" of the animal. Attentiveness and sensorial hypersensitivity are particular factors shared by both autistic child and pony, possibly facilitating contact between the two. A primitive form of communication established through cenesthetic sensitivity and affect-as-message seems not only to exist between the two but also appearing to benefit from modes of autistics contact conditions, while reassuring this animal. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Dimitrijević, I. (2009). "Animal-assisted therapy—A new trend in the treatment of children and adults." *Psychiatria Danubina* 21(2): 236-241.

Animal-assisted therapy is a familiar method of treatment in the rehabilitation of many illnesses and conditions, but is still not applied sufficiently in our milieu. This paper gives an overview of the available literature and some of the research which demonstrates that the interaction between the patient, animal and therapist provides a context which improves communication, elevates self-confidence, reduces the symptoms of diseases, and improves the quality of life. The dog, cat, horse, birds and toy animals are most often used in therapy. Short-term contacts with animals are used, as well as long term keeping of animals, which are looked after by patients following a particular methodology. The therapy is used in the treatment of psychiatric patients afflicted with depression, schizophrenia, phobias and addiction problems. Loneliness is easier to endure in the company of animals. It is also applied in cardiovascular diseases, dementia, Alzheimer's disease, child cerebral paralysis, rheumatoid arthritis, AIDS, and other diseases. Research shows a more rapid reduction of symptoms of many diseases when animals are included in the therapeutic process. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Fisch-Märki, J. (2009). "Interpretation beyond words. Von der Anspielung zum Spiel." *Selbstpsychologie: Europäische Zeitschrift für psychoanalytische Therapie und Forschung/ Self Psychology: European Journal for Psychoanalytic Therapy and Research* 10(38): 389-398.

Mutual communication enables human development as long as there is enough space. Unfortunately those processes often are blocked and hardly accessible to words. Animal assisted therapies facilitate a multimodal approach. Two patients with severe illnesses, both having anorexia in adolescence, brought spontaneously their dogs in the consulting room. As coplayers in the mode "affect is the coinage of protoconversation" (Mearns 2005), they initiated a change in the atmosphere and enriched the process "from empathic stance to empathic dance" (Preston and Shumsky 2000). (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Janko, S. and W. Milch (2009). "Der Dritte im Raum—Ein Erfahrungsbericht mit einem Hund in der Behandlung erwachsener Patienten." *Selbstpsychologie: Europäische Zeitschrift für psychoanalytische Therapie und Forschung/ Self Psychology: European Journal for Psychoanalytic Therapy and Research* 10(38): 399-405.

In this paper the experiences of two analysts with their dog attending to their therapies is described and how the dog developed the mental significance as a third in the analytic space. Both, man and animal seem to sense needs and faults coming up in this room and try to compensate them spontaneously. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Jordahl-Ball, J. (2009). "Animal-assisted therapy and self-transcendence." *International Forum for Logotherapy* 32(2): 105-107.

This article focuses on the potential for using animal-assisted therapy (AAT) to help clients experience self-transcendence. In logotherapy, mental health professionals often encourage and assist clients to achieve self-transcendence in order to help them discover meaning in their life. Mental health professionals may assist clients in joining therapeutic support groups; or they may help clients find volunteer opportunities in the community to achieve self-transcendence. Sometimes clients who enter therapy do not have family and/or social support. Using logotherapy tests (e.g., Purpose in Life test) prior to initiating AAT, and then again later in the course of the therapy, could provide documentation of possible enhanced sense of life-meaning resulting from self-transcendence facilitated by successful AAT. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

le Roux, M. C. and R. Kemp (2009). "Effect of a companion dog on depression and anxiety levels of elderly residents in a long-term care facility." *Psychogeriatrics* 9(1): 23-26.

Background: The aim of the present study was to explore the effect of a companion dog on the depression and anxiety levels of residents in a long-term care facility. Methods: A total of 16 residents (eight men and eight women) were randomly assigned to a control group (n = 8) and an Animal Assisted Activity (AAA) group (n = 8) that met once a week for 6 weeks. All residents in the AAA group were either in wheelchairs or walking with crutches. The Beck Depression Inventory and the Beck Anxiety Inventory (BAI) were used pre-and post-intervention. Results: For both the total group and control group no significant differences were found on depression and anxiety pre and post mean scores. However, for the AAA group, significant differences were found between pre and post BDI mean scores while the BAI mean score differences were non-significant. Conclusion: The results of this small study confirm the results of other studies that AAA visits can make a difference to the depression levels of residents in long-term care facilities. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Marinelli, L., et al. (2009). "Dog assisted interventions in a specialized centre and potential concerns for animal welfare." *Veterinary Research Communications* 33(1 Suppl. ): 93-95.

"In the last decade the employment of dogs in 'Animal Assisted Interventions' (AAI) has encountered growing popularity, in the absence of a systematic assessment of the potential threats to the welfare of the animals (Serpell et al. 2006). The present study is aimed at the analysis of the conditions in which dogs residing in a single specialized centre are most frequently employed and the potential sources of distress. In this context, the large number of AAI performed and the uniformity in the management of the animals, allows avoiding the potential effects of different living conditions of the dogs."

Somervill, J. W., et al. (2009). "Handling a dog by children with attention-deficit/hyperactivity disorder: Calming or exciting?" *North American Journal of Psychology* 11(1): 111-120.

Physiological reactions to handling a dog were recorded for 17 children (13 males & 4 females ranging in age from 7 to 12 years), 16 with a primary diagnosis of Attention Deficit Hyperactive Disorder. The major finding was a significant increase in blood pressure and pulse rate five minutes after holding a dog. It was concluded that a dog used for pet therapy with children diagnosed as ADHD was more likely to have an excitatory effect than a calming one. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Tílešová, S. (2009). "Hipoterapia ako skupinová a rodinná intervencia." *Psychológia a Patopsychológia Dieťaťa* 44(1): 81-91.

Twelve-year-old Peter lives with his mother and her new partner alone; his biological father, who does not show any interest in Peter, is in prison. As a result of Peter's negativism, truancy, repeated thefts, attacks on schoolmates and finally physical assault on his mother, he was placed into a group therapeutic riding organized simultaneously as family therapy. The principles of this therapy, which the author of the case study has elaborated and practically carried out, lie in social learning and in a personal example of therapist and her assistants in real situations at work with a horse. As a result of the therapy, Peter's relationship with his mother improved and his avoidance tendencies weakened, his behavior and achievements at school stabilized. Contacts with his biological father have still preserved unresolved. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Topel, E.-M. and F. M. Lachmann (2009). "Ameisen in Traumarbeit und tiergestützter Psychotherapie—Über zwei Patienten mit Asperger-Syndrom." *Selbstpsychologie: Europäische Zeitschrift für psychoanalytische Therapie und Forschung/ Self Psychology: European Journal for Psychoanalytic Therapy and Research* 10(38): 406-423.

Asperger's syndrome, a pervasive developmental disorder first diagnosed in childhood, is characterized by severe impairment in social interactions, communication, and by stereotypic behavior (DSM-IV: 299.80, ICD-10: F84.5). In this paper we present an approach that focuses on psychodynamic factors, nonverbal communication, and animal assisted psychotherapy. We describe interactions between patients and therapists on a procedural, verbal and nonverbal level that further the therapeutic process with increasing affect. The treatments of an adult and a child both presenting Asperger's syndrome illustrate the bridging from their non-human world to the world of feelings and people. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Walsh, F. (2009). "Human-animal bonds II: the role of pets in family systems and family therapy." *Family Process* 48(4): 481-499.

The vast majority of pet owners regard their companion animals as family members, yet the role of pets in family systems and family therapy has received little attention in research, training, and practice. This article first notes the benefits of family pets and their importance for resilience. It then examines their role in couple and family processes and their involvement in relational dynamics and tensions. Next, it addresses bereavement in the loss of a cherished pet, influences complicating grief, and facilitation of mourning and adaptation. Finally, it explores the ways that clients' pets and the use of therapists' companion animals in animal-assisted therapy can inform and enrich couple and family therapy as valuable resources in healing.

Walsh, F. (2009). "Human-animal bonds I: the relational significance of companion animals." *Family Process* 48(4): 462-480.

The importance of human-animal bonds has been documented throughout history, across cultures, and in recent research. However, attachments with companion animals have been undervalued and even pathologized in the field of mental health. This article briefly surveys the evolution of human-animal bonds, reviews research on their health and mental health benefits, and examines their profound relational significance across the life course. Finally, the emerging field of animal-assisted interventions is described, noting applications in hospital and eldercare settings, and in innovative school, prison, farm, and community programs. The aim of this overview paper is to stimulate more attention to these vital bonds in systems-oriented theory, practice, and research. A companion paper in this issue focuses on the role of pets and relational dynamics in family systems and family therapy.

