

SUMMARIES

*Leo K. Bustad: Recent Discoveries About Our Relationship With The Natural World
(Danish translation by Mai Andreassen)*

Leo K. Bustad (1920-1998), co-founder and first Chair of the Delta Society (now Pet Partners), played a key role in establishing human-animal-interaction as an area of systematic education, research and practice. As Professor of veterinary medicine and Dean of the Washington State University, he founded the first university-based programme for the training of service dogs. In his final Plenary Address at an international conference in 1989, Bustad outlined noteworthy developments in the field of human-animal-interaction and gave his suggestions for future visions and possible next steps. The editors of this issue believe that the address gives a good introduction to the field, and it is reproduced here with permission based on a Danish translation.

Tia G. B. Hansen & Karen Thodberg: Current perspectives on human-animal-relationships – a Danish introduction

The article provides an introduction to anthrozoology / human-animal studies and suggests “antropozoologi” as the general term in Danish. The history and dispersion of the field is summarised and the ideas behind animal-assisted therapy are described in more detail. Two small studies are also shown. One examined international growth in research interest by sampling records on “animal-assisted therapy” from three major databases and found a young field in rapid growth. The other study sampled questionnaires from Danish psychologists (N=59) on the perception and experience of Animal Assisted Interventions. Whereas most of this (self-selected) sample found the area highly relevant to psychologists, few had personal experience with it (n=17). On this basis, the authors welcome the 15 cross-disciplinary and predominantly Scandinavian contributions that make up this thematic issue of *Psyke & Logos* and discuss their potential impact.

Keywords: human animal bond; companion animals; animal-assisted psychotherapy

Karen Thodberg & Janne Winther Christensen: Therapeutic Use of Animals – Theories, Existing Studies, and How We Go On From Here

The paper gives an ethological perspective on therapeutic use of animals, introduces the theoretic framework, and provides information about the use of therapy animals in Denmark.

Animal-assisted therapy is a goal-directed intervention, where the animal is an integrated part.

The theories behind are based on 1) intrinsic abilities of animals or 2) the animal as an interactive partner. The therapeutic effect of animals has been studied, but we still lack scientific evidence.

An informal questionnaire in Denmark indicates that therapy animals are used for many different issues, that the providers have very different backgrounds, and primarily use the interaction with animals as the main element.

A strengthening of future research in animal-assisted therapy can be reached by focusing more on methodology, larger sample sizes and better study designs. Furthermore, we should focus on quantifying the human-animal interactions during the interventions, and relate these to traditional effects measures to make it possible to identify causal relationships.

Keywords: animal-assisted therapy, ethology (behavioural biology), quantitative studies

Sara Gilling, Andrew Moskowitz & Helle Spindler: Studies of Equine Assisted Psychotherapy for Adults: A Systematic Review

The present review evaluated studies of psychotherapy supported by horses for adults. The twelve studies, including both quantitative and qualitative research, reported positive findings. Participants included patients with schizophrenia, PTSD, borderline personality disorder, depression, anorexia, intellectually disabled, abuse victims and couples in couples therapy. The qualitative studies reported various improvements: increased confidence and improved attention or concentration, as well as improved physical abilities and body awareness. The quantitative studies reported clinical symptom reduction and general health improvement. Patients experienced affectionate bonding with the horses, and many reported relational improvements in general.

Study design biases and small sample sizes limited the generalisability of the included studies. Findings were promising in support of using horses in psychotherapeutic interventions, but further research is necessary.

Keywords: animal-assisted therapy, narrative meta-analysis

Tobba T. Sudmann & Rita Agdal: "Imagine! I can ride!". Equine Assisted Activities for Adolescents and Adults with Drug Related Problems

The present paper discusses how participation in equine assisted activities (EAA) can contribute to increased participation on social arenas such as family, education, leisure, and school or work. The empirical material is drawn from a previous EAA project with adolescents with drug related problems, and a running EAA project with adults with drug addiction. Re-analysis of the former project challenges the latter and the body of knowledge in the field.