Walter, H. (2009). "Prolog oder: Über die Menschen hinaus?" *Selbstpsychologie: Europäische Zeitschrift für psychoanalytische Therapie und Forschung/ Self Psychology: European Journal for Psychoanalytic Therapy and Research* 10(38).

It seems to be time for a systematic transfer from self-psychological theory of human-human relationships to human-animal relationships. This thesis is that appropriate discussions which adds to our knowledge about human-human relationships. The topics discussed in this issue are: about different self-object transferences on different companion animals; the development of a research instrument to identify possible self-object functions of dogs; the impact of dogs on the analytic work with two patients who brought their own dog to therapy sessions during a most burdensome period; how the analysts adopt their dog systematically in their therapeutic work; and two patients with Asperger's syndrome and the value of animal assisted therapy, that is its expanding potential from their self-psychological-psychodynamic point of view. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Corrieri, U. (2008). "La relazione uomo-animale come facilitatore del cambiamento." *Ecologia della Mente* 31(1): 69-83.

The man-animal relationship has been studied only recently, but has always exerted a powerful effect on humans, from about 100,000 years ago, when Homo sapiens, as a result of collaboration with the wolf and the dog, culturally grew and developed powerful social groups, so much so that he prevailed on the Neanderthal. Some new neurobiological discoveries help us to understand this relationship: the Theory of the Three Brains tells us that man and mammals have in

common the paleomammalian brain, which manages the emotions and the hierarchical organization of groups; the Mirror Neurons, which allow the observer to understand behavior and purpose of the acting one, were found in humans and many animals and so explain the interspecies understanding. Instead of the original terms "Pet Therapy", today we prefer to differentiate between "animal assisted activities" (AAA), generally aimed at the welfare of people and "animal assisted therapies" (AAT), when a therapist treats patients. Anyway, AAA and AAT share two main aspects: the man-animal relationship, that happens by means of the paleomammalian brain and the Mirror Neurons, and the fact that an operator promotes and monitors this relationship, providing the user a sense of comprehensibility, emotional and cognitive, of what happens. These two elements are the basis of changes triggered by the man-animal relationship. The author finally presents two cases: Claudia, an autistic girl who began again to talk whilst interacting with a parrot, and Andrew, who recovered from 6 years of domestic seclusion as a result of his relationship with some donkeys. Two examples of how the man-animal relationship facilitates the process of change. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Delfour, F. (2008). "Ethologie et bien-être des animaux utilisés dans les thérapies assistées par l'animal." A.N.A.E. *Approche Neuropsychologique des Apprentissages chez l'Enfant* 20(3[98]): 141-142.

Ethology should be used in Animal Assisted Therapy. This science offers a very robust tool not only to analyse this very particular interspecific relation (human and animal) but also to assess animal welfare and wellbeing. The case of the dolphinotherapy will be treated in this perspective. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Donio, S. (2008). "Expérience de soutien à l'aide des dauphins." A.N.A.E. *Approche Neuropsychologique des Apprentissages chez l'Enfant* 20(3[98]): 155-156.

The program "Supportive Experience with the Aid of Dolphins" has existed since 1991 and takes place at Dolphin Reef in Eilat, Israel. Dolphin Reef is a unique place in terms of the conditions and treatment the dolphins receive at our facility and also the human-dolphin relationships that are formed as the result of our interactions. The concept of this program is to give children an opportunity to be themselves. Many things come as a result of these connections: The attention span grows, self-esteem and self-confidence are raised, dealing with the frustration associated with a "no" answer becomes easier, and the ability to sit and learn is fostered. The children learn responsibility as they assist the trainers in their tasks in caring for the dolphins. Their sense of touch and fine motor skills are tuned. We demonstrate how to pet the dolphins appropriately, rather than pinching, grabbing, or pushing them away. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Eisenfeld, M. (2008). "Ohaleï Yacoov—Le silence des justes: Une porte sur la vie." A.N.A.E. *Approche Neuropsychologique des Apprentissages chez l'Enfant* 20(3[98]): 157-158.

The historical background of the day structure OY/LSDJ allowed us to consider a new way of helping autistic patients and their families. Our narrative begins by the necessity of bringing a sensitive, human and urgent response to the distress resented by the families surrounding youth with difficulties after their release of a day structure, without relay in medical care. The situation will bring to an unexpected consequence of which the effects are still resented fifteen years later. There's no need to describe the positive consequences of this lightning on family life. The participation of OY/LSDJ to the colloquium on therapies with animals follows the implementation of a program of dolphinotherapy which positive results were largely observed. We will express on the subject a few interrogations. If it is admitted that this type of experience favors the expression of emotions and the development of language skills, like it has been proved by various researches, is the animal putting into light the resignation of men from its fellows in difficulty? Is it not the entire responsibility of men to create the conditions necessary to the development of communication with its fellows? To place autistic persons on a specialized environment, barring from him any chance to socialize could be understood as a confession of helplessness or, more seriously, to legal segregation. Thus, are not initiatives like this of OY/LSDJ going in the right direction? (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Gautier, V. R. (2008). "La delphinothérapie gratuite au service des enfants: Un projet qui prend forme." A.N.A.E. *Approche Neuropsychologique des Apprentissages chez l'Enfant* 20(3[98]): 159-161.

Delphus, a Belgian nonprofit organisation, is offering dolphin assisted therapy for children with behavioural development disabilities. This program, and it is unique in Europe, is offered free of charge. The therapy takes place in Benidorm Spain, last for one week in collaboration with the "Fundación Aqualandia Mundomar". Each individual session



with a professional therapist last for 30 minutes. We collect informations from the parents before and after the therapy. The data are later introduced in a special program for further study. The therapy does not cure the children but it helps them and their parents to better integrate in normal life and improve their quality of life. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Gouabault, E. (2008). "«Un couple magique: Le dauphin et l'autiste»: Analyse socio-anthropologique d'une figure de l'imaginaire contemporain." A.N.A.E. Approche Neuropsychologique des Apprentissages chez l'Enfant 20(3[98]): 146-154.

Therapy with dolphins, or delphinotherapy, is one expression of the "dolphin phenomenon". As such, it reveals the magic dimension of the social imaginary dedicated to this cetacean; it becomes especially clear with the figure of the dolphin-autistic child couple. The author of this paper will introduce the dolphin phenomenon and delphinotherapy, and analyze this practice within two different contexts. The magic couple will be studied through the articulation of three essential images: the dolphin, the autistic child and the water element. This analysis reveals the activation of a mythical thinking based on several items: the social imperative of a marvellous encounter with the cetacean, the elision of the interactional context of the therapy, the mythification of the dolphin figure and finally the quest for a primitive wisdom. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Hamonet, C. (2008). "L'animal acteur de la réadaptation dans la conception moderne «situationniste» du handicap." A.N.A.E. Approche Neuropsychologique des Apprentissages chez l'Enfant 20(3[98]): 128-130.

Human group conquered the world helped by the animals? The conquest of autonomy by rehabilitation will be efficient with the support of the animals. The modern theory quadridimensionnal (lesion, functions, situations of handicaps and subjectivity) is an excellent guide to assess, to organize the rehabilitation and to put the animal aid in good place. Animal is very useful in motor (dogs), visual (dogs) and mental disorders (donkey, dogs, lamas...) rehabilitation. The place of animals in hospitals and rehabilitation centres must be boosted as humanizing this curious animal: Man. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Leitão, L. G. (2008). "Sobre a equitação terapêutica: Uma abordagem crítica." *Análise Psicológica* 26(1): 81-100.

Our main purpose was to study the theme of Therapeutic Riding, in a longitudinal viewpoint. The account of our historical perspective, with particular incidence in the Contemporary Age, allows understanding the present situation. Thus, we emphasized some factors arising from an historical complicity lived between Man and horse, since the Prehistoric period up to the present time. In the 20th century, we distinguish some moments that contributed in a decisive way to the modern conceptualization of the therapeutic horseback riding: the success of Liz Hartel at the Olympic Games of 1952 and 1956; the sprouting of the German Model; and the international congresses. The need of empirical credibility related to the therapeutic application of the horse, and of its disclosure, is concurrently highlighted as well as the systematization of this area mainly centered on a medical model. The psychology, especially cognitive-behavioral, initially arises through eclectic approaches integrated in Hippotherapy. Subsequently, in the last decade, psychology has coming to occupy a place of growing notoriety through the psychotherapeutic riding, in the different theoretical approaches (psychoanalysis, music therapy, theory of the archetypes of Jung, systemic theories, bioenergetics, psychodrama, existentialism, etc.) that can assume. Our subjective analysis focused in four complementary aspects: the incongruity between an obsessed search for the "proof and the scientific strictness; the difficulty to differentiate the Therapeutic Riding disciplines that limits so much the intervention's capacity for intervene like the conclusions that we can withdraw from the studies already done; the observed difficulty in the international disclosure of the majority of the works; and at last, the lack of sovereignty from FRDI while international entity representative of the Therapeutic Riding in 46 countries. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Maurer, M. (2008). "Etude de l'intérêt de l'enfant atteint d'autisme pour le dauphin à partir de deux méthodologies complémentaires." A.N.A.E. Approche Neuropsychologique des Apprentissages chez l'Enfant 20(3[98]): 143-145.

Programs of dolphin assisted therapy are numerous, however, very few scientific studies support this new practice. A preliminary step before considering the validation of this kind of therapy is to demonstrate that a mutual interest exists between human beings and animals. The consideration of the child with autism for the dolphin has been studied using two

different but complementary methodologies. The results show the relevance of the employed methodology and indicate that the children have an interest towards the dolphin. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Minatrea, N. B. and M. C. Wesley (2008). "Reality therapy goes to the dogs." *International Journal of Reality Therapy* 28(1): 69-77.

This paper discusses combining Animal Assisted Therapy (AAT) with Choice Theory (CT) or Reality Therapy (RT). Counselors seek methods to facilitate a positive therapeutic relationship or Therapeutic Alliance (TA), and this study incorporates a unique method, Animal Assisted Therapy (AAT), to enhance and expedite this stage. Additionally, therapists search for supportive means to move individuals into engagement and commitment to the counseling relationship. This article discusses how one four-legged-therapist and one two-legged therapist facilitated this. Although there have been several studies measuring correlation between AAT and physical health (Anderson, Reid, & Jennings, 1992; Dembicki & Anderson, 1996); this empirical study evaluates the relationship between AAT and individuals participating in mental health counseling. The study shows the outcome of using CT or RT and AAT with group members addicted to drugs, in an inpatient setting. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Scholl, S., et al. (2008). "Behavioural effects of goats on disabled persons." *Therapeutic Communities* 29(3): 297-309.

It is well known that contact with animals may benefit humans in a number of ways. In our pilot project we arranged weekly contacts of ten multiply-disabled adults (all deaf, four women and six men, aged 18-45) with well human-socialised goats. This is part of an effort to team up residential institutions for disabled clients with suitable farms. Over a period of three months, clients were video-taped when in contact with goats, one hour per week, 11 weeks in a row. In parallel, clients were videotaped in a dining room situation. This was done with the consent of clients and with support of the residential institution in Upper Austria. From these tapes, a number of parameters were coded for each client covering behaviour, communication and mood. Over time, attentiveness, active participation in the programme, and expression of joy increased, whereas withdrawal decreased in contact with the goats. In contrast, no changes were recorded in the dining room situation. Only in the goat situation, the population variance of most significant parameters decreased indicating an increasing homogeneity of the clients' behaviour over the weeks. We conclude that regular animal contact had contributed to the wellbeing of multiply-disabled clients, and had a sustained effect on their behaviour when with the goats, but did not lead to a measurable behavioural change of clients in other situations. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Somerville, J. W., et al. (2008). "Physiological responses by college students to a dog and a cat: Implications for pet therapy." *North American Journal of Psychology* 10(3): 519-528.

The effects of physical contact with a dog and a cat on blood pressure and pulse among male and female college students were examined. The final sample consisted of 62 participants (28 males and 34 females). It was tentatively hypothesized that participants would show a reduction in blood pressure while handling both a dog and a cat. It was also speculated that male and female participants would react differently to a dog versus a cat. There were no significant blood pressure or pulse differences, in response to a dog vs. a cat, nor were there significant gender differences although females generally had a lower blood pressure than males. There were no significant changes in blood pressure or pulse while participants held an animal, but a significant decrease in diastolic pressure occurred immediately following holding an animal. Results partially support previous findings of a reduction in blood pressure associated with animal contacts. Implications for pet therapy were discussed. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Tribet, J., et al. (2008). "Le soutien psychologique assisté par l'animal à des personnes atteintes de pathologies démentielles sévères." *L'Encéphale: Revue de psychiatrie clinique biologique et thérapeutique* 34(2): 183-186.

Introduction: The elderly represent the fastest growing population group in France. The care management of people suffering from dementia has become an important problem. Demented Patients manifest behavioral problems, depression, apathy, impairment in social activities and language disorders. The literature contains few studies investigating animal-assisted therapy for demented patients. However, there is a clear need for psychological assistance for this Population. In the management of such behavioural problems associated with dementia, we propose to develop a dog-assisted therapy. Three qualitative case studies are analysed to specify the perceptions of the therapist regarding animal-

assisted therapy. Subjects and methodology: This study is a qualitative pilot study. Subjects were two female and one male patients admitted in a nursing home. They were diagnosed with severe dementia. Their mean age was 94 years. All of them agreed to attend the dog therapy activities and informed consent from their family was requested. We met these patients 15 times over nine months. The meetings always took place in the same place for 30min, once a week. The evaluation was based on the clinical observations of the psychologist. Results: This study revealed many psychological benefits for patients with dementia. The animal-assisted therapy had a calming effect on the patients. It could well be helpful as a communication link during therapy sessions. The dog, because of its unconditional acceptance, increases the self-esteem of the patient and contributes to a more secure environment. The patients, who rarely interacted socially, increased their interactions with the dog. In spite of the lack of normal verbal use of language, nonverbal communication continues including touching and posture. Furthermore, patients verbalized that the dog was affectionate and they could identify themselves with it. Conclusions: This prospective study leads up to the conclusion that pet therapy could prove to be efficient. We conducted animal-assisted therapy sessions for patients with severe dementia and found that psychological assistance could be flexible enough, to meet the special needs of institutionalized persons suffering from dementia. The pet therapy programs may provide help for many patients, but the framework and conditions of this practice should be clearly defined, until the dog itself, can become the therapist. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Trivellin, E. (2008). "Cynothérapie: Une activité de thérapie à médiation au centre hospitalier de Mulhouse." A.N.A.E. *Approche Neuropsychologique des Apprentissages chez l'Enfant* 20(3[98]): 138-140.

Patients hospitalized in unity closed by Psychiatry, benefit, on medical prescription, from Dog Therapy, an activity of therapy which uses the dog as relational mediator, in the same way, for example, as the horse in Horse Therapy which is practised somewhere else. Even if this activity is reserved, at the moment, for the adults, it is completely possible to extrapolate what we make for an application with children or in other service of a hospital. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Trudel, M., et al. (2008). "L'évaluation de la présence d'un chien d'assistance auprès de l'enfant autiste et de sa famille." A.N.A.E. *Approche Neuropsychologique des Apprentissages chez l'Enfant* 20(3[98]): 131-137.

The study reported here was completed through a partnership with an organisation offering the services of assistance-trained dogs. The objective of the study was to evaluate the impact of the introduction of an assistance-trained dog on the autistic child and the child's family. The article will first review the research literature from the perspective of the controversy around autism and the mother-child attachment relationship. From there, the authors will tie in the results of studies examining the impact of the assistance-trained dog on the child and the family, with a particular focus on autism and family relations. The choice of a mixed methodology in the interest of an ecological analysis of the family will be discussed, and the results will be presented from the perspective, of the diversity of measures, issues of ecological validity and the constraints of assessing the atypical child in the everyday familial environment. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Vernay, D. (2008). "Y a-t-il des Mowgli parmi nous?" A.N.A.E. *Approche Neuropsychologique des Apprentissages chez l'Enfant* 20(3[98]).

Can an animal play the role of "co-tutor of resilience"? Under such a hypothesis, we try to provide clinical responses to the following: is there an individuality in the interaction profile between an animal and a specific person?; does an animal provide a fully specific support in such an interaction?; what can be said about a systemic approach of these human-animal interactions?. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Ewing, C. A., et al. (2007). "Equine-facilitated learning for youths with severe emotional disorders: A quantitative and qualitative study." *Child & Youth Care Forum* 36(1): 59-72.

The present study quantitatively and qualitatively evaluated the effects of an alternative therapeutic learning method on youths with severe emotional disorders (SED). The youths participated in a nine-week equine-facilitated learning program. Very little research exists investigating the effectiveness of utilizing horses in the therapeutic learning process. The present study encompasses three years of research on a unique program hypothesized to enhance traditional

therapy and facilitate the learning process for youths with special needs. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Fournier, A. K., et al. (2007). "Human-animal interaction in a prison setting: Impact on criminal behavior, treatment progress, and social skills." *Behavior and Social Issues* 16(1): 89-105.