The adolescents were enrolled in EAA as part of a governmental programme for work qualification. The adults are self-selected from a join-in centre. EAA facilitates new self-presentations and bodily experiences. Participants expect that those responsible for EAA have a legitimate authoritative position, and the horses are seen as mythological creatures. EAA-arenas hold actual and potential possibilities for facilitating a sense of community, and for stimulating participation and change processes. The paper discusses if and how horses, activities, sense of community, horse myths, physical activity or contact with nature may hold explanatory power as separate factors or in combinations. Suggestions for further research are offered.

Keywords: green care, recovery, addiction treatment

Inge Klitgaard, Tinne Quistorff Clausen & Tine Friis Magill: Riding Therapy for Children – In a Narrative Framework

The aim of this article is to describe a currently used therapeutic method in which horseback riding is applied as a pivotal activity to narrative praxis for children with difficulties. This method has been developed over 2 1/2 years with continuous evaluation and adjustment, and it is our experience, that the participating children have gained additional benefits compared to regular narrative praxis.

Through the description of our current praxis and a case story, we offer some general suggestions about active components in this kind of riding therapy and the potential to apply new aspects to traditional narrative praxis. Furthermore, we discuss what the combination of riding therapy and activities with horses in this type of setting can offer, such as: safe relations, activity based learning, therapy without stigmata, multi leveled learning and social support.

This article is a qualitative study of a currently used specific practice, which is then used as a basis for considerations on a more general level about the possible qualities of combining riding activities with an already existing and well established therapeutic method such as the narrative in work with children at the age between 5 and 15

Keywords: horses, experiential learning, narrative practice

Charlotte Glinborg: The Significance of Having a Dog for People with an Acquired Brain Injury. Two Case Studies

An acquired brain injury is known to lead to psychosocial consequences, e.g. depression, anxiety and identity crisis. Research in Animal-Assisted Therapy (AAT) has revealed that the presence of an animal can have a positive effect on health, e.g. in quality of life and to prevent depression and anxiety.

The paper describes Marie and Jesper who both have an ABI. Through these case studies, I examine how clients with ABI construct the significance of having a dog during their rehabilitation process. These case studies have been developed based on semi-structured interviews with Marie and Jesper. Discourse analysis drawing on the concepts of positioning and agency will be used to analyse self- and dog constructions.

The analysis reveals that the dog is constructed and positioned as a family member. Furthermore, the dog acts as a welcoming distraction and a motivator. At the same time, the dog offers social and emotional support, intimacy and unconditional attention. Therefore, we conclude that AAT is relevant to include in holistic rehabilitation as a tool that supplements and varies traditional rehabilitation practice.

Keywords: Brain injury, animal-assisted interventions, psychological rehabilitation.

Christine Olsen & Ida Kristin Myren: Animal-assisted Therapy for Young Adults in Somatic Rehabilitation. The CatoSenter Project

Norway wants to strengthen interventions for children, adolescents, and young adults in need of rehabilitation. Previous research indicates that Animal-Assisted Therapy (AAT) may facilitate rehabilitation. The current project aims to increase competencies and knowledge related to AAT for rehabilitation institutions.

13 patients (77% women), aged 16-23, received AAT with dogs three times a week for four weeks. About half of the patients had Chronic Fatigue Syndrome, while the rest had suffered trauma or other kinds of illness. Data were collected through semi-structured interviews with patients and a questionnaire for health sector professionals who were in close contact with these patients.

Almost all informants indicated that the dog helped to increase patients' physical fitness, and about half of their associated health staff felt that participants increased their commitment to other activities that were involved in rehabilitation. All of the health staff found the intervention to be very satisfactory and would recommend AAT with dogs to institutions that offer complex rehabilitation. As a result of the project, the institution that housed it has now added AAT to its rehabilitations programmes for all categories of patients.

Keywords: animal-assisted intervention, dog, Chronic Fatigue Syndrome.

Lisa Lunghofer & Kenneth Shapiro: The Co-occurrence of Human Violence and Animal Abuse: Policy Implications and Interventions

Increasing awareness of the co-occurrence of animal abuse and other forms of violence has resulted in important changes in policy and practice in the United States. This article reviews the empirical evidence of the relationship between animal abuse and antisocial behaviour, describes the policies that have been implemented in response to these findings, and discusses the importance of identifying and intervening with people who abuse animals. *AniCare*, the only published intervention for people who present with the behaviour of animal abuse, is described, along with other interventions that may be warranted based on the severity and circumstances of the animal abuse problem.