This quasi-experimental field study evaluated the effects of a forensic human-animal interaction (HAI) program on the criminal behavior of prison inmates. The study assessed the impact of the HAI program using between-subject methods and analyses. A total of 48 male inmates participated in the research by allowing researchers access to their institutional files and completing self-report measures. In general, it was hypothesized the HAI program would result in positive behavioral and psychosocial outcomes for inmates. Dependent measures included the frequency of institutional infractions, inmate treatment level within the prison's therapeutic community, and social skills. Analyses compared two groups of inmates in a pretest-posttest repeated-measures design, comparing a Treatment group with a Control group. Results indicated that inmates in the Treatment group evidenced statistically significant improvements in these dependent measures in comparison to the Control group. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Groth, B. (2007). "Was bewirkt das pferd in der psychotherapeutischen arbeit: Darstellung einer tiefenpsychologisch-fundierten psychotherapie unter einbeziehung von pferden." *PDP Psychodynamische Psychotherapie: Forum der tiefenpsychologisch fundierten Psychotherapie* 6(3): 162-174.

The present essay deals with the psychotherapeutic approach when working with a female patient who was severely traumatized by sexual abuse as a child. Part of her psychotherapy was working with horses. The effect of employing horses as an element of the therapy is examined. The experience of being held and carried by a horse enabled the patient to venture on a new experience in the form of a trusting and holding relationship. The pleasurable sensation of contact and movement within the safety of the therapeutic setting reactivated the feelings and memories of her sexual abuse. The patient was made aware of those feelings and memories; they were verbalized, worked on in the later course of her therapy and finally integrated. By means of her positive relationship with the horse, the patient discovered that she was able to experience good (physical) contact despite the fact that it kept frightening her time and again. As a result, she could overcome the paralyzing and disintegrating splitting caused by her traumatization. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Iwahashi, K., et al. (2007). "Questionnaire on animal-assisted therapy (AAT): The expectation for AAT as a daycare program for Japanese schizophrenic patients." *International Journal of Psychiatry in Clinical Practice* 11(4): 291-293.

Animal-assisted therapy (AAT) was developed to promote human social and emotional functioning as a day-care program for psychiatric patients. In this study, we determined which animals 481 schizophrenic patients liked and what they thought about AAT, using an original questionnaire. It was found that more than 80% of the present patients liked animals and that they thought contact with animals was useful as a novel therapy. They had much interest in, and many hopes, for AAT. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Kawamura, N., et al. (2007). "Long-term evaluation of animal-assisted therapy for institutionalized elderly people: A preliminary result." *Psychogeriatrics* 7(1): 8-13.

Background: Many researchers theorize that animal-assisted therapy (AAT) will have an effect on people suffering from the symptoms of dementia by evaluating short-term-effects. The purpose of this research was to evaluate the psychological and behavioral effects of AAT on elderly residents of a nursing home on a long-term basis. Methods: The subjects consisted of 10 residents of a residential nursing home. Researchers first created each participant's goal in an agreement with the nursing home staff. Visits were made twice a month, and on each occasion three or four dogs were taken. The residents were able to freely feed, hold and play with the dogs, with each dog placed on a separate table. Data collection methods included GBS Scale Japanese Version (GBSS-J) and Mental Function Impairment Scale (MENFIS). Data was collected four times during the period 2003-05. The scores were analyzed using SPSS11.5J. Results: According to GBSS-J, the scores for intellectual function, spontaneity, emotional function and other mental functions decreased during the first 6 months of the study and then increased until the twelfth month. The score for Motor function increased over the 12 months. When comparisons were made item by item, there were significant decreases in impaired orientation in space, and

emotional liability during the first 6 months. According to MENFIS, the overall score tended to decrease during the first 6-month period but increased from 6 months to 12 months. There was a tendency for scores to decrease in impaired emotional function, especially impaired suitability of emotional expression and impaired stability of emotional expression over the 12-month period. Conclusions: After 6 months of participation in AAT, there were improvements in mental functions, though physical functions decreased. It is suggested that after a 6 month period each subject's needs and goals should be re-examined. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Turner, W. G. (2007). "The experiences of offenders in a prison canine program." *Federal Probation* 71(1): 38-43.

A growing number of correctional facilities are recognizing the value of animal programs. Prisons and juvenile detention centers across the United States have begun implementing dog-training programs in which offenders within the facilities train dogs for a variety of service positions. This qualitative research study explores the experiences of the offenders who are involved in the Indiana Canine Assistant and Adolescent Network (ICAN) program at this prison. This methodology allows the researcher to capture more depth and detail of the offenders' experiences. The data collected suggests that the ICAN program has positive effects on the rehabilitation of the offenders within the program. Future quantitative research can possibly provide concrete evidence of the positive effects of canine prison programs. This evidence can be used by the current programs to justify their continuation, to seek additional funding, and to expand the scope of the programs. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

de Queiroz Marcelino, J. F. and Z. M. de Melo (2006). "Equoterapia: Suas repercussões nas relações familiares da criança com atraso de desenvolvimento por prematuridade." *Estudos de Psicologia* 23(3): 279-287.

This research was focused on studying children that have a neuropsychomotor development delay due to prematurity, and have been attending by an interdisciplinary therapy called therapeutic riding, a therapeutic approach that has the horse and its environment as primordial resources. The study was carried through two children from Caxangá Golf & Country Club Nucleus of Equine therapy, their respective families and professionals, who accompany these children in the therapeutic process. The techniques used during the research were the children's sessions observation; interviews with parents and therapists from the institution and other "caretakers". According to this study, the straight vinculum between child and animal is very important for the children and their family's involvement to the therapeutic process. Also the child, the team and other practitioners interaction in the socialization process is important, as well as the stimulation adequacy of the equine therapy environment by the interdisciplinary team and the family. There have been a child's social-affective improvement aspect that reflects on the family relations. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Furst, G. (2006). "Prison-Based Animal Programs: A National Survey." *The Prison Journal* 86(4): 407-430.

Although animals appear to be increasingly incorporated into correctional programming, the field has failed to systematically study the phenomenon. The present research is an initial attempt to capture the extent to which these types of programs are being administered in U.S. prisons through a national survey of state correctional systems. The research regarding the potential therapeutic effects of animals and what we know about prison-based animal programs (PAPs) are reviewed. Among the results: The programs are in most states, are most commonly of a community service design that uses dogs, are more likely to involve male than female participants, and most were established after 2000. Livestock care/prison farms emerge as a unique type of PAP. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Sellers, D. M. (2006). "The Evaluation of an Animal Assisted Therapy Intervention for Elders with Dementia in Long-Term Care." *Activities, Adaptation & Aging* 30(1): 61-77.

This study examined the effects of animal assisted therapy (AAT) on the social and agitated behaviors of elders with dementia residing in long-term care. A purposefully selected sample of four elders from one skilled nursing facility in a rural community participated in the study. Utilizing an A-B-A-B design, elders were videotaped for 15 minutes each day of the study and two coders tallied the presence and frequency of each of the designated behaviors for each elder. A statistically reliable difference in the social behavior category ( $t = -29.36, p < .0001$ ) and the total agitated behaviors category ( $t = 7.05, p < .0001$ ) indicated that the behaviors targeted by the intervention were successfully modified. This intervention demonstrates potential for increasing the quality of life for elders with dementia in long-term care facilities through increasing social and decreasing agitated behaviors. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Christian, J. E. (2005). "All Creatures Great and Small: Utilizing Equine-Assisted Therapy to Treat Eating Disorders." *Journal of Psychology and Christianity* 24(1): 65-67.

The author describes her experience working at a Christian treatment center for women with eating disorders using equine-assisted therapy, an approach using horses to bring emotional issues in the life of the resident to the surface. God plays a major role in the treatment sessions, which specifically address spiritual matters. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Liptak, G. S. (2005). "Complementary and Alternative Therapies for Cerebral Palsy." *Mental Retardation and Developmental Disabilities Research Reviews* 11(2): 156-163.

The optimal practice of medicine includes integrating individual clinical expertise with the best available clinical evidence from systematic research. This article reviews nine treatment modalities used for children who have cerebral palsy (CP), including hyperbaric oxygen, the Adeli Suit, patterning, electrical stimulation, conductive education, equine-assisted therapy, craniosacral therapy, Feldenkrais therapy, and acupuncture. Unfortunately, these modalities have different degrees of published evidence to support or refute their effectiveness. Uncontrolled and controlled trials of hippotherapy have shown beneficial effects on body structures and functioning. Studies of acupuncture are promising, but more studies are required before specific recommendations can be made. Most studies of patterning have been negative and its use cannot be recommended. However, for the other interventions, such as hyperbaric oxygen, more evidence is required before recommendations can be made. The individual with CP and his or her family have a right to full disclosure of all possible treatment options and whatever knowledge currently is available regarding these therapies. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Nathans-Barel, I., et al. (2005). "Animal-Assisted Therapy Ameliorates Anhedonia in Schizophrenia Patients." *Psychotherapy and Psychosomatics* 74(1): 31-35.

Background: Anhedonia, a component of the negative symptom dimension and a core phenomenon in schizophrenia, is associated with poor social functioning and is resistant to treatment. We tested the hypothesis that animal-assisted therapy (AAT) may improve anhedonia. Objective: To compare the effect of psychosocial treatment sessions in which a dog was an active participant (AAT) with comparable sessions without a dog, using a controlled protocol. Method: The hedonic tone of 10 chronic schizophrenia patients who participated in 10 weekly interactive sessions of AAT was compared to a control group treated without animal assistance. The hedonic tone was measured with the Snaith-Hamilton Pleasure Scale. Subjective quality of life variables and clinical symptoms were also assessed. Results: The AAT group showed a significant improvement in the hedonic tone compared to controls. They also showed an improvement in the use of leisure time and a trend towards improvement in motivation. Conclusion: AAT may contribute to the psychosocial rehabilitation and quality of life of chronic schizophrenia patients. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Velde, B. P., et al. (2005). "Resident and therapist views of animal-assisted therapy: Implications for occupational therapy practice." *Australian Occupational Therapy Journal* 52(1): 43-50.

Animal-assisted therapy is offered in a wide variety of settings. The literature contains few studies investigating animal-assisted therapy from an occupational therapy perspective. More information is needed to describe the use of animals as a therapeutic modality in occupational therapy. Three qualitative case studies were analysed to describe the perceptions of clients and therapists regarding animal-assisted therapy. This analysis was synthesised with an extensive literature review to produce a perspective of animal-assisted therapy for occupational therapy. Animal-assisted therapy could be a beneficial modality for occupational therapy. The Lifestyle Performance Model provides a useful framework for analysis and interpretation of the positive outcomes of animal-assisted therapy in an occupational therapy context. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Davis, B. W., et al. (2004). "Assistance dog placement in the pediatric population: benefits, risks, and recommendations for future application." *Anthrozoos* 17(2): 130-145.

Assistance animals have long been recognized for their value in enhancing the lives of adults with disabilities by increasing the physical independence, confidence, and social lives of their handlers. Recently, this concept has been applied to the growing population of children with physical disabilities and developmental impairments, though the benefits and

risks of these placements have not been thoroughly assessed. Our study used interviews to evaluate the outcome of placing assistance dogs in the pediatric population, looking specifically at the unique advantages and disadvantages of this application of the human-animal bond. We administered a structured interview assessing risks and benefits of assistance dog relationships to 17 families with a child under 18 years who graduated from a single provider (NEADS) over a five-year time period. Benefits were found in 88% of families, and were overwhelmingly social and cognitive, with additional physical and medical benefits for the pediatric client. However, risks, including behavioral, financial, and time/cost issues were significant, becoming a burden in 53% of families. Perhaps more than with adult placements, we found that it was of prime importance to understand the assistance animal in the context of the family, rather than just in relation to the individual with a disability. It is hoped that results of this and future studies will enhance the welfare of both client and assistance animal, as well as the overall success of this unique human-animal relationship.

Kaiser, L., et al. (2004). "Can a week of therapeutic riding make a difference? - A pilot study." *Anthrozoos* 17(1): 63-72.

The objective of this research was to determine the effect of a five-day therapeutic riding day camp on children's anger, quality of life and perceived self-competence. Our study sample involved 16 able-bodied individuals (11-or-4.4 years) with no known physical or psychological disability, and no known history of psychotropic medications. The Children's Anger Inventory, Peds Quality of Life, and Self Perception Profile for Children were administered prior to riding on day one and after riding on day five. Results show that after five days of therapeutic riding camp, the total score of the anger inventory and scores for all sub-scales except frustration decreased significantly. No other differences were noted. Data analysis suggests that five days of therapeutic riding day camp can significantly impact on anger. These changes may be related to the child's relationship with the horse, the social environment of camp, the horse and riding, increased contact with nature, or a combination of these factors.

Macauley, B. L. and K. M. Gutierrez (2004). "The Effectiveness of Hippotherapy for Children with Language-Learning Disabilities." *Communication Disorders Quarterly* 25(4): 205-217.

This study examined the effectiveness of hippotherapy versus traditional therapy for children with language-learning disabilities. Three boys, ages 9, 10, and 12 years, and their parents independently completed a satisfaction questionnaire at the end of traditional therapy (T1) and again at the end of hippotherapy (T2). A comparison of the responses from T1 and T2 indicated that both the parents and the children reported improvement in speech and language abilities after both therapies. Overall, responses were noticeably higher following hippotherapy, with additional benefits of improved motivation and attention also reported. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Zoltán, K., et al. (2004). "Állatasszisztált terápia bevezetése pszichiátriai betegek otthonában ápolt szkizofrén betegek rehabilitációjában." *Psychiatria Hungarica* 19(6): 514-523.

Background: The presence of pets seems to be helpful in the treatment of both mental and somatic disorders. To the best of our knowledge, no article has been published on the effectiveness of animal-assisted therapies in the rehabilitation of institutionalized middle-aged schizophrenic patients. Objectives: To determine whether animal-assisted therapy is effective in the rehabilitation of middle-aged institutionalized schizophrenic patients. Subjects and method: Seven schizophrenic patients (four women and three men) living in a social institute participated in the therapy. The program lasted for nine months, with fifty minutes long weekly sessions. The outcome was measured by the change in the Independent Living Skills Survey rated by an independent rater. Results: After the completion of the therapy every area assessed by the scale changed positively, with significant improvement in the domestic and health activities. Conclusions: Animal-assisted therapy seems to be helpful in the rehabilitation of schizophrenic patients living in a social institution. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Bizub, A. L., et al. (2003). "'It's like being in another world': Demonstrating the benefits of therapeutic horseback riding for individuals with psychiatric disability." *Psychiatric Rehabilitation Journal* 26(4): 377-384.

Five adults with longstanding histories of psychiatric disabilities were recruited for a ten-week therapeutic horseback riding program. Individuals learned basic riding skills and had the opportunity to bond with a horse. In addition, the riders participated in a post-riding process group that used artistic and creative exercises to promote individual expression. By the end of ten weeks, the riders reported success in learning basic horsemanship and, in doing so, also

reported additional psychosocial benefits, including an augmented sense of self-efficacy and self-esteem. In sum, this adjunctive therapy can facilitate the recovery process. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Catanzaro, T. E. (2003). "Human-Animal Bond and Secondary Prevention." *American Behavioral Scientist* 47(1): 40-41.

Explores secondary prevention for animals. Secondary prevention for animal companions is most often defined as the early detection and resolution of health problems, or sometimes client concerns about atypical behavior, whether it be simple diarrhea or vomiting to lameness or systemic infections. The desire to restore wellness, or mediate animal pain, is inherent in the human-animal bond, and the client-patient veterinarian bond is an important part of this quest for restoring wellness and quality of life. Author describes four types of animal-facilitated therapy interaction between people and animals. There can be negative effects when there is noncompliance to the animal-facilitated therapy protocols or when it becomes a source of rivalry and competition, such as when a patient becomes overpossessive of a ward mascot. Benefits of animal-facilitated therapy are highlighted. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Cumella, E. J. and R. D. Marx (2003). "Questions & answers." *Eating Disorders: The Journal of Treatment & Prevention* 11(2): 143-147.

Question: Is equine therapy useful in the treatment of eating disorders? Answer: According to the *Psychiatric Times* (Barker, 1999), the answer may be "yes." "Evidence has continued to accumulate, more rigorous controlled studies are being conducted, resulting in the emergence of a significant body of literature supporting the therapeutic value of the human-companion animal interaction. Animal-assisted therapy was even recommended in the prestigious *Journal of the American Medical Association*. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Meadows, R. L. (2003). "Commentary: Human-Animal Interaction & Wellness." *American Behavioral Scientist* 47(1): 100-102.

Comments on the articles in this special issue of "American Behavioral Scientist." The author also narrates his own experiences while practicing veterinary medicine which sheds light on the establishment of emotional bond between humans and animals due to interaction. The article focuses on the utilization of the interaction between humans and animals (HAI) as "therapy" (e.g., animal-assisted therapy [AAT] or animal-assisted visitations or associations [AAA]). The author discusses the research that describes HAI and its implementation as a therapy. These research papers also discuss two variant theoretical perspectives: the biophilia hypothesis and social support theory. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Parshall, D. P. (2003). "Research and Reflection: Animal-Assisted Therapy in Mental Health Settings." *Counseling and Values* 48(1): 47-56.

Although animals have been historically associated with promoting physical and mental health benefits for humans, only recently has there been support for such claims in the literature. This article is a preliminary attempt to bring together scientific studies and anecdotal reports that provide evidence of the benefits of using animals in particular counseling situations. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Richeson, N. E. (2003). "Effects of animal-assisted therapy on agitated behaviors and social interactions of older adults with dementia." *American journal of Alzheimer's disease and other dementias* 18(6): 353-358.