Keywords: animal cruelty, antisocial behaviour, human-animal interaction

Kristine Jensen de López: Children that mistreat animals, conduct disorders and the possibility of a coordinated effort in relation to an early identification and intervention.

Peer commentary from a Danish perspective to Lunghofer & Shapiro: This commentary is much in agreement with Lunghofer & Shapiro's proposal for a focused and well-coordinated effort to identify and help children that mistreat animals. There also seems to be some potential for introducing *AniCare* in Denmark, however, several elements remain unaddressed such as better knowledge about the specific role of the child's family in the intervention, identification of outcome measures, but also any protective factors.

Radka Antalíková, Anna Katrine Brodersen & Mie Bladt Fink Nissen: Pet Ownership, Pet Attachment and Empathy in Adulthood

Previous research has found that pet owners tend to be more empathetic than non-pet owners, and that pet owners' level of attachment to their pets predicts their level of empathy. Interestingly, the positive relationship between pet ownership and empathy has not been found only in individuals who currently own a pet, but also in individuals

who have owned a pet earlier in life, e.g. during childhood. However, as studies in the area have solely relied on samples of teenagers or university students, we wanted to test whether the relationship between empathy and current and/or past pet ownership persists also later in life, i.e. in adulthood. Therefore, we asked 132 participants ($M = 39.4$ years) to fill out an online questionnaire consisting of Lexington Attachment to Pets Scale, measuring attachment to both current and past pet, and Empathy Quotient Scale, measuring cognitive and emotional empathy. We found that participants who owned a pet during childhood were more empathetic than participants who have a pet now (regardless of whether they have had one during childhood or not), as well as more empathetic than participants who have never owned a pet. The level of attachment to a pet, whether during childhood or now, was not a significant factor with regards to the participants' level of empathy.

Keywords: companion animals, emotional development, human-animal bond

Tia G. B. Hansen, Mai Andreassen, Åsa H. Jansson & Runa E. Gjellan: Belief in animal mind predicts attitude to welfare for commercially used animals.

Denmark has a high production and consumption of meat and other animal products, and farmers and government increasingly want to have welfare issues addressed. A recent analysis showed that this cannot be market driven alone, however, improved targeting of information and advertising would be helpful. Validated instruments for attitude assessment are required for such work, but none were available in Danish. Thus, we first provide a translation of the Australian "Pet Pets Profit" scale and its psychometrics in an internet based Scandinavian sample ($N=210$). Furthermore, an adapted version of the traditional "Belief in Animal Mind" (BAM) was found to predict 38.5 % of the variance in attitudes to welfare on the "profit" scale, i.e., for commercially valued species specifically. We conclude that despite strong evidence that the mere classification of animals as meat reduces attribution of the mind to them, the relationship between BAM and attitude to welfare for commercially used animals is strong enough to be useful for the promotion of animal products that prioritise the animals' welfare. We suggest that inclusion of psychological theories and methods could generally improve animal welfare work in Denmark.

Keywords: psychology, measurement, agriculture

Iben Meyer & Björn Forkman: Dangerous dogs? An evaluation of the Danish breed-ban in 2010.

In 2010, a new law banning allegedly dangerous dog breeds was introduced in Denmark. The breeds were of two types, guarding/herding dogs and dogs of a pitbull/American Staffordshire type, and constituted 2.7% of all newly registered dogs in the years just before the ban. In the present study, we investigated whether the banning of these breeds led to an overall decrease in the number and severity of bites to humans or other dogs (data for 2008+2009 compared with 2011+2012). Data from a large university hospital showed no difference in the number or severity of dog bites to humans. Data from 3 veterinary hospitals produced ambiguous results. Participants in a retrospective survey (N

= 4030, including 2044 dog owners) reported no decrease in the number or severity of dog bites to humans or dogs, and no change in the proportion of attacks occurring in public spaces compared to other locations.