The effects of a therapeutic recreation intervention using animal-assisted therapy (AAT) on the agitated behaviors and social interactions of older adults with dementia were examined using the Cohen-Mansfield Agitation Inventory and the Animal-Assisted Therapy Flow Sheet. In a pilot study, 15 nursing home residents with dementia participated in a daily AAT intervention for three weeks. Results showed statistically significant decreases in agitated behaviors and a statistically significant increase in social interaction pretest to post-test. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Sato, Y., et al. (2003). "A Case of Refractory Borderline Personality Disorder Improved with Animal Assisted Therapy." *Seishin Igaku (Clinical Psychiatry)* 45(6): 659-661.

Reports the case of a 19-yr-old female patient with refractory borderline personality disorder who improved with animal assisted therapy in Japan. (PsycINFO Database Record (c) 2010 APA, all rights reserved)



Hinman, M. R. and D. M. Heyl (2002). "Influence of the Eden Alternative [sup]TM[/sup] on the Functional Status of Nursing Home Residents." *Physical & Occupational Therapy in Geriatrics* 20(2): 1-20.

The Eden Alternative was initiated to reduce feelings of loneliness, boredom, and helplessness among nursing home residents through interactions with plants, animals, and children in their environment. This study assessed the effects of the Eden Alternative on residents' physical, mental, emotional, and social function. Data were collected from observations of residents' interactions, ratings from selected functional indicators in the Minimum Data Set (MDS), and interviews with staff members. Data from on-site observations and staff views interviews indicate that the added stimuli in the Edenized environment helped promote function among residents, particularly in the physical and social domains. However, no significant changes were found in most of the MDS indicators. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Kato, K. and T. Atsumi (2002). "Transfiguration of the collectivity by animal assisted therapy: A case of dog therapy at a geriatric hospital." *Japanese Journal of Experimental Social Psychology* 41(2): 67-83.

Investigated the effects of dog therapy (i.e., animal assisted therapy using dogs; DT) on elderly clients at a geriatric hospital from the view of collective transfiguration. Subjects (Ss) were 55 elderly inpatients with senile dementia, in Japan, who did not have an animal allergy and who were not afraid of dogs. Ss were divided into 2 groups and Ss in one group participated in DT sessions 3 times between April 1998 and February 1999 at the hospital in which Ss were staying; Ss in the other group did not participate in DT. The results showed that: (1) the Ss changed their "Hyoujou" (e.g., look, atmosphere; Hiromatsu, 1989), and the relation between Ss and staff members at the hospital was transfigured by DT; (2) the variations in members' behavior was derived from the changes of tacit premises in the hospital caused by collective transfiguration; and (3) DT had an impact on collectivity at the hospital and generated new tacit premises and collective behaviors. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Kopasová, D. (2002). "Naše Skúsenosti S Využitím Hipoterapie V Rámci Starostlivosti O Deti." *Psychológia a Patopsychológia Dieťaťa* 37(3): 242-246.

Interdisciplinary care of a psychologist, hippologist (horse therapist), and speech therapist for 23 children at the age of 4-14 years - clients of the Children Center at Research Institute for Child Psychology and Pathopsychology - is aiming toward the relief of negative manifestations and consequences of various types of their handicaps. After a three-month period of practicing hippotherapy, the improved mental condition in the area of intellect, emotionality and personality manifested in 66% of researched children. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Steed, H. N. and B. S. Smith (2002). "Animal assisted activities for geriatric patients." *Activities, Adaptation & Aging* 27(1): 49-61.

Older individuals may experience decreased quality of life and increased stress related to life transitions. These include change of residences, the loss of a spouse and/or personal possessions. With these transitions, a decline in physical and emotional health may occur due to social isolation, loss of independence, institutionalization, and family breakdown. Studies that use animal assisted activities were evaluated for the effectiveness of improving various parameters in the geriatric population undergoing these transitions. Interactions with animals decreased blood pressure and heart rate, decreased depression, and increased life satisfaction. Animal assisted activities appear to improve the quality of life of aging individuals. Future research should focus on outcomes of using different types of animals and the amount of time spent with the animals. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Farias-Tomaszewski, S., et al. (2001). "An evaluation of therapeutic horseback riding programs for adults with physical impairments." *Therapeutic Recreation Journal* 35(3): 250-257.

Several methods have been developed over the years that employ animals as adjuncts in psychotherapeutic interventions; therapeutic horseback riding is one such example. The purpose of this exploratory study was to assess the outcome of a 12-week therapeutic horseback riding program for persons with physical disabilities. 22 adults (aged 17-61 yrs old) with a variety of physical impairments were participants in a therapeutic horseback riding program. A one group pre-test/post-test design was used to evaluate changes in levels of physical and global self-efficacy. Behavioral indices of self-confidence also were collected over the course of the intervention on 18 of the 22 participants. Physical self-efficacy

and behavioral self-confidence were found to increase from pre-test to post-test while global self-efficacy did not change over time. Findings from this exploratory study provide evidence in support of the psychological value of this type of intervention for adults with physical impairments. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Fawcett, N. R. and E. Gullone (2001). "Cute and cuddly and a whole lot more? A call for empirical investigation into the therapeutic benefits of human-animal interaction for children." *Behaviour Change* 18(2): 124-133.

There are many indications that humans have a tendency to affiliate with nature and to connection emotionally with non-human species. Research has also shown that humans can benefit significantly from their relationships with non-human animals (NHAs). For example, studies have indicated that even the mere observation of NHAs can result in reduced physiological responding to stressors and increased positive mood. The present review proposes that findings such as these may provide important information regarding the potential benefits to be derived from incorporating NHAs into intervention strategies, particularly for children. Of specific relevance for children is their fascination with, and attraction to, NHAs. There is also the very nonjudgmental nature of human-animal interactions (i.e., unconditional positive regard) that has been argued, among other benefits, to serve as a useful 'bridge' for the establishment of rapport between therapist and child. However, despite promising avenues of investigation, the area of animal-assisted intervention remains largely neglected by researchers. This paper also calls for sound empirical investigation into proposals regarding the potential therapeutic benefits of incorporating NHAs into psychological intervention programs for children. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Hanselman, J. L. (2001). "Coping skills interventions with adolescents in anger management using animals in therapy." *Journal of Child & Adolescent Group Therapy* 11(4): 159-195.

Pet therapy reduces apprehension and is, therefore an important tool in working with children and adolescents. Treatment of animals by children is also indicative of their mental health and healthy development. Cruelty to animals may foretell later abuse to humans providing the link between child and animal abuse. Understanding the role of pets as indicators of individual and family problems enable therapists and other professionals to provide the proper counseling for the situation. This paper presents and describes a group work program cognitive behavioral approach with adolescents in pet therapy as an adjunct to treatment in anger management. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Missel, M. R. J. (2001). "The use of choice theory in animal assisted therapy for children and young adults." *International Journal of Reality Therapy* 20(2): 40-41.

Animal Assisted Therapy (AAT) is the utilization of an animal that meets specific criteria to facilitate therapy within a goal-oriented treatment plan that is designed and administered by a professional. AAT is very useful to counselors, and the integration of choice theory into AAT is especially beneficial for the psychotherapist when working with children or young adults. This article explores the use of choice theory in AAT when obedience courses and animal maintenance are part of the treatment plan. The fulfillment of basic needs by AAT is also briefly examined and personal responsibility and effective control are emphasized. (PsycINFO Database Record (c) 2011 APA, all rights reserved)

Webb, N. L. and P. D. Drummond (2001). "The effect of swimming with dolphins on human well-being and anxiety." *Anthrozoos* 14(2): 81-85.

The present investigation aimed to explore the psychological effects for humans of swimming with dolphins as opposed to swimming in the ocean without dolphins. It was hypothesized that people swimming with dolphins would experience significantly greater levels of well-being and reduced levels of anxiety than those who swam without dolphins. Participants were sampled from Perth's UnderWater World marine park and at the Bunbury Dolphin Discovery Centre, Australia. Participants completed well-being and anxiety measures before and after their swim. Well-being was greater in participants who swam with dolphins than in those who did not, both before and after their swim. However, well-being increased to the same extent in both groups. In contrast, anxiety decreased for participants swimming with dolphins but not in those who swam without dolphins. The findings suggest that anticipation of a new and exciting experience, and swimming, itself increase well-being. In addition, swimming specifically with dolphins may lower anxiety. Whether these effects are responsible for the therapeutic benefits associated with human-dolphin interactions requires further investigation.

Funk, M. S. M. and B. A. Smith (2000). "Occupational therapists and therapeutic riding." *Anthrozoos* 13(3): 174-181.

Statistics indicate that physical therapists considerably outnumber occupational therapists in utilizing therapeutic horseback riding as a treatment modality. This study was conducted in an effort to gain insight into the reasons for the discrepancy. Two different questionnaires were developed and distributed to two different populations, occupational therapy practitioners, and the American Occupational Therapy Association (AOTA) accredited schools offering occupational therapy programs. Three hundred and twenty-four occupational therapy (OT) practitioners responded to a questionnaire about their knowledge and interest in therapeutic horseback riding (THR). These practitioners included both registered occupational therapists (OTR) and certified occupational therapy assistants (COTA) in the United States, who were randomly selected from a mailing list obtained through the AOTA. The first questionnaire addressed the research question, "Why are there so few occupational therapy practitioners involved in therapeutic horseback riding?" The most frequent response cited by OT practitioners was a lack of horse knowledge, followed closely by a lack of time. Additionally, 181 schools offering occupational therapy programs responded to a questionnaire addressing the research question, "Do AOTA approved occupational therapy programs include therapeutic horseback riding as a treatment option in their curriculum?" The most frequent manner in which THR was included in a curriculum was through informal discussion or student presentation.

Katsinas, R. P. (2000). "The use and implications of a canine companion in a therapeutic day program for nursing home residents with dementia." *Activities, Adaptation & Aging* 25(1): 13-30.

Reports the use and implications of a Canine Companion within a rehabilitation model program for nursing home residents with dementia. Projected results included elimination of some restraints for wanderers, social interaction between the animal and individuals, between group members about the dog, and orientation of individuals to the present in the presence of the dog. Unexpected results included re-orientation of individuals who had withdrawn into themselves, and the use of the dog's presence to anchor orientation to the day of the week by residents. General and specific implications of these findings are discussed with recommendations for future research. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Kogan, L. R. (2000). "Effective animal-intervention for long term care residents." *Activities, Adaptation & Aging* 25(1): 31-45.

Discusses the benefits of interactions between animals and the elderly, specifically long-term care residents. The paper presents clearly delineated steps needed to successfully introduce "live-in" animals, visiting animals and a human-animal team intervention program. Emphasis is placed on practical advice for staff and caretakers in residential settings to help promote positive, smooth transitions toward more animal-friendly and, therefore, human-friendly facilities. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Altschuler, E. L. (1999). "Pet-facilitated therapy for posttraumatic stress disorder." *Annals of Clinical Psychiatry* 11(1): 29-30.

It is suggested that pet-facilitated therapy (PFT) might be a useful adjuvant on treatment of posttraumatic stress disorder (PTSD). PFT may be helpful in alleviating some of the fear and anxiety of PTSD patients, who are often refractor to therapy. These patients may tend to separate themselves from human society, and thus may benefit from interacting with their animals. Some motivation and rationale for these ideas are given, and a method of testing it is presented. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Kogan, L. R., et al. (1999). "The human-animal team approach for children with emotional disorders: Two case studies." *Child & Youth Care Forum* 28(2): 105-121.

The therapeutic potential of animal-assisted therapy (AAT) was assessed in 2 case studies of emotionally disturbed children. Two males (11 and 12 yrs old) participated in weekly AAT sessions for 12 wks. Progress of individual goals was assessed through The ADD-H Comprehensive Teacher Rating Scale (ACTeRS), direct observation and videotapes of the therapy sessions, Individual Education Plans (IEP), and post-intervention interviews with the Ss, their families, and educational professionals. Data analysis revealed progress in most identified goals. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Lukina, L. N. (1999). "Influence of dolphin-assisted therapy sessions on the functional state of children with psychoneurological symptoms of diseases." *Human Physiology* 25(6): 676-679.

Explored the use of Black Sea Afalina dolphins, kept in conditions of the oceanarium, for treatment and rehabilitation of 90 children (aged 4–12 yrs) with infantile neurosis, mental retardation, or other psychoneurological diseases compared with 57 healthy controls. A biotechnical complex for dolphin-assisted sanitation and rehabilitation of humans was created and tested using the author's methods of dolphin therapy. The latter beneficially influenced Ss' autonomic homeostasis and psychoemotional status, thus facilitating successful psychophysiological rehabilitation in the family and the collective. Introduction of special psychotherapeutic methods into the system of treatment and sanitation procedures helped patients achieve a positive effect from contacts with a dolphin, which led to activation of the adaptive mechanisms of neurohumoral homeostasis. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Granger, B. P., et al. (1998). "A Human-Animal Intervention Team Approach to Animal-Assisted Therapy." *Anthrozoos* 11(3): 172-176.

A human-animal intervention (HAI) team approach to animal-assisted therapy is described and assessed. The effectiveness of this modality is evaluated in two case studies of emotionally disturbed children. Two school age children (both males, 11 and 12 years of age) participated in an average of 12 weekly sessions. Progress of individual goals was assessed through numerous sources: The ADD-M comprehensive Teacher Rating Scale (ACTeRS); observations during each session from school district researchers and professionals; video tapes of the therapy sessions; the participants' Individual Education Plans (IEP); and post-intervention interviews with the participants, their families, and the educational professionals involved. Evaluation showed positive results for the majority of individual goals set.

Reichert, E. (1998). "Individual counseling for sexually abused children: A role for animals and storytelling." *Child & Adolescent Social Work Journal* 15(3): 177-185.

This article addresses the use of animal assisted therapy in individual counseling for sexually abused children. It focuses on how the animal can help the sexually abused child disclose abuse and express feelings. Storytelling forms a part of the treatment process. The author's clinical experience at Project Against Sexual Abuse of Appalachian Children in Knoxville, Tennessee, forms the basis for the article. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Holcomb, R., et al. (1997). "Use of an Aviary to Relieve Depression in Elderly Males." *Anthrozoos* 10(1): 32-36.

This study examines the effect on the depression levels of 38 elderly males (Mean age=76y) exposed to an aviary at a Veterans Administration Medical Center adult day health care program. The research design was A1B1A2B2, with each phase (A=no treatment, B=treatment) constituting two weeks. Initial analysis uncovered no significant difference on the group's Geriatric Depression Index (GDI) scores associated with presence or absence of the aviary. A subsequent analysis of covariance on the difference between treatment and no-treatment depression scores indicated that utilization of the aviary by the men was significantly associated with reduced depression ( $N=38$ ;  $F=7.48$ ;  $df=1,36$ ;  $p<.01$ ), with greater reduction in depression associated with greater utilization of the aviary. Results from this study suggest that introduction of an aviary into the physical environment of elderly male day care participants may produce a reduction in depression among some men, possibly due to increased social interaction stimulated by the presence of the aviary.

Darrah, J. P. (1996). "A pilot survey of animal-facilitated therapy in Southern California and South Dakota nursing homes." *Occupational Therapy International* 3(2): 105-121.

The purpose of this study was to identify the current uses of animal-facilitated therapy (AFT), in nursing facilities located in Southern California and South Dakota. A mail questionnaire was sent to a random sample of 105 California and 45 South Dakota nursing facility administrators. Selection criteria for Southern California nursing facilities included a geographical location south of 36 degrees latitude, and listing of pet therapy as a facility activity in the Directory of Nursing Homes (1993). South Dakota nursing facilities were randomly selected. A total of 56 nursing facility administrators from South Dakota and California completed the survey resulting in a 40% return rate. The study supported previous research indicating the multiple benefits of AFT. Both California and South Dakota nursing facility administrators identified sensory stimulation, facilitation of resident social interaction, stress reduction, and companionship as the top four therapeutic purposes for using pets and animals in the nursing home. Administrators also identified patient-therapist interaction,

increasing muscle strength and ROM, pain management, reduction of blood pressure and heart rate, increasing responsibility, self-esteem, and patient independence as therapeutic benefits of pet therapy. Further research is needed in the field of pet therapy to demonstrate the efficacy of AFT. In addition, occupational therapists should become more involved with the use of AFT for treatment purposes. It has been demonstrated that pet therapy can be used with a variety of diagnoses and conditions and for implementing therapeutic goals. It is recommended that occupational therapists participate in research on pet therapy and consider its use in nursing homes with older patients. It is also recommended that the use of pets in therapy be incorporated into occupational therapy curricula. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Shalev, A. and D. Ben-Mordehai (1996). "Snakes: Interactions with Children with Disabilities and the Elderly: Some Psychological Considerations." *Anthrozoos* 9(4): 182-187.