Keywords: dog aggression, dog bites, dangerous dog act

Jill T. Byrnie: The Nature of Cooperation in Humans and Other Primates

Humans (*Homo sapiens*) are a highly cooperative group-living animal. All over the world, from game hunters in the Arctic to IT specialists in Denmark, people form complex and fluctuating constellations of formal or informal groups designed to solve mutually beneficial cooperative tasks. The cooperating communities often involve individuals who are not related to each other, although there is considerable cultural variation in with whom and in what form individuals in a group are expected to cooperate (Boyd & Richerson, 2009). The nature of human cooperation has challenged the older evolutionary explanations of the phylogenetic development of pro-social behaviour.

Keywords: human cooperation, prosocial behaviour, comparative psychology.

Betty Li Malvang Meldgaard: Cat and Mouse – Design of Digital Games for Cats

Simple videogames for iPads and other tablets have led designers to investigate the role of pets as technology users, and cats have become the focus of an exploration into alternative ways of using interactive technologies. This article takes a look at the latest development within the design of digital games for cats and the potential for human-animal interaction that is suggested.

The article takes its outset in a game for cats developed by the author. A game concept that is based on the ecological approach to perception. A discussion is presented of the design of games for touch-screens in a human-animal interaction perspective. The ecological approach presents a potential for design thinking in relation to animal computer interaction, where concepts such as the animal's niche, its visual perception and its process of picking up information to shed light on the affordances. Observations from screen-based games are discussed in conjunction with observations made by the author.

In conclusion, the article suggests a new collective research field for human-animal interaction that incorporates interactive digital technology.

Keywords: human-animal interaction, interactive digital technology, ecological approach to visual perception, HACI (Human-Animal Computer Interaction)

Extra articles, not related to the special theme of this issue:

ELI MARIE KILLI: When a Child Suffers an Accident – Parental Perspectives After Traumatic Brain Injury

This article examines the perspectives of parents of young persons who have sustained traumatic brain injury (TBI) in childhood, and discusses what can help expand parents' pos-

sibilities for participation and influence in school. The theoretical framework for the analyses is social practice theory, including critical psychology. The analyses of the parental perspectives and concerns contribute to a better understanding of the impact of TBI on the lives of parents and children. On this background, the article argues for the necessity and possibility of expanding opportunities for parental involvement. Further, the analyses reveal the significance of collaboration between parents and professionals to develop a shared understanding of the child's educational needs to support the child in different contexts. This article argues accordingly that "just in time" knowledge, through an interaction between knowledge about TBI as a diagnosis and practice grounded and experience based knowledge on the part of the parents, the child, the teachers, and other professionals involved, will expand parents' opportunities for participation and influence at school. Thus, this article aims at contributing to a broader analysis regarding opportunities for participation and influence, than the isolated questions of parental influence or professional knowledge alone.

Keywords: parental influence, experience-based knowledge, special needs education

Chalotte Glinborg & Kristine Jensen De López: A New Perspective on Coordination in Rehabilitation - Ensuring the Psychological Interventions in Brain Injury Rehabilitation

Since the midst of the 1990s, the psychosocial consequences following an acquired brain injury have been known to be a substantial challenge for rehabilitation, and recent research confirms that these psychological consequences still represent a major challenge in 2013. This is in spite of the fact that since 2007, new positions as coordinators have been introduced within the field of brain injury in order to enhance coherent rehabilitation, and in 2011, the Danish Health and Medicines Authority further increased the role of coordination in brain injury rehabilitation by profiling coordination among the recommended and nationally funded priorities. The aim of this study is to revise the current concept of coordination. We propose a new definition that invites additional psychological aspects and competences into interdisciplinary brain injury rehabilitation. We suggest that ensuring the psychological aspects within a coordinated rehabilitation could be a first step towards the introduction of rehabilitation psychology as a specialised discipline in Danish psychology.

Keywords: Rehabilitation Psychology, Acquired Brain Injury, Psycho-social consequences

Benny Karpatschof: Review of the book "Voldens ansikter – en dialog om ondskap, ansvar og håb" by Yngve Hammerlin & Paul Leer-Salvesen, Norway: Cappelen Dam, 2014.