Over the last three years we have successfully introduced snakes into group activities of children with disabilities, adolescents with behavior problems, and the elderly in nursing homes. This study presents data on the interaction of these groups with four placid and non-poisonous species of snakes of the Boidae and Colubridae families. The primary interactions (PI) included touching, holding, or petting; and the interaction rates during three meetings were recorded. Interaction rates with the children ranged from 50% to 100% and with the elderly from 67% to 86%. In the third encounter 9.5% more elderly agreed to interact with the snakes. When children in the study were offered the choice of a friendly dog, a rabbit, or a snake, 25% to 47% (mean 39%) chose the snake, whereas only 27% and 25% preferred the dog or the rabbit respectively. These results suggest that the affinity and desire of children with disabilities and the elderly to interact with snakes is strong and that this affinity and desire can outweigh cultural stereotypes, widespread fears, and negative attitudes. Many of the negative attitudes, including fear of snakes, are believed to be unconscious and unrelated to conditioned behavior. The psychological significance of the snake as a symbol in the human psyche and culture is discussed in relation to the potential future use of snakes in Animal Assisted Therapy (AAT) with populations that have disabilities.

Law, S. and S. Scott (1995). "Tips for practitioners: Pet care: A vehicle for learning." *Focus on Autistic Behavior* 10(2): 17-18.

Discusses pet care programs (PCPs), as educational intervention for students with pervasive developmental delay/autism. PCP involves care and handling of domestic animals within the confines of the classroom. Opportunities to work with a variety of pets on a regular basis serve to reduce or eradicate these children's worry and fear, and results in increased student confidence and comfort when handling domestic animals. Daily pet routines, where the child cares for and nurtures a living creature, foster a sense of student responsibility. They also serve as a vehicle for receptive and expressive language development. Preliminary activities involve selection of the pet, its actual purchase, and preparation of a step-by-step daily pet care routine. Among the PCP benefits are development of responsibility, and self-help, decision making and problem solving skills, social interaction with adults and peers in the community and school. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Walsh, P. G., et al. (1995). "The effects of a 'pets as therapy' dog on persons with dementia in a psychiatric ward." *Australian Occupational Therapy Journal* 42(4): 161-166.

Assessed the effect of regular contact with a dog, under a pets as therapy program, on a selected group of 7 chronic ward-bound, aged patients suffering mainly from dementia. A control group of 7 patients closely matched for sex, diagnosis, and medication was also used. Assessment measures used included global measures of daily functioning, physiological measures (BP and heart rate), and a measure of general ward noise levels. Results indicated significant experimental group changes in heart rate, but not BP, but this latter result could be due to the various medications the Ss were receiving. There was also a substantial drop in noise levels in the experimental ward during the presence of the dog. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Folse, E. B., et al. (1994). "Animal-Assisted Therapy and Depression in Adult College Students." *Anthrozoos* 7(3): 188-194.

This study investigated the effects of animal-assisted therapy (A-AT) on self-reported depression in a college population. Forty-four participants were selected on the basis of scores on the Beck Depression Inventory (BDI). They then were assigned to one of three groups: A-AT in conjunction with psychotherapy (directive group), A-AT only (nondirective

group), and control. Standardized regressed BDI posttest scores were used as dependent variables in one-way analysis of variance with treatment as the independent variable. Results revealed significant differences among groups,  $F(2,41)=3.69$ ,  $p<.05$ . Duncan's Multiple Ranges Test indicated that standardized regressed BDI post-test scores differed significantly between nondirective ( $M=5.67$ ) and control groups ( $M=10.18$ ).

Mallon, G. P. (1994). "Cow as co-therapist: Utilization of farm animals as therapeutic aides with children in residential treatment." *Child & Adolescent Social Work Journal* 11(6): 455-474.

Investigated the experiences of 80 children (aged 7–16 yrs) placed in a residential treatment center that used farm animals as one of its treatment approaches. Findings from interviews with children and staff and from observations indicate that the children made use of the farm animals in the same way that one would use the services of a therapist. Children indicated that they spoke to the animals, without fear that what they said would be repeated; they visited the animals to feel better when they felt sad or angry; and they learned about nurturing and caring for other living things. Issues of aggressiveness, age appropriateness, separation from the animals, and communication between children and animals are addressed. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Mallon, G. P. (1994). "Some of our best therapists are dogs." *Child & Youth Care Forum* 23(2): 89-101.

Assessed the benefits and drawbacks of introducing dogs into residential treatment centers in group care programs. Six child care workers and 12 children (aged 6–14 yrs) participated in qualitative, in-depth interviews. Although both benefits and drawbacks were identified, the benefits appeared to outweigh the drawbacks by a wide margin. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Nielsen, J. A. and L. A. Delude (1994). "Pets as Adjunct Therapists in a Residence for Former Psychiatric Patients." *Anthrozoos* 7(3): 166-171.

A tank of guppies and a cage of guinea pigs was introduced into an interim residence for former psychiatric patients. The residents showed great concern for the animals and quickly developed social relationships with them. All residents talked to the guinea pigs and most petted them and commiserated with the surviving guppy after the death of its companion. Questionnaire responses indicated that the residents found the presence of the animals beneficial and strongly approved of their continued presence. After the termination of the study period, additional fish were acquired by the residents and plans were made to upgrade the guinea pig holding area. Unfortunately, the residents were unable to maintain this level of concern and the animals had to be removed from the home.

Reichert, E. (1994). "Play and animal-assisted therapy: A group-treatment model for sexually abused girls ages 9–13." *Family Therapy* 21(1): 55-62.

Presents a framework for conducting group therapy for girls aged 9–13 yrs. The model was developed from the author's clinical experience in conducting a series of groups over 4 yrs at the Project Against Sexual Abuse of Appalachian Children. Treatment modalities consist of animal-assisted therapy. There are 3 treatment phases. Phase 1 conveys why it is necessary to slowly and carefully examine what happened to the children and explain therapy in the form of metaphor. Phase 2 re-creates the traumatic elements through play and fantasy in which the children can be victorious survivors rather than victims. Phase 3 integrates education and prevention and deals with termination of the group. (PsycINFO Database Record (c) 2010 APA, all rights reserved)

Perelle, I. B. and D. A. Granville (1993). "Assessment of the Effectiveness of a Pet Facilitated Therapy Program in a Nursing Home Setting." *Society & Animals* 1(1): 91-100.

In the past twenty years Pet Facilitated Therapy (PFT) has been used, apparently successfully, with several populations, including nursing home residents. Studies report positive behavior changes as a result of PFT intervention, but little effort has been made to quantify such behavior changes. This study presents the results of a PFT program in a nursing home setting. Results were positive, and were measured using the Patient Social Behavior Scale, designed for this study. Nursing home residents showed an increase of social behaviors from pretest to midpoint and from midpoint to post test, but these behaviors declined four weeks after post test. Although both males and females showed an increase in social behaviors, males' and females' response patterns differed.

Taylor, E., et al. (1993). "Effect of animals on eye contact and vocalizations of elderly residents in a long term care facility." *Physical & Occupational Therapy in Geriatrics* 11(4): 61-71.

Determined the effectiveness of a live puppy in eliciting eye contact and vocalizations from 18 residents (aged 68–96 yrs) in a long-term care facility. A repeated measured design with the Ss in 2 stimulus conditions, a live puppy and a photograph of a puppy, was used. While the results do not reveal significant increases in eye contact or vocalizations during the live puppy condition when compared with the photograph condition, a more global involvement with the social environment was noted during the live puppy condition. Results are similar to those of H. M. Hendy (see record 1988-36898-001) and consistent with the conclusion of A. M. Beck and A. H. Katcher (1984). (PsycINFO Database Record (c) 2010 APA, all rights reserved)

DeSchriver, M. M. and C. C. Riddick (1990). "Effects of Watching Aquariums on Elders' Stress." *Anthrozoos* 4(1): 44-48.

Experimental group members watched a fish aquarium or a fish videotape, while control group members viewed a placebo videotape. Three eight-minute treatment sessions were held one week apart. Members of all three groups perceived their treatments as relaxing. Aquarium observers tended to experience a decrease in pulse rate and muscle tension and an increase in skin temperature. Theoretical and practical implications of the results and ideas for further research are discussed.

Holcomb, R. and M. Meacham (1989). "Effectiveness of an Animal-Assisted Therapy Program in an Inpatient Psychiatric Unit." *Anthrozoos* 2(4): 259-264.

Proper diagnostic assessment in an inpatient psychiatric setting requires observation of patients under various conditions. Group activities such as animal-assisted therapy (A-AT) can provide an excellent opportunity for assessment - but only if the patient chooses to attend. Retrospective analysis of attendance at a major metropolitan inpatient psychiatric unit indicates that over the course of two years (N= 23 months) the A-AT group attracted the highest percentage of inpatients voluntarily choosing to attend an occupational therapy group. It was found that A-AT was the most effective of all groups offered in attracting isolated individuals regardless of diagnosis. The authors conclude that A-AT is an effective tool for diagnostic observation and assessment.

Prepared by G. Stephens, Bibliographer, HABRI Central March 2015